

SUBMISSION TO THE ACCC MOBILE SERVICES REVIEW 2003

In response to the Australian Competition and Consumer Commission's ('the Commission') review of mobile services April 2003 Discussion Paper, please find following the submission on behalf of the Competitive Carriers Coalition (the CCC). For the purposes of this response, the CCC is constituted by:

PowerTel
Comindico
Primus Telecom
Macquarie Corporate Telecommunications

Together, the CCC members provide a much needed voice to the present inquiry given their status as carriers and service providers in the telecommunications sector that operate in retail and wholesale capacities to deliver telecommunications services via fixed line, data and mobile products to customers across Australia.

It is the experience of the CCC that notwithstanding the maturing of the market for the provision of voice services to and from mobiles, this sector exhibits characteristics that necessitate ongoing and heightened regulation.

Indeed, it is the CCC's shared experience that all of the factors identified as prerequisites to access regulation as set out in Part XIC of the *Trade Practices Act, 1974* exist. Furthermore, absent increased regulatory intervention, such factors will continue to distort investment decisions, promote inefficient use of networks and limit consumer choice. Such circumstances presently operate in a manner entirely inconsistent with the longer term interests of end users of telecommunications services.

Accordingly, this review is a timely opportunity for the Commission to address a number of issues that adversely effect competition in a range of related telecommunications markets. For the reasons set out in the attached, on going and increased regulatory action is necessary. Aside from the need to affirm the current declaration, the CCC has identified the issues of fixed to mobile wholesale and retail pricing as key issues to be rectified. In the context of this inquiry the CCC submits that an interim cost based regime must be adopted by the Commission as soon as possible, pending more detailed access pricing analysis. Simply put, unless such access charges decrease toward a level approaching cost, significant market failure of the kind identified will prevail.

The CCC looks forward to working with the Commission throughout the mobiles inquiry process. This submission offers to make available further data and analysis that may assist the Commission's deliberations. Accordingly, representatives of the CCC would be pleased to meet with Commission staff in order to present this information as well as respond to any queries or clarifications arising from the submission. Matt Healy is the contact should you wish to arrange for a briefing. In the meantime, if you have any questions in relation to this submission, please contact Matt Healy on 03 9206 6847.

Yours sincerely,

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On behalf of the Competitive Carrier Coalition (CCC)



MOBILE SERVICES REVIEW 2003

Submission in Response to ACCC Discussion Paper

OVERVIEW

1. The Australian Competition & Consumer Commission (the Commission) has decided to conduct a general inquiry into the regulation of the mobiles sector of the telecommunications services industry. As part of this inquiry the Commission released a discussion paper *Mobile Services Review 2003* (the Discussion Paper) in April 2003 inviting written submissions. This response provides a joint submission on behalf of:

- a. Macquarie Corporate Telecommunications
- b. Primus Telecom
- c. PowerTel
- d. Comindico.

For purposes of this submission the above group of carriers is referred to as the Competitive Carriers Coalition (the CCC).

2. The Discussion Paper requests submissions to address the need for regulation of mobile services and the form of any such regulation. The Commission will consider these matters in relation to the following mobile telephony services, as set out in the Discussion Paper:

- the domestic GSM and CDMA terminating access service;
- the domestic GSM and CDMA originating access service;
- the domestic intercarrier roaming service;
- the international intercarrier roaming service; and
- 3G services.

3. This submission focuses mainly on the domestic GSM and CDMA terminating access service (the mobile terminating service), because of the CCC's primary interest in fixed to mobile and mobile to fixed telephony. It does not address either of the roaming services, as these services are not provided by, or impact upon, any of the CCC carriers.

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BACKGROUND TO THE MOBILES INDUSTRY

4. This part of the CCC submission provides comments on section 4 of the Discussion Paper.

THE NATURE OF THE MOBILES SERVICES INDUSTRY

5. Section 4.1 of the Discussion Paper reviews the main types of service providers, the mobile networks and their market shares.

The types of service providers

6. The CCC agrees with the Commission's summary of the main types of service providers and comments that Macquarie Corporate Telecommunications should also be considered as an MVNO with the recent launch of its branded mobiles service. The CCC recommends to the Commission that for the stated purposes of this inquiry only the mobile network operators (MNOs) are relevant, and consequently any consideration of the MVNOs or reseller CSPs should be set aside. This is because only the MNOs control access to the mobile terminating service.

Mobile networks

7. The CCC notes, in section 4.1.2 of the Discussion Paper, the two types of networks that provide mobile telephony in Australia. The CCC also notes the summary of alternative mobile technologies provided in paragraphs 3.5-3.9 and 3.108-3.109 of chapter 3 of the *Reports on references under Section 13 of the Telecommunications Act 1984 on the charges made by Vodafone, O2, Orange and T-Mobile for terminating calls from fixed to mobile networks*, UK Commerce Commission, January 2003 (the UKCC Report). The CCC agrees with the Commission that for the reasons set out in section 4.1.2 of the Discussion Paper, together with the reasons set out in the UKCC Report, that this inquiry should only consider digital cellular networks.

Market shares

8. In section 4.1.3 of the Discussion Paper the Commission reviews the mobile network carriers and their market shares based on subscriber numbers and revenues. The CCC notes the following:
 - The high market share of Telstra, together with the dominant market share of Telstra and Optus combined, as demonstrated in Table 4.1. This makes an interesting comparison with the UK, also with 4 MNOs, where market shares are more evenly distributed (see the UKCC Report).
 - The demise of the One.Tel network, the indefinite deferral of AAPT's CDMA network, the high cost associated with 3G spectrum and the deferral of the roll-out of some of these networks, and the views of the Productivity Commission regarding acquisition of market share by new entrants.
 - Notwithstanding differences in market shares, the behaviour of each of the three dominant MNOs in terms of commercial dealings on F2M terminating access

rates strongly indicates behaviour inconsistent with that which ought to apply in a competitive market.

9. The CCC is of the view that the skewed nature of the MNO market shares, when considered together with the fact that both Telstra and Optus are integrated carriers (i.e. they both operate fixed line networks and provide a wide range of fixed line services), means that the Commission must pay particular attention to the market power of Telstra and Optus in the provision of certain retail services, particularly fixed to mobile, which are central to this inquiry. This matter is discussed in more detail in later parts of this submission.
10. The CCC is also of the view, based on the material in the Discussion Paper, that there are high barriers to entry to the establishment of further MNOs, not the least being the non-availability of additional mobile spectrum, with the likelihood that there is currently over investment in mobile infrastructure. This being the case, then the CCC is of the view that in respect of the LTIE objective of:

encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which telecommunications services are supplied,

the primary focus of the Commission in this inquiry should be directed to the efficient use of the existing mobile networks.

RECENT KEY DEVELOPMENTS IN THE MOBILES INDUSTRY

11. This part of the Discussion Paper comments upon a number of recent developments in the mobiles industry. Each of these is commented upon below, with some additional matters being raised.

Growth and ARPU trends

12. In sections 4.2.1 and 4.2.2 of the Discussion Paper the Commission reviews recent developments in mobiles subscriber and revenue growth, the range of services operated by the MNOs, and ARPU trends.
13. The CCC notes the continuing growth in the number of mobiles subscribers to the level where the penetration of mobile phones in Australia¹ now exceeds the penetration of fixed telephony lines. Since fixed lines usually serve more than one end-user (e.g. a home phone line), whereas a mobile service is usually personal, the penetration of mobile phones in Australia is likely to continue to grow.
14. Table 4.3 in the Discussion Paper clearly shows that voice services dominate mobiles revenue, and even allowing for very rapid growth in data and messaging services over the next few years, this is likely to be the case for the foreseeable future. Table 4.3 also includes data on monthly minutes per mobile subscriber showing a growth over the three year period examined. The CCC queries this data on the basis that it appears to be inconsistent with the following data from Telstra's *Annual Report 2002* (Table 8) which shows a declining level of minutes per mobiles subscriber:

	FY2000	FY2001	FY2002
Mobile Telephony Mins (m)	4,372	5,277	5,780
Total Mobiles SIOs ('000)	4,092	5,176	5,942
Annual Minutes per SIO	1,068	1,020	973

15. This declining trend in voice minutes per SIO is consistent with the Commission's observation on declining voice ARPU, which it attributes to the high growth in pre-paid subscribers relative to the low growth in post-paid customers.
16. The CCC notes its experience with recent years' growth in fixed line national and international long distance services, where fixed line telephony penetration is virtually stagnant, is that of increasing average annual minutes per SIO]. This would suggest that average annual minutes per mobiles SIO should also be increasing. However, with the continuing growth in mobiles SIOs the average annual minutes per SIO appears to be decreasing. Such an outcome suggests that in recent years the majority of additional subscribers to the MNOs must necessarily have very low average annual voice minutes of use, to the point where their low level of usage is more than offsetting what should be an increasing usage by the established customer base. To the extent that these additional (marginal) mobiles customers generate low levels of mobiles call, it is also likely such subscribers would generate relatively few additional fixed to mobile calls.

¹ See Table 11.1 *Telecommunications Performance Report 2001-02*, Australian Communications Authority.

