Ministry of Economic Development
Manatū Ōhanga

VOTE COMMUNICATIONS AND INFORMATION TECHNOLOGY

BRIEFING FOR THE INCOMING MINISTER 2008

Prepared by the Ministry of Economic Development

CONTENTS

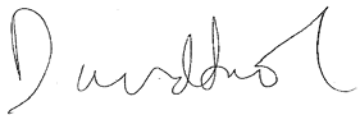
INTRODUCTION

This briefing provides you with an introduction to the Communications and Information Technology portfolio and Vote: Communications in the light of the Government's stated intentions in this portfolio - such as the deployment of ultra-fast broadband. It summarises key areas of policy, and major policy issues. It also lists pending actions and decisions that you will need to consider in the next three months.

The briefing is supplemented by the Ministry of Economic Development's broader overview briefing on *Key Economic Development Opportunities and Challenges*, along with a *Guide to the Ministry of Economic Development*, which details the Ministry's role, structure and functions.

As you have noted, Information and Communication Technologies (ICT) are an important contributor both to productivity growth and the quality of life of New Zealanders. We look forward to helping you maximise this contribution.

We would welcome an early meeting with you to discuss your priorities and how we can best help you achieve them.



David Smol
Chief Executive

OVERVIEW

The full potential that ICT offers is likely to be substantial...

1. The New Zealand economy has performed well over the past decade, with GDP per capita levels continuing to improve slowly compared with the OECD average. However, a large proportion of New Zealand's recent economic growth has been driven by increases in labour utilisation, which is not a sustainable source of long term growth. Future growth will increasingly need to be derived from increases in productivity.

2. Information and Communication Technology (ICT) is an important contributor to such productivity growth. This happens through:

    - the development of the ICT sector itself, which includes telecommunications companies, software firms, hardware providers and digital content firms
    - capital deepening driven by investment in ICT equipment
    - all sectors of the economy using ICT to enhance their efficiency.

3. ICT allows firms to introduce and improve products, services and processes, reduce costs and enhance sustainability – through reduced transport costs and more efficient production. Broadband is of particular note here, because not only do numerous production processes increase in efficiency as broadband performance improves, but an extensive broadband network also paves the way for companies to enter new markets and overcome some of the obstacles faced by a small, distant economy.

4. Research is underway to help us understand and quantify the contribution of ICT (including the deployment of faster broadband) to economic output and performance.

...but to maximise these benefits, we need to address a number of challenges

5. The key challenges and issues in the Communications and Information Technology portfolios are:

    - promoting telecommunications and broadband investment to address gaps in infrastructure and deliver new and improved services
    - addressing the regulatory challenges that new technologies and convergence pose
    - promoting the development of digital content, digital capability and cyber-security and safety.

6. These issues are discussed in more detail in the *Major policy and implementation issues* section of this briefing.

Work under Vote Communications ranges from regulation and investment to service delivery...

7. Government's role within Vote Communications centres on:

- establishing a regulatory environment that promotes competition and investment in ICT service markets (telecommunications, broadcasting and postal) in the long-term interests of consumers
- ensuring social and cultural objectives are met, such as providing universal service and supporting the visibility of New Zealand content online
- ensuring the radio spectrum resource is allocated and used efficiently
- facilitating the provision of broadband and uptake of information technology across the economy and within communities.

...covers both policy and operational functions…

8. The Ministry supports this role through:

- policy advice on the regulatory regime for telecommunications, postal services and radio spectrum (including oversight of the enforcement regime for telecommunications that the Commerce Commission's Telecommunications Commissioner provides)
- management and delivery services in regard to the radio spectrum
- policy advice on ICT as an enabler and enhancer of activity across the economy and within communities
- advice on the development of the information technology sector as an important sector for the economy in its own right
- implementation of measures to lower the cost and risk of broadband service deployment (including administration of the Broadband Investment Fund).

9. The annual operating appropriations for Vote Communications in 2008/09 total approximately $89.4 million, covering the following:

- $7.6 million (or 8.5 percent of the Vote) is for policy advice on New Zealand's communications sector
- $3.2 million (3.6 percent) is for administration of broadband investment mechanisms
- $10 million (11.2 percent) is for management and enforcement of the Radiocommunications Act 1989, which is funded predominantly from third-party fee income
- $7.8 million (8.7 percent) is for purchasing outputs from the Commerce Commission to enforce regulated telecommunications services and undertake specific telecommunications regulatory functions
- $1.5 million (1.7 percent) is for contractual payments to administer the telecommunications relay service
- $0.9 million (1.1 percent) is for Crown-related expenses for contributions to International Telecommunications Organisations
- $58.3 million (65.2 percent) in Multi Year appropriations is for accelerating broadband and growth in digital high-speed connectivity.

