

**Optus submission**

**to the Australian Competition and Consumer  
Commission**

**Proposed variation to make the GSM service  
declarations technology neutral**

**October 2001**

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## **Introduction**

This paper is written in response to the Australian Competition and Consumer Commission's (the Commission) discussion paper examining a proposed variation to make the Domestic GSM Originating and Terminating Access Service technology-neutral with respect to technologies currently in use.

### **Executive Summary**

The over-riding point of Optus' submission is that the best way to ensure that regulation is applied in a technology neutral fashion is to revoke the GSM service declaration, as opposed to declaring the CDMA service. Optus finds it unfortunate that the Commission's discussion paper focuses almost exclusively on the option of declaring the CDMA service rather than examining whether revocation of the GSM service declaration is a more beneficial path forward.

In particular, Optus rejects the notion that issues raised in relation to GSM termination, such as control over access and consumer ignorance, are relevant to other networks, not because other networks have different characteristics, but because the analysis conducted by the Commission in relation to GSM termination is flawed. Optus does not believe the further extension of this analysis is good policy, and recommends the revocation of the GSM declaration.

The main arguments put forward in this submission will support the contention that the Commission should revoke the GSM service declaration. We argue that the the current declaration of GSM is not in the long term interests of end users (LTIE).

If the Commission is not minded to revoke the GSM declaration, then Optus agrees that the current regulation is anomalous, and that the declaration of the CDMA service to bring parity with the GSM declaration would be reasonable.

Optus will also clarify our understanding of the current GSM declaration. In particular, Optus does not believe that either SMS or 2.5G services are captured by the current service description. We believe there is no need to extend the service declarations to include these services. Optus does not support including SMS or 2.5G services in the current or future GSM service descriptions.

## **1. Future scope of the GSM declaration**

- 1.1 Given the highly competitive nature of the mobiles industry, we believe the domestic GSM originating and terminating access service (GSM declaration) is no longer necessary or desirable.
- 1.2 As such, we believe that the recommendation arising from the current Commission discussion paper should be the revocation of the declaration.
- 1.3 We have outlined in Section 2 the competitive state of the mobiles industry in support of our contention.
- 1.4 If the Commission is not minded to proceed with the revocation of the declaration, Optus views the current regulatory environment as being anomalous, given the non-declaration of CDMA networks, which provide a substitutable service. As such, if the Commission does not agree that the GSM declaration should be revoked then it should move to instigate a technology neutral service description.

### **The LTIE statutory criteria**

- 1.5 The Commission described in the following terms the LTIE statutory criteria which it takes into account when deciding whether to declare a service, revoke a declaration or grant an individual or class exemption in a recent report:

“The test for declaration of the eligible services... is the long-term interests of end-users test. That is, the Commission must be satisfied that making the declaration will promote the long-term interests of end-users of carriage services or of services provided by means of carriage services.

In order to determine whether declaration will promote the long-term interests of end-users, s. 152AB of the Act provides that the Commission must consider the extent to which declaration is likely to result in the achievement of the following objectives:

- the objective of promoting competition in markets for carriage services and services supplied by means of carriage services;
- for carriage services involving communication between end-users, the objective of achieving any-to-any connectivity; and
- the objective of encouraging the economically efficient use of, and economically efficient investment in, the infrastructure by which

carriage services and services provided by means of carriage services are supplied.<sup>1</sup>

In the Commission's view these are essentially 'secondary objectives'.<sup>2</sup> They are not ends in themselves but are the means by which the primary objective (of promoting the long-term interests of end-users) is to be realised."<sup>3</sup>

### **Revocation of the GSM declaration would be in the LTIE**

- 1.6 Optus believes that revoking the GSM service declaration is in the LTIE. Declaration of services, and maintaining declarations, is likely to be in the LTIE where the operator of those services possesses significant market power. A good example of this is Telstra's PSTN originating and terminating access service.
- 1.7 However, mobile operators do not possess significant market power, as there are multiple mobile networks vigorously competing for customers. The mobile industry is characterised by indicators not normally associated with either market power or significant market failure including:
- (a) De-concentrated market structures;
  - (b) Low barriers to entry and a demonstrated ability of new entrants to rapidly acquire market share;
  - (c) Strong growth and technological change;
  - (d) The decision to subscribe to a mobile network is price elastic or marginal for a significant portion of Australian consumers; and
  - (e) Less than full penetration (generally in the range of 20 to 65 per cent worldwide).
- 1.8 The mobile industry structure and market performance is elaborated in section 2. Section 2 provides the evidence the Commission would need to revoke the GSM declaration.
- 1.9 Extending the declaration to include CDMA services is not likely to be in the LTIE because, like GSM networks, CDMA networks do not possess significant market power.