17. Based on the material contained in sections 4.2.1 and 4.2.2 of the Discussion Paper, together with the above observations, the CCC is of the view that:
- The marginal benefit to fixed line subscribers of these additional low usage mobile SIOs is minimal and declining. This matter is taken up later in this submission in addressing the issue of network externalities.
 - The Commission's observation that average minutes of use on Australia's mobile networks is low by most international standards, is significant and demands attention. This would suggest a focus of this inquiry should be on increasing average annual minutes per mobile SIO rather than a focus on the acquisition of additional mobile subscribers. This is consistent with the above comment that the LTIE objective of efficient use of infrastructure should be more important to this inquiry than that of efficient investment. It also draws attention to the current pricing of retail and wholesale services on the mobile networks, a primary consideration in stimulating increased utilisation of those networks – a further issue addressed later in this paper in relation to efficient use of networks.
 - While, at the retail level, data and messaging services over mobile networks are still developing, it can be concluded that retail voice services over mobile networks are now well developed.
18. The CCC notes that sections 4.2.1 and 4.2.2 of the Discussion Paper do not provide any analysis of recent developments in fixed to mobile (F2M) telephony services. As such services are central to other parts of the Discussion Paper and, as noted above, are the primary interest of the CCC in this inquiry the following observations are made:
- F2M voice service has, over recent years, been the fastest growing sector of the group of fixed line pre-selectable services. For this reason F2M represents an increasingly important consideration in the development of competition in fixed line services.
 - Apart from the increase in the number of mobile SIOs to which F2M calls can be directed, the only recent development in this service relates to retail pricing, which is discussed below. For this reason, together with the reasons set out above in relation to additional mobile SIO, it can be concluded that retail F2M voice service is now well developed.

Retail pricing

19. In section 4.2.3 of the Discussion Paper, the Commission reviews recent trends in retail pricing. The CCC makes the following comments on this review:
- The Commission's consideration of retail pricing has only been undertaken at a high level. While this analysis of headline rates is important to its considerations in the inquiry, it is equally important for the Commission to examine the details of recent retail pricing because of the competition issues raised by such pricing. This applies at the level of F2M calls, mobile to fixed (M2F) calls, mobile to mobile (M2M) calls, both on-net and off-net, and access charges for mobiles

subscribers. Further comment on some of the details of this retail pricing is made below.

- The Commission notes that price decreases in F2M calls have not been as great as those in other PSTN services. The CCC agrees with this observation and attributes this to the continuing high level of MNO charges for the mobile terminating service. These charges have a greater impact on the smaller non-integrated fixed line carriers than on the large integrated carriers. This matter is addressed in more detail later in this submission.
20. At the more detailed level of retail pricing, the CCC makes the following observations on developments in recent years:
- The continuing large number of mobiles plans aimed at new and existing mobiles subscribers. Most of these plans bundle access, call minutes and handsets, with few (if any) making any specific reference to the price of F2M calls. The detailed level of customer targeting inherent in these plans suggests a sophisticated level of price discrimination consistent with a well developed retail market.
 - An increasing emphasis on the pricing of on-net M2M calls, with many plans offering very large price discounts (often in the form of free calls during certain periods). This represents a sophisticated level of retail price discrimination aimed at market share and competing against F2M services, rather than at new mobiles subscribers (for the reason stated above relating to low call volumes of recent subscribers). Such pricing is consistent with a well developed retail market.
 - An increasing emphasis on capped prices for M2F and F2M voice calls, again targeted at market share. In respect to F2M calls, such pricing represents a form of price discrimination that can be readily practised by the integrated carriers to their benefit in the fixed line services market. Again, such discriminatory pricing is consistent with a well developed market.
 - Aggressive pricing aimed at business customers with requirements for large numbers of handsets and/or constituting a closed user group. In the case of the integrated carriers this may be linked with aggressive pricing in the associated F2M calls. Such pricing appears to be aimed mainly at market share and is also consistent with a well developed market.

Further discussion on retail pricing, and its impact on competition in the provision of F2M service, is provided later in this submission.

21. Based on the above, the CCC concludes that the retail pricing of voice services, both for calls to and from mobile phones, indicates that the various retail markets in which voice services to, from and between mobile phones are provided, are now well developed.

Capital expenditure

22. In section 4.2.4 of the Discussion Paper the Commission reviews the developments in mobile network technology and services, and capital expenditure accompanying those developments.

23. The CCC notes the Commission's review of capital expenditure in mobile networks (which includes spectrum licences) by Telstra, Optus, Vodafone and Hutchison over recent years. The CCC raises the question whether with 6 mobile networks and the skewed nature of market shares, all of this investment can be classified as "efficient" in view of the considerations raised earlier regarding business failure and deferral.
24. The CCC also notes the review of technology developments, as shown in Figure 4.2, and concludes that these developments are primarily (if not totally) designed to expand the range of mobile services beyond the standard voice service; in particular, to provide messaging, data and video services.
25. In the CCC's view this conclusion is supported by the findings of the Australian Communications Authority in chapter 11 of its *Telecommunications Performance Report 2001-02* (the ACA Report), under the heading Industry Performance, that in 2001-02 there was only a marginal increase in total land area covered by mobile networks and that "...the Australian mobile networks show consistently high levels of performance", i.e. coverage and performance were well developed.
26. The CCC is of the view that this conclusion is also applicable to mobile handsets, where the developments in recent years have been in respect of messaging, data and video services, value added functions and design appeal, while basic voice functionality has remained virtually unchanged.
27. For the above reasons, the CCC is of the view that most of the recent capital expenditure in mobile networks is related to the development of messaging, data and video services, as the standard voice service is now well developed and requires little or no additional capital expenditure. The extent to which this new investment is "efficient" is still to be determined by the market's acceptance of these new services. Consequently, in assessing the LTIE objective of efficient investment in infrastructure for the provision of voice services the Commission should pay little regard to the most recent capital expenditure on mobile networks.

Mobile Number Portability

28. In section 4.2.5 of the Discussion Paper the Commission comments upon MNP and its impact. MNP has been operating successfully for more than 18 months and according to the ACA Report "this porting process is widely recognised as world's best practice". The CCC also notes the relatively low levels of churn following the availability of MNP, and the comment attributable to Telstra that MNP "...has not had a material impact on services in operation".²
29. For these reasons the CCC is of the view that the experience to date with MNP is another indication of a well developed market in mobile services.

² Furthermore, lack of churn from Telstra mobile services in the context of heightened marketing of bundled offerings may also indicate a leveraging of Telstra's control of fixed line services into an integrated fixed/mobile offering absent effective price competition. This gives further weight to the need for the Commission to expand the scope of its current bundling RKR as suggested later in this submission.

SUMMARY COMMENTS

30. The next part of this submission addresses the matters raised in section 5.1 of the Discussion Paper relating to the mobile terminating service. However, before proceeding to this it is important to summarise the key issues arising from the Commission's review of the mobiles industry. From the foregoing discussion, these are:

- The structure of the mobiles industry in Australia is such that it is dominated by Telstra and Optus, with a combined (approximate) market share of 80%. Telstra and Optus are also integrated carriers with a very large share of the F2M market.
- There is a question whether the current level of investment in the mobiles industry is "efficient". For this reason, and to increase network utilisation from what appears to be a relatively low level, the focus of this inquiry should be on encouraging more efficient use of existing mobiles infrastructure.
- Voice is the dominant service provided on the mobile networks, and by all measures this service is now well developed. The provision of messaging, data and video services is the driver behind much of the recent investment by the MNOs and such services can be described as "still developing".
- While the penetration of mobile phones is likely to continue to grow, there is evidence that most new subscribers are "marginal" with low levels of network use and, consequently, ARPUs.
- Recent developments in the retail pricing of F2M, M2F and M2M voice services raise serious competition issues in relation to the pricing of the mobile terminating service generally. These concerns are directed at Telstra and Optus in the first instance, however the other MNOs also share a common intransigence in relation to dictating F2M termination rates.
- All of these matters are important to consideration of the need for, and form of, regulation of the mobile terminating service. As such they provide the starting point for the next part of this submission.

DOMESTIC GSM AND CDMA TERMINATING ACCESS SERVICE

31. This part of the CCC submission provides comments on section 5.1 of the Discussion Paper.

INTRODUCTION

32. The CCC notes the following key points from sections 5.1.1-5.1.3 of the Discussion Paper:

- The mobile terminating service provides carriage of telephone calls (voice, data over the voice band) from a POI to the end-user connected to a GSM or CDMA network, and is an essential (CCC emphasis) input for the provision of fixed to mobile (F2M) and mobile to mobile (M2M) call services between end-users on different networks.
- Pre-selection for fixed network services includes F2M in a single basket of services including national and international long distance calls. For this reason competition issues arising in F2M necessarily impact upon competition in the full suite of pre-selected services.
- The GSM termination service was deemed in July 1997. In March 2002, following a public inquiry, the Commission extended this service description to include termination on CDMA mobile networks, so that the termination service would be technology neutral. In its report, the Commission also put forward its view that the price of the mobile termination service was above the efficient cost of providing the service.
- The Commission in its March 2002 report also noted that sustained above cost access prices for mobile termination are more likely to be a problem when the service is supplied in relation to F2M calls rather than M2M calls. This was because of the traffic flows between the MNOs and the associated settlement arrangements.
- In respect of its proposed retail benchmarking approach to regulating the price of the mobile terminating service, the Commission's comment in its March 2002 report that if retail price decreases did not eventuate, or if price squeezing was observed in the F2M market, the Commission may need to reconsider its approach to pricing the mobile terminating service.
- The Commission's review of recent inquiries undertaken by a number of overseas regulators notes the range of outcomes, from increased regulation including mandated price reductions in mobile termination to continuing non-regulation. The CCC is of the view that the most extensive of these reviews appears to be that undertaken in the UK. For this reason a number of references to the UKCC Report are made later in this submission.