10. The Vote's overall budget operating baselines are forecast to remain at approximately $89.5 million for 2009/10. In addition, a one-off capital appropriation of $15 million has been made in 2008/09 for accelerating investment in the deployment of a second trans-Tasman fibre cable.

11. In line with your policy for State services, the Ministry is reviewing all Vote expenditure it has responsibility for, and is looking at specific opportunities to improve the cost effectiveness of delivering the Government's priorities. This includes identifying any areas where savings might be considered.

...and is carried out within two branches of the Ministry

12. The issues and outputs covered by this document relate to two branches within the Ministry of Economic Development. Day-to-day responsibility for these issues has been delegated to:

    - Stuart Calman, Acting Deputy Secretary, Energy and Communications – telecommunications, information technology, postal, radio spectrum and spectrum-related broadcasting issues.

    - Neville Harris, Deputy Secretary, Business Services – radio spectrum licensing, compliance and enforcement matters.

13. More information on these branches can be found in the *Guide to the Ministry of Economic Development*.

MAJOR POLICY AND IMPLEMENTATION ISSUES

Promoting investment in broadband and mobile networks

New Zealand is improving its broadband performance

14. Broadband coverage is now almost universal, with fixed-line (DSL-based) broadband available to around 93 percent of all lines, and either wireless or satellite-based broadband available to the rest of the population.

15. New Zealand is also catching up with the OECD average on broadband uptake: our overall ranking (measured by broadband subscribers per 100 inhabitants) has increased from 22nd out of 30 OECD countries in 2003 to 19th in 2008.

16. New Zealand consistently ranks in the top third for OECD broadband internet access plan price benchmarking. This suggests that vigorous competition is starting to develop. However, there is a lack of advanced broadband service options (such as packages including Voice over IP and content) compared with leading OECD countries.

Recent reforms aimed to increase competition and investment

17. The 2006 Telecommunications Stocktake led to wide-ranging reforms that have paved the way for new competition. This has been primarily achieved by introducing a range of unbundled wholesale services that enable competitors to access Telecom's local loop circuits and bitstream services; the operational

separation of Telecom into wholesale, network access and retail businesses; and the identification and allocation of additional spectrum for wireless broadband services.

18. Competition arising from these regulatory changes will lead to new investment, initially at the network services level and, over time, in infrastructure.

19. These regulatory reforms also required new investment in broadband. As part of its separation undertakings, Telecom will upgrade urban broadband access to 84 percent of customer lines to a minimum capability of 10 Mbps by the end of 2011, and progressively move telephone service provision to a Next Generation Network platform.

These regulatory changes will take time to bed in…

20. A significant amount of work is required to bed in the major regulatory changes introduced in 2006. Consideration of further regulatory reform will need to take into account the adjustment costs for industry and the benefits of regulatory certainty for investment (in a volatile financial context), and weigh these against the benefits of faster deployment of new technologies.

...and significant new investment is expected…

21. Service providers have responded to the regulatory changes by making significant investment commitments on top of business as usual.

22. Substantial private investment in the telecommunications sector (in both broadband and mobile networks) is now expected over the next five years. Signalled new investment from the private sector is expected to total approximately $3.0 billion by 2012 – including investment in core fibre networks and cabinetisation, as well as new and enhanced third generation (3G) mobile services.

...but more action will be needed if we're to close the gap with other OECD countries

23. This new investment will create a better platform for competition and innovation in the sector. However, some form of supplementary action to leverage faster and greater private sector investment in ultra-fast broadband is needed if New Zealand is to continue to close the gap with other OECD countries.

24. Pre-election commitments indicate that the incoming Government will work to accelerate the provision of ultra-fast broadband. The core commitment is to invest up to $1.5 billion to drive the roll out of fibre to, or closer to, the home, supported by mobile and satellite solutions where appropriate. We understand that priority in the first six years is to be given to business premises, schools, healthcare facilities and a first tranche of homes. The Ministry would welcome the opportunity to discuss with you options for implementing your policies.

25. This approach could be complemented by other measures in the short term while the $1.5 billion investment plan is designed, and implementation begins.

