

**COMMUNICATIONS PORTFOLIO
BRIEFING FOR THE INCOMING MINISTER
December 2011**

Prepared by the Ministry of Economic Development

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INTRODUCTION

Government's economic aim is to build a more competitive economy trading more successfully with the rest of the world. This will depend primarily on the efforts of firms, but also on ensuring the best underlying environment for business success.

New Zealand's unique status as an OECD economy that is both small and distant from other markets makes this environment particularly challenging by:

- limiting competitive pressures for firms to become more productive
- limiting scope for them to build economies of scale domestically
- making it harder for them to build such economies through overseas expansion.

A continuing focus on sound government finances, macroeconomic stability, tax and welfare systems which create the right incentives, an efficient public sector and a world-class education system will provide a solid foundation for firms to tackle these challenges.

The portfolios supported by the Ministry of Economic Development complement this approach by working with business to improve other key aspects of the business environment. They aim, in particular, to strengthen:

- drivers for success and productivity improvement in firms
- international linkages that support trade and flows of investment, skills and ideas
- the competitiveness, integrity and effectiveness of New Zealand's markets
- the regulatory framework for, and how public agencies interact with, businesses
- the quality and reliability of key infrastructure services that support growth
- the framework for environmentally responsible use of New Zealand's natural resources.

Building a more competitive economy will depend on progress on all these fronts. It will also require a coherent overall government strategy and approach which is well aligned with business requirements and efforts. We will work to support you, and other Ministers, to help you define and deliver this overall strategy.

Your portfolio contributes to this picture as Information and Communications Technology (ICT) is increasing in importance in all areas of life, and there is a direct correlation between investment in broadband internet access and growth in GDP, gains in productivity and net job creation. A number of studies suggest that a move to faster broadband could increase economic growth by up to 1.2 to 1.4 percentage points. It also leads to a number of societal benefits (for example, in health, education, and the environment).

The roll-out of the Ultra-Fast Broadband and Rural Broadband initiatives and the free-up of 4G wireless frequencies have the potential to transform New Zealand's future and move our broadband speeds to among the fastest in the world. The key focus for the portfolio over the next few years is to ensure the initiatives are completed on time and according to plan, and that uptake of the services is encouraged to ensure New Zealand makes the most of the potential from telecommunications investment.

As ICT operates across the economy and society it is more than just a sector, and work not only under this portfolio but a number of other portfolios rely on ICT initiatives to deliver their

objectives. This Vote, therefore, plays a key coordination and facilitation role across government in the ICT area.

This briefing provides you with an introduction to this portfolio. It summarises key areas of policy and major policy issues. It also lists immediate issues and decisions that you will need to consider in the next few months.

We have also provided you with a *Guide to the Ministry of Economic Development* which details the Ministry's role, structure, and functions.

We would welcome an early opportunity to meet you to discuss the points in this briefing, so that we can establish how we can best help you achieve your objectives.

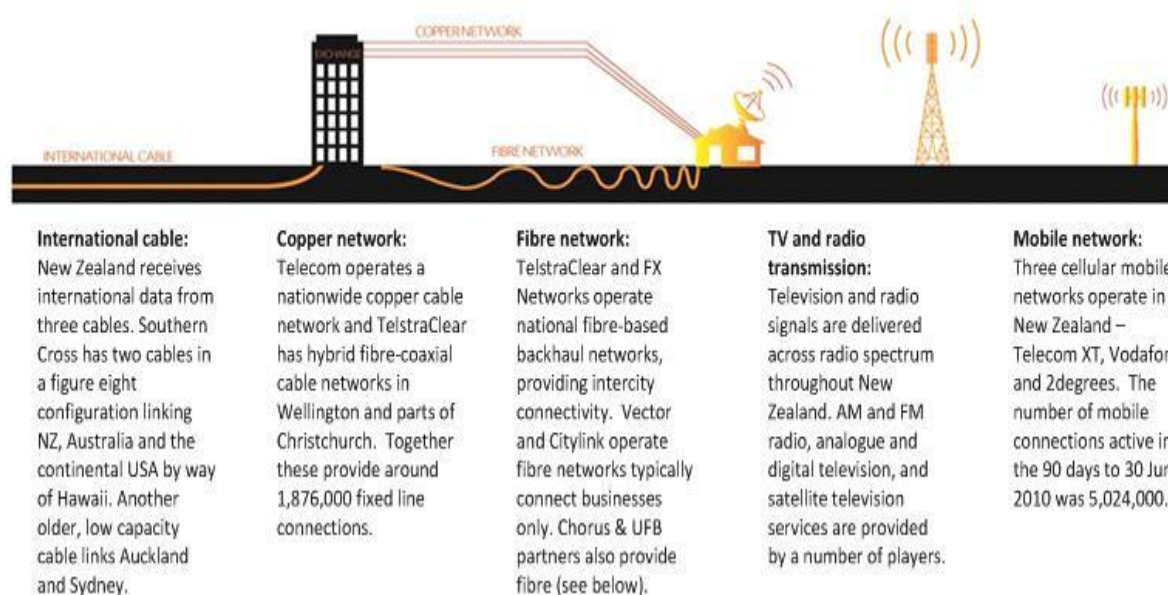
A handwritten signature in black ink, appearing to read 'David Smol', with a stylized flourish at the end.

David Smol
Chief Executive

OVERVIEW

The Telecommunications sector in New Zealand...

1. New Zealand's communications infrastructure supports fixed-line, fixed wireless and mobile telephony, and allows homes and businesses to access the internet. Communications networks are owned and operated by predominantly privately owned telecommunications companies. Below is a description of the infrastructure and providers.



2. New Zealand's expenditure on information and communications technology infrastructure as a percentage of GDP is lower than the OECD mean. New Zealand is in the middle of the OECD pack for average advertised broadband download speeds, but the cost of accessing broadband and mobile telephone appears to be higher than in most other OECD countries. However, there are signs of improvements; since 2006 the number of broadband subscribers per 100 inhabitants has increased faster in New Zealand than in other OECD countries.

...involves fast-moving technological developments...

3. Examples of fast-moving technological change include: the move away from purchasing hardware and software, to purchasing information technology as a service (for example, the cloud); converging digital industries delivering voice/video and high speed data; and applications moving from desktop to mobile. End-user needs are also changing – people are now always online and on-demand (“I want to access information anytime, anywhere”), and operating globally. This is changing operating practices and the way in which services and goods are being delivered (for example, music, books and travel arrangements are all increasingly being purchased online).

...which have the ability to transform the way people do business and live their lives

4. The technological changes, applications and increasing reliance on the internet can provide economic productivity gains and other social and cultural benefits (for example in the health and education sectors). It is broadly accepted both in New Zealand and internationally that there is a direct correlation between investment in broadband internet access and growth in GDP, gains in productivity and net job creation. A number of studies suggest that a move to faster broadband could increase economic growth by up to 1.2 to 1.4 percentage points.