33. In section 5.1.4 the Commission identifies two key issues to address in this current inquiry. In respect of both issues, the CCC notes that the Commission has expressed the issue in terms of continuing to regulate the mobile terminating service – a bottleneck service. The CCC supports this approach and therefore takes the

view that in assessing the need (if any) for changing the present form of regulation, the onus is on those stakeholders advocating variation or revocation to substantially prove their case.

DEFINITION OF THE MOBILE TERMINATING SERVICE

34. As indicated above, the Commission deemed the GSM termination service in July 1997; this was in the context of 2G networks. The inquiry which resulted in the March 2002 decision to vary this service description to include CDMA technology, was also with reference to 2G networks³.
35. The range of mobile technologies to be considered in this inquiry is set out in Figure 4.2 of the Discussion Paper, and remains restricted to GSM and CDMA. Of particular interest to this inquiry is the extent to which the newer 2.5G and 3G technologies offer the ability to provide services other than 'voice, data over the voice band', as specified in the current service description.
36. In its Discussion Paper the Commission has indicated that the first step in its assessment of whether it should continue to regulate the mobile terminating service is to define the service. Based on the Commission's comment that a mobile terminating service is an essential input to retail F2M and M2M services, the CCC is of the view that the logical approach to defining this service requirement is to start with a list of F2M and M2M retail services and an analysis of how these calls are provided and routed.

Services

37. When the GSM termination service was deemed in July 1997, mobile phones were used primarily (if not exclusively) for voice calls. Where a physical connection was made between a mobile phone, a computer and a dial-up modem there was also an ability to send and receive data over the voice band. It is the CCC's understanding that the main requirement for a data over the voice band capability is from a mobile end-user interacting directly with a corporate fax or computer or for Internet/Email access, and not for F2M calls.
38. As noted in the Discussion Paper, in recent years SMS has emerged as a rapid growth service. The implementation of 2.5G technology has also seen the advent of EMS⁴, and MMS together with a growth in Internet/Email services on mobile phones. With the launch of 3G, this growing range of services has been expanded to include Video calls.
39. While the underlying handset requirement for voice services has remained virtually unchanged through the evolution of network technology from 2G to 3G, the recent service developments in messaging, data and video require upgraded handsets to allow mobile end-users access to these enhanced network functions.

³ See third last paragraph of section 4.5 of the Commission's March 2002 report *Variation to make the GSM Service Declaration Technology-Neutral*, where it is stated that "...the proposed variation does not extend the reach of declaration to 2.5 and 3G services."

⁴ Enhanced Message Service, which on a 2.5G network increases the capacity of an SMS from 160 characters to 640 characters.

Provision and routing of calls

40. For F2M voice calls, these are usually originated on the PSTN and are routed to the POI using conventional circuit switched technology. Alternatively they could originate from a broadband connection as VOIP. Either way, the call is delivered to the POI with the terminating mobile network in a form which meets the technical and operating requirements of the current description of the mobile terminating service. This applies across all mobile network technologies.
41. In its March 2002 report on the variation of the GSM terminating service, the Commission noted that SMS messages are routed through the control channels (rather than the traffic channels) of the mobile networks. It is the CCC's understanding that currently there is no technical capability to deliver an SMS from the PSTN directly to a mobile phone. To the extent that an SMS can be delivered via the Internet the SMS would still be delivered via a control channel and not via the mobile terminating service. The same applies to EMS. For these reasons the CCC is of the view that the SMS service (including EMS) is predominantly an M2M service and is likely to remain so in the near future.
42. For MMS, it is the CCC's understanding that the message is delivered in a traffic channel. However, it is also the CCC's understanding that currently there is no technical capability to deliver an MMS from the PSTN to a mobile phone, and that there is no inter-operability of MMS between MNOs. Consequently, the CCC sees the MMS service as essentially an on-net M2M service.
43. It is the CCC's understanding that the situation with MMS also applies to Video calls, i.e. it is an on-net M2M service.
44. Regarding Internet/Email services, it is the CCC's understanding that these mostly operate via the Internet gateways of the MNOs and that such services mainly originate from mobile users and not from the PSTN via an F2M call.

Conclusions

45. Based on the above analysis of services and their provisioning, the CCC concludes:
 - For F2M calls there is a single type of call service, viz. voice.
 - For M2M there is a range of services, which can be classified into two broad categories, viz. voice and data⁵. This is consistent with the manner in which mobile service ARPUs are reported (see Table 4.3 of the Discussion Paper).
46. The first call service (F2M voice) requires a mobile terminating service equivalent to that of the current service definition. In this respect, it should be noted that while the Commission in its March 2002 report stated that the variation to the GSM termination service description specifically excluded the reach of service declaration to 2.5G and 3G services, the varied service definition is also appropriate for these technologies. Operational experience to date with the 2.5G and 3G networks confirms this, and the CCC is unaware of any approach by an MNO to the Commission seeking a further

⁵ This category of calls includes SMS, EMS and MMS messaging, Internet/Email calls and Video calls. For purposes of this submission, and for consistency with common usage, the single term 'data' is used to describe this broad category.

variation to the current service description to accommodate the 2.5G and 3G technologies.

47. For these reasons, the CCC concludes that for F2M calls the current service definition of the mobile terminating service remains appropriate and that no variation to this service description is required. In this respect the CCC notes the common aspects of this service description with that of the PSTN originating access service, such that there is a consistent set of technical and operating requirements for an end-to-end service which originates on the PSTN and terminates on a mobile network.
48. The CCC is also of the view that the underlying service description, which was deemed in July 1997 and only varied in March 2002 to make it technology neutral, has not changed over an extended period of time. For the reasons stated above, that retail F2M, M2M and M2F voice calls can now be classified as well developed services, the mobile terminating service as currently defined can also be classified as well developed.
49. For M2M calls there are two broad categories of call type – voice and data. M2M voice calls have the same requirement for a mobile terminating service as F2M voice calls and hence the above conclusions in respect of F2M voice calls apply to M2M voice calls.
50. In respect of M2M data calls, it is apparent that the MNOs have reached commercial agreement on the mobile terminating service(s) required, and if this is the case then there may not be a requirement for declaring the necessary mobile terminating service(s). However, because these data services are still developing, and at some future date F2M calls may include data calls, the CCC recommends the Commission should monitor these developments.

MARKET DEFINITIONS

51. In its Discussion Paper the Commission has indicated that the second step in its assessment of whether it should continue to regulate the mobile terminating service is to define the market in which the mobile terminating service is supplied together with other related markets.

Overall approach

52. To date the Commission has considered there to be two relevant markets, viz. the mobile services market and the fixed to mobile services market. The mobile services market has been defined as the market in which mobile calls are supplied, and necessarily includes mobile network access and the supply of handsets. This market has been viewed as a national market involving distinct wholesale and retail functional elements and includes the supply of the mobile terminating service. The F2M market has been defined as the retail market in which F2M calls are supplied, and is viewed as a related downstream market to the mobile services market with the mobile terminating service seen as a wholesale input.
53. The CCC notes that these definitions are not technology dependent. For this reason, the consideration of 2.5G and 3G technologies should be in the manner outlined

above, i.e. in terms of services, service provision and call routing, and not in terms of specific technologies⁶.

54. In assessing whether the Commission's market definitions are still appropriate for this inquiry, the CCC notes (from section 5.1.3 of the Discussion Paper) the approach taken by the regulatory bodies in the UK and the Netherlands. In essence, this was to define the relevant market as mobile termination, which was defined separately for each MNO. With this approach the directly related downstream markets are the F2M market and the M2M market.
55. The CCC is of the view that the approach to market definition adopted by the UK and Netherlands regulators has merit and should be considered by the Commission. This is because it defines the mobile terminating service as the primary market in recognition that this service is an essential input to F2M and M2M services. In proposing this approach for consideration, the CCC is not necessarily advocating that the mobile termination market be defined separately for each MNO. The CCC is of the view that a single market for mobile termination could be defined and an analysis of this market could then be undertaken to determine the extent of market power of each MNO.
56. The CCC would then see the F2M and the M2M markets as the primary downstream markets against which the LTIE criteria would be assessed⁷. Recognising that the M2M market could be considered as part of the broader mobiles market, then such consideration would extend to this downstream market. This was the approach adopted in the UKCC Report. For the same reasons, because competition issues in F2M impact upon competition in the full suite of pre-selected services, then consideration should also be extended to this broader downstream market.
57. One of the concerns the CCC has with the Commission's approach to date is that it has viewed the broad mobiles market as the primary relevant market, with the consequent risk of being diverted from the core issue of mobile termination by considerations such as handset subsidies and incentives for becoming a mobile subscriber. In respect of the mobile terminating service, the primary downstream markets are F2M and M2M and any consideration of the broader mobiles market must be secondary to these considerations.