26. Firstly, the local Telecommunications Service Obligation (TSO) agreement (formerly the Kiwi Share Obligation), under which Telecom provides a local free calling telephone service, could be updated to address a range of concerns such as rural

investment levels, telephone services in a Voice over IP environment, an internet dial-up replacement and cost allocation. Updating the local TSO may also provide an opportunity to cost-effectively enhance rural broadband capacity.

27. There is also potential to continue with elements of the Broadband Investment Fund (BIF) – either in its existing form, or in a modified form (for example, a focus on rural broadband deployment). Round one of the BIF is currently underway and early decisions will be required from you regarding the future of the Fund.

A further investment challenge is in the area of mobile technologies

28. While the number of mobile phone subscribers in New Zealand is higher than the OECD average (6th out of 24 countries) mobile prices are very high by international standards (low and medium user plans are 25th or worse out of 30 OECD countries). Further investment - primarily through the entry of a third mobile network operator to the New Zealand market – would increase competition and put downward pressure on pricing.

29. The Commerce Commission announced on 6 November 2008 that it has launched a Schedule 3 investigation into whether to regulate mobile termination rates (including mobile-to-mobile voice termination, fixed-to-mobile termination and SMS termination). The outcome of this investigation may help determine the speed at which a third operator is likely to enter the market.

30. Obtaining RMA consent for cell sites continues to be reported by service providers as a constraint on the timing of roll out plans for new mobile infrastructure, although the recently introduced National Environmental Standard for Telecommunications is expected to help ease this situation.

Responding to new technologies and convergence

Convergence offers significant new opportunities...

31. Convergence is an example of technologically driven evolution of markets. In the past, telecommunications, information technology and broadcasting all operated independently in terms of the technology used, the information transmitted, and the networks employed. Television, radio, telephones and computers were used for discrete purposes and the services provided were regulated separately. Technological convergence, however, enables traditionally distinct voice and data transmissions to be transported over the same network, and integrated end-user devices to be used for purposes such as telephony, television or personal computing.

32. This convergence offers substantial opportunities for the development of new value-added services, convenience, efficiency and the expansion of consumer choice. It allows both traditional and new communication services to be provided over the same networks, which can lower the price of communications services due to increased efficiency and lower overall network capital expenditure costs.

33. This is forcing telecommunications and broadcasting companies to change their business models. For example, telecommunications companies are realising that selling connection alone is no longer viable, and are looking at adding value by providing high quality content. For broadcasters, a channel with a single

programme schedule is no longer viable. They now need to create content, package it, and distribute it across multiple platforms.

...but also poses new policy and regulatory challenges

34. With these benefits come new policy and regulatory challenges:

- Market power in network services has the potential to spill over into media content markets, and consequently reduce these markets' level of competitiveness.
- There is a need to decide to what extent telecommunications carriers should be responsible for the content and applications carried on their networks in relation to issues such as copyright, privacy, or inappropriate material.
- A discrete approach to the regulation of these three sectors may no longer be appropriate and a converged regulatory environment needs to be explored.

35. Work is already underway to review the digital broadcasting regulatory framework to ensure it meets the demands of a converging digital environment. This review will report to you and the Minister of Broadcasting. A major objective of the review is to ensure a suitable level of competition in terms of access to broadcasting networks, platforms, and content to promote economic, social, and cultural outcomes. The review is considering:

- the appropriateness of current institutional arrangements in a converging digital environment – in particular, the roles of the Commerce Commission, the Telecommunications Commissioner, and the Broadcasting Standards Authority
- a competition study to examine access to content and platforms or networks for broadcasting-like channels and services
- analysis of options to support the achievement of public service broadcasting outcomes
- options for improving investment in broadcasting infrastructure.

36. You may also wish to consider, in consultation with the responsible Minister, whether existing copyright legislation requires further review in light of concerns about recent changes to legislation requiring Internet Service Providers to take down infringing content and terminate the accounts of repeat infringers.

37. One of the most rapid areas of technology change is wireless infrastructure, since many older analogue systems are being replaced by newer digital systems. New wireless technologies can allow the radio spectrum to be used more efficiently, and pave the way for innovation and new services. Consequently, the way we allocate and manage the spectrum resource also needs to be reviewed on an ongoing basis, to ensure that New Zealand businesses and consumers are able to take advantage of these technologies.

