Interconnection of Mobile Services

Ian McGill examines the new regulatory regime governing mobile telephone services and points out some of the pitfalls for service providers.

Competition for the provision of mobile telephone services is achieved through the issue of three mobile telephone services ("PMTS") licences including one to AOTC, one to the second carrier and one to a third operator. Further operators are contemplated after 1995. Public Access Cordless Telephone Services ("PACTS") are also open to competition under a class licence. This article examines some of the key issues which will confront mobile service providers.

Definitional maze

The definition in the *Telecommunications Act* of public mobile service (PMTS) is reasonably complex as it does a number of things:

- it has to define a mobile service without being too technology specific;
- it must distinguish a PMTS service from a PACTS service; and
- it must distinguish PMTS from functionally similar types of services provided solely or mainly by means of radiocommunications, such as paging and trunked land mobile radio services.

The consequence of satisfying the Act definition of PMTS is that the right to supply those services is reserved to the mobile carriers (Section 94 of the Act) or to a person making direct or indirect use of a PMTS supplied by a mobile carrier through a resale chain.

Under the Act you have a PACTS and not a PMTS when, essentially, there is no capacity for intercell handover (the ability to move between cells while on the same call). So a PACT under the Act certainly includes CT-2 technology. However some PACTS services (eg, CT-3) have intercell handover capability. The legislative drafter has contemplated this by providing a mechanism for the regulations to replace the definition in the Act if the development of new technology gives PACTS services intercell handover capability. The PACTS class licence does contemplate that the regulations may allow call handover in *specific places* such as railway stations, airports and shopping centres.

Just in case some entrepreneurs were developing incipient excitement that the PACTS definition could be used to take advantage of open competition to establish themselves as a de facto public mobile carrier, the Act provides that the regulations can prescribe certain services as not being PACT services.

New GSM Standard

AUSTEL recommended and the Government has accepted that mobile operators commence service with the EC standard General Special Mobiles (GSM) digital technology in accordance with standards to be determined by AUSTEL.

GSM is capable of supporting about three times the number of callers in a given band width than analogue. The availability of this standard which supports the start up of three competitors in mobile was a cornerstone of AUSTEL's recommendations. It is likely that the GSM technology is going to have an impact on subscriber growth. It is hoped that GSM will bring down the cost of operation which will help to lower service costs and stimulate demand. I understand that GSM terminals will initially be quite expensive but should fall below the price of analogue terminals within one to two years from implementation. AUSTEL also recommended the introduction of GSM because it was an available digital standard which supported the start up of three competitors.

As recommended by AUSTEL, AOTC's licence requires it to sell air time on its existing analogue (AMPS) network to the second carrier and the third mobile and they are prohibited in their licences from installing and operating an AMPS network.

Carriers and Interconnection

Part 8 of the Act includes rules relating to the access of carriers to other carrier's networks and services. The Act creates access rights of two kinds:

- the first is the basic right of any carrier to connect its facilities to the network of any other carrier and have its calls carried and completed over that network; and
- the second are supplementary access rights created by a condition on a carrier's licence.

A licensee must, when requested to do so by another mobile carrier, provide prescribed information to that carrier relating to its network.

These rights will, hopefully, assist in the second and third mobile carriers achieving competitive status with the incumbent.

As between AOTC and the second general carrier, Government policy clearly suggests an equal access regime should apply. That is, an access service which is economically and technically efficient and non-discriminatory between carriers in terms of its functionality, quality and performance. However, there is little guidance on the type of interconnection which should apply between the AOTC local network and PMTS networks, between PMTS (local) networks and AOTC or the second carrier's long distance networks or between the different PMTS networks themselves.

At least in the short term, where Telecom has a well entrenched local access network, I would expect that mobile-fixed local network interconnection will be guided by broad access interconnection principles. The extent to which that interconnection will include service provider selection in a single stage calling process and other carrier interconnection capabilities will be a matter for commercial negotiation.

Resellers and Interconnection

It is a principal feature of the 1991 Act that all restrictions on resale of domestic and international telecommunications capacity are removed. Accordingly, PMTS services can also be supplied by a person other than a carrier under the eligible services class licence. I suspect that it is the potential for resale of PMTS services supplied by a general carrier which might excite a deal of commercial interest.

The question is whether the Act actually provides sufficient protections to ensure that potential competitors have access to the facilities and services necessary to participate in the market for mobile (or PACTS operators under the Class Licence).

The position of service providers and resellers of mobile services (whether AMPS or GSM) is difficult from an interconnection point of view. AUSTEL, in its June 1991 report, *A Technical/Operational Framework for Interconnection and Equal Access* with admirable frankness recognised that neither the Government's policy decisions nor the Act specifically addressed carrier-

service provider interconnection rights with respect to access to basic carriage services. AUSTEL stated:

"The presence of more than one carrier in the market place, however, should provide sufficient competitive incentive to ensure service providers achieve adequate access to interconnection facilities/services and information under a purely commercial carrier-service provider relationship"

As the Australian Telecommunications Users Group (ATUG) has noted, this hope may prove unfounded. I wholeheartedly agree with ATUG for some avenue of appeal to AUSTEL to intervene if carrier competition does not provide the incentive to ensure that service providers can acquire the level of, in particular, technical interconnection they seek.

