VODAFONE SUPPLEMENTARY SUBMISSION TO THE PRODUCTIVITY COMMISSION

Review of Telecommunications Specific Competition Regulation

DECEMBER 15, 2000

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1. Introduction

1.1 In its submission to the Productivity Commission Review of Telecommunications Specific Competition Regulation in Australia, Vodafone examined the principles underpinning economic regulation and their application to the telecommunications sector, in light of the historical sector specific regulation of telecommunications in Australia.

1.2 Vodafone submitted that regulation is only warranted in the event of durable market failure. Further, Vodafone submitted that, going forward, the general competition law framework should apply in respect of the telecommunications industry unless there is a compelling basis for applying industry-specific regulation in relation to particular facilities or services.

1.3 Accordingly, Vodafone submitted that:

- the regulation of access to services should revert to application of general access principles;
- the rules governing anti-competitive conduct in the telecommunications industry should be aligned with general competition conduct rules, except where specific rules may be required to address Telstra's historical dominance in certain market sectors.

1.4 Vodafone adopted a principled approach because its experience is largely limited to the mobile sector, where market forces have been the primary driver of improvements in end user benefits. As discussed in section 2 below, the mobile sector has experienced dramatic growth, falling prices, strong service quality improvements, the dynamic introduction of new products and new market entrants.

1.5 At the Inquiry Hearing on 14 August 2000, the Commission asked Vodafone to elaborate on a number of specific aspects of its submission. In particular, the Commission sought further comment from Vodafone in relation to the following issues:

- the impact of the telecommunications regulatory regime on investment;
- the incentives to provide unregulated interconnection;
- whether market share is a useful measure of market power;
- what services would be regulated under the suggested Vodafone approach;

1.6 Set out below is Vodafone's supplementary submission in relation to these issues, prefaced by an overview of competition in the mobile telecommunications sector. In summary, this supplementary submission:

- demonstrates the highly competitive nature of the mobile telecommunications sector;
- demonstrates that unregulated and negotiated solutions in the mobile sector have delivered significant benefits for end-users;
- rejects the suggestion that the operators of competitive networks are automatically able to exercise market power and that terminating access should as a result be regulated; and
- emphasises that market share alone is a crude and often inappropriate measure of market power.

2. Competition in Mobile Telecommunications

2.1 The mobile industry in Australia is in the middle of an unprecedented growth phase. Recent years have been characterised by huge investments in infrastructure, the introduction of an increasingly sophisticated array of products and services and significant reductions in prices for both retail and business consumers. These developments have all occurred during a period of sharply intensifying competition.

2.2 The combination of these factors has delivered tremendous benefits to Australians. An independent quantification of these end-user benefits is provided by the ACA's Telecommunications Performance Report 1999-2000. The ACA estimates that consumer benefits from fixed to mobile calls increased by between $551.4 million and $978 million in 1999-2000, compared to between $118.0 million and $161.2 million in 1997-1998. Consumer benefits from mobile telephony increased by between $1.884 billion and $2.747 billion in 1999-2000 compared to between $581.0 million and $773.3 million in 1997-98.[1] These benefits accounted for between 43 per cent and 47 per cent of all incremental consumer benefit arising from changes to telecommunications services between 1995 and 2000, and between 73 per cent and 76 per cent of incremental consumer benefit in 1999-2000.[2] These increases are largely attributable to increased competition in the mobile industry.

1 Australian Communications Authority, *Telecommunications Performance Report, 1999-00*. Pages 46-48.

2 Ibid at page 50.

2.3 Competition is alive and well. However, consistent with the dynamic nature of the sector, it manifests itself in many different dimensions. For instance:

- in October 2000 the penetration rate in Australia was 48.5 per cent.[3] This compared favourably with the overall European average of 43per cent[4] and with other countries such as Germany (27.9 per cent) and the United Kingdom (37.7 per cent), both of which have four facilities-based competitors in the cellular sector;[5]

- new entrants into mobile telecommunications have included Hutchison, One.Tel and AAPT. All of these new carriers commenced operations as service providers and are now rolling out their own networks. With no limit on the number of carrier licences available, the availability of spectrum is now the only regulatory barrier to entry. The recent spectrum auctions and the auctions planned for this financial year are opening the way for new mobile carriers;