38. Current work covers spectrum arrangements to support a range of new technologies and services, including next generation cellular systems, wireless broadband access services, digital broadcasting, digital land mobile radio systems and radio frequency identification tags.

Promoting digital development

Government plays an important role in promoting digital development

39. Harnessing the potential gains from ICT requires more than investment in high-speed digital infrastructure. As businesses, application developers, exporters of digital services, communities, and home consumers gain access to faster networks, they are changing the way they work and do business, and new opportunities are emerging. This leads to complementary investment in related technologies (such as new hardware and software), re-design of business processes, and the development of new skills. It is an evolving process of technologically driven innovation – and a key characteristic of this type of development is rapid and widespread innovation as new products and services lead to further opportunities.

40. As with the convergence example above, there is a need for regulatory frameworks to adjust to market-led changes to ensure effective competition to facilitate interconnection and access, and to provide for consumer protection.

41. There is also a challenge for government to facilitate development by:

    - making complementary investments in areas such as research and development, skills supply and market development, where the private sector is likely to under-invest and/or where significant public benefit exists
    - addressing co-ordination and information failures (for example, by encouraging interaction between firms and research or education providers)
    - recognising that the government is the biggest purchaser and user of ICT and there are direct productivity gains to be had through this, changes in the way government services can be delivered and potential synergies with private sector activity. These government procurement and e-government issues will be covered in more detail in briefings from the State Services Commission.

Digital development needs to be well-coordinated to be effective

42. Digital development not only contributes to increased productivity, but also to improved environmental, community and cultural outcomes. Policy in this area needs to be well integrated across government, the private sector and the community.

43. The Ministry of Economic Development takes the lead role in coordinating digital development policy across government, currently through the Digital Strategy. We also lead many of the initiatives outlined in the Strategy (especially in the economy, environment, connection and confidence areas), with other initiatives being led by agencies represented in the Digital Strategy Steering Group and reporting to the responsible Ministers.

44. You and your Ministerial colleagues may wish to review the priorities for digital development. A number of priority initiatives have no current funding or require additional funding. The Ministry could coordinate a funding process if digital development is seen as a priority.

Increasing the number of skilled ICT professionals will be critical...

45. A sufficient supply of skilled ICT professionals is vital for the continued development of New Zealand as a 21st century economy. However, the fill rate for ICT jobs in 2007 was only 57 percent, and the number of students enrolling in ICT courses in New Zealand has been steadily declining for the last five years. This may change as economic conditions affect ICT services worldwide.

46. Effective progress in this area is likely to require the cooperation of the ICT industry. There have recently been positive signs that the industry may be forming an independent industry body which could become a partner with government and tertiary providers. At the compulsory education level, the ICT curriculum and teaching guidelines have recently been reviewed, to focus on ensuring all students are digitally literate, and that senior students can choose a clear path into specialist ICT careers.

47. Policy responses you may wish to consider, in consultation with responsible Ministers, include:

- the promotion of ICT careers
- better matching of tertiary courses to industry needs
- creating a professional development and accreditation framework for ICT practitioners
- ensuring immigration policy has sufficient focus on attracting and retaining ICT practitioners.

...as will ensuring universal digital literacy…

48. Digital literacy – the basic ability to use computers, the internet and other ICT devices – is a fundamental skill for 21st century workers and citizens.

49. Current generations are growing up as 'digital natives', but existing workers, older people and even younger people from disadvantaged backgrounds do not necessarily have the digital literacy needed to be productive and fully participate in the digitally-enabled economy and society.

50. Policy responses you may wish to consider, in consultation with responsible Ministers, include:

- supporting community-based digital access and literacy programmes
- encouraging employers to enhance the digital skills of employees.

...protecting users from cyber-crime...

51. Confidence in the security and reliability of the internet underpins increased adoption of digital technology across the economy and society.

52. However, ensuring cyber-security is becoming increasingly difficult as bandwidth expands and the range of services available online increases. Users are vulnerable to profit-motivated cyber-crime and mischievous or unintentional disruptions to service. Policy responses that you might wish to consider, in consultation with other responsible Ministers, are:

- building universal awareness of online safety, security and privacy issues
- enhancing the mechanisms available in New Zealand to ensure the security of digital infrastructure and networks and respond to cyber-attacks
- enhancing the security of digital information
- enforcing privacy and cyber-crime law.

...ensuring SMEs don't miss out on the benefits of digital technologies...