Telecommunications infrastructure needs to keep up with demand to deliver on this potential...

5. Complex applications, the use of cloud computing, and the growing use of 'smart' devices is increasing demand for bandwidth. Data from a TeleGeography study (2010) shows internet traffic growing at about 30 percent per annum or more and international traffic grew 60 percent last year¹. Further, as technologies develop and countries move to ultra-fast broadband networks, more and more applications will become available, which will result in additional demands on the capacity of our infrastructure.
6. This demand for communications technology will outstrip current communications infrastructure and New Zealand's current legacy networks cannot be upgraded to provide the speed and capacity consumers will expect in the medium term².

...and government has actively encouraged investment in this sector

7. Because demand will outstrip current infrastructure in the medium term, and as the private sector was not yet ready or may not have adequate incentives to build the infrastructure required to deliver fibre to the premise on scale quickly, the government has put in place the Ultra-Fast Broadband (UFB) initiative to build a fibre network based on a private/public sector partnership. The government also recognised that the productivity gains from fibre will be realised most acutely in particular sectors (for example, education and health) and that fibre should be deployed early to these areas. However, they may not always be the most commercially attractive targets for privately directed investment.
8. The government has also invested in the Rural Broadband Initiative (RBI) to incentivise the extension of fibre backhaul, DSL (digital subscriber line: technologies

¹ Data from TeleGeography's Global Internet Geography study revealed that international Internet traffic grew 62 percent in 2010. While down slightly from the 74 percent growth recorded in 2009, it is well in line with previous years.

² By the end of 2011, the copper network should be capable of delivering ADSL2+² (10 Mbps or better) services to 84 percent of lines. Some lines are capable of VDSL² (25Mbps or better). Some additional upgrade is possible (for example, by bonding pairs of copper lines or by using VDSL2+). TelstraClear's cable network for residential customers is able to provide up to 100 Mbps and upload speeds of 10 Mbps with the potential to increase to 100 Mbps. Wireless will likely be capable of speeds of 100 Mbps and more in the medium term, but will always have contention, range and reliability issues and is much better utilised for mobile communications and where line/cable-based terrestrial solutions are not possible. In any case, wireless networks all still rely on fibre-based transport and backhaul, so UFB is needed to support the backbone of ever more bandwidth-demanding wireless networks. Fibre by comparison is a more durable technology able to be upgraded to achieve 1000 Mbps or more.

which connect a computer to the internet), and fixed wireless broadband to rural communities where it may not have been commercially viable to do so.

9. Faster and better broadband that is internationally competitive is particularly important for New Zealand given its geographic isolation. Business needs to effectively connect with the rest of the world and early adoption of fibre will enable New Zealand to be positioned to take early advantage of new technological developments and productivity gains.

However, future ongoing private sector investment is required and the settings have to be right to encourage this investment...

10. For the potential of telecommunications services to keep being realised, the sector will need to continue to invest in telecommunications infrastructure and innovate. In order to undertake this investment they need to be clear about whether, when, and why, government is likely to intervene in the sector, and confident that the regulatory systems are stable and supportive of investment.

Regulation will need to keep up with changing technology...

11. Changing technology, such as UFB, the evolving relationship between broadcasting and telecommunications sectors, and the changes in the way content and services are delivered through the internet will impact on telecommunications regulatory and competition settings and other areas like privacy and intellectual property law. Legislation needs to allow for, and not impede, the benefits arising from telecommunications.

...and infrastructure needs to be resilient

12. The increasing reliance on information technology by business, critical infrastructure providers and government, means there is a corresponding increase in risk of cyber intrusion. Further, the risks of disruption occurring within New Zealand (and with our connection to the rest of the world) and their impact, due to national disaster or other forms of disruption, need to be minimised.

Improving the quality, availability, price, and security of telecommunications services

13. The government's aim for the ICT portfolio is that the quality, availability, price and security of New Zealand's telecommunications services increasingly supports New Zealand's position as a competitive and life-style location.

14. This will be delivered through the following outcomes:

- Urban and rural New Zealanders have access to competitively priced voice and broadband services, and high speed broadband is readily available to New Zealanders and sectors critical for growth.
- New Zealand's local and national telecommunications infrastructure is used efficiently to maximise overall capacity over the medium and long term, and minimise cost to consumers.

- Radio spectrum is allocated to the highest value use, subject to cultural, social and community objectives.
 - Key telecommunications infrastructure and networks are reliable, secure and resilient.
 - Legislation and policy frameworks keep pace with technological developments, and a good balance is achieved between intervention (to protect consumers and address market failures) and providing sufficient certainty to invest.
 - Use of UFB and RBI infrastructure is actively encouraged in sectors critical for growth (for example, education, health, business and government sectors) and information about the benefits of RBI and UFB is easily accessible.
 - Consumers and businesses have access to information that enables them to make informed decisions about which products best meet their needs, and have access to effective redress mechanisms.
15. We deliver those outcomes by providing advice on:
- the regulatory regime for telecommunications and information technology
 - the regulatory regime for radio spectrum, including the allocation of rights in relation to spectrum
 - cyber security, and other security and resilience issues
 - how to encourage use of faster broadband services by priority users, such as schools, businesses and health providers – particularly where government is a funder or has other levers of influence
 - the use of radio spectrum for broadcasting and related regulatory issues
 - general advice on telecommunications related issues.
16. The ICT portfolio also provides advice on postal services, including the efficient operation of the postal market, and manages New Zealand's international obligations relating to telecommunications.
17. The portfolio also supports Crown Fibre Holdings Limited (CFH), the entity which has been established to manage the Government's \$1.35 billion investment in UFB.
18. Policy advice is delivered primarily through the Communications and Information Technology and Radio Spectrum Policy and Planning teams within the Energy and Communications Branch of the Ministry. The Radio Spectrum Management team within the Ministry administers the issuing of licences and the online Register of Radio Frequencies. It also undertakes compliance and enforcement actions to ensure that radio devices are operating within the terms of their licences. The key Ministry personnel are:

- David Smol, Chief Executive
- Bruce Parkes, Deputy Secretary, Energy and Communications Branch
- Kirstie Hewlett, Director, Energy and Communications Branch
- Brad Ward, Manager, Communications and Information Technology Policy Team, Energy and Communications Branch
- Len Starling, Manager, Radio Spectrum Policy and Planning Team, Energy and Communications Branch
- Sanjai Raj, Group Manager, Radio Spectrum Management Group, Business Services Branch.

MAJOR POLICY AND IMPLEMENTATION ISSUES

Competitively priced and faster voice and broadband services

The government is encouraging increased capacity, speed and coverage in New Zealand's networks ...

