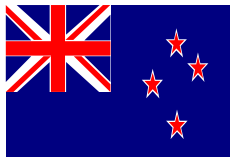


TELECOMMUNICATION MARKETS OF NEW ZEALAND AND AUSTRALIA



Market Research Final Report

February – June 2006



JUPPA
Management Consulting

This report is an example of my work done for one of my clients in the first half of 2006. The report itself is available for download from my website free of charge for review, academic and personal purposes.

If you find findings of this report useful for your business, please send an amount you consider relevant to my bank account, the invoice will be issued and sent to you in return.

My bank contact info is below:

- **Tomas Juppa, Husova 605, 50008 Hradec Kralove, Czech Republic**
- **HVB Bank Czech Republic, branch Hradec Kralove, SWIFT (BIC) code BACXCZPP**
- **Account number IBAN CZ50 2700 0000 0001 0391 1018**

**Tomas Juppa
Husova 605
50008 Hradec Kralove
Czech Republic**

**tomas.juppa@juppa.net
www.juppa.net
+420604835780**

Copyright © Tomas Juppa 2006. All rights reserved.

PREFACE

This report is a result of a five month survey conducted in New Zealand and Australia with an aim to research, describe and analyze local telecommunication markets with regards to the business of one of my clients and potentially discovering new business opportunities.

The report is based on survey of publicly available data, personally held interviews and also personal experience from both markets.

The report focused on analyzing alternatives with regards to two main business lines – data products led by ADSL modems and routers and telephones represented mainly by cordless phones for household use.

The author of this report holds no responsibility for information and data presented in this report as well as for any action taken by any company in response to this report.

AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

Conclusions and next steps

Appendices

AGENDA

New Zealand

- **General & economy information**
- **Fixed line market overview**
- **Broadband situation**
- **Competitive landscape & main players**
- **CPE market in New Zealand**
- **Market specialties**
- **Projection of development**
- **Conclusions**

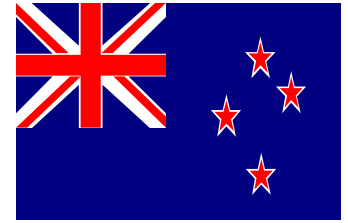
Australia

- **General & economy information**
- **Fixed line market overview**
- **Broadband situation**
- **Competitive landscape & main players**
- **CPE market in Australia**
- **Projection of development**
- **Conclusions**

Conclusions and next steps

Appendices

NEW ZEALAND SUMMARY



New Zealand is a developed country with half the population, three times the area and 1,5 times the GDP per capita of Czech Republic

Further growth of the population (especially thanks to immigration of skilled migrants) as well as of the economy is forecasted

New Zealand is ahead in the fixed line penetration of CEE countries, on the other hand lags in mobile phone penetration – broadband penetrations is higher than that of CEE countries, but lower than the GDP per capita level would suggest

Fixed line telecommunications are particularly popular in New Zealand, nevertheless Kiwis seem to be a little bit late adopters of the state-of-the-art broadband technologies

- **Especially thanks to the flat rate dial-up and low speed and low data cap ADSL**

Further boost is seen in upcoming LLU which should open the market and lessen the dominance of Telecom New Zealand

On the other hand the dominance of the market by one strong player allows covering the market by one partnership, if properly managed

AGENDA

New Zealand

- **General & economy information**
- **Fixed line market overview**
- **Broadband situation**
- **Competitive landscape & main players**
- **CPE market in New Zealand**
- **Market specialties**
- **Projection of development**
- **Conclusions**

Australia

- **General & economy information**
- **Fixed line market overview**
- **Broadband situation**
- **Competitive landscape & main players**
- **CPE market in Australia**
- **Projection of development**
- **Conclusions**

Conclusions and next steps

Appendices

NEW ZEALAND WITH HALF THE POPULATION OF THE CZECH REPUBLIC AND THREE TIMES LARGER AREA

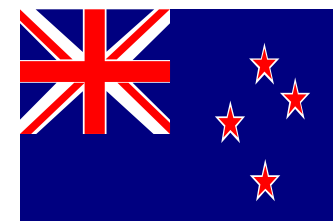
The GDP per Capita Higher by One Third

Main indicators (I)

	2005	2000	CAGR %
Total population (mil)	4,07	3,84	1,7
Area (sq km)	270 500		
Density of population	15	14	
GDP (NZD mil)	149 042	109 696	6,3
GDP per capita (NZD)	36 594	28 545	5,1
Average salary (NZD/hour)	19,30	15,64	4,3
Population growth (%)	1,37		
Unemployment (%)	3,9		
CPI index (%)	2,8		
Exports (as % of GDP)	29,8		

Main indicators (II)

	2005	2000	CAGR %
Number of businesses	334 340	274 917	4
Retail sales (ths NZD)	57 989	42 161	6,6



