Communications LAW B·U·L·L·E·T·I·N

THE OFFICIAL PUBLICATION OF THE COMMUNICATIONS AND MEDIA LAW ASSOCIATION (CAMLA)

Registered by Australia Post. NBG 4474 EDITED BY GRANTLY BROWN VOL 9 No 4 December 1989

The cellular mobile phone debate: the shape of things to come

Peter White argues that the current inquiry should focus on service type rather than technology

Austel is currently conducting an inquiry into the implications of licensing an additional operator of cellular mobile telephone services (CMTS). On the surface the inquiry can be seen as the first major debate about the introduction of competition into the supply or actual telecommunications services since the government's new telecommunications framework was legislated into being earlier this year. The government's decision to allow for competition in the cabling of buildings and in the supply of an expanded range of PABX equipment does not really impinge on the supply of telecommunications services themselves. Given this reading of the agenda, it is not surprising that the inquiry should have received submissions from a range of organizations with an ultimate interest in the supply of actual telecommunications services. And taken within this framework the debate is about the economic costs and benefits of varying forms of competition in the supply of cellular mobile telephone services.

But another reading of the CMTS inquiry sees the issues raised by this particular inquiry in a much broader context. And this broader context raises important questions about the way in which Australian telecommunications and communications policy is conceived.

One inquiry, two agendas

The broader context emerges when it becomes apparent that underpining the CMTS debate are two conflicting views of the service. And these views embody two different visions of the future development of the overall telecommunications system. These two conflicting views are embodied in the Telecom Australia's submission to the inquiry and the submission which was made by Henry Ergas and others associated with the Monash Information and Communications Technology Centre.

The Telecom submission sees an increasing proportion of standard telephone calls as having a mobile component. So that while calls which either end in, or originate from cellular mobile telephone services will remain a small but significant proportion of all telephone calls, new technology will see an increasing emphasis on a mobile handset. The second wave of innovations will make it possible to both originate and receive telephone calls from a personal mobile handset within a specified area. The long term vision of the future is the widespread use of small handheld personally owned handsets which can receive and originate calls from any location. Such a service would be able to locate subscribers no matter where they were, and charge the handset owner for the use of the services which are integrated with the standard telephone service wherever that occurred. This scenario sees the current cellular mobile telephone service as a precursor to a variety of services which are integrated with the standard telephone service which we know today. According to this view the distinction between mobile, semi-mobile and fixed telephone services will become increasingly blurred.

By contrast, Ergas argues that there is little reason to consider CMTS as a part of the public switched telephone network (PSTN). He argues from the perspective of economic theory that there is little substitution between the mobile and fixed telephone services, that the joint provision of the PSTN and CMTS does not lead to any economies, and that the CMTS is more akin to the mobile services such as paging and messaging. As a consequence, he argues that the CMTS should not be seen as a part of Telecom's monopoly reserved service.

The Trojan Horse

But why is this debate about the conceptual status of the CMTS and its successors so important? This is because the new Australian telecommunications framework grants Telecom a monopoly over the provision of the PSTN. So according to Telecom's argument, any regulatory decision on the licensing of a second CMTS operator has implications for "the orderly and efficient development of the national telecommunications system" (Ministerial Guidelines, 1989). For if there is an increasing blurring of the distinction between other forms of semimobile services and the traditional forms of access to the PSTN, the decision to license a second

continued on p2

In this Issue –

CMTS operator has consequences for Telecom's monopoly on that telephone network. While any decision to license a second cellular mobile telephone service would have little impact on Telecom's current operations, it would be seen as the Trojan Horse by which competition on the basic infrastructure would be introduced.

Should regulation be service or technology based?

It is tempting to enter the fray and discuss the merits of the arguments, but it is more interesting to see this debate as a manifestation of a more fundamental problem for Australian communications policy making. This is a problem created by the policy making and regulation which is primarily based on 'technologies' as opposed to a regime which is oriented towards 'services'. What we can see in Austel's CMTS inquiry is that it is essentially an inquiry into a particular technology which is currently being used to provide a specific service.

Even though the inquiry's terms of reference oblige Austel to consider the 'likely future development of this [CMTS] technology and the implications growth may have for the orderly and efficient development of the national telecommunications system', even this reference starts from the standpoint of 'technology' rather than the question of 'service'.