19. The outcome we are working towards is to ensure urban and rural New Zealanders have access to competitively priced voice and broadband services, and that high speed broadband is readily available to New Zealanders and sectors critical for growth
20. In order for New Zealand's telecommunications networks to: meet the rapid increase in demand for processing large amounts of data cheaply; have good access and competitive pricing for telecommunications services; and receive the benefits that telecommunications services can bring across a range of sectors in the economy, New Zealand needs:
 - wide-spread deployment of fast broadband
 - to minimise the gap between urban and remote rural areas with respect to broadband availability, services, speed and quality
 - radio spectrum to be freed up for new uses and investment as needed (in the future this will become more and more challenging as demand hits a ceiling for spectrum allocation)
 - sufficient international bandwidth and competitive international pricing.

...including the deployment of the Ultra-Fast Broadband (UFB) initiative...

21. The aim of the UFB initiative is to deploy a fibre network to 75 percent of the population by 2019, with a focus on delivering the network to schools, health care providers and business in the first 6 years. The UFB initiative and the Rural Broadband Initiative (RBI) together will also connect 97 percent of schools to broadband peak speeds of at least 100 Mbps in the next five years.
22. The government's partners for the delivery of UFB are: Northpower (Whangarei), Enable (Christchurch and Rangiora), Ultra-Fast Fibre Limited (Hamilton, Tauranga, Tokoroa, New Plymouth, Hawera and Wanganui), and Chorus for all other candidate areas. Crown Fibre Holdings (CFH), a Public Finance Act Schedule 4 company, is responsible for managing the Government's investment in UFB until the end of the build period, 31 December 2019.
23. While the decisions around investment partners have been made and UFB is starting to be deployed, there is still significant implementation work to be done under the portfolio to achieve the 2019 deadline. For example:
 - CFH will be monitoring performance of investments (including ongoing involvement on the boards of Local Fibre Companies) and ensuring deployment is on track, particularly to priority users

- CFH, the Ministry and the sector are determining technical and other standards to be applied to UFB partners to ensure national consistency across the network. For example, the Ministry is working with Auckland Council and CFH on the development of national standards for the deployment of optical fibre which will supplement the Utilities Code, applying to all utility sectors for accessing road corridor space
- CFH is working with business groups, local communities, and Councils to establish Digital Leadership Forums in UFB areas and to facilitate fibre deployment and coordination with local government initiatives and plans. It is also working with retail service providers and local fibre companies to encourage the development of products on the fibre network
- The Ministry is leading the development of a Multi-Unit Complexes Code, which is designed to limit the opportunities for landlords and body corporates to unreasonably hold up the supply of fibre services to tenants of multi-unit complexes who may want the fibre. It also works to ensure unreasonable access charges to properties are not imposed.

...and the deployment of the Rural Broadband Initiative (RBI)

24. The Government is also investing in the Rural Broadband Initiative (RBI). The aim of the RBI is that by 2016, 97.8 percent of New Zealand households and enterprises can access broadband services of 5 Mbps or more. This includes: agreements with Telecom and Vodafone worth \$285 million to provide faster and ultra-fast broadband to schools and rural communities in what is known as Zone 4 (areas served by telephone exchanges with fewer than 500 lines); and \$15 million (still to be allocated) which will be used to connect two further groups of schools – very remote and Zone 3 schools (Zone 3 is typically defined as large rural towns). The RBI will also connect all public libraries, public hospitals and Integrated Family Health Centres to ultrafast broadband, and will provide the schools and community of the Chatham Islands with improved services over satellite broadband.
25. Again, there is still significant implementation work under the ICT portfolio in this government term around the RBI including:
 - The Ministry is responsible for ongoing administration and monitoring of the RBI contracts over their duration (2011-2017) to ensure that the outcomes of the RBI are delivered.
 - By the end of 2011, the Ministry needs to complete procurement processes for: all remaining schools, public libraries, public hospitals, and integrated health centres that are outside of the UFB and existing RBI contracts; terrestrial wireless services for 57 remote schools on the mainland, Stewart Island, Great Barrier Island; and infrastructure for the Chatham Islands.
 - The Ministry and the government's RBI partners are receiving advice from the RBI National Advisory Committee on the deployment of rural broadband, and from Ngā

Pū Waea³ on how to make the most of the broadband initiatives for rural communities and Māori.

The Ministry monitors international bandwidth and competitive international pricing...

26. Approximately 98 percent of New Zealand's international web traffic is carried on the Southern Cross Cables that link Auckland to Sydney and Hawaii and onward to the United States. Southern Cross is part-owned by Telecom New Zealand. A small amount of traffic is carried via satellite and a much older, low capacity cable from Auckland to Sydney.
27. To date the government's policy position has been that another international cable into New Zealand is desirable, to increase competition and resilience. An additional cable is also likely to be needed to meet demand for international data over the medium to long term. While building cables is clearly a private sector role, the government has been willing to be an early customer or 'anchor tenant' for a proposed new cable. To this end it has signed a deal with Pacific Fibre Ltd to buy capacity on the planned Pacific Fibre cable linking New Zealand, Australia and the United States. This \$91M deal was funded by \$15M from Vote Communications, and from REANNZ's (Research and Education Advanced Network New Zealand) ongoing operating funds. It was the result of a competitive tender process.
28. Besides Pacific Fibre, there are also other private sector players considering the building of international cables or increasing international capacity. For example, Kordia is in negotiations with parties to build a new submarine cable between Auckland and Sydney, and Southern Cross has also recently announced plans to increase its capacity.
29. The Ministry maintains a watching brief in this area.

...and is freeing up spectrum for new uses and investment

30. Over the next term, work will need to be advanced on the digital switchover with the Minister of Broadcasting and the Ministry for Culture and Heritage. This includes supporting the completion of the extension of the free-to-air digital terrestrial television network coverage; and implementing arrangements for the restacking of television frequencies so that the 700 MHz band is cleared and ready for the deployment of new mobile broadband services after the digital switchover is completed.
31. The switchover from analogue to digital television will be completed by November 2013. This will free-up a significant amount of radio spectrum, which can be allocated to new uses. Planning has begun so that New Zealand can see the benefits of this 'digital dividend' as soon as the spectrum is available.
32. This spectrum, the 700 MHz band, will be suitable for fourth generation mobile broadband services. The technical characteristics of the band mean that deploying such networks in this band will be much cheaper than in higher frequency spectrum bands.

³ See Appendix One

33. It has been estimated that the allocation of this band to mobile broadband services will bring economic benefits of \$1.1-\$2.4 billion over 20 years, as well as associated productivity gains from:
- deployment of new 4G mobile broadband services bringing faster speeds, and improved coverage, particularly for rural areas
 - additional capacity for mobile networks to meet increasing consumer demand for mobile data
 - improved network efficiency and cost savings.
34. Key issues for government decision include: *[Withheld under sections 9(2)(f)(iv) and 9(2)(g)(i) of the Official Information Act 1982]*
35. A key risk to the timing of this work is that a band plan developed by the Asia-Pacific Telecommunity is considered to be the best band plan for use in New Zealand. However, New Zealand needs to align with some major economies to ensure that handsets are available at reasonable prices. Most countries in the Asia-Pacific region are behind New Zealand in releasing their digital dividend spectrum and a lack of certainty about international take-up could delay New Zealand's band plan selection and therefore the allocation process.