- new and existing carriers have made huge investments in mobile infrastructure and spectrum. Telstra's new CDMA network was built quickly at a cost of $600 million. C&W Optus is estimated to have spent $400 million improving its network in the 1999-2000 period, and Vodafone is expected to invest $560 million in its network in the 2000-2001 period. Among the new carriers, One.Tel spent around $700 million on GSM spectrum licences and is reported to have contracted with Lucent for $1.1 billion for network construction. Hutchison spent $71 million on CDMA spectrum and has contracted with Samsung to construct its network in Sydney and Melbourne for around US$210 million including handsets. It also spent $671 million on GSM 1800 MHz spectrum licences but has not yet announced details of its construction plans in relation to this spectrum;

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3 Sydney Morning Herald, "Optus's Mobile Run Over", 25 October 2000. Based on 9.35m users and population of 19m. Figures from carriers.

4 Source: Paul Budde Communications Pty Limited, *Europe – Wireless Communications – Mobile Cellular Services*

5 BT Cellnet, Vodafone, One2One and Orange in the UK; T-Mobil, Mannesmann, E-Plus and Viag InterKom in Germany.

- providers of new technology, products and services are in many cases seeking to extend the competitive market place by directly challenging the fixed line business. In particular, Hutchison has launched its Orange One service providing local calls for a flat rate of 20 cents and long-distance calls for a maximum $1.98 for mobile calls made within a nominated "local zone", rates which are competitive with traditional fixed-line rates. Recent and future spectrum auctions will provide additional opportunities for high-speed mobile local services, particularly in business areas. The ACA provides figures showing decreasing local and long-distance calls per fixed line and attributes these decreases to substitution by mobile calls;[6]

- given the historical position of the Australian industry, particularly Telstra's legacy, and the continuing market growth, it is more informative to consider share of new connections and changes in market share rather than absolute market shares. For example, One.Tel still has a very small proportion of mobile subscribers on its own network, but this network secured 6 per cent of new additions in the September 2000 quarter.[7] The ability of new entrants to secure a disproportionately large share of new subscribers provides a real challenge to existing providers and maintains the extremely competitive nature of the industry;

- it is estimated that annual "churn rates" in Australia are on par with the international average of around 20-25 per cent. These churn rates demonstrate that the existing mobile subscriber market is an attractive commercial opportunity for all mobile carriers, giving rise to strong competition in mobile phone packages to attract customers. For example, One.Tel's "bring your own" package includes strong incentives to customers who sign up using their existing mobile phones, and strong comparative advertising based on price and service quality. Similarly the cost of customer churn to the 'losing'

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6 ibid at pages 43-44.

7 Sydney Morning Herald, "50,000 lift for One.Tel", 3 November 2000.

carrier is high, leading to those carriers offering incentives such as new handsets and free monthly access to retain customers. This is further evidence of a highly competitive market;

- Australia's mobile prices have fallen dramatically since services were first introduced. Vodafone estimates that between 1993 and 1999, service costs fell by 60 per cent for average users, and handset and access costs fell by 90 per cent for low-volume users.[8] The Besley Report estimates that overall prices declined by 48 per cent for low-volume users, 20 per cent for medium-volume users and 16 per cent for high volume users between 1998 and 2000.[9] Vodafone has also introduced or adopted pricing innovations such as one-second charging, and call credits that match the monthly access fee. Australia's reduction in prices conforms to international trends and is reflected in the global reduction in annual revenue per user (ARPU), which dropped by more than 50 per cent between 1993 and 1999.[10] The decrease in ARPU has forced carriers to innovate and provide more value-added services to customers;

- Australia is at the forefront of the introduction of innovative mobile services such as WAP and GPRS. For example, Vodafone Australia was the first Vodafone company to introduce the "My Vodafone" Internet portal service. Australia's carriers have been early testers of WAP and GPRS systems and early providers of predecessor systems such as SMS-based information services and SIM-based mobile banking. Australian users have been among the world's first to adopt satellite-based mobile telephony such as Globalstar; and

- sophisticated commercially negotiated wholesale arrangements allow mobile providers to compete effectively with established carriers without necessarily investing in mobile networks themselves. Mobile providers such as Virgin in the United Kingdom extend the concept of

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8 Vodafone mobile prices study, September 1999.