Detailed approach

58. In the Discussion Paper the Commission has indicated that markets can be defined at a functional, product or geographic level. Under the CCC's overall approach to market definition there is no requirement to consider further definition at the functional level. The CCC also accepts that all relevant markets should be considered national.

⁶ For this reason the CCC disagrees with the Commission's inference in the third last paragraph of its March 2002 report *Variation to make the GSM Service Declaration Technology-Neutral* that there are separate markets for 2.5G and 3G services per se. This also appears to be the same inference in the Discussion Paper in having a separate section on 3G services. The inclusion of any references to 3G technology within the sections of this submission dealing with the mobile terminating service reflects the CCC view that there is unlikely to be a separate market for 3G services per se.

⁷ This also allows examination of the Commission's comment in its March 2002 report that sustained above cost access prices for mobile termination are more likely to be a problem when the service is supplied in relation to F2M calls rather than M2M calls.

59. Based on the above analysis of services and provisioning and call routing, the CCC concludes that the market for mobile terminating service should be defined at the product level in terms of separate voice and data markets. This approach should also be adopted in examining all relevant downstream markets.

Conclusions

60. The CCC recognises that, under Part XIC, service declaration does not require the determination of a definitive market definition as is required for a Part XIB case. However, market definition is a useful tool in being able to assess the LTIE criteria, and for this reason the CCC has made an effort in this submission to comment on this part of the Discussion Paper.
61. While not disagreeing with the Commission's approach to market definition, the CCC puts forward its alternative approach, which is based on that adopted by regulators in the UK and the Netherlands. The CCC believes this approach has merit and has adopted it in this submission. In doing so, the CCC is aware of the Commission's comment in its July 2001 report on pricing methodology that even if the Commission "...accepted arguments that GSM termination should form its own market, it believes its conclusions would not differ."
62. However, the key point from the above analysis of market definition is the CCC conclusion that at the product level there are separate markets for voice and data. This simply reflects the types of services which constitute F2M and M2M calls, and the different ways in which these calls are provided and routed.
63. Since F2M calls are voice only, in the remainder of this submission only voice calls are examined in assessing the LTIE criteria for declaration of the mobile terminating service. For M2M calls, both voice and data calls are included in the assessment.

WHETHER THE COMMISSION SHOULD CONTINUE TO REGULATE THE MOBILE TERMINATING SERVICE

64. As background, the CCC notes the following key points from the Discussion Paper in regard to whether the Commission should continue to regulate the mobile terminating service:
- Maintaining the declaration of the mobile terminating service means the Commission can continue to regulate the terms and conditions of access to this service.
 - The mobile terminating service was regulated in the pre-1997 regulatory regime, and was deemed by the Commission in July 1997 to ensure any-to-any connectivity.
 - Terms and conditions of access to the declared service usually are considered in two parts – price terms and conditions, and non-price terms and conditions. Following a public inquiry, since July 2001 the price of the mobile terminating service has been subject to a regulatory scheme described by the Commission as a retail benchmarking approach. The CCC understands that the Commission

has not yet applied this scheme, either in an arbitration or in the assessment of an undertaking.

- Only recently, in March 2002, the Commission completed a public inquiry into whether it should vary the service description of the mobile terminating service. The Commission undertook a full LTIE assessment of the proposed variation and determined that the varied service description met the LTIE requirements. As outlined above, the CCC is proposing that this service description remains appropriate for voice service across the full range of GSM and CDMA 2G, 2.5G and 3G technologies.

The comments in the following part of this submission are made against these background points.

65. Before proceeding to examine whether the mobile terminating service should continue to be declared by reference to the specific LTIE criteria, the issues of pass through and the legitimate interests of the access provider are addressed.
66. The Commission defines pass through as the relationship between changes in the price of the mobile terminating service and the retail prices charged to end-users for the downstream services using the wholesale service. Because this relates to the price of the wholesale service, this matter is addressed later in this submission, in that part dealing with pricing of the mobile terminating service.
67. In the Discussion Paper, the Commission expresses the preliminary view that consideration of the legitimate commercial interests of the MNOs providing the mobile terminating service are best dealt with when determining the price for this wholesale service. The CCC agrees with the Commission that if an appropriate price is set for the mobile terminating service, the legitimate commercial interests of the access provider should be met.
68. As mentioned in the above background points, maintaining the declaration of the mobile terminating service allows the Commission to regulate the price terms and conditions of this wholesale service. However, declaration does not necessarily mean pro-active price regulation by the Commission. For example, the Commission may adopt a policy of forbearance, in which case the impact of declaration on the supply of the designated wholesale service is likely to be minimal. Alternatively, the Commission could adopt a passive (or light-handed) approach to price regulation, in which case the impact on the price terms and conditions of supply of the declared service may also be minimal. In this submission the CCC focuses on the price terms and conditions of supply of the mobile terminating service. This is because the CCC is of the view that the primary purpose, and benefit of, service declaration arises from price regulation.
69. In its *Access Pricing Principles* the Commission sets out a framework of pricing principles that will generally apply to a declared service, as follows:
 - The service must be necessary for competition in dependent (downstream) markets.

- The service must be supplied in markets where the forces of competition, or the threat of competition, work poorly to constrain the price of access to efficient levels.
- The service must be well developed in the market and have established demand characteristics.

For the reasons set out earlier in this submission, requirements 1 and 3 are clearly met for the mobile terminating service.

70. In previous reports the Commission has expressed the view that requirement 2 is also met. In the following sections the supply of the mobile terminating service is reviewed to determine whether requirement 2 continues to be satisfied.
71. As concluded in paragraph 47 above, the current service description for the mobile terminating service remains appropriate for voice (and data over the voice band) calls. Accordingly, unless specifically stated otherwise, any reference below to call services in related markets is only to voice services.

Promotion of competition

72. This section of the CCC submission is addressed in two parts, viz. the F2M downstream market and related markets, and the M2M downstream market and related markets. This follows from the two separate requirements for the mobile terminating service (F2M and M2M), and the fact that there are some differences in the downstream and related markets of each. It also reflects the point noted above that the Commission has previously observed that if the price for the mobile terminating service is above cost, this is more likely to be a problem in relation to F2M calls than for M2M calls.
73. In each assessment of the downstream markets, the market for the mobile terminating service is first examined to assess whether the forces of competition, or the threat of competition, work poorly to constrain the price of access to efficient levels.

F2M DOWNSTREAM MARKET AND RELATED MARKETS

74. The specific markets to be examined in this section are:

- wholesale market for the supply of the mobile terminating service;
- downstream F2M market for voice calls;
- the related (broader) downstream market of fixed line pre-selected services; and
- the related downstream mobiles market.

As indicated in the comments on market definition, the CCC contends that this analysis should be restricted to voice calls.

WHOLESALE

75. As already noted, the key question here is whether the mobile terminating service is supplied in a market where the forces of competition, or the threat of competition, work poorly to constrain the price of access to efficient levels.

76. The Commission has undertaken this examination on a number of occasions, most recently in its March 2002 report. Throughout its considerations, the Commission has always recognised that if the fixed line calling party wants to contact a mobile end-user, then he/she has no alternative but to acquire the (essential input) mobile terminating service from the MNO which the mobile subscriber has chosen. There is no possibility of substitution and this means that the MNO has control over access to the mobile terminating service in relation to all its subscribers. In this respect, nothing has changed since the Commission's last review, nor is it likely to change in the foreseeable future.

77. Given this MNO control of access, the Commission has previously examined those factors which might mitigate an MNO's control over access to determine the extent (if any) to which those factors would constrain the price of access to efficient levels. These include:

- price of incoming calls;
- closed user groups;
- transit arrangements; and
- call back.

The Commission has to date concluded that none of the "mitigating" factors considered are likely to constrain the price of access to efficient levels.

78. In its recent comprehensive review, the UK Commerce Commission reached the same view on mobile termination. The CCC commends to the Commission chapter 2 (specifically paragraphs 2.90-2.147) of the UKCC Report, agrees with the analysis therein, and is of the view that the regulator's findings apply equally to the Australian market for the mobile terminating service.

79. While the CCC is of the view that nothing has changed in recent years that would warrant the Commission reaching a different conclusion, for purposes of this inquiry the following comments on the above four "mitigating" factors are made to assist the Commission assess whether there have been any changes:

- The CCC knows of no substantive empirical evidence showing that the price of F2M calls (i.e. retail price differences according to the terminating network) has any significant impact on a mobile subscriber's choice of MNO. The CCC is of the view that customer ignorance of F2M termination is still high⁸, and that there is little or no reference to the price of incoming calls in the marketing of mobiles subscription and call services. Also, as pointed out in the UKCC Report, because of calling party pays pricing, the primary basis upon which a mobile subscriber will choose an MNO will be the costs the mobile subscriber himself/herself will incur, i.e. handset, connection and mobile call charges.
- Closed user groups refer to a group of mobile subscribers making a collective decision on choice of MNO. As noted in the UKCC Report it is likely that MNOs will offer these groups differential rates for subscriptions and M2M/M2F calls in recognition of volume (particularly corporate customers). To the extent that the price of F2M calls is a consideration, the integrated MNOs are advantaged in that they can also offer differential rates for F2M calls. However, such offers would not necessarily pass through to all F2M calls, nor to other fixed line CSPs in the form of lower prices for the mobile terminating service on the integrated MNOs' networks.
- Transit arrangements, including the possibility of "repurposing" F2M traffic so that it appears to the MNO as an M2M call, are no more than a marginal arbitrage opportunity, which relies upon differential charges for the same mobile terminating service. These differential charges, wherein the price for an F2M call is higher than say for an incoming international call or an M2M call, only arise because of MNO control over access and the consequent ability to sustain differential pricing in accordance with the origin of the call. Such transit arrangements are necessarily less efficient operationally than direct F2M calls, and usually involve additional operating and/or capital costs when compared to a direct F2M call.
- The extent to which call back is likely to have any impact on pricing the mobile terminating service is dependent upon the co-operation of the mobile subscriber and their willingness to absorb the cost of the call. It is less efficient (involving two calls rather than one), and because an F2M and an M2F call use the same network elements, it also is essentially a marginal arbitrage opportunity.