53. SMEs are a key part of our economy. Defined as employing fewer than 20 people, they represent over 97 percent of New Zealand firms and in 2006, produced 38.9 percent of total value-added output[1].

54. However, these firms tend to lag behind larger firms in their understanding of the opportunities and implications of ICT, and they therefore may be missing out on potential productivity enhancement opportunities.

55. Policy responses could include providing information and brokering services to SMEs regarding available digital technology and assistance services.

...and promoting the development of innovative digital content and applications

56. Innovative digital content and applications build value and underpin developments in areas as diverse as primary industries, healthcare, and entertainment. New Zealand has pockets of expertise in electronic learning, gaming, interactive content, animation and digital effects. However, the sector is small and fragmented, and faces strong international competition for skills and financing.

ICT also offers the opportunity to increase efficiency of resource use…

57. ICT manufacture and use currently contribute about two percent of global carbon emissions. The short life-span and toxic components of much hardware create an e-waste problem. However, use of ICT also offers the opportunity to reduce carbon emissions and increase the efficiency of resource use.

58. Policy responses, in consultation with responsible Ministers, could include:

- supporting ICT-related efficiencies in government and across the economy, including increased use of tele-working and video-conferencing
- supporting ICT efficiency standards, recycling schemes and sustainable procurement guidelines
- creating and promoting environmentally-friendly digital tools, such as environmental management systems.

[1] *SMEs in New Zealand: Structure and Dynamics*, The Ministry of Economic Development, 2008

PENDING DECISIONS OR ACTIONS

59. You will need to consider the following matters over the next few months.

Issue	Reason	Timing/comment
Issues/decisions required		
The local telephone service TSO needs to be updated to include delivery by new technology	Without amendment, Telecom will be technically in breach of the TSO if it provides local service by Voice over IP based technologies.	Draft Cabinet paper by February 2009.
Digital broadcasting review	Decisions will be required on the next steps of the digital broadcasting review, particularly in regard to converged regulator options, any issues identified by the competition study of audio-visual broadcasting markets, and spectrum rearrangements associated with the switching off of analogue TV	You will be receiving regular progress briefings, including status updates on the competition study. The competition study is due to be completed by 27 March 2009.
Radio licensing regime	The Ministry is undertaking a review of competition related issues associated with the radio licensing regime in the 2008/09 financial year. Consideration needs to be given to the arrangements under which licences are assigned, in order to encourage competition and 'best value' use of the spectrum resource.	Draft consultation paper for Minister to consider (December 2008).
800-900MHz radio spectrum bands	The Ministry is undertaking a review of the current allocation of the '800 MHz' and '900 MHz' spectrum bands, which have high market value for cellular, broadband and emerging technology uses.	Draft consultation paper for Minister to consider and to provide to Cabinet (February 2008).
Schedule 3 investigation into mobile termination	The Commerce Commission launched this investigation on 6 November 2008. This is likely to be the major regulatory decision impacting the mobile market that you will make in 2009.	The final proposal for regulation is likely to be made to you by the Commission by mid to late 2009. There will be draft reports and significant media/sector interest throughout the review.

Funding issues		
Broadband Investment Fund (BIF) - two-stage application process incorporating Expression of Interest (EOI) and full application	Evaluations of EOIs submitted on 30 September under two-stage process are now complete – and the Minister for Communications announced successful EOIs on 6 November. Decisions on Applicant Development Assistance (ADA) were also made. The process for successful EOIs is currently on hold. Full applications were submitted on 30 September 2008 under the one-stage process. Evaluation of these is currently being completed	Decisions will be required about the future of BIF ideally by December 2008.
Deployment of second trans-Tasman fibre cable	As part of BIF in May 2008, Cabinet agreed to support the deployment of a further trans-Tasman fibre cable to a maximum of $15 million. The Research and Education Advanced Network New Zealand (REANNZ) has commenced the tender process (RFI).	Briefings on the RFI are likely in December/January. RFP concluded and final purchasing decisions likely to be made by Cabinet in March/April 2009. You, and the Minister of Finance, will need to confirm whether you are happy to move to the RFP stage of the tender process.
State sector core networks - Kiwi Advanced Research and Education Network (KAREN) operated by REANNZ, and the Government Shared Network (GSN), operated by State Services Commission.	Information withheld in accordance with section 9(2)(b)(ii) of the Official Information Act – prejudice to commercial position of the subject of the information.	Reports on both due with Ministers early 2009.