9 *Connecting Australia: Report of the Telecommunications Service Inquiry*, 30 September 2000. Page 126.

service providers (who largely resell carrier packages) by allowing greater flexibility in access to the carrier's network elements. The existence of these sophisticated wholesale arrangements allows a continuum of access, so that a mobile provider can choose which network elements and products to provide and develop itself, and which to acquire from other carriers.

2.4 This evidence clearly demonstrates that the mobile sector is very competitive and that this competition is delivering real benefits to consumers. It is not representative of an industry that is in need of continuing regulatory oversight.

2.5 Indeed, the mobile telecommunications sector is perhaps one of the most dynamic industry sectors in the world today. However, past success is no guarantee of how the future will unfold. Looking forward, the industry requires huge investments in new technology to meet consumer expectations for an even greater range of new products and services (not least of which will be the need to roll out new 3G mobile networks). These investments carry significant commercial risks.

2.6 The nature of competition in dynamic markets is fundamentally different to that existing in less dynamic network industries (such as electricity and water). It is critical for regulators and the Government to take into account the nature of the competitive forces that shape this industry. Furthermore, regulators should acknowledge that where risky investments have been made in competitive environments, those investors should have the opportunity to earn commercial returns. Penalising success through regulatory intervention once investments have been sunk inevitably dulls incentives to invest further.

2.7 Competition in the mobile sector works against a backdrop of change and innovation. Outcomes may not be perfect (given its dynamic nature) but regulators will rarely have enough information to know how to make things better, or be confident that intervention will not negatively impact on the efficient evolution of the industry.

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[10] Paul Budde, *Global Mobile – Cellular Developments*

3. Impact of Regulatory Regime on Investment

3.1 Vodafone does not contend that Part XIC and XIB are necessarily negative for investment generally. Vodafone's concerns relate to regulatory creep, where sectors of the telecommunications industry that are not subject to durable market failure can be subject to mandated regulatory outcomes. This poses the following risks:

- "regulatory lock-in" may result where regulatory decisions dictate the structure of the market and the products offered within it. Regulatory decisions may not be responsive to changing market conditions, and can result in inappropriate structures and product offerings;

- regulatory inconsistency may distort market forces between products and industries subject to different kinds of regulation;

- returns for innovative and dynamic but risky investment decisions can be lost through ex-post regulatory decisions;

- uncertainty of outcome will inherently impact on investment. For example, investors are required to predict the regulator's approach to access pricing. Accordingly, the investor in a competitive market faces not only competitive market risk, but also regulatory risk;

- regulatory oversight also introduces uncertainty not only over the price for a service, but also over all terms and conditions attaching to the service. All of these uncertainties affect the return to the investor; and

- the additional risk to an investor in a competitive market from the prospect of regulatory access is demonstrated by the ACCC approach to access pricing (using TSLRIC), which is designed to replicate the pricing that would be achieved in a competitive market. Given the dynamic nature of telecommunications markets, it is more likely that not that a regulated price will be set too high or too low (compared to the price set in the market). If the price is set too high, it will retard (efficient) entry and help lock in inefficient incumbent pricing. On the other hand, if the price is set too low, there will be inefficient entry while the incumbent will have lower incentives to invest and innovate in the areas subject to regulated pricing.

