



Towards leading-edge connectivity

A manifesto for the 2008 general election

About TUANZ

TUANZ was formed in 1986 as a membership-based support group comprising major end-users of the telecommunications system. It represents the interests of large end-users and their customers. The 500 members comprise a broad cross-section of the New Zealand economy including banks and financial services companies, retail chains, universities, transport companies, government agencies, local authorities, IT vendor companies, telecommunications and Internet service providers, manufacturing companies, and a smaller number of SMEs and individuals.

TUANZ income is generated through members' subscriptions, enhanced by an events operation.

TUANZ is politically independent and dedicated to improving New Zealand's telecommunications and IT usage to improve our economic performance and the lives of New Zealanders. Our policies are determined by a Board comprising 11 representatives elected by our members and drawn from a wide-cross section of New Zealand society.

Introduction

Communications technology has made a vast impact on lives and living standards around the globe over the past 20 years but, thus far, New Zealand has failed to capitalise on the opportunities.

The government has made a tentative start through the Digital Strategy, while Parliament took a decisive step by passing the Telecommunications Act 2006 with overwhelming cross-party support.

But positive as the direction of these changes may be, they are still too little and too late to arrest a serious decline. In New Zealand, the availability and usage of communications technology for economic and social benefit is well below those of comparable developed countries. With concerted leadership, vision and serious investment, we could harness technology to improve our relative prosperity and quality of life. Right now, by failing to act on opportunities, we are drifting backwards.

The smaller and more isolated a country, the greater competitive benefit it stands to gain from modern communications technology. Digital communication is to the 21st-century as water and roads were to the 19th. So far, New Zealand has failed to recognise that and to act accordingly. Less-developed countries are placing great emphasis on communications technology as a tool to raise their standards of living, to spectacular effect. Unless we act in a similar way, New Zealand will rapidly fall back in relative terms.

Our nation needs a far greater sense of opportunity, risk and urgency in bringing our communications up to 21st-century standards. Otherwise, we will quickly condemn today's young New Zealanders – the people who really count in policy-making – to living in a country with a third-class communications infrastructure which is increasingly isolated from the global digital economy on which we rely for the wellbeing of our citizens. Our brightest and best are already leaving.

New Zealanders are very aware of these issues, but less so of the solutions. Evidence of public frustration about telecommunications services appears in the media regularly. In Australia, broadband reach became a major issue in the 2007 elections, despite the fact that Australia has pulled well ahead of us in broadband penetration.

But this is not simply an electioneering issue. Governments have a role to play in putting taxpayers' money to best use to deliver public-good outcomes and the economic transformation required to secure New Zealand's place in the 21st-century world. Telecommunications, now firmly recognised as critical infrastructure, are the cornerstone of a healthy economy. Government must adopt an unambiguous leadership posture, actively exercising its position as regulator, user, investor and facilitator for the good of the country. This stuff matters.

TUANZ has produced this Manifesto as a resource document for those responsible for the writing of party policies in the lead-up to the 2008 general election. We offer all possible assistance to each and every political party that commits to the themes following.

The vision for a user-driven, leading-edge, online New Zealand

Communications technology offers solutions to the great majority of New Zealand's economic challenges, especially those that stem from our isolation, as well as to many of our social challenges.

The vision of TUANZ is that:

“BY 2014, ALL NEW ZEALAND BUSINESSES AND GOVERNMENT ORGANISATIONS CONTINUALLY LOOK FIRST TO COMMUNICATIONS TECHNOLOGY AS THE KEY ENABLER OF HIGHER PRODUCTIVITY, BETTER ECONOMIC PERFORMANCE AND IMPROVED SOCIAL WELLBEING.”

“COMMUNICATIONS TECHNOLOGY IS CHARACTERISED BY EFFECTIVE COMPETITION IN BOTH FIXED AND MOBILE SERVICES, RAPID DEPLOYMENT OF FIBRE TO THE PREMISES EVERYWHERE THROUGH A MIX OF PUBLIC AND PRIVATE INVESTMENT, AND A MATCH BETWEEN THE NEED FOR ICT SKILLS AND THE SKILLS AVAILABLE.”