International events		
Korea, Australia, and New Zealand (KANZ) Broadband Summit	New Zealand is scheduled to host the next KANZ Broadband Summit in late 2009. This is a Ministerial level meeting and is expected to attract up to 200 overseas participants as well as Ministers of Communications and IT (or equivalent) from Australia and Korea. A budget provision of $160,000 would be required.	The summit is to be held in late 2009. A final Ministerial decision on New Zealand hosting the Summit will be required in early 2009.
Appointments		
No issues		

APPENDIX 1

MINISTERIAL RESPONSIBILITIES IN RELATION TO CROWN ENTITIES AND OTHER BOARDS

Telecommunications Commissioner

The Telecommunications Act 2001 establishes a Telecommunications Commissioner who is a member of the Commerce Commission and is appointed by the Minister responsible for the Act.

The Commissioner has powers under the Act to make determinations, in some circumstances in conjunction with two other Commissioners from the Commission, on telecommunications services or telecommunication service obligation matters regulated under the Telecommunications Act 2001.

The Commissioner also has powers to undertake investigations into the case for regulating telecommunication services and make recommendations to the Minister responsible for the Act on whether they should be regulated.

The Telecommunications Act was amended in Dec 2006 to extend the Telecommunications Commissioner's powers and functions to initiate regulated services determinations, to monitor and provide public information on telecommunications service market performance such as OECD country relative pricing, enforcement of Telecom's Separation Undertakings, set up an accounting disclosure regime, and strengthen the enforcement provisions.

Since the introduction of the Act, the Commerce Commission has issued its final determinations on standard terms and conditions for access to the unbundled local loop, unbundled bitstream access, and co-location regulated services. The Commission is currently undertaking standard terms determination (STD) processes for mobile co-location and sub-loop related services.

The Commission has also recommended regulation of fixed-to-mobile termination; however in April 2007 this recommendation was rejected. Both Telecom NZ and Vodafone NZ separately provided deeds setting out binding commitments related to mobile termination rates as an alternative to regulation.

The Digital Development Group

The Digital Development Group is charged with creating and implementing initiatives to advance digital development throughout the country. It is made up of a Council and a Forum.

The Council is an incorporated body which receives operational and programme funding through a funding agreement with the Ministry. It currently comprises the independent Chair, an Executive Director, and ten members from the ICT industry, community groups, and other organisations that have an interest in digital development matters.

The Digital Development Forum is a broad grouping, open to all comers with an interest in digital development. The Forum will meet at least once yearly to provide feedback and direction to the Council Board. This first meeting of the Forum was on 23 September 2008.

APPENDIX 2

LEGISLATION ADMINISTERED BY THE MINISTRY UNDER VOTE COMMUNICATIONS

Electronic Transactions Act 2002

The Act's objective is to confirm the legality of electronic transactions and facilitate the use of electronic technology for meeting thousands of statutory requirements for information to be in writing, signed, retained or produced. The Act contains a list of statutory requirements which are exempt from the Act's provisions allowing requirements to be met by electronic means. This list of exemptions has been reduced since the Act coming into force and it is intended that it will continue to be reduced over time.

Unsolicited Electronic Messages Act 2007

This Act regulates the sending of electronic messages. The Act prohibits the sending of unsolicited commercial electronic messages for marketing or promotional purposes using email, text or instant messaging services and imposes certain requirements on the sending of commercial electronic messages.

The Act establishes a civil penalty regime for non-compliance and is enforced by the Department of Internal Affairs.

Year 2000 Information Disclosure Act 1999

The objective of this Act is to protect people against civil liability for information disclosure statements relating to the electronic processing of information between 15 May 1999 and 30 June 2001. It is now redundant and can be repealed.

Telecommunications Act 2001 (amended December 2006)

The Act is the principal legislation that sets up the telecommunications regulatory regime. In particular it provides a mechanism that is used to promote competition in the telecommunication services market by regulating the supply of key services to service suppliers where this will deliver long term benefits to end-users of those services. The Act empowers the Telecommunications Commissioner to resolve the terms and conditions of supply of regulated services.

The Act provides provisions for initiating investigations by the Telecommunications Commissioner of the case for regulating further services and making regulatory recommendations to the responsible Minister.

The (Telecommunications Service Obligation (TSO) framework was established by the Act. The framework is used to ensure that essential telecommunications services are made widely available at affordable prices.