3.2 For these reasons, it is not appropriate to maintain industry specific regulatory provision in a competitive sector.

4. Unregulated Interconnection

4.1 There are numerous examples of commercially negotiated interconnection, roaming and resale agreements in unregulated sectors, including agreements with new entrants:

- Hutchison and One.Tel have each entered into roaming agreements with Telstra in respect of their CDMA and GSM networks respectively;
- Telstra, C&W Optus and Vodafone have negotiated short message service (SMS) connectivity without regulation;
- Vodafone has negotiated unregulated terminating access with Telstra and Hutchison for calls originating on the Vodafone network and terminating on Telstra's and Hutchison's CDMA networks;
- In New Zealand, there is no regulation of interconnection (apart from a requirement for disclosure of terms and conditions by Telecom New Zealand of its interconnection agreements). The lack of regulatory oversight has not prevented commercial agreements from being struck;
- transit arrangements are becoming more prevalent. Vodafone has negotiated with a number of network operators to terminate calls to third party networks through those operators, and is aware of other carriers doing the same; and

- in the United States, all interconnection has been successfully negotiated privately on a commercial basis except for certain regulations applying to fixed-line incumbents.[11]

4.2 With the existence of transit arrangements, no infrastructure provider has the incentive to restrict interconnection to its network. Where there is more than one infrastructure provider, failure to resolve interconnection arrangements with one can be sidestepped through transit arrangements with another. Once a network reaches a critical threshold or is interconnected to *any* other network, further networks can enter into transit arrangements for indirect connection. With transit arrangements, even new network operators will be able to obtain interconnection on non-discriminatory terms.

4.3 In the unlikely event that interconnection is refused, or it is believed that the access provider is behaving anti-competitively, then it should be dealt with under ordinary competition conduct provisions (particularly the misuse of market power provisions in *Trade Practices Act* section 46).

4.4 In its November 2000 supplementary submission to the Commission, the ACCC notes observations that all network operators, including mobile network operators, may have market power in respect of call termination due to the requirement of "any-to-any" connectivity. The ACCC's implication may be that regulation of call termination is required even in the highly competitive mobile sector.

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[11] The US Telecommunications Act of 1996 (47 USC §251(a)(1)) requires mobile carriers to interconnect directly *or indirectly* with other carriers. The FCC has not imposed any additional regulation on mobile carriers, affirming in July 2000 that the indirect interconnection achieved by two mobile carriers connecting to an incumbent fixed line provider is sufficient and that "the best way of achieving interconnection is through voluntary private agreements". Fourth Report and Order, CC Docket No. 94-54, FCC 00-253, 24 July 2000.

4.5 Vodafone does not accept that:

- "any-to-any" connectivity confers market power on mobile network operators in any relevant market;
- regulatory intervention is required to ensure optimal outcomes; or
- there is any evidence of a durable market failure in the termination of fixed to mobile calls (as argued by the ACCC).

4.6 The possibility referred to by the ACCC assumes the existence of a separate functional market for the supply of call termination services to originating carriers in respect of each call to each subscriber. However, the ACCC does not provide or refer to any analysis whatsoever in support of such a market definition. In the absence of any such analysis, the ACCC's suggestion of market power is unsupportable. Further, Vodafone considers that proper economic analysis mitigates the conclusion suggested by the ACCC.

4.7 Terminating access is an input into many telecommunications services, but is not supplied in a functionally separate market. All telecommunications services include both originating and terminating elements. To achieve any-to-any connectivity, all carriers must obtain *and* provide terminating access either directly or indirectly to all other networks. As discussed below, in the mobile sector the price of terminating access is inextricably connected with, and constrained by, competition in end-to-end mobile telecommunications services. As a result, it is not appropriate to consider terminating access as a separate functional market.

4.8 There is significant value to mobile subscribers in being able to receive mobile calls. Any mobile carrier must ensure that its subscribers can be called from other networks. The larger the originating carrier's network, the greater the imperative on the terminating carrier to provide access. This access must be provided on reasonable terms. A higher termination charge will invariably be passed through to callers on the originating carrier's network, and this will discourage calls and decrease both termination revenues and value to the terminating carrier’s subscribers.

4.9 It may be suggested that callers on the originating carrier’s network do not have knowledge about, or are not sensitive to, prices in relation to calls to mobile subscribers. However, many callers are repeat callers and beyond the immediate term it is highly likely that significant numbers of customers will be aware of and react to price rises. This reaction is likely to consist of using another method to contact the end-user, such as fixed-line calls to home or work, e-mail or SMS messaging or to put pressure on the mobile subscriber to switch to an operator with lower charges.