Consequently, the CCC remains of the view that none of these "mitigating" factors represent any real, or threatened, competitive force on the pricing of the mobile terminating service.

80. The CCC acknowledges that, in recent years, there have been reductions in the prices charged by the MNOs for the mobile terminating service. However, despite these reductions, the CCC supports the Commission's observation in the Discussion Paper that the price of access remains above the efficient cost of provision. In the CCC's view this observation is supported by:

⁸ MNP is likely to be a contributing factor.

- The analysis in chapter 7 of the UKCC Report, which calculates the cost of mobile termination using both a LRIC model and MNO cost data.
 - The recently mandated reductions in mobile termination rates in a number of European countries, following regulatory review. This has resulted in rates below those currently applying in Australia.
81. In comparing the current price of mobile termination to efficient cost, the CCC also notes that the efficient cost of mobile termination (allowing for the fact that termination is provided to any location in Australia) is likely to be greater than the efficient cost of PSTN termination (allowing for the fact that this declared service is geographically limited compared with mobile termination). Accordingly, the CCC concludes that mobile networks may be higher cost than the PSTN in the carriage of equivalent voice calls – an observation also made in the UKCC Report. This matter is taken up later in this submission.
82. Since the underlying costs of a mobile network are relatively high, then the price for the mobile terminating service will represent a significant part of the total cost of an F2M voice call. With the combined dominant presence of Telstra and Optus in both the downstream F2M market (see below) and the downstream mobiles market (see above), the prices these two vertically integrated carriers each charge themselves for their own mobile terminating service is of critical importance in assessing the state of competition in the various downstream markets. In this respect, the CCC notes the following:
- In addition to the broad pricing principles listed in paragraph 69 above, the Commission's *Access Pricing Principles* list a set of pricing guides. The first of these relates to comparing the access price charged to an AS with the AP's internal transfer price for the same or similar service (CCC emphasis). The Commission states that:

“If the access price available to third parties is greater than the access provider's price to its own vertically integrated operations, the Commission will need to be satisfied that the difference is consistent with the legislative criteria.”
 - In paragraph 12 Annexure A of the document *Telstra's Submission in Support of its Undertakings dated 9 January 2003*, Telstra states that:

“The costs allocated to each of the UT Services should be consistent with those allocated to Retail PSTN Services sold by the efficient access provider. To do otherwise would mean that the input costs into the Retail PSTN Services faced by the efficient access provider and an access seeker would be different. If the efficient access provider faces higher input costs for Retail PSTN Services than those faced by access seekers, then the access seekers could undercut the efficient access provider in end user markets, potentially take the majority of the market for Retail PSTN Services and thus prevent the efficient access provider from recouping all of the costs of its investment.”

The corollary of this statement is that in the well developed market for the provision of the mobile terminating service, and in the well developed downstream F2M

market, the price charged to an access seeker should be the same as the internal transfer price of the vertically integrated MNO.

The CCC is concerned that in recent years the integrated carriers have not charged their own services in the relevant downstream markets the same prices charged to third parties, such as the CCC carriers. The reason for this concern is demonstrated in the F2M section immediately below.

83. For all these reasons, the CCC is of the view that the prices charged by the MNOs for the mobile terminating service are not efficient. There are no competitive forces to drive these prices to efficient levels and, in the CCC's view, the only reason for the recent modest price reductions has been the threat of further price regulation since the Commission's July 2001 decision to adopt its retail benchmarking pricing methodology. However, this threat has still not resulted in efficient prices, nor has it resulted in implementation of the Commission's pricing guide on internal transfer pricing. Accordingly, the CCC believes the Commission must now move beyond its current light handed price regulation and embrace a more pro-active approach.
84. The CCC therefore concludes that requirement 2 in paragraph 69 above is met, and therefore all three requirements that will generally apply to a well developed declared service are satisfied.

F2M

85. The CCC is of the view that the integrated carriers have a combined dominant market share of the F2M market. As noted above in paragraph 8, they also have a combined dominant share of the mobiles market. This means that their pricing of the mobile terminating service to third parties, vis-à-vis their own internal transfer pricing of access, will have a significant impact upon the level and effectiveness of competition in the F2M market.
86. As stated in paragraph 20 above, the CCC has noted the level of price discrimination in the F2M market being practised by the integrated carriers and the difficulty that third party carriers have in matching this pricing given the current high level of mobile terminating service charges.
87. To demonstrate the CCC's concern, the following simple example in the form of a competitive parity test is provided⁹. The example uses Telstra's BusinessLine Plus plan, and is indicative only with all figures rounded to the nearest half cent for simplicity. Two options for the price Telstra charges itself for access are shown – Option A where Telstra charges itself the same price it charges third parties, and Option B where Telstra makes no direct charge to itself in pricing the call:

(Refer to table on the following page)

⁹ This analysis is akin to similar tests that the Commission has undertaken in evaluating the reasonableness of PSTN access prices.

COMPARATIVE PRICING TABLE

F2M calls in Telstra's BusinessLine Plus call plan

		Call duration and \$		
		2 mins	5 mins	10 mins
Telstra to Telstra mobile	Revenue	0.76	1.00	1.00
<i>Option A</i>	PSTN originating access	0.03	0.075	0.15
	Mobile terminating access	0.44	1.10	2.20
	Contribution to billing/marketing/admin	0.29	(0.175)	(1.35)
<i>Option B</i>	PSTN originating access	-	-	-
	Mobile terminating access	-	-	-
	Contribution to network costs + billing/marketing/admin	0.76	1.00	1.00

		Call duration and \$		
		2 mins	5 mins	10 mins
Telstra to non-Telstra mobile	Revenue	1.02	2.22	4.22
<i>Option A</i>	PSTN originating access	0.03	0.075	0.15
	Mobile terminating access	0.44	1.10	2.20
	Contribution to billing/marketing/admin	0.55	1.045	1.87
<i>Option B</i>	PSTN originating access	-	-	-
	Mobile terminating access	-	-	-
	Contribution to network costs + billing/marketing/admin	1.02	2.22	4.22

		Call duration and \$		
		2 mins	5 mins	10 mins
Third party carrier	Revenue	0.90	1.67	2.77
	PSTN originating access	0.03	0.075	0.15
	Mobile terminating access	0.44	1.10	2.20
	Contribution to billing/marketing/admin	0.53	0.495	0.42

Notes: Assumption that third parties are charged 1.5c/min for PSTN originating access and 22c/min for the mobile terminating service.

Option A is equivalent to the service being provided by a third party carrier.

For Option B the marginal cost of a call, on both the PSTN and the mobile network, is minimal due to the fact that both types of networks are characterised by fixed and common costs.

88. For purposes of comparing the outcome for a third party carrier which is not an MNO, the above table includes an analysis matching the BusinessLine pricing (in terms of an average price for termination to all MNOs), assuming 45% of F2M calls are to a Telstra mobile. This demonstrates the difficulty a third party carrier has in matching the pricing of an integrated carrier. It also demonstrates the flexibility of the integrated carriers to offer differential pricing to targeted customers such as closed user groups.
89. As noted in paragraph 32 above, the Commission is aware of the possibility of price squeezing in the F2M market. The above table demonstrates how such price squeezing could arise, and the CCC strongly recommends that, as part of this inquiry, the Commission examines some of the retail pricing of the MNOs. In paragraph 20 above, the CCC has summarised recent developments in retail pricing, and can provide further details on potential price squeezing to the Commission if so requested.
90. The simplified example set out above demonstrates the importance of:\
- the price charged to third parties for the mobile terminating service; and
 - the internal transfer price of the integrated carriers,
 - in the pricing of F2M calls and hence the level of competition in the F2M market.
91. It is the CCC's view that competition will be promoted in the F2M market if charges to third parties for the mobile terminating service represent efficient prices and the pricing guides in the Commission's *Access Pricing Principles* are fully implemented. This assumes pass through of the price reductions which would result from such pro-active price regulation, and this matter is discussed later in this submission.

PRE-SELECTED SERVICES

92. The CCC is of the view that F2M calls, measured in terms of call minutes, represent an increasing share of the total call minutes for the basket of pre-selected services¹⁰, and hence of growing importance in assessing the level of competition in this broad market. The CCC is of the view that F2M minutes are likely to continue to grow as a proportion of total pre-selected minutes, and consequently it is important that competition be promoted in F2M if competition in the basket of pre-selected services is to be promoted.
93. The CCC notes that, as a consequence of the Commission's pro-active approach to price regulation of PSTN access, all corresponding access services required for national long distance and international calls are priced at efficient levels. This also applies to originating access for F2M calls. The CCC's view is that efficient pricing of the mobile terminating service, particularly when compared with that of PSTN access (as evident in the table above), would promote competition in the F2M market, and subsequently in the broader market for pre-selected services, in the same way that has occurred with the efficient pricing of PSTN access.