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<sup>1</sup> Subs. 152AB(2) of the Act.

<sup>2</sup> Part XIC of the Act does not use the adjectives 'primary' and 'secondary' to distinguish between the objectives. However, the Commission uses them to assist in placing the competition, any-to-any connectivity and efficiency objectives within the context of the overall long-term interests of end-users objective.

<sup>3</sup> ACCC, January 2000, "Competition for long distance mobile telecommunications services, A report about declaration of a long distance mobile originating service", pp. 4-5

## **The specific question of mobile termination**

- 1.10 In calling party pays countries, the case for regulation rests on the argument that because the calling party has no choice over the network to which the called party subscribes, the terminating operator has a monopoly or “bottleneck” control over terminating calls to their subscriber base, and therefore can price termination services above normal competitive levels. The argument continues that without price regulation, the terminating mobile operator can raise interconnection charges for terminating calls above costs and against the public interest.
- 1.11 Optus has submitted extensively on this issue, and restates its view that mobile termination is not a bottleneck. As such, declaration does not advance the LTIE — the competitive process does.
- 1.12 In particular, there is pricing interdependence between mobile origination, termination and subscription charges. Mobile telephony is sold by firms as a bundled package to consumers with three primary revenue streams:
- (a) Mobile subscription fees;
  - (b) Mobile call origination charges; and
  - (c) Charges for terminating calls on mobile networks.
- 1.13 Given effective competition for mobile subscribers between current firms, a regulated decrease in the price of one of these component revenue streams will necessarily produce offsetting increases to other mobile prices. In particular, a decrease in the mobile termination charge will produce an offsetting increase in mobile subscription and origination charges in a competitive equilibrium. This means that mobile carriers do not have market power over terminating access. Rather, terminating access creates a chooser/payer dichotomy giving rise to both positive and negative externalities. It can be shown that the elasticities of demand for these services would have to be very strange before a welfare benefit from regulation could be obtained.

## **Applying the LTIE**

- 1.14 Each of the three statutory objectives comprised in the test for LTIE is best achieved by revoking the GSM declaration. Extending the scope of the declaration demonstrably harms the LTIE, and should be seen as a second best policy prescription.
- 1.15 Revocation of the GSM declaration would promote competition in the mobile market. There is considerable competitive uncertainty associated with the application of the GSM declaration. As described above, the regulation of pricing in relation to the GSM declaration will have a significant effect on the structure of market pricing. Competition has led to the current pricing structure

with low upfront costs for consumers. This is the type of activity one would expect in an emerging competitive market.

- 1.16 Pricing intervention in relation to the GSM declaration is likely to increase handset prices and thereby slow mobile penetration, undermine efficient pricing structures and undermine competition. Mobile penetration is currently a significant indicator of the highly competitive state of the mobiles market. The mobile operators may not compete as vigorously for consumers following any interference in the current efficient pricing structure.
- 1.17 Revoking the declaration means that the operators are free to continue to offer the diverse range of pricing plans and offerings that have been a hallmark of competition. Such an approach will promote competition by providing a better environment for such competition to continue than that which may arise from price regulation.
- 1.18 Extending the declaration to CDMA networks would simply threaten pricing innovation in CDMA networks, to the detriment of their performance in adding new subscribers.
- 1.19 The revocation of the GSM declaration would not have any adverse impact on any-to-any connectivity. Each operator has a strong incentive, in a highly competitive market, to ensure that its customers are all able to call the customers of other operators. Similarly it is in all operators' interests to ensure that they can make and receive calls at reasonable prices, otherwise consumers would not connect to their networks or calls would be routed in alternative ways to avoid prohibitive charges. Any-to-any connectivity is naturally achieved in a competitive marketplace, such as that which exists in the mobile sector.
- 1.20 Optus notes that the Commission agrees that declaration of mobile services does nothing to promote any-to-any connectivity:

“...despite CDMA networks not being declared services, end-users connected to them still enjoy the benefits of any-to-any connectivity. Carriers and carriage service providers who do not provide such connectivity would find it difficult to attract end-users and grow their market share.”<sup>4</sup>
- 1.21 Most importantly the revocation of the GSM declaration will tend to promote infrastructure investment. The future business cases of the mobile operators are undermined by the uncertainty which currently exists are a result of the declaration and pricing principles. Such uncertainty leads to investment uncertainty. This uncertainty would be reduced by revocation of the declaration. This will not, however, merely benefit the operators. It will benefit consumers because infrastructure competition is the best way of delivering long term competition based on price, innovation and product range.

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<sup>4</sup> ACCC, 2001, “Proposed variation to make the GSM service declarations technology-neutral”, p. 21

## Summary

- 1.22 In summary, Optus believes that the mobiles industry is competitive, and as such should not be subject to access regulation. Optus recommends that the Commission should revoke the GSM declaration.
- 1.23 If the Commission is minded to keep the current GSM declaration in place, then the Commission should vary the declaration to take into account the range of networks currently in existence, by moving towards a technology neutral approach.
- 1.24 The reason the Commission would need to extend the GSM declaration if it was not minded to revoke it is that currently the competitive neutrality between the substitute mobile technologies is not assured. It is important to ensure that one technology is not artificially assisted in competing against another technology, as is currently the case. Given that mobile termination regulation distorts pricing decisions, and inhibits the ability of operators to structure prices in response to the market, the first best option is to revoke the declaration on GSM services. However, the second best policy response is to extend the declaration to CDMA services. The third best policy response is to continue with uneven treatment of substitute mobile technologies, which is the current situation.
- 1.25 Mobile number portability brings the importance of a technology neutral declaration to the fore. Given that the service is linked to number ranges, once customers port their number from one network to another, the Commission may find that a small segment of the CDMA network is declared, while a small segment of the GSM network has effectively had its declaration revoked. This is clearly not the intent of Commission policy, and should be guarded against, as it would make the access regime completely unworkable.



## 2. What is the state of competition in mobile services?

- 2.1 In the Commission's discussion paper, it asks whether its competition analysis of the current state of competition in the mobile services market and the related downstream fixed-to-mobile services market accurate.
- 2.2 As stated in section 1, Optus has consistently disagreed with the Commission's hypothesis that consumer ignorance produces the mobile termination bottleneck. Optus has submitted extensively in the past in support of our view. In particular, the empirical data available does not support the contention that mobile operators have market power over mobile termination, since these same mobile operators continue to lower their termination rates. More broadly though, Optus believes that the Commission has under-stated the degree of competition in the mobiles market, and presents the following analysis in an effort to demonstrate the mobile market's competitiveness.
- 2.3 All available evidence shows the mobiles industry is performing very well, and there is no case for maintaining the GSM declaration. The mobile market in Australia is effectively competitive, as illustrated by the following:
- (a) There are four nationwide ubiquitous competitive networks — Telstra, Optus and Vodafone GSM networks and Telstra CDMA network;
  - (b) There is another CDMA network which covers Sydney and Melbourne — Hutchison (Orange) launched its CDMA network in 2000 in Sydney and Melbourne. Further, Hutchison(Orange) also has access to Telstra's nationwide CDMA network through roaming agreements;
  - (c) There are sufficient spectrum holdings to launch another four networks — One.Tel's network was extensive, and the network assets are available to any new entrant. AAPT owns sufficient 800 MHz spectrum to launch a CDMA network. Hutchison(Orange) owns sufficient 800 MHz spectrum to launch a GSM 800 network. Finally, The OziTel Network(TON) had commenced building a GSM 800(IDEN) network in Sydney and Melbourne based on 800 MHz spectrum;
  - (d) There are five new 3G networks being rolled out — Telstra, Vodafone, Optus, Hutchison(Orange) and Qualcomm all acquired either nationwide or metropolitan spectrum, and can launch their 3G networks from October 2002. While 3G networks are not a perfect substitute for either GSM or CDMA 2G networks due to the additional functionality they provide, 3G networks do provide basic voice services like 2G networks.
  - (e) There is vigorous competition at both retail and wholesale levels of the mobile market as evidenced by low prices, low industry concentration and rapidly changing market shares;
  - (f) The elasticity of demand for mobiles is high;