“FAST INTERNET, BOTH FIXED AND MOBILE, IS RAPIDLY BECOMING UBIQUITOUS, WITH SPEEDS AND AFFORDABILITY KEEPING AHEAD OF COMPARABLE DEVELOPED COUNTRIES. RURAL AND PROVINCIAL BUSINESSES INCLUDING FARMS HAVE HARNESSSED FAST INTERNET TO MATERIALLY IMPROVE THEIR SUSTAINABLE COMPETITIVE ADVANTAGE AND HAVE STARTED COMMERCIALISING RURAL APPLICATIONS OF BROADBAND FOR WORLD MARKETS.”

“An incoming government should commit to a vision statement along these lines, and encourage all central and local government agencies to work actively towards that end.”

Key enablers of the vision

- + The positive steps taken to enable competition through the Telecommunications Act should continue. Officials should increase their monitoring of international developments in 'best practice' regulation, becoming more conversant with international trends and taking action to pre-empt bottlenecks and competition issues when necessary. The focus should move from dealing with the fixed-line competition issues around the incumbent, to a leading-edge future.
- + The environmental benefits of communications technology should be recognised and weighed up in ensuring communications services are fast-tracked as much as possible through RMA processes, with industry-wide standards replacing site-by-site approvals wherever possible.
- + Replacement of 20th-century copper wires with 21st-century fibre-optic cable, right to the customer's premises, should be recognised as a national strategic economic priority through a national digital architecture driven by an analysis of future user needs. Government should lead a national plan to bring this about, including a comprehensive engineering audit and costings followed by targeted investment to ensure a viable national fabric can be consolidated from a diversity of public and private sector infrastructure investments.
- + Intergenerational fibre-optic investment should be shared among central government, local government and the private sector, with recognition that tomorrow's telecommunications investors may be a broader and very different group to yesterday's.
- + Local government should be given a specific mandate to ensure the migration from copper to fibre in its region, along with the tools to make this occur.
- + Institutional structures should be updated through the creation of a single 'Digital Age' government agency modelled on the successful Singaporean precedent. This should reflect the vast expansion of the role of ICT in the economy. The current ICT policy role of the Ministry of Economic Development and its oversight of the Digital Strategy, should be subsumed into this unit – the MED is no longer the appropriate agency in this complex field.
- + ICT research and development should be a government-funded activity with extensive connections into international research programmes.
- + The Commerce Commission should be recognised as a competent 'hands on' regulator and given whatever powers it reasonably needs to manage the evolving ICT ecosystem in the most effective way for the long-term benefit of end-users.
- + The proposed new 'Digital Age' agency should be made accountable for understanding the reasons for the shortage of ICT skills and taking immediate action to implement short-term and long-term remedies.

New Zealand's challenges and technology's solutions

Challenge: An increasing proportion of New Zealanders are seeing their children move offshore as adults

Being in touch, online, at world-class speeds has become an essential element of modern-day life. While New Zealand lags behind, our young adults – especially the better educated – will have strong incentives to make their lives elsewhere. Conversely, if we offer high-quality connectivity, they will be more inclined to stay or return. At worst, if they do not, then the ability to communicate liberally across the Internet, exchanging family photos and messages, is a wonderful 21st-century way to keep families in contact and keep our national cultural identity strong.

Challenge: Poor workplace productivity, slow growth and low wages

The productivity of New Zealand's workplaces is among the worst in the developed world according to OECD statistics. Meanwhile, regardless of vocation – be it trades, professions, blue or white-collar roles – we have an acute shortage of labour. We desperately need to get more work, and better-focused work, from fewer people who are paid higher wages.

In almost every occupation, communications technology can provide solutions. In 2002 and again in 2004, TUANZ published reports giving examples of specific ways technology can be used to economic advantage in major economic sectors. The opportunities are endless. Recent work by the New Zealand Institute confirmed this with its calculation that the national economic benefits would be between \$2.7 billion and \$4.4 billion annually with further upside possible.

Better productivity will also impact on wages, allowing us to close the gap with other countries and reduce unnecessary emigration of skilled people.

Challenge: To arrest the decline of rural and provincial communities

Regional development is a key element of economic policy in this country as in many others. As communications technology continues to exert its pervasive impact on our lives, dealing with the urban/rural digital divide becomes vitally important. If rural and provincial communications are as good as those in urban areas are, this has a significant positive impact on education, health, community services, security and people's way of life. Conversely, if rural communications decline relative to those in the cities, this will encourage a population drift in the other direction.