Maximising capacity and minimising cost

Telecommunications traffic needs to be managed efficiently...

36. The outcome we are working towards is to ensure New Zealand's local and national telecommunications infrastructure is used efficiently to maximise overall capacity over the medium and long term, and minimise cost to consumers.
37. While the deployment of new networks, and freeing up of spectrum can work to address demand issues, to deliver the full potential of investments it is important that Internet Protocol (IP) traffic is managed efficiently in terms of:
- local interconnection of service providers ('peering')
 - national transport of IP traffic ('transit' between service providers)
 - local storage of international internet content ('caching')
 - international IP traffic.
38. There is currently evidence that IP traffic routing in New Zealand is not efficient:

- the two largest ISPs (Internet Service Providers) interconnect (peer) locally, but do not allow smaller national or regional ISPs to peer with them⁴
 - rather than using a national transport service (transit) to connect to the large ISPs, small ISPs find it more cost effective to route all their traffic overseas, even if it is destined for servers within New Zealand
 - video content providers find it more cost effective to host their content overseas, rather than provide it from servers in New Zealand.
39. It has also been questioned whether there are inappropriate barriers to the availability of premium content to distributors other than Sky in New Zealand, and whether this will impede take up and the benefits of the UFB.

...and we need better information to assess whether there are barriers to be removed

40. The Ministry currently has limited quantitative and commercial information in this area and without better information it is difficult to determine if current market arrangements risk limiting the capabilities of the UFB and RBI access networks. Better monitoring of IP routing and the interconnection environment is vital. Further, as essential services (such as 111 calling, medical and home alarms, Deaf Relay, and local calling as required by the Telecommunications Service Obligation) migrate to IP, interconnection arrangements will require regulatory oversight to ensure that the incentives to interconnect exist and that there is no market behaviour inhibiting or limiting the provision of essential services.
41. To effectively monitor this area, the Ministry is planning to acquire better information on physical interconnection arrangements, traffic flows, greater understanding of commercial drivers (including relative costs of national and international backhaul capacity and local hosting and caching costs) and operators' service migration plans, particularly for current copper voice services to voice over IP.
42. In relation to content distribution networks the government completed a review of digital broadcasting regulation in 2009 and concluded that there were no grounds to change the regulatory environment.
43. The content delivery strategy for video over UFB is not yet developed and will be dependent on decisions and relationships formed by retail providers and also the types of content delivered. CFH has been undertaking some engagement with content providers to encourage participation in the UFB. In our view, it is too early to predict what the content market will look like in response to the UFB in future years, and therefore any regulatory action now (based on the current market structure) would be premature and could in fact stifle innovation.
44. This is a likely to be a key issue over the next government term and the Ministry believes it will be important to monitor developments in this area.

⁴ Due principally to the imbalance of customer numbers, meaning that there is far more value for the small ISP to peer than there is for the large one.

45. The Commerce Commission is currently undertaking a study to “identify and inform on” any factors that may impede the uptake of high speed broadband services in New Zealand. The Commission intends to publish its final report in April 2012. This will provide useful information in these areas.

Encouraging uptake in sectors critical for growth

Faster broadband has the potential to deliver real benefits...

46. The outcome we are working towards is to ensure uptake of the UFB and RBI is actively encouraged in sectors critical for growth, and information about the benefits of RBI and UFB are easily accessible.
47. While it is clear that faster broadband is a critical enabler of growth and productivity – the pace of deployment and the uptake of services will define how long it takes until we see the benefits of the investment for New Zealand.
48. The sector and businesses, particularly the government’s UFB and RBI partners and retail service providers, have a key role to play in encouraging uptake of the UFB and RBI. CFH is also actively promoting the UFB to businesses and communities. The key issue for government is what role it plays in the uptake of services of the UFB, and how awareness of the benefits and uptake of these services can be encouraged across government.

...which requires the government to play a role where it has influence

49. The government has indicated it sees itself as playing a role in uptake of services where it has influence through funding mechanisms, other levers, or relationships. Further, it is currently already undertaking a range of initiatives which leverage off, or will be facilitated by, the UFB and RBI. However, it is not always obvious to the public what work is going on and what involvement the government has in encouraging uptake. To this end a five point action plan has been developed that outlines what government is going to do to encourage the uptake of faster broadband services. While the Ministry maintains an oversight of the plan, other agencies lead many of the initiatives. These include:
- E-Education: led by the Ministry of Education, and includes the Network for Learning, the school network upgrade, the installation of school fibre drops and teacher professional learning and development.
 - E-Health: led by the Health IT Board and includes: the Health Innovation Hub (which will aim to test, commercialise and encourage uptake of health applications through DHBs) and the National Health IT Plan which contains various initiatives to encourage better patient care through IT solutions.
 - E-Government: led by the Department of Internal Affairs and includes: encouraging development of new applications and services by government; and initiatives that support the Directions and Priorities for Government ICT, such as – facilitating better access to government data, increased use of the web channel into homes for government services, centralisation of ICT services, business

processes and information. It also includes a number of other agency specific ICT initiatives.

- E-Business: led by the Ministry of Economic Development, New Zealand Trade and Enterprise and the Ministry of Science and Innovation: provides information about the business benefits of broadband to business through government information channels. It also encourages use of digital tools and business productivity through New Zealand Trade and Enterprise programmes; and innovation and commercialisation of IT firms through Ministry of Science and Innovation funding – for example, the Wynyard Quarter Innovation Precinct in Auckland, which has a special focus on ICT, Project Landing Pad, and ICT Entrepreneurs Scheme.
- E-Development: is contributed to by a number of agencies and includes: working with communities to identify and provide access to priority customers in local communities and to promote the community benefits of the UFB and RBI; the RBI Advisory Committee; Ngā Pū Waea; improving digital literacy through the Department of Internal Affairs programmes – Computer Clubhouse and Computers in Homes; and using ultra-fast broadband to connect all libraries and enhance libraries' role as a hub for broadband access.

50. Over this term there is a significant amount of work to be done furthering these initiatives, raising awareness and buy-in across government and communicating to the public what the Government is doing in this area. The Minister for Communications and Technology will have a key leadership role to play in this area.

Infrastructure and networks

51. The outcome we are working towards is to ensure key telecommunications infrastructure and networks are reliable, secure and resilient.