- (g) Output is not being restricted below competitive levels as evidenced by high penetration rates and growth trends exceeding other countries;
  - (h) There are low barriers to entry as evidenced by the rapid success of Vodafone, Orange and One.Tel in acquiring subscribers. The demise of One.Tel & TON does not diminish this point, and the fact that there is interest in both their spectrum, base station sites and network assets demonstrates that the nature of their investments was not exclusively sunk; and
  - (i) Australia is amongst the most highly penetrated and lowest priced countries in the world for mobile services.
  - (j) The recent launch of MNP in September 2001 has substantially increased competition in the Australian marketplace and will lead to increasing levels of churn.
- 2.4 Australia had achieved 48 per cent penetration of mobile services as at 30 September 2000, with 9.3 million users, placing us amongst the most highly penetrated countries in the world. More recent benchmarking indicates the gains in consumer surplus in financial year 1999–2000 alone from increased penetration, higher quality and lower pricing is over \$2 billion per annum.
- 2.5 Despite this performance, mobile services are being erroneously subjected to declaration by the Commission.

### **Competitive analysis**

- 2.6 The fixed service market constrains the exercise of market power in mobiles to a significant extent. The mobiles market is relatively new and immature, and is exhibiting the strong growth and increased penetration levels characteristic of a start-up evolving a dynamic network and industry structure. Much of the growth stems from consumers substituting cellular service for their traditional usage of plain old telephone service (POTS) as the downward trend in mobile prices intensifies.<sup>5</sup>

### **Competition at the retail level is extremely vigorous**

- 2.7 There is extremely vigorous competition in the mobile market at the retail level. Sufficient influences exist which each participant must take into account and which constrain their behavior.
- 2.8 The price data showing the competitive performance of mobiles is not available in a continuous fashion from the launch of GSM until today. The data Optus has been able to secure is as follows:
- (a) Optus internal data for mobile prices between 1993 and 1998; and

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<sup>5</sup> For example, the Optus 'yes' Time promotion offering free calls between Optus mobiles is an example of a competitive substitute for fixed line service.

(b) DCITA data from 1997 to 1999.

2.9 Both sets of data demonstrate that retail prices have fallen since 1993, and are at competitive levels.

***Optus internal data***

2.10 Pricing of mobile services has already been historically subject to fierce competition as is evidenced by a comparison between what an average customer paid in 1993 for Optus GSM services and what they would pay in 1997. In 1998, the average customer was paying in real prices 26 per cent less for access fees and call charges (see Figure 2.1). In calendar year 1998, Telstra dropped its mobile prices by a further 6 per cent in real terms. Optus was required to meet this competition via, in particular, further access and handset discounts because its demand curve is highly elastic.

**Figure 2.1: Optus competitive price reductions in mobiles market (access fees and call charges), 1993–1998**

2.11 The range of pricing plans and special promotions such as ‘yes’Time are also indicative of the dynamic state of the market. Under this promotion, calls between Optus mobile customers are free between 8pm and 12pm. The advent of pricing plans has enabled customers to select a plan that meets their particular needs. This not only saves the customer money but also allows a mobile operator significant scope to differentiate itself in terms of price and diversity of product offered.

***DCITA price data — 1997–99***

- 2.12 More recent benchmarking by the CRU for the ACCC has found usage price have continued to fall from 1997 to 1999. The ACCC “Telecommunications charges in Australia” report at page 47 finds that GSM mobile prices fell 10 per cent between 1997–1999:

*“The average price per minute paid by consumers for mobile telephony, including access, connection and call charges but excluding handset costs, is estimated to have declined between 1997 and 1999. The CRU estimates that nominal price per minute has declined by around 10 per cent (Figure 2.2). ....*

**Figure 2.2: Change in average price paid per minute – digital mobile services 1997 –99**

*Source:* CRU estimates based on data provided by Telstra, Optus and Vodafone.

