

Telecommunications Performance Monitoring and Unlimited Data

Editorial

Mark A Gregory
RMIT University

Abstract: The Australian telecommunications industry has been slow to call for or to adopt new practices and the National Broadband Network has exacerbated the problem of technology adoption lag. There are two key issues facing telecommunication consumers today. The cost of optical networking has significantly reduced over the past five years so there is no justification for the network congestion that occurs on Australian telecommunication networks. To remedy this situation the introduction of performance monitoring is fully supported. It is time for the telecommunications industry to adopt new broadband business models that are based on the provision of unlimited data and a maximum of 90 to 95 per cent utilisation on optical network links.

In This Issue

In this issue the *Journal* includes topical articles that cover Australian telecommunications, historical events and an article of the state of telecommunications in Mexico.

Big Data in the Trumpocene takes a satirical look at the potential outcomes of the Trump Presidency. For media, the French Presidential system of government, adopted by the U.S., provides an endless stream of stories, many of which are quite bewildering. It is with this backdrop that *Edouard Estaunié* considers what might happen next.

30 Years after Launch provides a brief history of Telecom Australia's launch of a mobile cellular service in Australia. This strategic decision has led to an explosion of mobile cellular that provides Australian's with unprecedented mobility and coverage.

The Seymour-Bendigo Pole Route is a fascinating look at the construction, in 1952, of an aerial trunk route and the challenges faced.

A Trust-Aware RPL Routing Protocol to Detect Blackhole and Selective Forwarding Attacks addresses blackhole and selective forwarding attacks and provides a trust-based routing protocol for low-power and lossy networks.

Review of the Mexican Telecommunications Market discusses the shift from an incumbent government owned monopoly to a competitive telecommunications market in Mexico and highlights the favourable outcomes achieved.

A New QoS Routing Northbound Interface for SDN introduces a software-defined constrained optimal routing algorithm for improved QoS routing and traffic engineering.

The Tragedy of Australia's National Broadband Network reviews recent developments in global broadband deployments, highlights the growing global dominance of fibre to the premises and argues that the increasing deployment of fibre to the node is not beneficial to Australia's future.

Telecommunications Performance Monitoring and Unlimited Data

The recent announcement by the Australian Government that it would fund broadband performance monitoring is a giant leap forward for consumers that have been caught in a vortex caused by the Australian telecommunications industry failing to remove data usage restrictions. The Australian telecommunications industry has maintained a structure and business approach based on data utilisation charges, partly due to the high cost data transmission, both nationally and internationally.

Over the past five years, the cost of optical networking has reduced significantly and when coupled with the growth of content delivery networks that push content closer to consumers, there is no justification for the previous business model to be retained.

Broadband performance monitoring will highlight what we already know, and that is the daily congestion experienced by consumers is alarming high and unacceptable moving forward.

A shift to unlimited data for a fixed wholesale access monthly charge at each broadband connection speed tier should be adopted immediately. The telecommunications industry should agree upon a set maximum of 90 to 95 per cent utilisation on wholesale or regulated optical networks.

If the industry fails to act, Government should regulate the shift to unlimited data and the provision of sufficient capacity over wholesale or regulated optical networks to ensure that congestion cannot occur.

The telecommunications industry needs to work with content providers to ensure that consumer experience improves dramatically from the unacceptable situation today.

Further data compression is not the panacea and it is vital that the quality of content provided over broadband networks improves dramatically. For content providers to improve the quality of their offering the Government and the telecommunications industry needs to take the first step.

Looking Forward

The key themes for 2017 will be *International Telecommunications Legislation and Regulations* and *International Mobile Cellular Regulation and Competition*. As the global digital economy evolves it is timely to consider the different telecommunications markets and how each is coping with the transition to next generation networks – the ‘gigabit race’ – and how competition is being fostered with the market. Mobile cellular continues to be an expensive consumer product and for many nations the promise of a competitive mobile cellular market has not eventuated due to the inherent advantages enjoyed by incumbent telecommunication companies during the deregulation years.

Papers are invited for upcoming issues and with your contributions the Journal will continue to provide the readership with exciting and informative papers covering a range of local and international topics. The Editorial Board values input from our readership so please let us know what themes you would like to see in the coming year.

All papers related to telecommunications and the digital economy are welcome and will be considered for publication after a peer-review process.

Mark A Gregory