MAIN CITIES: AUCKLAND AND WELLINGTON IN THE NORTH ISLAND, CHRISTCHURCH AND DUNEDIN IN THE SOUTH

Map of New Zealand



Largest urban areas of New Zealand with # of inhabitants

Urban area	Inhabitants
Auckland	1 241 600
Wellington	370 000
Christchurch	367 700
Hamilton	185 000
Napier-Hastings	119 600
Dunedin	114 700
Tauranga	109 100
Palmerston North	78 800
Nelson	59 600
Rotorua	54 900
New Plymouth	49 600
Whangarei	48 600
Invercargill	47 800

NEW ZEALAND ON THE CROSSROADS OF THE FUTURE

DIRECTION: TECHNOLOGY ONE OF THE OPTIONS

A Situation Not Much Different From The Situation Of The Czech Republic

New Zealand lost much of its former markets with United Kingdom access to the EU

- UK had to apply same conditions as on other countries, therefore NZ lost its competitive advantage
- The distance basically prevented any further exports from NZ to GB

Managed to recover and focus on Asian markets with its traditional goods

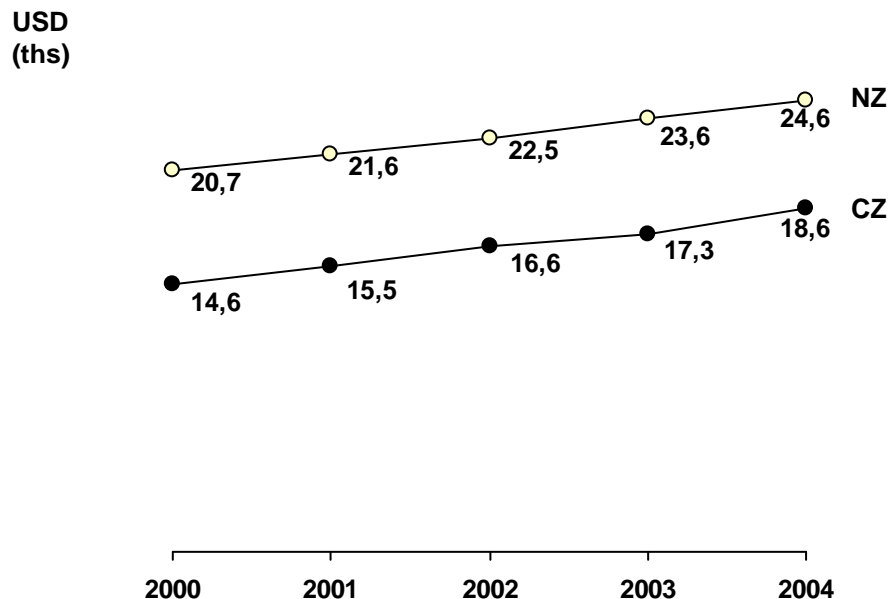
New direction for the economy has to be sought

- All the former manufacturers shifted the production from New Zealand overseas – car, appliances as well as machinery producers
- New Zealand currently exports mainly its traditional agricultural goods
 - Wool
 - Beef and lamb meat, dairy products
 - Fish
- Despite the traditional goods is sold with a value added, the country cannot rely on agriculture and has to build knowledge industries
 - Thanks to the pure NZ origin, the agricultural products can charge a price premium, thanks to which the agriculture remains viable
- Technology and microbiology are seen as the most attractive and viable options
 - The country's universities are seen as centers of R&D to be commercialized

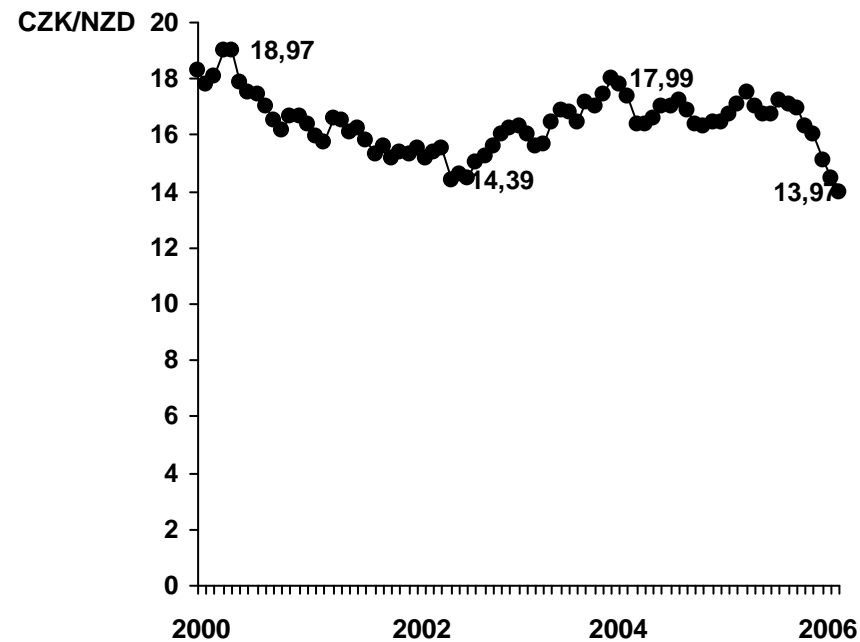
Technological orientation would require significant further investments in the networks