- 2.13 More recent benchmarking by the CRU, that also incorporates the price of handsets, has found the total price of GSM service has fallen by 19 per cent in real terms since 1996. The price falls have ranged from 47 per cent for very low users to 16 per cent for very high users. Quoting from the CRU report: “Mobile telephony in Australia, measuring price change”, presented by Peter Collins at the Communications Research Forum October 2000:

**Table 2.1 Bundle Price Indices**

	<b>1996/97</b>	<b>1997/98</b>	<b>1998/99</b>	<b>1999/2000</b>
<b>very low user</b>	100.00	94.55	74.60	53.00
<b>Low user</b>	100.00	95.69	87.99	72.37
<b>Medium user</b>	100.00	95.92	94.20	81.00
<b>High user</b>	100.00	95.57	89.25	78.80
<b>very high user</b>	100.00	97.21	95.28	84.38

2.14 An overall index was then calculated by weighting each bundle, or quintile, by its aggregate value in the market (Table 2.2).

**Table 2.2 Mobile Price Index**

	<b>1996/97</b>	<b>1997/98</b>	<b>1998/99</b>	<b>1999/2000</b>
<b>Mobile Price Index</b>	100.00	96.55	92.82	81.11

**Figure 2.3: CRU mobile price index, 1996–97 to 1999–2000**

### **Current pricing of mobiles is competitive**

- 2.15 Not only have mobile prices trended downward in Australia, but on an international basis, they are amongst the lowest in the world. This reinforces the point that mobile prices are at competitive levels.
- 2.16 As demonstrated consistently by the benchmarking work done by several independent consultants below, Australian prices for mobiles consistently rank amongst the world's lowest. The mobiles market is competitive. A representative sample of these benchmarking charges for mobile calls is provided in Figures 2.4–2.7.

### **Figure 2.4: Total cost of a mobile package, OECD**

Source: OECD, Communications Outlook, 1999

2.17 Figure 2.4 is sourced from OECD benchmarking.<sup>6</sup> It shows the total costs of a mobile package, including handset and usage prices for a moderate user of a mobile telephone. Australia, as represented by Telstra's pricing, ranks fifth lowest priced within the OECD.<sup>7</sup> The OECD average cost is above US\$1000, whereas Australian prices are closer to US\$600, 40 per cent below the competitive benchmark of the OECD average.

**Figure 2.5: Relative mobile prices for small businesses, February 1998<sup>8</sup>**

Note: The price index is expenditure in each country (in \$US using PPP exchange rates) on a fixed basket of cellular mobile services. The expenditures are valued at February 1998 prices based on the widely available discounting plan that minimises cost to the customer.

Source: Productivity Commission estimates based on Eurodata (consultant) data.

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<sup>6</sup> See Communications Outlook 1997, at p. 129.

<sup>7</sup> It should be noted that Optus and Vodafone are constrained by this Telstra pricing and, in general, would need to offer better packages to consumers to entice patronage, given the incumbent's economies of scope, scale and ubiquity.

<sup>8</sup> This information has been sourced from the Productivity Commission's (PC) Report "International Benchmarking of Telecommunications Services", 1999.

## Figure 2.6: Relative mobile prices for medium to large businesses, February 1998

Note: The price index is expenditure in each country (in \$US using PPP exchange rates) on a fixed basket of cellular mobile services. The expenditures are valued at February 1998 prices, based on the widely available discounting plan that minimize cost to the customer.

Source: Productivity Commission estimates based on Eurodata (consultant) data.

### 2.18 Quoting from the Productivity Commission report:

“ As for small businesses, Australia’s relative performance for mobiles used in medium and large businesses is better than for most other telecommunications services because of low call charges..... Of the eight countries studied, Australia has the lowest usage charges for calls to the PSTN and the second lowest charges for calls to mobile telephones.”<sup>9</sup>

2.19 The result is particularly noteworthy given, as illustrated below, Australia is in the relatively early stages of the mobile product life cycle, which is generally characterized by low handset prices and relatively higher mobile usage charges — to encourage increased network penetration and take up. Note that two-thirds of the mobiles market are business users, so the results shown in Figures 2.5 and 2.6 are particularly important.