¹⁰ For example, figures from Telstra's *Annual Report 2002* indicate that for Telstra F2M minutes increased from 22.9% of total pre-selected minutes in FY2000 to 27.4% in FY2002.

94. The requirement for pro-active price regulation of the mobile terminating service is increasingly important given the bundling of mobile and other services by the integrated carriers, which is also impacting competition in this broader market. The CCC is aware the Commission is currently reviewing the practice of bundling in respect of residential customers. The CCC is of the view that this inquiry is a timely opportunity to ensure that the bundling of services for business customers also accords with the RKR.
95. Arising from what appears to be the discretionary pricing of the mobile terminating service by the MNOs for M2M and M2F calls, the CCC is of the view that M2M calls (both on-net and off-net) and M2F calls now compete directly with, and substitute for, national long distance calls¹¹. Examples of such retail pricing include:
- free M2M on-net calls (e.g. Optus free time);
 - low price M2M off-net calls (e.g. Communic8 price of 20c connection plus 1c/min); and
 - low price M2F calls (e.g. Orange offer of 10 minutes for 24c).

If the simplified competitive parity test set out above for F2M calls was also applied to such examples, it would be apparent that the MNOs are not charging themselves the same price for mobile termination as they charge to third parties for F2M calls.

96. The CCC is of the view that the competition from M2M and M2F calls is not based on efficient access prices. Partly, this may be because the regulation of the price of the mobile terminating service (including the internal transfer price) is “light handed” in contrast to the pro-active price regulation of PSTN access. This asymmetry in regulation is an opportunity being exploited by the MNOs, resulting in end-users being encouraged to transfer national long distance calls (and some local calls) from the fixed network to mobile networks (i.e. from a low cost network to relatively high cost networks). The current above cost pricing of the mobile terminating service, resulting in an effective cross-subsidy from F2M calls to M2M and M2F calls, exacerbates this effect. The CCC encourages the Commission to take this matter into account in assessing the LTIE criteria of efficient use of, and investment in, infrastructure.

MOBILES

97. The CCC acknowledges that there is apparent strong competition in the mobiles market, but makes no comment on whether such competition has reached a level where it could be described as “effective”. The CCC also recognises that because the MNOs control both originating and terminating access on their networks, competition in the mobiles market appears to be directed at “subscription” (where this can be defined in terms of a basket of connection charges, handset prices, and charges for M2F and M2M on-net and M2M off-net voice calls¹²). The CCC recommends to the Commission that in its examination of the mobiles market it would be useful to consider network access, handset subsidies, voice call charges and data services separately, rather than as a basket. The CCC believes that such an approach will assist the Commission to better examine the matters discussed in

¹¹ M2M calls also compete with local calls, as evident from certain M2M pricing and MNO marketing material.

¹² For the reasons stated above this analysis is limited to voice. Further, the CCC is of the view that there is little, if any, substitution between voice and data calls.

the paragraphs below relating to network externalities, cost based pricing and monitoring internal transfer prices.

98. Under the CCC's proposal for pro-active regulation of mobile terminating service pricing, the current cross-subsidy from F2M calls would be eliminated and there would be more efficient competition between mobile and fixed network calls. This should not impact the level of competition between the MNOs in respect of the basket of services marketed to prospective mobile subscribers, because such regulatory intervention would be neutral as between the MNOs. It would simply remove the current cross-subsidy from F2M to this basket, and therefore make the basket more transparent as to its real cost.

SUMMARY

99. The mobile terminating service is well developed and is a necessary input to F2M voice calls. Because the MNOs have control of access once a mobile subscriber has made a choice of mobile network, F2M callers have no choice other than to acquire access from that particular MNO. Consequently, there are no competitive forces to constrain the price of terminating access to efficient levels. Only declaration and price regulation of the mobile terminating service, acting as a proxy for competitive forces, can ensure an "efficient" outcome.
100. Based on recent experience, the CCC recommends that pro-active price regulation to achieve efficient terminating access prices is now required, and that this should include examination of the internal transfer prices of the MNOs, and in particular the two integrated carriers.
101. The CCC is of the view that such a regime would promote competition in the downstream F2M market for voice calls, and in the related market for pre-selected services. It would also have the benefit of promoting efficient pricing in the mobiles market, thus ensuring that any choice between use of the fixed network and a mobile network for national long distance calls, is based on the relative costs of these networks rather than inefficient access prices as is presently the case.

M2M DOWNSTREAM MARKET AND RELATED MARKETS

102. In paragraphs 56 and 57 above, the CCC noted the benefits in examining the M2M market(s) separately. The specific markets to be examined in this section are:

- wholesale market for the supply of the mobile terminating service;
- downstream M2M market for voice calls; and
- the related downstream mobiles market.

As indicated in the comments on market definition, the CCC contends that this analysis should be restricted to voice calls.

WHOLESALE

103. While the key question here is whether the mobile terminating service is supplied in a market where the forces of competition, or the threat of competition, work poorly to constrain the price of access to efficient levels, the CCC recognises that the market conditions for the supply of the mobile terminating service for M2M may be different from the supply of the identical mobile terminating service for F2M.

104. As with F2M wholesale, each MNO has control over terminating access to a subscriber to that particular mobile network. However, in the case of M2M, access is only supplied to another MNO and not to any third party, and in the long term it could be expected that the flow of voice traffic between any two MNOs is likely to be in balance. This being the case, control of access is likely to be diffused. This would certainly be the case if the MNOs operated under a “bill and keep” settlements scheme.

105. It would appear to the CCC that the four MNOs have reached commercial agreement between themselves on the prices they charge each other for the mobile terminating service. However, this does not mean there is not a case for price regulation of the service.

106. It is the CCC’s view that, of critical importance, is the prices the MNOs charge each other and whether these prices differ from those for the identical F2M wholesale service. While the CCC has no knowledge of the prices the MNOs charge each other (if any), it is deeply concerned that these prices may be significantly lower than those charged for F2M wholesale. If so, then the CCC can see no reason why these lower prices should not also apply to F2M wholesale, and any difference simply reinforces the fact that, in the absence of price regulation, there are no constraints on F2M wholesale pricing. In this matter the CCC again refers the Commission to its *Access Pricing Principles* and the need to pro-actively price regulate the mobile terminating service to ensure that any price charged for the service meets the legislative criteria.

M2M

107. Since the M2M wholesale termination service is only supplied for M2M off-net calls, consideration here is limited to such calls.

108. The CCC is of the view that declaration and price regulation of the mobile terminating service would have little, if any, impact on competition for the supply of M2M voice calls. This is because the MNOs control originating access in the same way they control terminating access, and because there is the strong likelihood that traffic between MNOs will virtually balance in the long term.

MOBILES

109. The CCC is of the view that declaration and price regulation of the mobile terminating service would have little, if any, impact on competition in the mobiles market since M2M off-net calls represent only a part of this broader market, and such regulatory intervention is neutral as between the MNOs.

SUMMARY

110. An examination of the downstream M2M market and related markets suggest that declaration and price regulation of the wholesale mobile terminating service would not necessarily promote competition in any of these markets.

Promotion of competition – summary

111. Based on the above consideration of the wholesale mobile terminating service market, together with all relevant downstream markets, the CCC makes the general conclusion that competition will be promoted if the mobile terminating service continues to be regulated. However, to ensure that this is achieved, the CCC concludes that a pro-active approach to price regulation of the service is now required.

Any-to-any connectivity

112. The CCC notes that in deeming the mobile terminating service the Commission determined that the requirement for any-to-any connectivity was an important consideration. This requirement remains. In the absence of declaration of the mobile terminating service, an MNO could unreasonably refuse to interconnect a fixed line CSP for the purpose of providing F2M calls. The CCC acknowledges that this is unlikely. However, because of its market power in providing the mobile terminating service, an MNO could demand unreasonable terms and conditions from a fixed line CSP in return for connectivity (i.e. a constructive refusal to supply). On the other hand, any-to-any connectivity is of mutual benefit to both the MNO and the fixed line CSP. On balance, because of each MNO market power in the provision of the mobile terminating service on its own network, it is the CCC view that continuing declaration is justified by the LTIE requirement for any-to-any connectivity.

Encouraging efficient use of infrastructure

113. The CCC agrees with the Commission's view set out in the Discussion Paper in relation to the mobile terminating service that "...the closer the price of the service is to the cost of providing the service, the greater will be the efficient use of the infrastructure used to provide this service". The CCC notes this was the same approach adopted by the Commission in regulating the price of access to Telstra's PSTN.