52. There are three key issues facing the portfolio relating to issues of network resilience and security:

- Effective implementation of the *National Cyber Security Strategy*
- Interception capability
- 111 Emergency Services

Having effective cyber security measures is increasingly important...

53. Cyber security threats are real, current, and evolving exponentially. If New Zealand does not protect itself effectively against cyber-intrusion then this could result in a syphoning away of New Zealand innovation and intellectual property, and incidents which lead to other significant economic and social impacts. *[Withheld under section 6 (a) of the Official Information Act 1982]*

54. In the last government term, the Minister for Communications and Information Technology published New Zealand's Cyber Security Strategy (the Strategy), and a National Cyber Security Centre (NCSC) was launched within GCSB. The Strategy contains initiatives designed to: increase the protection of government-held information; improve cyber incident response and planning; support critical national infrastructure providers and other businesses; raise cyber security awareness for individuals and small businesses; and enhance international cooperation with our close security partners. *[Withheld under section 6 (a) of the Official Information Act 1982]*
55. Many jurisdictions are now moving to strategies which seek to gain economic advantage by actively promoting their countries as safe places for businesses to operate.
56. Cyber security is an economic, security, domestic and international issue. For this reason it requires a whole of government response and ownership. The Ministry works closely with its main partner agencies, GCSB (who operates the NCSC), the Department of Prime Minister and Cabinet, the Ministry of Foreign Affairs and Trade and the Department of Internal Affairs. A cross-agency governance committee of senior officials (the Cyber Security Steering Committee) has also been formed to oversee the implementation of the Strategy.
57. *[Withheld under sections 6(a), 9(2)(f)(iv) and 9(2)(g)(i) of the Official Information Act 1982]*

...as is interception capability for law enforcement purposes ...

58. Network operators are obliged under the Telecommunications (Interception Capability) Act 2004 (TICA) to ensure that public telecommunications networks are interception capable. This allows New Zealand surveillance agencies to gain access to telecommunications for the purposes of law enforcement and national security, where authorised. *[Withheld under sections 6(a), 9(2)(f)(iv) and 9(2)(g)(i) of the Official Information Act 1982]*

...that doesn't unnecessarily burden the sector

59. [Withheld under section 9(2)(f)(iv) of the Official Information Act 1982]

Potential improvements to the supply of 111 services are also being looked into

60. A small number of Telecom system faults occurred in 2010 that disrupted 111 services, and prompted a review of emergency call services. This has raised a number of issues around the end-to-end monitoring and governance of the system.
61. A discussion paper identifying key issues with 111 services has been prepared and is awaiting release for public consultation. One of the main focuses of the 111 discussion paper is the governance arrangements for 111 services, recognising the current lack of overall oversight for the 111 system end-to-end. The paper floats the idea of establishing a dedicated group that is responsible for oversight of 111 services.

Legislation and policy frameworks

Regulation needs to keep pace with changing technology...

62. The outcome that we are working towards is to have legislation and policy frameworks that keep pace with technological developments.
63. As mentioned earlier the introduction of UFB, other technology changes, the evolving relationship between broadcasting and telecommunications sectors, and changes in the way content and services are delivered through the internet are likely impact telecommunications regulatory and competition settings and other areas like privacy and intellectual property law.
64. For example, in the intellectual property space content providers and regulators need to find a balance between protecting intellectual property holders' rights to encourage innovation while ensuring there is good access and opportunities to use information on the internet which is also important for innovation.

... which involves reviewing current frameworks

65. In order to keep pace with industry developments, the Ministry will be seeking your agreement to the following work over the next government term:
 - Review of the Telecommunications Service Obligations (TSO): Telecom Retail is currently obliged under the TSO to provide basic price-capped telecommunications services, and Chorus has an obligation to provide the network services necessary for Telecom Retail to provide these services. The industry contributes to a Telecommunications Development Levy, which funds the RBI and

relay services for the deaf and hearing impaired⁵. A Review of the TSO framework is scheduled for 2013 (but work will start in 2012). The Review is intended to take into account a number of developments that may affect the need to continue to impose an explicit obligation on particular companies to provide TSO services, for example, the impact of the RBI.

- Review of the Radiocommunications Act: The last major review of the Act was conducted in the late 90s. The Ministry considers that it could be timely to review the legislation again. The Act's provisions with respect to interference came under scrutiny in 2009 when Telecom's new XT network detrimentally affected the Vodafone and 2degrees networks. The parties ultimately resolved the issue commercially, but certain provisions in the Act may need to be strengthened to provide greater regulatory certainty. New technologies also present challenges when defining spectrum rights, particularly from the perspective of balancing the rights of incumbents seeking continued exclusivity with the demands of new users. For example, new users may have the opportunity to use sophisticated radio devices that can find and use available frequencies on a dynamic basis.
- Copyright: Digital content creation is becoming increasingly important from an economic perspective and concerns have been raised by users around whether copyright laws discourage the development of new digital content and innovation, and protect out-dated business models. This is a complex issue which other countries (for example, the United Kingdom) are currently considering. There is a review of the Copyright (New Technologies) Amendment Act 2008 due in 2013. The Communications and the IT Policy Team intends to work with the Intellectual Property Policy Team within the Ministry (which reports to the Minister of Commerce), to assess whether the 2008 amendments encourage the appropriate balance between protecting intellectual property holders' rights to encourage innovation while ensuring there is good access and opportunities to use information on the internet, which is also important for innovation.

[Withheld under sections 9(2)(f)(iv) and 9(2)(g)(i) of the Official Information Act 1982]

66. The outcome that we are working towards is to achieve a good balance between intervention (to protect consumers and address market failure) and providing sufficient certainty to invest.

67. *[Withheld under sections 9(2)(f)(iv) and 9(2)(g)(i) of the Official Information Act 1982]*

⁵ A new five year contract for the ongoing supply of Relay services came into force on 1 October 2011. A full range of services will be provided including: text to speech and speech to text (also accessible by the internet); speech to speech; and video relay. Captioned telephony service will be introduced in 2012.

Accessible information

Telecommunication products are increasingly complex ...

69. The outcome that we are working towards is to provide consumers/businesses with accessible information to make informed decisions about products.
70. The Telecommunications environment is evolving rapidly away from conventional, well-understood, voice and data services to next generation networks that enable a much wider range of broadband IP services. These services allow service providers and consumers to trade off factors such as price and convenience against service features, including service reliability and technical performance. In considering such trade-offs, it is important that consumers and businesses have sufficient information to make informed choices.
71. Over the past three years, the Commission's broadband performance measurement programme has demonstrated that there can be a wide variation in the performance and reliability of broadband access services, even for top of the range packages from a single provider. These access products generally do not carry performance guarantees, other than "best effort service". In migrating essential services onto the broadband IP infrastructure, even over UFB, consumers and businesses will require additional performance and reliability disclosure and guarantees from their retail service providers.