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<sup>9</sup> Productivity Commission, 1999, p. 137.



2.20 In the residential market, Australia is again performing well against the benchmark countries, as shown in Figure 2.7, having the third lowest usage prices of this better performing sample.

**Figure 2.7: Relative usage prices for residential mobile telephone services, February 1998 (calls)**

Note: The price index is expenditure in each country (in \$US using PPP exchange rates) on a fixed basket of cellular mobile services. The expenditures are valued at February 1998 prices, based on the widely available discounting plan that minimise cost to the customer.

Source: Productivity Commission estimates based on Eurodata (consultant) data.

2.21 The Productivity Commission has released a more recent international benchmarking report that shows Australia to be performing less well on a range of pricing benchmarks. Unfortunately, the Productivity Commission used an incomplete methodology for its pricing study. Instead of studying the total price of mobile services, including the handset, connection, monthly rental and airtime, the Productivity Commission chose to only benchmark airtime. This distorted the benchmarking, as most price competition in Australia has occurred at the connection and handset level, as well as the inclusion of free calls, which lowers the effective monthly access fee.

2.22 Figure 2.8 shows benchmarking done by Ovum for the ACCC. It shows that Telstra has the lowest mobile termination rates in the world for calls to mobiles. This again shows the highly competitive nature of the mobile market in Australia.

2.23 In summary, all available data shows that Australia's mobile access and usage prices are amongst the lowest in the world, are falling rapidly, and are likely to continue to fall rapidly. Competition in the mobiles market is clearly very effective.

**Figure 2.8: Comparison of peak mobile termination charges in PPP \$Aus**

Source: Ovum, An assessment of Telstra's access undertakings, A report for the ACCC, p. 35

Note: Peak in Australia classified as between 7am and 7pm, when over 80 per cent of all mobile calls are made. Telstra was also below average in off peak.

**Elasticity of demand for mobile market is high**

2.24 The market power of any firm is further constrained by the elastic demand for the mobile market. The demand for mobile services is quite elastic as shown by empirical studies that estimate the own price elasticity of demand for mobiles ( $\Delta Q/Q/\Delta P/P$ ) to be significantly higher than for fixed line service.

2.25 For example, the Access Economics (1998) review of the literature at pg 99 estimates the industry own price elasticity for mobiles at 0.8, whereas the elasticity for basic access was 0.03 and for local calls was 0.06. The higher order of magnitude elasticity for mobiles was:

“because of the existence of fixed services as a close substitute in many locations.”<sup>10</sup>

- 2.26 The 0.8 figure reflects an industry elasticity of demand; the demand curve for any one firm’s mobile product would be much more highly elastic. This makes the exercise of market power by any firm even more unlikely.

### **Output is not being monopoly constrained in the mobiles market**

- 2.27 If a market is characterized by market power, evidence of dominant behavior should be prevalent. For example, we would expect to see consumers harmed as firms restrict output below the competitive level. However, this is not the case in the mobiles market since take up and expansion is amongst the most rapid in the world.

- 2.28 The current growth rates in customer acquisition are also evidence of the highly competitive nature of the market. As Paul Budde notes:<sup>11</sup>

“During the mid nineties, the effects of increased levels of competition at infrastructure level in the cellular market have become evident. Increased network coverage, product innovation, lower tariff and handset prices, improved levels of customer service and new distribution strategies have all contributed to the continued growth (around 65 per cent) in the market.

Mobile telephony is one of the high growth areas in the Australian market. Among the OECD countries, only the Scandinavian countries experienced faster growth rates.”

- 2.29 Figure 2.9 shows Australia as the fifth most penetrated country in the world:<sup>12</sup>

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10 Access economics, 1998, p. 100

11 Ibid, para 6.1.2

12 These figures are sourced from the OECD.

## Figure 2.9: International mobile penetration rates, OECD

Source: OECD “Cellular Mobile Pricing Structures and Trends”, May 2000. Australian data taken from ABN Amro July 2000

- 2.30 Penetration figures are expected to increase further as a result of the popularity of pre-paid services. Pre-paid services enable low spend users and potential bad debt consumers to enter the mobile market. Pre-paid services have introduced increased flexibility and therefore choice to end users.
- 2.31 In the future, as the market moves further into its second phase of growth, the marketing emphasis will shift from customer acquisition to customer retention, and even lower usage prices can be expected. This will occur without any requirement for regulatory intervention as part of the natural evolution of the mobile industry.