114. The CCC is of the view that efficient prices for the mobile terminating service (both to third parties and as internal transfer prices), will have the flow through effect of more efficient prices for mobile calls. The consequence of this would be that the relative use of mobile network infrastructure (higher cost) to fixed network infrastructure (lower cost) would be determined on the basis of incurred costs, rather than the cost assignments that currently prevail.
115. As noted by the Commission, the utilisation of mobile network infrastructure in Australia is relatively low, and the price of the mobile terminating service is above cost. The CCC is of the view that reducing the price of the mobile terminating service to cost will, as a result of competition in the retail market (particularly from third party carriers), lead to lower retail prices for F2M and hence greater utilisation of the mobile networks¹³. This contention relies upon the pass through of reductions in the price of the mobile terminating service, and this matter is addressed below.
116. For the reasons stated in paragraphs 122 and 123 below, the CCC is of the view that neither forbearance, nor a continuation of the current “light handed” retail benchmarking approach to price regulation of the mobile terminating service, will result in driving the price of this wholesale service closer to its cost. Consequently, to achieve this objective a more pro-active approach is required. Continuing declaration of the mobile terminating service is necessary to allow the Commission to adopt this approach to price regulation.

Encouraging efficient investment in infrastructure

117. The CCC is of the view that so long as the price of the mobile terminating service is set at an “efficient” level, then the resulting price signal for investment in mobile network infrastructure will also lead to an efficient level of investment. For reasons already stated in this submission, the CCC is of the view that the current price of the mobile terminating service is above the efficient cost of supply with the consequence that some recent investment in mobile network infrastructure has, in all likelihood, been inefficient. As outlined above, this contention is supported by recent market failures and deferrals.
118. The current mobile terminating service is primarily for voice telephony, and hence its pricing should only take into account “efficient” investment for the supply of this wholesale service. In this respect, the CCC notes that additional capital for extending network coverage appears as though it is being provided by Government (see the ACA Report), and that given the current satisfactory levels of quality of service (as noted in paragraph 25 above) additional investment to maintain such levels would be expected to be relatively small.
119. For the reasons stated elsewhere in this submission, the pricing of the mobile terminating service should not take into account the investment requirements associated with the MNOs’ development of data services, nor any subsidies offered to end-users to encourage them to acquire handsets to access these “developing” services. That is, the business case for investment in infrastructure to provide these

¹³ The CCC has similar experiences with the pricing of other services in the pre-selected basket. Evidence supporting this view can be made available to the Commission upon request.

“developing” services should stand on its own merits. In particular, this contention applies to 3G services (other than voice services).

120. To ensure that the level of investment to provide the mobile terminating service is efficient implies that the price of this wholesale service is set as close as possible to the efficient cost of providing the service. For the same reasons stated above, this will require pro-active price regulation and hence continuing declaration of the service.

Conclusions

121. Based on its assessment of the LTIE criteria, the CCC concludes that the mobile terminating service should continue to be regulated. As part of this regulation the CCC recommends that to ensure pricing of the service meets the legislative criteria, the Commission should now adopt a pro-active approach to price regulation.

APPROPRIATE FORM OF REGULATION OF THE MOBILE TERMINATING SERVICE

121. Earlier in this submission the CCC commented that neither forbearance nor the Commission's "light handed" retail benchmarking approach to pricing regulation will ensure that the price charged by the MNOs for the mobile terminating service will:

- be cost based, and not be inflated to reduce competition in dependent markets; and
- not discriminate in a way which reduces efficient competition.

Both of these requirements have been identified by the Commission as being pre-requisites for an access price to meet the legislative requirements of Part XIC¹⁴.

122. In regard to forbearance, there is no empirical evidence, either in Australia or overseas, that such an approach to pricing the mobile terminating service will be effective in delivering an "efficient" price for the service. The CCC also notes the experience in the Netherlands, as summarised in the Commission's Discussion Paper.

123. In regard to the retail benchmarking approach, the CCC has acknowledged that the Commission's decision in 2001 to adopt this pricing methodology may have contributed to the recent modest reductions in some access prices. However, this "light handed" approach has still failed to deliver access prices which meet the above criteria. Other shortcomings of the current approach identified by the CCC are the following:

- It would be difficult to administer, as one of the major problems is to determine the appropriate retail prices to use in a market where there is a significant level of price discrimination.
- There will always be at least a six months time lag between any changes in retail prices and the flow through to wholesale prices.
- Since its adoption by the Commission two years ago, the pricing approach remains unique to Australia. This limits the Commission's opportunity to evaluate the methodology and to share experiences with other regulators.

For these reasons the CCC does not believe that any attempts to "refine" the current approach should be considered.

124. Consequently, the CCC is of the view that the Commission should now move to an explicit cost based approach to regulating the price of the mobile terminating service.

125. In the CCC's view the mobile terminating service meets the following requirements:

- The service is necessary for competition in dependent (downstream) markets.

¹⁴ See Chapter 4 of the *Access Pricing Principles*.

- The service is supplied in markets where the forces of competition, or the threat of competition, work poorly to constrain the price of access to efficient levels.
- The service is well developed in the market and has established demand characteristics.

Consequently, in accordance with the Commission's *Access Pricing Principles*, the CCC is of the view that the appropriate cost based approach is that which calculates a price based on the total service long-run incremental cost (TSLRIC) of providing the service. This is the same approach adopted by the Commission in regulating the price of PSTN access, which is characterised by the same requirements listed above.

Fixed and common costs

126. Earlier in this submission, the CCC commented that the marginal cost of a call on a mobile network is likely to be minimal because network costs are characterised by fixed and common costs rather than variable costs. This is the case with the PSTN and has been commented upon by the Commission in its deliberations on PSTN access pricing. Thus in implementing any explicit cost based approach to pricing the mobile terminating service, consideration must be given as to how fixed and common costs are to be allocated.
127. It is possible in this inquiry that some stakeholders may seek to justify the current (above cost) charges for the mobile terminating service in terms of Ramsey pricing. This, presumably, would be based on a contention that F2M calls have relatively low price elasticity¹⁵. While acknowledging the theory of Ramsey pricing, the CCC notes that it is very difficult to implement. The CCC is of the view that any consideration of Ramsey pricing must be based upon:
- Reputable empirical evidence, and not opinion or circumstantial evidence, and include reliable quantitative estimates of all relevant price elasticities.
 - Recognition that a single price for mobile termination should be determined. This price would apply equally to F2M and M2M off-net calls, since they use the same mobile terminating service¹⁶.

The CCC notes that the Commission has not applied Ramsey pricing to the allocation of fixed and common costs in determining PSTN access prices, partly for the reasons stated above.

128. Consequently, the CCC is of the view that the Commission should ensure a consistent approach to the mobile terminating service and PSTN access. This suggests that in adopting an explicit cost based approach, the allocation of fixed and common costs in a mobile network should be allocated in accordance with minutes and/or calls.

¹⁵ Such a contention would be inconsistent with any claim that call back diffuses MNO control over the mobile terminating service.

¹⁶ The CCC can see no justification for differential prices for the same wholesale service. As stated elsewhere, it appears that the current M2M differential pricing is already contributing to a transfer of calls from the low cost fixed network to higher cost mobile networks, with this transfer being partly subsidised by F2M callers through above cost prices for the mobile terminating service.

Network externalities

129. It is possible in this inquiry that some stakeholders may seek to justify the current and future (above cost) charges for the mobile terminating service on the basis of network externalities.
130. The CCC notes the reference in the Discussion Paper to the UKCC Report and the decision of the UK Commerce Commission to include a surcharge on the cost of the mobile terminating service in recognition of network externalities. While generally supporting the analysis and findings of the UKCC Report, the CCC has concerns with any consideration of using the UK findings to justify a similar impost in Australia. The reasons for this include the following:
- The UK remit was to examine only 2G services, whereas this inquiry is across the full range of GSM and CDMA 2G, 2.5G and 3G technologies. This means that the possibility of any surcharge being misdirected to the promotion of the developing data services, and the necessary upgrade in handsets to access such services, must be taken into account.
 - The UK mobiles market is not characterised by the same skewness of MNOs¹⁷ that exists in Australia, nor by the presence of integrated MNOs. For example, the perverse consequence of any surcharge included in the price of the mobile terminating service is that third party carriers¹⁸ would cross-subsidise the largest mobile network in Australia so enhancing the profitability of that network, thus allowing Telstra, in turn, to use these additional profits to compete with the third party carriers in the F2M market.

In addition, the UK analysis does not appear to place a ceiling on mobile penetration beyond which the surcharge no longer applies¹⁹, nor does it discuss whether a per minute surcharge is the most efficient means of cross-subsidising new mobile subscribers²⁰. Further, it does not investigate whether those end-users encouraged to take up mobile subscription can afford mobile call charges in the long term (including the prospect of aggressive marketing of the developing data services by the MNOs to increase overall ARPUs in the face of declining voice ARPUs).

131. In paragraphs 16 and 17 above, the CCC has commented on declining voice ARPUs and the fact that additional mobile subscribers are now marginal. The CCC is of the view that, in respect of voice services, there are now no network externalities (if such ever existed) given the current level of mobile penetration.
132. The CCC sees no merit in the case for a surcharge to reflect network externalities, particularly as it would require ongoing administration by the Commission to ensure that the proceeds of the cross-subsidy were targeted to the intended purpose and to

¹⁷ That is differences in network coverage, subscriber numbers and market share.

¹⁸ Defined in this submission as fixed line carriers who are not MNOs.

¹⁹ That is, it appears to endorse increasing penetration simply for the sake of growth.

²⁰ For example, in Australia “uneconomic” PSTN customers are funded through the USO which is a lump sum calculation and not a per minute surcharge on PSTN calls.

ensure that the MNOs (and in particular the integrated MNOs) are charging themselves the same surcharge as is imposed on third party carriers.