4.10 Raising termination charges may therefore provide sufficient discouragement to marginal customers to have an impact on termination revenue. Equally importantly, this discouragement will reduce the value to the terminating carrier’s subscribers since they will become less contactable. Although many subscribers may be unaware of or insensitive to the prices paid by others to contact them, a sufficient number of subscribers will be aware and sensitive to have an impact on profit.

4.11 Termination charges also interact closely with monthly subscription charges and call charges. Since the mobile industry is highly competitive, any increase in termination charges will be offset by reduced monthly subscription or call charges. This reduction will be further necessitated in order to attract or retain subscribers discouraged by their reduced value from receiving calls. This interaction further reduces a carrier’s ability to make a profit by raising termination charges: any profit will of necessity be “competed away” in the highly competitive mobile telecommunications sector.

4.12 Conversely, any reduction in mobile termination charges will result in increases in monthly subscription or call charges, since mobile carriers must recoup the cost of building their networks and providing each call.

4.13 The interdependence of these prices and charges means that it is not appropriate to consider termination charges in isolation or as a separate functional market. There is no compelling evidence of any market failures in the termination of fixed to mobile calls. Indeed, independent evidence suggests the opposite. The ACA's Telecommunications Performance Report 1999-2000 points to the very significant improvements in consumer benefit in fixed to mobile calls in the last three years (nearly a 500 per cent increase).

5. Market Power and Market Failure

5.1 One of the questions raised by the Productivity Commission at the initial public hearings was whether market share is a useful measure of market power. Vodafone considers that in the telecommunications industry it is generally not. It is more appropriate to examine the circumstances in which market share is obtained and the extent to which these circumstances provide a durable or insurmountable advantage to certain participants at the expense of others.

5.2 Vodafone recognises that there are a number of factors that can favour Telstra. Traditionally, Telstra has benefited from the following factors:

- high fixed costs, which are largely sunk;
- vertical and horizontal integration;
- historical dominance in the supply of some services, such as the fixed customer access network;
- network economies; and
- economies of scope, allowing products to be bundled at a discount in order to retain customers.

5.3 In the case of Telstra, its high market share and current market position has generally arisen from historical dominance created by the state. Hence, for Telstra, there may be a prima facie case for intervention to address the transition from this historical dominance in the market in order to promote competitive outcomes.

5.4 By contrast, earned market share is invariably transitory in nature since it is subject to ordinary competitive market forces. The only regulated barrier to entry into the mobile sector is the availability of radio spectrum. Increased spectrum allocations and sophisticated wholesale arrangements are overcoming this barrier. The contestability of the sector ensures competitive results even where there may be few established participants. Intervention in this case is not justified except where firms behave anti-competitively. Competition law is well placed to deal with these issues, should they arise.

5.5 Accordingly, it is inappropriate to rely on market share alone in determining whether and what regulatory action should be taken in a market.

6. What would be regulated under Vodafone's approach

6.1 Vodafone has adopted a principled approach and has not provided specific views on this issue. This is partly because of its limited direct experience in the areas of greatest concern to the ACCC. In particular, its experience with Telstra's fixed access network is limited to originating and terminating access for Vodafone's mobile services.

6.2 Vodafone is aware of the arguments that the local loop remains uneconomic to duplicate, as discussed in the C&W Optus, AAPT and ACCC submissions to the Commission. Vodafone is also aware of the arguments that certain aspects of transmission capacity may also be uneconomic to duplicate, such as regional transmission capacity. While Vodafone does not submit a view as to whether regulatory intervention is needed in these areas, it would expect that these areas would be the primary focus of the regulator's attention under Vodafone's forbearance approach to telecommunications regulation.

7. Conclusions

7.1 As set out in its previous submission, Vodafone considers that the following principles should apply in the regulation of the telecommunications industry:

- General competition regulation, such as competition conduct regulation in Part IV and access regulation in Part IIIA of the Trade Practices Act, should be the default position.

- There should not be industry specific regulation except to address industry specific durable market failures.

- The regulatory regime should be responsive to changing conditions, particularly changing market conditions. To this end, sunset provisions should be built into all current and future industry-specific regulations.