There are currently two TSO instruments: one for the local residential telephone service (known as the "Local Service" or "Kiwi Share" obligation), and the other for the telecommunications relay service (known as the "deaf relay" obligation).

The Local Service TSO requires Telecom to provide an unmetered local calling service. It has recently been reviewed to ensure that TSO requirements continue to efficiently meet the needs of telecommunications users.

The 2006 Telecommunication Act amendments introduced a requirement for the responsible Minister to settle and maintain a robust operational separation plan with Telecom that requires the business operation to be separated to support transparency, non-discrimination, and equivalence of supply of particular services.

The Act provides a range of supporting measures to enhance the effectiveness of the Act, such as accounting disclosure, enforcement provisions, market monitoring and information dissemination.

Postal Services Act 1998

This Act, which came into force on 1 April 1998, removed the statutory monopoly on letter delivery that New Zealand Post had previously enjoyed. The Act requires all postal operators involved in carrying letters for less than 80 cents to be registered.

Under the Act, New Zealand Post currently has the sole right to represent New Zealand as a postal administration internationally and to issue postage stamps with the words "New Zealand" on them.

Registered postal operators generally have the right to install post-boxes in public places, and are subject to obligations regarding the detention and delivery of postal articles.

Post Office Act Repeal Act 1987

This Act repealed the Post Office Act 1959 to facilitate the corporatisation of the Post Office. It contains transitional provisions relating to employee funds and benefits but it is likely that the Act can now be repealed.

Radiocommunications Act 1989

The Radiocommunications Act 1989 provides the legislative framework for managing radio spectrum in New Zealand. It allows privately-held, tradable, long-term rights to spectrum (either nation-wide management rights or geographically-specific spectrum licences) to be created, while also continuing the system of administrative licensing that existed before 1989 for those frequency bands not transferable to the tradable rights regime. It also sets up procedures for dealing with interference and managing disputes between spectrum users.

Telecommunications (Residual Provisions) Act 1987

This Act was formerly the Telecommunications Act 1987, and now contains residual provisions from that Act that were not replaced by the Telecommunications Act 2001. This Act now contains the power for police or customs officers to obtain call data warrants.

Year 2000 Information Disclosure Act 1999

This Act related to year 2000 compliance, and has very limited continuing effect.

APPENDIX 3

STATUTORY FUNCTIONS WITHIN THE COMMUNICATIONS AND INFORMATION TECHNOLOGY PORTFOLIO

The following statutory functions are undertaken in Vote Communications:

Statutory

- Manage the legislation detailed in Appendix 2
- Administration of the registration of telecommunications network operators in New Zealand
- Administration of the registration of postal operators in New Zealand
- Administration of information disclosure for postal policy
- Enforcement of the Radiocommunications Act 1989, including licence assignment, compliance, enforcement, and registration responsibilities
- Administration of TSO obligations and Industry Levies.

Major responsibility areas

- Provision of policy advice on the regulation of the ICT sector including advice on recommendations of the Telecommunications Commissioner
- Policy advice on the social, cultural, environmental and economic impacts of information and communications technology
- Provision of policy and technical planning advice on the allocation of the radio spectrum resource, including advice broadcasting spectrum and related commercial broadcasting matters.
- Monitor the performance of the telecommunications functions of the Commerce Commission
- Administer TSO instruments
- Administer the Broadband Investment Fund
- Represent New Zealand's interests in international ICT fora and trade negotiations.

APPENDIX 4

KEY STAKEHOLDERS

Stakeholders are consulted with to ensure an understanding of the strategic issues underpinning decision making within the Communications and Information Technology portfolio: In particular consultation takes place with:

- ICT sector service providers, for instance, telecommunications companies, creative sector companies, postal operators, broadcasters, commercial and non-commercial radio spectrum users
- ICT sector representative bodies, for instance, TCF, Computer Society, Digital Development Council, ISPANZ
- Other sector representative bodies, for instance, New Zealand Institute of Management, Business New Zealand and Federated Farmers
- Government departments, for instance, Treasury, SSC, DIA, DPMC, MCH
- International bodies, for instance, ITU, APEC Tel, ICANN, OECD, UPU
- Consumer organisations, for instance, Internet New Zealand, Consumers Institute, TUANZ
- Local bodies for instance, Local Government NZ, Regional and Local councils
- Crown entities, for instance, Commerce Commission, NZTE, REANNZ
- Community groups, for instance, Maori and other ethnic groups, Deaf Community regarding relay services
- Other Ministers with an interest in the Communications and Information Technology portfolio, for instance, Ministers of Finance, Rural Affairs, SSC, Broadcasting, Education, National Library, Economic Development, Community and Voluntary Sector and Maori Affairs.