**There are low barriers to entry in the mobile market**

2.32 The mobiles industry is characterised by intense competition between network based competitors. Currently there are four mobile operators, with eight operational networks competing for customers, as shown in Table 2.3.

**Table 2.3: The proliferation of mobile operators and mobile networks**

<b>Operator</b>	<b>Mobile network</b>
Telstra	GSM 900 GSM 1800 CDMA 800
Optus	GSM 900 GSM 1800
Vodafone	GSM 900 GSM 1800
Hutchison(Orange)	CDMA 800(Sydney & Melbourne) National Roaming on Telstra CDMA 800

2.33 Importantly, the mobiles industry, despite the demise of One.Tel and TON remains competitive, and remains a contestable industry. The barriers to entry are very low, and certainly do not include spectrum, as outlined in Table 2.4.

**Table 2.4: Market entry is contestable**

<b>Contestable networks</b>	
One.Tel	GSM 1800 — network assets and spectrum are available through the One.Tel liquidator to any new entrant who wants to enter the Australian mobile market
TON	GSM(IDEN) 800- network assets and spectrum are available to any new entrant who wants to enter the Australian mobile market
Hutchison(Orange)	Owns 800 MHz spectrum that could be used to launch a GSM 800 network. Has decided to focus on its 3G joint venture with AAPT rather than roll out a GSM network, but presumably would consider selling spectrum to a new entrant
AAPT	Owns 800 MHz spectrum that could be used to launch a CDMA network. Has decided to focus on its 3G joint venture with Hutchison rather than roll out a network, but presumably would consider selling spectrum to a new entrant

2.34 In addition, new market entry will occur in 2002 through the roll out of 3G networks.

- 2.35 The wholesale market for provision of mobile telephony services is very competitive with four existing carriers, nine networks, and two opportunities to enter the market through contestable spectrum and network asset holdings.
- 2.36 Telstra's CDMA network was built and achieved ubiquitous nationwide coverage very rapidly. Vodafone achieved similar ubiquitous network build within three years of its license purchase, and has achieved close to 20 per cent retail market share within four years of its market entry. Barriers to entry are minimal.
- 2.37 Numerous GSM and CDMA resellers already compete vigorously with the four network operators in the mobile market through provision of an end-to-end mobile service.
- 2.38 Table 2.5 shows the GSM market share of different carriers after the demise of One.Tel and TON. Note that despite the demise of One.Tel and TON, Hutchison(Orange) is starting to make its presence felt in the mobile market, with very aggressive pricing deals designed to drive customer acquisition as well as unique CDMA product offerings of a combined mobile and local call service.
- 2.39 Hutchison(Orange) announced solid growth in subscriber numbers in the 3rd quarter of 2000. As at 30 September 2000, the company had 39,048 subscribers on its Orange One Service, up from 11,682 at June 30 2000. This represented quarterly growth of 234 per cent. In its prospectus, Hutchison(Orange) has forecast 400,000 Orange One subscribers by 2002.<sup>13</sup>

**Table 2.5: GSM mobile markets share**

%	1998	1999	2000	2001E	2002E	2003E
Telstra	57.5	52.9	48.3	44.9	44.2	43.4
Optus	30.5	30.6	33.2	33.8	35.9	36.4
Vodafone	12.0	16.5	18.3	18.4	17.8	17.5
Other (mostly Hutchison(Orange))	0.0	0.0	0.2	2.9	2.1	2.7

Source: Company reports, UBS Warburg estimates, August 2001

- 2.40 Hutchison(Orange) is expected to out-perform the mobile market growth over the next four years. As outlined in Table 2.6, these estimated subscriber growth profile for Hutchison(Orange) is impressive.

