

Editorial

Regulation and Convergence

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Abstract: This editorial argues from content in this issue that telecommunications regulation has not kept pace with convergence of telecommunications and content providers. It suggests that the loose co-ordination between regulations and regulators for telecommunications services and digital platforms no longer makes technological sense within the converged architectures of 5G and 6G.

In addition, all the published papers, not just those relating to regulation, are briefly described. This issue also includes an obituary for John Burke, an influential member of this *Journal's* Editorial Advisory Board.

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Regulatory Proliferation

In this issue, we return again to the perennial topic of “telecommunications” regulation. (The quotation marks are deliberate, as you will see later.) We publish the Charles Todd Oration 2023, given by Rob Nicholls (2023), who looks, in part, at existing regulatory instruments and whether or not they are fit for current purposes. We also include a speech given to TelSoc earlier in the year by Cynthia Gebert (2023), the Telecommunications Industry Ombudsman (TIO); she argues for more direct regulation of telecommunications in relation to consumer issues. And we have a paper by Mark Gregory (2023), who considers that telecommunications should be included in the Australian critical infrastructure regime.

It is worthwhile first to survey the regulators that are currently concerned with telecommunications and its uses. In Australia, competition in telecommunications is regulated by the general competition regulator, the Australian Competition and Consumer Commission (ACCC), with special powers for regulating the telecommunications sector. As the TIO points out (Gebert, 2023, p. 139), technical regulation of telecommunications was put in

the hands of the Australian Communications Authority, which eventually became part of the current Australian Communications and Media Authority (ACMA). As a “converged” regulator, with responsibility for broadcasting as well as telecommunications, the ACMA also regulates content (see, for example, [ACMA, 2022](#)). The ACMA may also be given additional powers “to combat misinformation and disinformation on digital platforms” ([Australian Government, 2023](#)). In addition to the TIO, which handles unresolved consumer complaints about telecommunications services, there is an eSafety Commission, which “helps remove serious online abuse, and illegal and restricted online content” ([“What you can report”, n.d.](#)); and the Office of the Australian Information Commissioner, whose purpose is “to promote and uphold privacy and information access rights” ([OAIC, n.d.](#)). And there is regulation, still evolving, of “digital platforms” ([Wilding, 2021](#)).

It is likely that telecommunications will be brought under the critical infrastructure regime: the earlier exclusion of telecommunications from the regime has been called a “sweetheart deal” by the relevant Minister ([Mizen *et al.*, 2023](#)).

This proliferation of regulators — and regulations — comes about for several reasons. It may be a need for specific expertise and focus (e.g., competition policy). It may also come about from the ongoing identification of new requirements (e.g., online safety). It does suggest, however, that there is no overarching theory or practice on how or where regulation should reside or by whom it should be enforced. Dedicated expertise may well be required for detailed regulation, leading to a proliferation of regulators. At the very least, however, good coordination between regulatory regimes is important and will become more so as greater convergence between telecommunications and online service providers continues.

Convergence and Regulation

One heading that is notable — for a technologist, at least — in the TIO’s speech is “The Lessons Telco Can Offer to Digital Platforms” ([Gebert, 2023](#), p. 146). There is nothing wrong with this heading. It indicates the way the government thinks about the underlying issue: there are telecommunications operators (“Telco”) and there are digital platforms; and each needs to be regulated in its own way.

From a technological point of view, however, the two topics are intimately interconnected. Digital platforms are only useful if they can be communicated with, by telecommunications; and a good deal of telecommunications traffic is directed to or from digital platforms. Telcos operate their own digital platforms and hope to profit from them. If content from some digital platform is to be restricted, the restrictions may well be implemented by a telco or an Internet Service Provider (ISP).

With 5G, the interdependence between telcos and digital platforms becomes even stronger. In the 5G architecture (see, for example, Campbell (2021), Figure 2, p. 4, reporting on a speech to TelSoc by Bruce Davie), the 5G core network includes a variety of “clouds”; and all “clouds” are digital platforms, some or all of which are “digital platforms” in the sense used by government. 5G networks do not work without digital platforms. It will probably be a topic of future “technical” regulation as to how much the telco-deployed 5G core networks should be opened to third-party digital platforms.

There is a growing convergence between telecommunications and the services provided by digital platforms. To those who would argue for a continuing special case for telecommunications services, it should be pointed out that much voice and messaging traffic is now dependent on digital platforms (e.g. WhatsApp, Skype) – and the distinction will become every blurrier as 5G and 6G architectures become bedded down.

There is a need, then, to seriously consider further convergence of regulation. Just as a “converged” regulator once meant combining telecommunications and broadcasting, now a converged regulator should consider the whole picture of content, communication, carriage or complaint – even critical infrastructure – without historical boundaries getting in the way. It is absurd, for example, that content declared restricted or taken down on one digital platform should then become accessible on another platform. The solution, if there is an acceptable one, lies with both content and carriage working together.

While Rob Nicholls (2023) has argued that the regulatory instruments for future considerations are most likely already in place, the regulatory architecture needs more work to make it efficient and fit for purpose in the converged communications world.

Elsewhere in This Issue

In this issue, the two papers specifically concerned with regulation are Nicholls (2023), published in the Special Interest section, and Gebert (2023) in the Public Policy section. Readers should note that these papers, like all others, have been subject to peer review before publication.

There are three papers in the Digital Economy section. *Effect of Exchange Rates and Information and Communication Technology on Indonesia’s Economic Growth* seeks to identify the effects of ICT on economic growth within a varying exchange-rate environment. *Strategies and Challenges of Unified Payment Interface* is concerned with the digital payments system in India. *AI Chatbot Innovation – Leading toward Consumer Satisfaction, Electronic Word of Mouth and Continuous Intention in Online Shopping* looks at interactions between consumers and chatbots.

In the Telecommunications section, we publish six papers. *Building Trust in Telesurgery through Blockchain-Based Patient Consent and Surgeon Authentication* looks at how blockchain technology can be used to support consent in telesurgery. *SBM-SA: A Safety Beacon Message Separation Algorithm for Privacy Protection in Internet of Vehicles* is concerned with protecting privacy as motor vehicles communicate with one another. *Secure Data Sharing in a Cyber-Physical Cloud Environment* describes a secure data-sharing protocol. *CNN-based Occluded Person Re-identification in a Multi Camera Environment* considers the case of identifying a specific person in a video sequence. We also publish an *Interview with Teresa Corbin*, now Telstra's Chief Customer Advocate. Finally in the Telecommunications section, we have the paper by Mark Gregory (2023) on *An Analysis of the Optus National Outage and Recommendations for Enhanced Regulation*.

We also have one Discussion paper on *Digital Transformation, Social Innovation and the Not-For-Profit Sector in Australia*. This invites correspondence on the issues raised.

In the Biography, we publish an obituary for John Burke, *Vale John Burke (1942–2023)*, who contributed much to this *Journal*, to TelSoc (our publisher), and to Australian telecommunications.

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