APPENDIX 5

INTERNATIONAL AGREEMENTS RELEVANT TO THE PORTFOLIO

World Trade Organisation

As a member of the WTO and a signatory to the General Agreement on Trade in Services, New Zealand has made binding sector-specific commitments in both basic and value-added telecommunications and IT services to maintain New Zealand's open market in telecommunications and IT.

The Organisation for Economic Cooperation and Development

The OECD has a parent committee, the Committee for Information, Computer and Communications Policy. This provides an invaluable mechanism for exchanging policy information, peer reviewing individual country performance, and benchmarking information for the benefit of its members. New Zealand participates, where possible, in the work of this committee and its sub-committees, as a means of enhancing our policy decisions, and comparing our performance (for example, broadband statistics) with our OECD peers.

Closer Economic Relations with Australia and other Bi-lateral Trade Agreements

Under CER, New Zealand and Australia have agreed to maintain an open market for telecommunications and IT. Telecommunications chapters relating to market access issues are often included in other bi-lateral trade agreements.

International Telecommunication Union (ITU)

The ITU is an inter-governmental organisation whose main roles in telecommunications are setting international standards for telecommunications equipment interfaces and developing recommendations for use by telecommunications service providers handling telephone traffic between countries. New Zealand is a member state of the Union, and Telecom New Zealand and Kordia are non-state members. The World Summit on the Information Society was also established under the auspices of the ITU.

The ITU Radiocommunications Sector is responsible for international allocation of various types of services across the full range of useful radio frequencies and setting recommended standards for radiocommunications services and systems.

Internet Corporation for Assigned Names and Numbers (ICANN) Governmental Advisory Committee (GAC)

ICANN is responsible for policy and administration of the unique identifiers on which the Internet is dependent: the Internet Protocol addressing system and the domain name space. The GAC provides advice from member governments to the ICANN Board on relevant issues. The GAC, being a non-treaty organisation, operates by consensus and its advice has a decisive weight on ICANN deliberations. New Zealand normally attends two of the three annual meetings with the support of InternetNZ which meets travel and incidental costs of attendance.

Asia Pacific Economic Cooperation (APEC)

New Zealand participates in APEC Telecommunications Working Group activities that aim to promote trade in telecommunications services. The group aims for consensus, as it does not have a power to make binding decisions. Its main value is in sharing experiences on regulatory approaches and measures to promote internet and broadband access and to overcome the digital divide. It holds a ministerial meeting every two years.

Intelsat

Intelsat is an international satellite company that has recently been formed from the former intergovernmental co-operative set up under an international treaty. The restructuring was to improve its ability to compete against private satellite companies and fibre optic cable systems. Telecom has a shareholding.

Universal Postal Convention

The Universal Postal Convention, established by the Universal Postal Union (UPU), sets out the internationally agreed rules that countries use to charge each other for the exchange of international mail. New Zealand is a member of the union.

Asia-Pacific Telecommunity

The Asia-Pacific Telecommunity is an intergovernmental organisation that coordinates government viewpoints on issues and promotes the role of telecommunications in the region. It is particularly active in radio spectrum management matters.

International Mobile Satellite Organisation (IMSO)

The IMSO is a small intergovernmental organisation that has responsibility to manage public service obligations relating to communications for distress and safety on the high seas. New Zealand is a signatory to this treaty-level organisation. The associated satellite operator, Inmarsat plc, is a listed company based in the United Kingdom.

International Telecommunications Satellite Organisation (ITSO)

The ITSO is a small intergovernmental organisation that exists to ensure public service obligations relating to satellite communications for small and developing countries (for example Pacific Island States) are maintained. New Zealand is a member of this treaty-level organisation. The associated satellite operator, Intelsat, is now wholly privately owned by a United States investment fund. Other satellite operators now also provide competitive services.

Mutual Recognition Agreements, Memoranda of Understanding and Cooperation Agreements

There are number of bi-lateral agreements that do not have the status of treaty obligations which relate to standards, mutual recognition and general cooperation between the signatories. Two significant examples are mutual recognition arrangements with Australia and China relating to the regulation of radio interference from electrical products (known as ‘EMC’).