Cost based pricing

133. Throughout this submission the CCC has argued that charges for the mobile terminating service should be based on “efficient” prices. As noted above, the CCC is of the view that this is best achieved if such prices are calculated in accordance with TSLRIC, with fixed and common costs allocated in the same manner used by the Commission to determine PSTN access prices. Also, “the service” to which TSLRIC should apply is the mobile terminating service as currently defined, which, like the corresponding PSTN access services, is used primarily for the carriage of voice calls.
134. In its determination of PSTN access prices, the Commission has used a TSLRIC model to calculate call conveyance costs including the allocation of fixed and common costs. The CCC is of the view that use of a similar TSLRIC model for calculating “efficient” costs of “the service” would also be appropriate.
135. As noted in the Commission’s Discussion Paper, there are 4 MNOs and 6 GSM/CDMA networks in Australia. There are large differences in the coverage of some of these networks and the number of subscribers connected to them.
136. Consistent with the CCC’s view on market definition that there is a single market for mobile termination, the CCC is of the view that a single price should be determined for the mobile terminating service. This should be based on an efficient MNO, where “efficient” takes into account the profitability of the mobile network, i.e. a loss making network with a small number of subscribers is unlikely to meet the LTIE criteria of efficient use of, and investment in, network infrastructure. On this basis, the CCC would suggest that Telstra’s GSM network is likely to represent the most appropriate mobile network for modelling the TSLRIC of the well developed mobile terminating service.
137. The CCC is aware that the Commission does not currently have a TSLRIC model of an efficient MNO, and that it would take some time to develop such a model. Because of this lead time the CCC recommends that, as part of this inquiry, the Commission researches how it might acquire and/or develop a TSLRIC model. In the UKCC Report (chapter 7), the CCC notes that the UK Commerce Commission compared the costs of the mobile terminating service calculated using both a LRIC model and MNO cost data, and that the results were similar. Noting that the Commission already has ready access to RAF data, the CCC also recommends that as part of this inquiry the Commission investigate the suitability of this data²¹ for calculating interim “efficient” prices until a TSLRIC model becomes available and can be used. Such an interim rate would give industry guidance in the same manner as proposed for the model terms and conditions covering core services. Furthermore, such a two stage process would see the proxy rates immediately flowing through the market whilst the issue of the adequacy of present resources available to the Commission to undertake the broader process are addressed.

²¹ Together with cost data and related analysis undertaken in other jurisdictions.

Monitoring internal transfer prices

138. Earlier in this submission, the CCC identified the need for pro-active price regulation, which included the Commission applying provisions in its *Access Pricing Principles*. Specifically, this included monitoring the internal transfer prices for the mobile terminating service (especially for the integrated MNOs) to ensure that such prices were consistent with the legislative criteria of Part XIC. It is the CCC's understanding that in the case of Telstra this should be a relatively simple exercise using accounting separation data.
139. In the CCC's view, reducing to cost the price of the mobile terminating service charged to third party carriers, may not be sufficient to meet the LTIE requirement of promoting competition in dependent markets. What is also required, as parallel regulation, is full compliance with the provisions set out in the *Access Pricing Principles*. This is of critical importance because of the magnitude of the price of the mobile terminating service relative to all other costs of an F2M call, and the flexibility the MNOs (particularly the integrated MNOs) have to price discriminate.

Compliance costs

140. The above regulatory regime is similar to that already in place for regulating PSTN access. Accordingly the CCC would envisage that compliance costs would be similar. The PSTN compliance costs appear to have been accepted by the Commission as reasonable, and the CCC sees no reason why the Commission should not accept similar costs for regulating the mobile terminating service as also being reasonable.

Pass Through

141. The CCC is confident that, should third party carriers be charged a cost based price for the mobile terminating service, the cost of mobile termination will reduce by an amount which will promote competition in F2M calls through reductions in the retail prices of those calls. This view is supported by the CCC's experience with cost reductions in the provision of national and international long distance calls.
142. Should the Commission decide, as part of the implementation of cost based pricing, to monitor the pass through of such cost reductions, the CCC would fully support this process. The CCC suggests to the Commission that, should it decide to monitor pass through, this program could be considered at the same time as the Commission's forthcoming review of the price control arrangements.

CONCLUSIONS

143. In summary, the CCC recommends that:
- An explicit cost based pricing of the mobile terminating service be implemented by the Commission, in association with a monitoring program of MNO internal transfer prices to ensure compliance with the provisions set out in the *Access Pricing Principles*.

- TSLRIC should be the choice of costing methodology, with a single price across all mobile networks. The most appropriate choice of MNO to model is likely to be Telstra's GSM network.
- Until the Commission is able to acquire and/or develop a TSLRIC model, it should consider the use of RAF (and other) data to calculate interim prices, with a view to giving industry guidance in the same manner proposed for the model terms and conditions covering core services.
- Should the Commission be concerned about pass through of any reductions in the price charged for the mobile terminating service, it should consider instituting a monitoring program.

The CCC is confident that these recommendations, if fully implemented, will promote competition, improve mobile network utilisation, and establish the appropriate pricing signals for network infrastructure investment (for both fixed and mobile networks).

DOMESTIC GSM AND CDMA ORIGINATING ACCESS SERVICE

144. The CCC notes the Commission's comments in the Discussion Paper that the current regulated mobile originating service is far more limited in scope than the mobile terminating service, i.e. it only applies to calls made to numbers such as 13/1300 and 1800 call services. The CCC would expect the majority of these calls from a mobile subscriber would be voice, although it might also be expected that there is also a requirement for a data over the voice band capability (e.g. for fax calls).
145. The CCC does not disagree with the limited scope of the service definition, and is of the view that this could continue. In particular, at this stage it sees no requirement for a mobile originating service for data calls of the type discussed earlier in this submission.
146. For the same reasons set out above relating to the mobile terminating service, the CCC is of the view that the current service description remains appropriate for all GSM and CDMA 2G, 2.5G and 3G technologies. Also, the MNOs have control over the originating service in the same way they have control over the terminating service.
147. The CCC is aware that all MNOs currently charge for 13/1300 and 1800 call services on a different basis to the corresponding calls originating on the PSTN. The CCC understands this involves air time charges to the mobile end-user, with rates likely to vary by number type.
148. In the Discussion Paper (Figure 5.4), the Commission shows how the mobile originating service would be used to provide a call from a mobile phone to a 13/1300 and 1800 service provider. This involves the service provider acquiring mobile origination from the MNO and possibly PSTN termination.
149. An alternative arrangement is where the MNO seeks connectivity with the 13/1300 and 1800 service provider by means of a PSTN termination service, i.e. the MNO remains the primary service deliverer for these types of calls. In this way the MNO sets the call charges and bills the mobile end-users. It is the CCC's understanding that this is currently the preferred arrangement for the provision of 13/1300 and 1800 calls from mobile phones.
150. If this is the case, then the requirement for a mobile originating service is diminished. However, it is not entirely removed for the reason that an MNO could refuse to provide connectivity to a particular 13/1300 or 1800 service, leaving the 13/1300 and 1800 service provider with no option but to acquire the mobile originating service.
151. Turning now to the LTIE criteria, the CCC comments as follows:
 - The relevant markets are the mobile originating service market, and the 13/1300 and 1800 markets.
 - As with the mobile terminating service, there are no competitive forces present in the wholesale market and hence an efficient price for the service will only be

achieved through regulation. This in turn will promote competition in the downstream 13/1300 and 1800 markets.

- For the reason stated above, any-to-any connectivity requires that the mobile originating service be supplied and this will only be guaranteed with regulation of the service.
- Since 13/1300 and 1800 calls represent a relatively small percentage of mobile calls, it is likely that regulation of the mobile originating service would have minimal impact on the efficient use of, or efficient investment in, infrastructure.

For all these reasons the CCC is of the view that the current mobile originating service (in its limited scope) as defined, should continue to be regulated.

152. As with the mobile terminating service, pricing of the mobile originating service should be “efficient” and this is best achieved if it is set at the same level as that of the mobile terminating service.

3G MOBILE SERVICES

153. Throughout this submission the CCC has expressed the view that the mobile terminating service required to provide F2M calls²² is the same across all GSM and CDMA 2G, 2.5G and 3G technologies, i.e. the service description is technology neutral. In its March 2002 report varying the description of the mobile terminating service the Commission simply extended the GSM service description to include CDMA. It did not make any variation to reflect the upgrade in GSM networks from 2G to 2.5G.
154. The CCC can see no reason why the current service descriptions can not continue to apply to 3G technology, as already appears to be the case.
155. As indicated earlier in this submission the case for regulation of the current mobile terminating service rests mainly upon the promotion of competition in the downstream F2M and related markets for voice calls. However, as advocated, regulation should also apply to M2M voice calls for the purpose of monitoring the internal transfer prices of the MNOs.
156. The business case for 3G appears to be based on the demand for enhanced data services, in particular video services. The CCC has characterized all these data services as “developing” and recommends that the Commission monitor, rather than regulate, these for the time being.
157. Consequently, for the purposes of this inquiry the CCC concludes that 3G services should be treated in the same manner as 2G and 2.5G services.

²² As well as the mobile originating service required for mobile calls to 13/1300 and 1800 numbers.