<sup>13</sup> UBS Warburg, Australian telecoms, 24 October 2000

**Table 2.6: Estimated subscriber growth profile**

<b>%</b>	<b>2001E</b>	<b>2002E</b>	<b>2003E</b>	<b>2004E</b>	<b>2005E</b>
Telstra	28	14	7	4	2
Optus	39	23	10	4	2
Vodafone	36	11	7	2	0
<b>Hutchison (Orange)</b>	<b>767</b>	<b>114</b>	<b>42</b>	<b>25</b>	<b>17</b>
<i>Market</i>	<i>35</i>	<i>15</i>	<i>9</i>	<i>4</i>	<i>2</i>

Source: UBS Warburg estimates, August 2001

### **Large number of alternative providers**

2.41 As discussed, there are currently three GSM 900 MHz network operators providing services to customers. In addition, the spectrum in the 800 and 1800 MHz ranges is starting to be used by new operators to provide new mobile services. This is increasing competition in the provision of mobile services. Combined with the construction of the Telstra CDMA network, and the Hutchison(Orange) network, there are currently eight active mobile networks in Australia. Substantial build-out can be expected due to the co-location rights under Schedule 1, Part 5 of the Telecommunications Act.

2.42 As mentioned earlier, these networks will be further added to by the build-out of five new 3G networks in the coming years.

### **Summary**

2.43 In summary, Optus does not agree with the competition analysis conducted by the Commission in examining the question of mobile termination regulation for GSM networks. As such, Optus does not support the extension of this flawed competition analysis to the CDMA networks.

### 3. Other issues in moving to a technology neutral declaration

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- 3.1 In addition to canvassing whether the Commission should declare CDMA services in an effort to move to a technology neutral declaration, the Commission also asks for comment on the nature of the current GSM declaration.
- 3.2 In particular, the Commission asks:
- (a) What functionality is currently provided for in the GSM service declarations? Should 2.5G technologies be included?
  - (b) Is the functionality of delivering a SMS message currently provided for in the current GSM service declarations? Should it?
- 3.3 In this section, Optus will clarify what it understands to be the current GSM declaration — in particular, Optus does not believe that either SMS or 2.5G services are captured by the current service description.

#### Service functionality should not extend to 2.5 G

- 3.4 The GSM service declarations provide that the GSM originating and terminating services are used ‘for the carriage of telephone calls (i.e. voice, data over the voice band)’.
- 3.5 Optus does not believe that the GSM service declaration includes, or was meant to include, 2.5G technologies for a number of reasons:
- (a) **2.5G technologies have not been widely taken up;**  
Since 2.5G technologies are still fledgling technologies that compete with many other sources of content (such as newspapers etc), it makes no sense to assume a market failure will take place in the absence of any actual information.
  - (b) **2.5G technologies use packet based data; and**  
Since 2.5G technologies use packet based data switching, and are likely to be charged for either on a subscription basis or on a per data packet basis, it is not clear that any previous competition analysis conducted by the Commission for circuit switched voice calls(STS) would be at all relevant.
  - (c) **The Commission would need to hold a separate declaration inquiry if it wanted to include 2.5G technologies in the declaration.**  
Optus believes that the Commission would need to conduct a full competition analysis examining what market failures are present in the 2.5G market before any move to declare this technology was made.



### **SMS messaging should not be declared**

- 3.6 Optus does not believe that the functionality of delivering SMS messages is currently provided for in the GSM service declaration. As the Commission notes, SMS messages are carried over control channels, and are not instantaneous.
- 3.7 In addition, Optus does not believe any purpose would be served in seeking to broaden the declaration to include SMS messaging. There is no observed market failure in SMS messaging, as interconnection arrangements between all four mobile operators have been successfully commercially negotiated. This has been done even between GSM and CDMA networks for SMS, despite more complex technical issues involved in interconnecting between these networks.
- 3.8 There is not an analogous fixed-to-mobile market for SMS messaging. Web based SMS messages are not delivered by independent fixed message originators. Rather, web based SMS are originated at the mobile portals of the mobile operators in the main. This means that interconnection arrangements have similar characteristics to mobile to mobile arrangements, and can be successfully commercially negotiated.

### **Are tables GOASD1 to GOASD7 are relevant to the proposed service declarations**

- 3.9 The references to tables GOASD1 to GOASD7 are still relevant to the proposed service declarations.