...and may require better disclosure and monitoring

72. The Ministry, in consultation with the Commission and the Telecommunications Carriers Forum, would like to consider the need to develop a framework for better disclosure and monitoring of product performance at the retail level. We will brief you on the issues and seek your agreement to any work.

Other Issues

Digital literacy is important ...

73. Increasing digital literacy is important, especially in low socio-economic groups where there are traditionally low levels of literacy. The government is undertaking a range of initiatives in this area, led by Department of Internal Affairs and funded through Vote Community and Voluntary Sector. The Ministry works with the Department of Internal Affairs to support such literacy initiatives.

...and ensuring our postal system is “fit for purpose”

74. The Postal Deed of Understanding (‘the Deed’) is a legal arrangement between the government and New Zealand Post recording the social and service obligations that New Zealand Post is required to meet to support the provision of a universal postal service for New Zealand. The current Deed has not been substantially varied since it was entered into on 17 February 1998.
75. In a review of postal regulatory arrangements in March 2010, consultants MartinJenkins recommended that the Ministry review the Universal Service Obligation contained in the postal Deed to ensure that it remains “fit for purpose” in the context of changing public preferences for postal services.
76. New Zealand Post, with the Ministry’s oversight, will begin a full review of the Deed in early 2012. The intention is to update the Deed to reflect the current environment in which New Zealand Post is operating, where mail volumes and revenues are declining and New Zealand Post is required to adapt its business model. Following this review, the Ministry will work with New Zealand Post to negotiate necessary changes to the Deed. Changes to the Deed will require Cabinet agreement.

PENDING DECISIONS OR ACTIONS REQUIRED IN THE NEXT SIX MONTHS

	Report Back item	Form i.e. Cabinet paper, brief or both	Due Date	Cabinet Paper reference
1	RBI Phase 2 Contracts (Noting of Ministry procurement decisions for Phase 2 and Remote Schools procurement processes).	Briefing	Before 22 December 2011	N/A
2	<i>[Withheld under section 9(2)(g)(i) of the Official Information Act 1982]</i> National Cyber Security Strategy.	Briefing (joint to Prime Minister)	Before 22 December 2011	N/A
3	Planning of the digital TV band: report-back on technical planning of the band and possible allocation of unused spectrum in rural areas.	Cabinet paper	Due December 2011 but could be deferred to April 2012	CAB Min (09) 45/12
4	Exemptions for sharing arrangements. Chorus and Telecom retail must comply with a legislative monitoring regime for sharing arrangements unless an exemption is granted. Ministerial exemptions are allowed for arrangements which do not have competition concerns. Exemptions need to be in place as early as possible to avoid unnecessary compliance costs for the companies.	Briefing	Late January	N/A
5	<i>[Withheld under section 9(2)(g)(i) of the Official Information Act 1982]</i> National Cyber Security Strategy <i>[Withheld under section 9(2)(g)(i) of the Official Information Act 1982]</i>	Cabinet paper	28 February 2012	
6.	Proposed auction allocation of licences suitable for sound broadcasting, including consideration of unused reserved national spectrum blocks.	Cabinet paper	March 2012	N/A
7	111 emergency calling review.	Report to Economic Growth and Innovation Cabinet Committee (EGI) on outcome of review	30 April 2012	EGI Min (11) 22/9
8	Approval of the Multi-Unit Complex Code for access to multi-unit dwellings when fibre is deployed. The code will have statutory standing and compliance will be mandatory for all relevant parties.	Cabinet paper	30 April 2012	N/A
9	In an April 2010 Cabinet paper, the Minister of Communications and IT indicated he would report back to Cabinet on progress on trans-Tasman roaming.	Cabinet paper	<i>[Withheld under section 9(2)(f)(iv) of the Official Information Act]</i>	EGI Min (10) 7/6

	Report Back item	Form i.e. Cabinet paper, brief or both	Due Date	Cabinet Paper reference
			1982]	
10	Options for addressing Māori interests in the radio spectrum: report-back to Cabinet together with the Minister of Māori Affairs on proposals.	Briefing and/or Cabinet Paper	No date specified	CAB Min (11) 28/7
11	Allocation of the digital dividend spectrum: report back to EGI on the detailed band plan design, and together with the Minister of Māori Affairs report back to EGI on the allocation process, including consideration of Māori interests in this band.	Cabinet paper	April 2012	EGI Min (11) 18/9

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 range of functions and powers under the Act (see appendix two, below), some of which are carried out alone or, in other circumstances, in conjunction with other Commissioners from the Commission.

The Commerce Commission as a whole is monitored by Vote Commerce and the Minister of Commerce. However, you play the key role in the appointment of the Telecommunications Commissioner and are the key Ministerial contact for the Telecommunications Commissioner. The Energy and Communications Branch of the Ministry works closely with the Commission and Vote Commerce officials in relation to any telecommunications related matters.

The current Telecommunications Commissioner term will finish in mid-2012.

Ministerial Committee on Government ICT

The Ministerial Committee on Government ICT is an expert sub-committee of Cabinet, providing advice to Cabinet on ICT innovation and expenditure across Government. The Committee's role is to set the strategic direction for Government ICT, set ICT investment priorities, and gain early oversight and understanding of ICT investment plans.

Members include yourself as Minister for Communications and Information Technology and the Ministers of Finance (Chair), State Services, Health, Education, Internal Affairs and Immigration as well as the Government Chief Information Officer, ICT Strategy Group Members (Agency Chief Executives, chaired by the Chief Executive of the Ministry of Economic Development), and the Director of the Office of the Government Chief Information Officer.

Ngā Pū Waea - the Māori Broadband Advisory Group

Ngā Pū Waea was established by the Minister of Māori Affairs and the Minister for Communications and Information Technology in May 2011. The Terms of Reference describe Ngā Pū Waea's role: "to assist in ensuring Māori communities can be connected in a timely and efficient manner, and are able to maximise opportunities arising from the deployment of broadband". The seven members of Ngā Pū Waea are appointed by the Minister of Māori Affairs, in consultation with yourself.

Ngā Pū Waea intends to:

- Develop options for maximising coverage and connectivity to marae, wānanga, kura, kōhanga, rūnanga, and other Māori organisations through rural broadband
- Establish and implement trade training programmes and employment opportunities for Māori through the initiative
- Ensure relationship brokerage with Māori at community, regional and national levels to support, among other things, economic development opportunities (including investment opportunities), and community-wide education.

Crown Fibre Holdings

Crown Fibre Holdings (CFH) is a Public Schedule 4 company responsible for managing the Government's investment in UFB until the end of the build period, 31 December 2019. Because of the investments being made, and to address any perceived conflict with the Minister for CIT being the policy Minister, the shareholding Ministers for CFH are the Minister of Finance and the Minister for State Owned Enterprises, and the Treasury is the monitoring agency. However, in relation to delivering UFB policy – you as Minister for Communications and Information Technology and the Ministry are the key stakeholders CFH interacts with. The Ministry also work closely with the Treasury around the effective monitoring of CFH.