The relative economic contribution of rural communities in New Zealand is far greater than it is in most countries, adding weight to the need for universal connectivity. The provision of fibre-enabled broadband to farms may sound expensive, but the economic return over the life of the investment will be massive.

Just as rail and road opened up regional New Zealand to early settlers, the way we deal with ICT deployment in the early part of the 21st-century will have an enormous impact on where people choose to spend their lives.

Challenge: Dealing with the economic cost of an aging population

New Zealand health costs are rising dramatically as the population ages and expectations for a reasonable quality of life increase. These cost increases are unsustainable in the medium to long term without improved prevention and treatment of chronic conditions, more effective community-based and self care, and increased efficiency in health-care delivery.

Effective and efficient implementation of population health initiatives and chronic-care models requires an increasing focus on national approaches to best use of specialist resources, care co-ordination and information sharing across a range of health providers.

Practical applications of technology, such as the 'Smart Home' concept for elderly care, whereby household movements and routines, abnormal use of appliances, taking of medication, and other functions specific to each individual can be monitored in order to delay a move to a rest home, mandate quality connectivity.

Technology, and in particular the ability to connect the thousands of health providers nationally, will underpin all strategies to address New Zealand's health challenge.

Challenge: Getting serious about environmental sustainability

World-class telecommunications infrastructure is essential to environmental sustainability. Digitally connecting specialist expertise with demand points that are presenting nationally increases productivity, improves sustainability and reduces costs.

Allocation of water rights can be made with infinitely more precision using technology-dependent communications. Sensors can be placed in the soil across a region which report on water content and humidity, allowing an operator at a central console to make allocations day by day in the national economic interest, communicate them to users and possibly, facilitate cross-compensation payments and charges online.

Early warning systems for such issues as waterway contamination can also be achieved.

Most tellingly, many usages of communications technology are a direct substitute for carbon-intensive transportation. Examples of 'telepresence' replacing actual face-to-face presence include teleworking from home; use of high-definition videoconferencing instead of flying to meetings; and farmers having online videoconferences with vets instead of the vets needing to come to the farm.

Telecommunications policy needs

Old generation copper lines

- + The Commerce Commission should complete its work on local loop unbundling and related services.
- + Telecom's long-awaited cabinetisation programme and 'Next Generation Network' roll-out should be managed, and where necessary regulated, in a competition-inducing and timely way.
- + RMA processes must be simplified.

New generation fibre networks to the customer

- + Fibre to the customer's premises, based on dynamic multi-vendor open access networks, should be adopted as a national economic development goal. There should be a time frame of no more than 6–8 years for completion. Fibre must go to every home, business, farm and marae.
- + Private sector investment should be stimulated, working with local government, central government, utility companies and end-users through a co-ordinated action plan.
- + The state sector, owned by all New Zealanders, should be leveraged deliberately through demand aggregation programmes as a tool to stimulate investment in open access infrastructure.
- + Creative options for achieving fibre-optic access to the nation's farms should be investigated by a small, dedicated task force.

Mobile

- + Government should support the Commerce Commission's investigation into mobile services and adopt its recommendations.
- + Ongoing action should continue to unblock barriers to entry, noting that New Zealand has only two mobile networks while all other comparable countries have three or more.

Institutional structures

Government's structures to meet the vast challenges of the digital age are well out of date and need to be reviewed.

- + The key policy resource in the Ministry of Economic Development dates from when 'IT' was a small industry in its own right. It does not have the sophistication to deal with the challenges of communications technology as a crucial enabler of economic and social progress. It should be replaced by a distinct agency of government, modelled on Singapore's Infocomm Development Authority, and charged with achieving measurable targets that will lift New Zealand's relative ICT performance over a five-year period.
- + The Commerce Commission should continue to act as the 'hands on' regulator of the complex and fast-changing ICT ecosystem, making sure that roadblocks to competition are identified and resolved quickly. Government should give the Commission all the powers it reasonably needs for that purpose. Its objective should be to ensure New Zealand has superior communications services compared to other developed countries of comparable size. Government should routinely accept its regulatory decisions unless there are extraordinary reasons to the contrary.