In this area, the Act does, at first glance, include service provider safeguards such as:

- the reporting of Basic Carriage Services (BCS) charges;
- the ability of AUSTEL to give a direction to a carrier to unbundle a BCS (ie, requiring a carrier to make available the lower level BCS necessary to provide other telecommunication services);
- the prohibitions on discrimination provided in the Act; and
- resellers who are eligible service providers are provided with a statutory right of access to the telecommunications networks of the carriers under Section 234 of the Act for the purpose of supplying eligible services.

Tariffing

In relation to tariffing, AOTC as the dominant carrier, will be required to charge in accordance with the provisions of its tariff while the second carrier is only obliged to ensure that its charges do not exceed its current tariff (refer sections 197 and 198 of the Act). Essentially, therefore, there should be a great deal of transparency for resellers in relation to the cost of the building blocks of their network. The tariffed rates cannot be overridden by anything contained in an access agreement between the carrier and the reseller (see section 199 of the Act). Because the second carrier is permitted to charge for a BCS below its tariff this is the obvious supplier of mobile BCS to resellers.

It is in the interests of a mobile reseller to attempt to drive the carriers below their tariffs. The reseller appears to be at significant disadvantage to the PMTS licensees in dealings with Telecom/AOTC. AOTC must sell airtime on its AMPS network to the other mobile licensees. Under the Ministerial Privacy Principles those carriers will have the benefit of the 'directly attributable incremental costs' requirement. Resellers will not because the carrier-reseller price relationship is subject to commercial forces, with some trade practices-like protectors.

Anti-Discrimination

AOTC as a dominant carrier cannot discriminate between acquirers of telecommunication services (section 183 of the Act) and a general carrier cannot discriminate between resellers or their customers (section 184 of the Act).

The differential pricing that may result between AMPS airtime sales to mobile carriers and to resellers may result in a breach of section 183 of the Act. However, presumably Telecom/AOTC can argue that discrimination between the mobile carriers and resellers is protected by the statutory exception to non-discrimination: cost related discrimination, for example, volume discounts.

As between resellers, the prohibitions will not apply if any reseller can convince the carriers to supply mobile BCS below tariff if the discrimination in relation to those charges makes only reasonable allowance for differences in costs in supplying the services if those differences result from, for example, the volume in which the services are supplied.

To persuade a carrier to discriminate may be difficult (the carrier bears the onus of proof in establishing the reasonable allowance in any proceeding for a contravention of the discrimination rules) and in the case of Telecom may be impossible if there is a condition in their public mobile carrier licence prohibiting bulk volume discounts until notified in writing by the Minister.

Once GSM is up and running, however, the Telecom MobileNet network may find a niche between the enhanced digital services and the CT-2 city only networks. It seems to to me that Telecom might validly discriminate between acquirers of GSM capacity and MobileNet capacity because, presumably, such discrimination makes only reasonable allowance for the reduction in costs associated with the difference performance characteristics (which equate with quality of service) at which MobileNet is supplied. This price-cutting should be good news for resellers and consumers.

Unbundling and connection

The mobile carrier can, under section 237 of the Act, refuse to supply a BCS. This refusal to supply is subject to the unbundling regime in the Act (that is, requiring the carrier to make available BCS necessary to provide other telecommunications services). The unbundling regime will not, initially, apply to the second or third mobile carriers (because, presumably, those carriers will not be in a position to dominate a market).

In addition unbundling requires an AUSTEL inquiry and there seems to be plenty of scope for the mobile carriers to shelter behind the argument that it may not be technically feasible (because of, for example, limitations of spectrum) to resell mobile services (particularly AMPS).

A carrier must connect an eligible service provider to its network. However, this right to connect is subject to the significant restraint that the carrier is under no obligation to connect if there is included in another carrier's BCS tariff the telecommunications service that would otherwise have been supplied by the carrier.

There may be significant technical constraints to competition in the mobile cellular area using the existing AMPS service. The introduction of the GSM cellular standard is certainly predicated on the assumption that it will facilitate competition.

Because of the evident Government policy and freezing the introduction of GSM and prohibiting the second carrier from installing and operating an AMPS network there is a valiant attempt to level the playing field. This is also evidenced by the requirement that Telecom must sell its airtime on its existing AMPS network to the other mobile carriers requesting that airtime. Once GSM is established there may be significant opportunities for Telecom to price-cut its analogue network.

The position of cellular mobile resellers looks to me to be very difficult in the short to medium term. There is insufficient guidance given by the Act or Government policy as to the existence of a right of interconnection and access.

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