LEGISLATION AND STATUTORY FUNCTIONS

Telecommunications Act 2001

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, either alone or with other Commissioners, to set comprehensive terms and conditions of supply of regulated services, including price. The Commission typically sets cost-based prices, based on international benchmarking. The terms and conditions are set by the Commission through Standard Terms Determinations. The Commission can subsequently review the terms, and revise them.

The Act provides for the Telecommunications Commissioner to initiate investigations into regulating additional services and making regulatory recommendations to the responsible Minister. The Commission can also recommend the removal of regulation if markets become more competitive.

The Act sets up the traditional local calling Telecommunications Service Obligation, which obliges Chorus and Telecom Retail to provide unmetered local calls, and the Telecommunications Development Levy. The Commission is responsible for allocating liability for funding obligations to supply non-commercial customers (for example, supply of particular services to the hearing-impaired, or services to rural customers funded by the Telecommunication Development Levy).

The Commission's decisions are subject to review on procedural grounds, or points of law, but are not open to merits review.

The Act provides for access providers to lodge open access undertakings for approval by the Minister. The undertakings typically contain obligations to supply services to all access seekers on a non-discriminatory basis, and in some cases, on an 'equivalence of inputs' basis. The undertakings also prevent the supply of services to end-users, in some cases. Chorus is prohibited from supplying services to end-users under the Act itself. The Commission enforces the undertakings.

At this time, the Minister has approved open access undertakings lodged by:

- Chorus, in relation to UFB fibre networks, its legacy copper network, and RBI networks
- Whangarei Local Fibre Company, UltraFast Broadband Limited and Enable Networks, in relation to their UFB fibre networks
- Vodafone, in relation to its RBI networks.

The Commission also has broad monitoring powers under the Act. The Commission is able to report regularly on market performance. It has extensive information disclosure powers in relation to UFB fibre networks. It will monitor key performance indicators that Chorus

develops in consultation with the Commission and the industry to demonstrate compliance with the Undertakings.

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 nationwide 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 transferred to the tradable rights regime. It also sets up procedures for dealing with interference and managing disputes between spectrum users.

Spectrum management and enforcement

The Radio Spectrum Management (RSM) team within the Ministry administers the issuing of licences and the online Register of Radio Frequencies. It also undertakes compliance and enforcement actions to ensure that radio devices are operating within the terms of their licences.

RSM works to ensure that licence administration is fast, simple and effective, and that the use of online services is maximised wherever possible. In order to ensure operational efficiency, almost all technical engineering required to issue licences is now performed by accredited private sector engineers. This allows RSM to focus on core regulatory functions.

In order to minimise the compliance burden on industry, RSM has worked to simplify requirements and keep licensees and suppliers informed of their obligations and of enforcement outcomes. While compliance with transmitter licensing and electrical product standards reduces the potential for radio interference to occur, inevitably incidents arise that disrupt communications. RSM investigates and resolves radio spectrum interference complaints, giving priority to services affecting safety and economic outcomes, and actively monitors interference levels by targeted auditing. RSM has recently been paying particular attention to the risk posed by online trading of non-compliant products, and is seeing benefits from self-policing action among suppliers.

The costs associated with radio spectrum planning, licensing, registration, compliance and interference investigation are appropriated by Parliament under Vote Communications, and funded by way of annual administration fees levied on licensees under the Radiocommunications Regulations. RSM will be reviewing costs for spectrum management in the 2012-2013 year with a view to implementing any necessary fee changes on 1 July 2015.

Crown Spectrum Asset Management

The Crown has reserved the right to manage particular bands of frequencies for a mixture of social, economic and technical reasons. There are currently 14 management rights registered under the Crown's name out of a total of 82 registered management rights.

Within the AM and FM radio broadcasting management rights, the Crown has reserved licences for national Māori and Pacific programmes, Radio NZ National and Concert, and iwi radio, as well as for community and youth purposes. The national Māori and youth licences

are currently unused. There are approximately 750 FM and 166 AM licences. AM licences generally cover wider geographical areas than FM licences.

The Crown also holds management rights at 2.5 GHz (the 'Managed Spectrum Park') and 3.5 GHz for local or regional wireless services, including links and wireless broadband access services. A management right at 2.3 GHz is held in reserve for Hautaki Ltd, the operating company of Te Huarahi Tika Trust (the Māori spectrum charitable trust).

The Crown also holds management rights for the VHF and UHF television bands.

The main issues which arise under Crown management rights relate to implementation requirements, sharing requirements, spectrum caps, renewal terms and conditions at the expiry of licences and management rights – including valuation matters, and whether spectrum should be auctioned (for new rights), or re-auctioned (for expiring rights).

Postal Services Act 1998

This Act came into force on 1 April 1998 and 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.

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 contains the power for police or customs officers to obtain call data warrants.

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 came 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, fax 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.

Telecommunications (Interception Capability) Act 2004 (TICA)

The TICA relates to establishing lawful interception capability across New Zealand's public telecommunications networks. The TICA imposes the following basic obligations:

- a blanket obligation on “network operators” to ensure that their public networks and services have interception capability (section 7)
- a duty, on “network operators” and “service providers” to assist agencies in carrying out lawful interception in a particular operation, for example, by providing technical staff (section 13).

The administration of the TICA has recently been transferred from the Minister of Justice to the Minister for Communications and Information Technology. The primary administrative function is to grant exemptions to “network operators” from the obligation to have interception capability (or some of the requirements), where special circumstances exist, and after consulting with the Minister/s responsible for the surveillance agencies. The Minister may recommend the making of regulations under the TICA, but to date no regulations have been issued under the TICA.

The following statutory functions are undertaken in Vote Communications:

- Manage the legislation detailed in Appendix 2, including monitoring the impact of regulatory change, and changes in industry structure following structural separation of Telecom.
- Provide advice to the Minister on Commission recommendations and regulation or deregulation of services.
- Undertake scheduled reviews of core elements of the Telecommunications Act 2001.
- Contribute to monitoring the performance of the Commerce Commission in performing its telecommunications regulatory functions.
- 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 the Telecommunications Development Levy.