Placed within this framework it is possible to see the two positions outlined above as disputes about the relative weight which should be given to 'technologically oriented regulation' as opposed to a 'service oriented regulation'. Telecom's position that the cellular mobile telephone service should be seen as an expansion of the standard telephone service can be seen as operationally and conceptually distinct from the public switched telephone service and this distinction arises, at least in part, from the cellular telephone technology itself.

The emphasis on regulation of specific technologies varies across the Communications portfolio. For example Aussat is largely limited to the exploitation of satellite technology. Telecom employs a range of technologies to provide even its standard telephone service. These include traditional cable-based communications as well as analogue and digital radio techniques. On the other hand OTC's governing legislation focuses on the provision of a range of geographically specific services and makes it possible for the organization to make use of a range of technologies.

The transmission of television is regulated in different ways depending on whether unfettered access to the programming is allowed such as in broadcasting, or whether access is restricted by criteria such as location or the payment of a fee for that service. For example the Broadcasting Act regulates broadcast programs and some narrow-cast programs such as the Remote Commercial Television Service, while the Radiocommunications Act regulates narrow-cast television services such as Sky Channel, which are provided under the Video Audio Entertainment and Information Service regime. Here it is possible to see a mixture of technologically oriented and service orientated regulation.

"broadband communications ....will place great strains on Australia's broadcasting and telecommunications legislative framework"

So even within existing Communications portfolio legislation there is no clear path which has been followed. But can this state of afairs remain? If one looks at the rate of technological change and the rapidly changing service expectations of users, the answer would need to be no.

Regulation must take account of evolution

Essentially regulation must take account of evolution on two fronts. On the first, technologies develop and mature quite rapidly so that an appropriate technology for a given service might be less than appropriate within a relatively short time frame. This can be seen in the shift away from long distance point to point transmission via satellite in favour of optical cable. On the second front there are gradual shifts in the nature of services. So a standard telephone service becomes redefined in the eyes of subscribers in relatively short time frames. For example the availability of automatic, STD and ISD telephone facilities has come to be the expected norm in the last 15 years. It is possible that an element of mobility provided by cellular mobile telephone services and their successors will come to be seen as an essential part of what we now know as the standard telephone service in the next few years.

Given this problem, the government needs to address the issue of regulations in an area of rapidly changing technological options and expectations of telecommunications services. It also needs to ensure that regulation is only applied where it is absolutely necessary. One way this can occur would be through a regime which regulated in terms of services rather than in terms of technologies. Such a regime would provide maximum encouragement for the use of the most appropriate technologies for specific services and encourage technological and service innovation. It would also make it possible to clarify which services required ongoing regulation and which did not.

But if this was to occur the principal task of the current Austel inquiry would involve a decision on whether the cellular mobile telephone service should be seen as an integral part of the public telephone service. Such an approach would also encourage definition of Telecom's monopolies as monopolies on particular services The monopoly on the basic network and public switched telephone operations would be seen as monopolies on network and telephone services. There would be no restrictions on the technologies which could be employed to provide those services. On a broader scale such an approach would encourage a greater integration of Aussat into the multi-technology infrastructure provided by OTC internationally and Telecom domestically. A service-oriented approach would also make it possible to place technical regulatory responsibilities with one agency. For example Austel could be responsible for licensing and frequency allocation in the telecommunications and broadcasting areas. While those areas which dealt with the content of areas such as broadcasting, could be dealt with by another agency along the lines of the Australian Broadcasting Tribunal.

The development of broadband communications capabilities and services will place great strains on Australia's broadcasting and telecommunications legislative framework. The debate about the nature of the cellular mobile telephone service is likely to be repeated when the Government is faced with the introduction of a satellite-based mobile telephone service which can be provided by the next generation of Aussat satellites. Similar issues will arise with the introduction of broadband cable services, capable of delivering telecommunications, data and entertainment services. A rethinking of the regulatory boundaries with a focus on services, rather than technologies, might help to clarify a situation which is becoming increasingly complex.

Peter B. White is Associate Director of the Monash Information and Communication Technology Centre, Monash University.