APPENDIX 3**LIST OF KEY STAKEHOLDERS**

The Ministry consults key stakeholders to understand the strategic issues underpinning decision-making within the Communications and Information Technology portfolio. In particular we consult with:

- Other Ministers with an interest in the Communications and Information Technology portfolio and their relevant government agencies: for instance, the Prime Minister, Ministers of Finance, Education, Health, Economic Development, Science and Innovation, Rural Affairs, Foreign Affairs, Internal Affairs, Broadcasting, National Library, Community and Voluntary Sector, and Māori Affairs.
- Crown entities: the Telecommunications Commissioner, Commerce Commission, Crown Fibre Holdings, REANNZ, and NZTE.
- ICT sector service providers, for instance: telecommunications companies, digital content companies, software and service companies (e.g. IBM and Google), postal operators, broadcasters, commercial and non-commercial radio spectrum users.
- ICT sector representative bodies, for instance, the Telecommunications Carriers Forum, the New Zealand ICT Group, the Radio Frequency Users Association of New Zealand and the New Zealand Association of Radio Transmitters.
- Consumer organisations, for instance, Internet New Zealand, Consumers' Institute, and the Telecommunications Users Association of New Zealand.
- Other business representative bodies with an interest in ICT, for instance, New Zealand Institute of Management, Business New Zealand and Federated Farmers.
- International bodies as described in Appendix 4.
- Local bodies, for instance: Local Government NZ, and Regional and Local Councils.
- Community groups, for instance: Māori and other ethnic groups, and the deaf and hearing impaired community regarding relay services.

APPENDIX 4

SUMMARY OF RELEVANT INTERNATIONAL AGREEMENTS AND WORK ON INTERNATIONAL RELATIONSHIPS

World Trade Organisation (WTO)

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 (OECD)

The OECD provides annual reports on major economic sectors, including telecommunications, which compare New Zealand performance with other OECD countries. These include comparative statistics which are widely read and commented on.

In the ICT area, the way many statistics are collected is based on measures chosen by the OECD in order to provide international comparability, as far as possible. The Ministry is principally involved in checking relevant statistics and working with Statistics New Zealand to ensure that appropriate questions are included in surveys of the telecommunications industry, the Census, and the Household Economic Survey so that the OECD statistics reflect reality in New Zealand.

Ministry officials occasionally attend relevant OECD working group meetings. Officials will continue to monitor and attend working groups where required.

The relationship with Australia

Under Closer Economic Relations, New Zealand and Australia have agreed to maintain an open market for telecommunications and IT. We are also undertaking some more detailed work with Australia in the telecommunications area.

In collaboration with our Australian counterpart – the Department of Broadband, Communications and the Digital Economy (DBCDE) – the Ministry is preparing an analysis of the level of competition in the trans-Tasman roaming market. The two agencies will report back to you and Senator Conroy of Australia with a draft analysis early in 2012 including, if appropriate, proposals for government intervention.

We work closely and cooperatively with the Australian spectrum regulator, the Australian Communications and Media Authority (ACMA), and endeavour to align our regulatory frameworks and international actions wherever possible. For example, Australia has recently agreed to recognise New Zealand certified radio engineers, following a similar New Zealand initiative for Australian engineers several years ago. We are currently exploring options for even closer integration of our activities.

Bilateral agreements and the Trans-Pacific Partnership Trade Negotiations (TPP)

Telecommunications chapters relating to market access issues are often included in other bilateral trade agreements New Zealand has with other countries.

The key international agreement being negotiated at the moment is the TPP. The TPP is a multilateral trade negotiation being conducted between the US, Peru, Chile, Australia, Singapore, Brunei, Malaysia, Vietnam and New Zealand. Ministry officials provide support for the Ministry of Foreign Affairs and Trade lead negotiators with the Telecommunications and Electronic Commerce chapters. While there are many issues requiring resolution with the TPP as a whole, negotiation of the Telecommunications chapter is making good progress. *[withheld under section 6(a) of the Official Information Act 1982]*

Round eight of negotiations was held in Chicago in September 2011 and round nine in October 2011 in Lima, Peru.

Korea Australia New Zealand Ministerial Broadband Summit (KANZ)

KANZ is held roughly every 18 months between Ministers for IT, officials and business people from Korea, Australia and New Zealand. The lead agency for New Zealand is New Zealand Trade and Enterprise, with the Ministry dealing with policy issues and liaison with our Minister and the Ministry of Foreign Affairs and Trade assisting with international liaisons. Over the years a number of useful 'pre-competitive, pre-commercial' collaborations have been initiated and at the recent meetings, Ministers have agreed that increased cooperation was required. The next meeting is to be hosted by Korea sometime in 2012 and it is anticipated that you will attend.

International Telecommunication Union (ITU)

The ITU is the United Nations specialised agency for information and communication technologies and is the forum through which parties work towards consensus on a wide range of issues affecting the future direction of the industry. New Zealand is a long-standing member of the ITU and participates in the organisation in a number of different areas including technical studies concerning standardisation, radio spectrum allocation and management, and overall policy direction. As a Member State of the ITU, New Zealand is a (treaty) signatory to the Constitution and Convention of the ITU. These treaties are reviewed on a four-year basis.

The ITU Administrative Regulations, which include the Radio Regulations and International Telecommunication Regulations, complement the Constitution and Convention. These documents also form binding treaties. World Radiocommunication Conferences are held every 3-4 years to review and revise the Radio Regulations. These Regulations form the basis of worldwide use of the radio frequency spectrum. The International

Telecommunication Regulations are to be revised in 2012, having last been amended in 1988.

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

ICANN is an international non-profit organisation, which has responsibility for coordinating critical internet resources, namely IP addresses and the domain name system. The GAC provides advice to the ICANN Board on public policy issues affecting critical internet resources. New Zealand is represented at most GAC meetings, supported by InternetNZ.

With the domain name system, ICANN has recently approved processes for applications for new generic top level domains. The GAC has noted concerns for governments in areas such as intellectual property (trade mark protection), geographical names, sensitive strings and access for marginalised groups. The sensitive strings issue has the most potential to be disruptive, where the GAC provides a mechanism for governments to object to strings of particular concern. New Zealand will need to be aware of possible applications of interest to the public and government such as .kiwi, .māori or .aotearoa, and be prepared to take appropriate action if necessary.

Asia Pacific Economic Cooperation (APEC)

The APEC Telecommunications Working Group (TEL) is one of the more active of the APEC working groups. APEC TEL meets twice yearly and has an extensive work programme spread over three Steering Groups: Development Cooperation, Security and Prosperity, and Liberalisation. The work of the TEL is mandated by meetings of APEC Economy Ministers of Communications (TELMIN) held roughly every two years. The TEL has had substantial input into APEC Ministerial Statements in recent years, especially emphasising the need for cooperation in online security and highlighting issues such as the need for adoption of IPv6. The last TELMIN was in October 2011 in Japan and the Ministry's Deputy Secretary attended as a representative for the Minister.

Intelsat

Intelsat is an international satellite company that has recently been formed from the former intergovernmental cooperative 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 is a shareholder in Intelsat.

Universal Postal Convention

The Universal Postal Convention, established by the Universal Postal Union, 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 manages 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 also provide competitive services.

Mutual Recognition Agreements, Memoranda of Understanding and Cooperation Agreements

There are number of bilateral 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').