GDP PER CAPITA GROWING STEADILY, EXCHANGE RATE DROPPED RATHER SHARPLY IN 2006

NZ stays ahead of CZ at a constant distance with GDP per capita PPP



The exchange rate vs. CZK experienced sharp drop in the first half of 2006, thus making imports more expensive or less profitable



Further development will be important as to whether the economy will recover or not

AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

Conclusions and next steps

Appendices

NEW ZEALAND TELECOMMUNICATION MARKET OVERVIEW

Total number of telephone subscribers growing at 10% a year

- Number of fixed lines constant, has been decreasing till 2002, since than growing again
- The entire growth of subscription can be attributed to mobile phones, which complement fixed lines rather than substitute them

Compared to most of the countries of Central and Eastern Europe (CEE), New Zealand is more fixed line oriented with fixed line penetration well ahead of CEE and similar mobile penetration (but far behind Czech Republic)

Fixed line penetration favors the broadband implementation, growing at over 80% a year, but still the total penetration lags behind developed European countries and is only a step ahead of CEE countries

- 8,1 broadband connections per 100 inhabitants, vast majority of which are DSL lines
- Over 90% of fixed lines are DSL enabled, which makes NZ one of the least penetrated countries with high share of DSL enabled fixed lines and opens large space for further growth

Further development of the market is being influenced by several factors

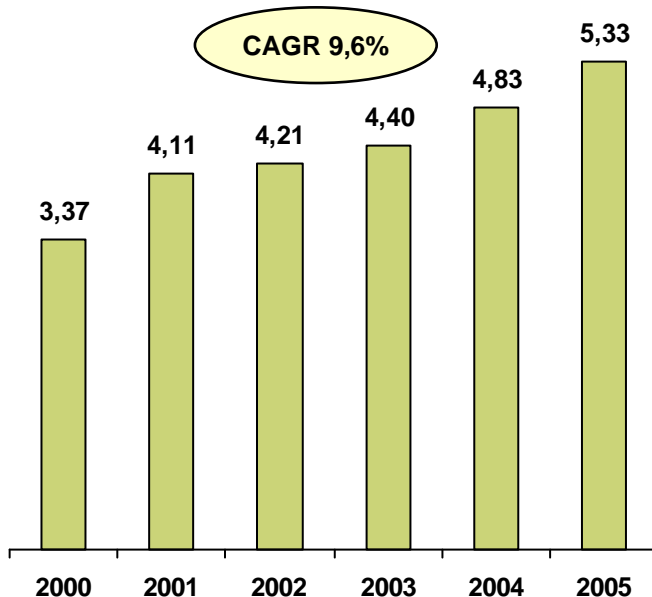
- Free local calls make a fixed line a must have for most of the Kiwis
- Unlimited dial-up connection for a flat fee slows down broadband growth and makes mobile data plans inferior
- LLU could increase the competition, speed up broadband and bring ADSL to rural areas

NUMBER OF PHONE SUBSCRIPTIONS RISING STEADILY, IN TOTAL NEW ZEALAND RANKS BETWEEN CZ AND HU

134 Phone Subscriptions per 100 Inhabitants

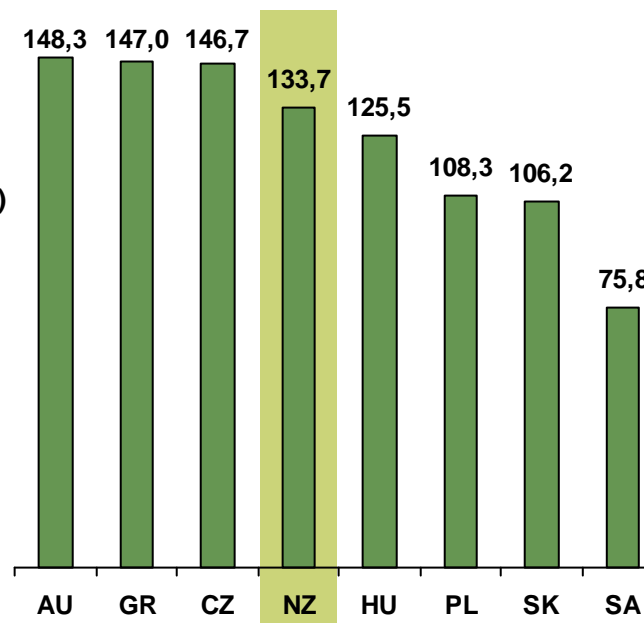
New Zealand number of phone subscriptions rising steadily at 9,6% a year on average

Fixed lines + mobile phones (mil)



New Zealand ranks between Czech Republic and Hungary in the total subscriptions penetration

Fixed lines + mobile phones penetration (per 100 inhabitants)

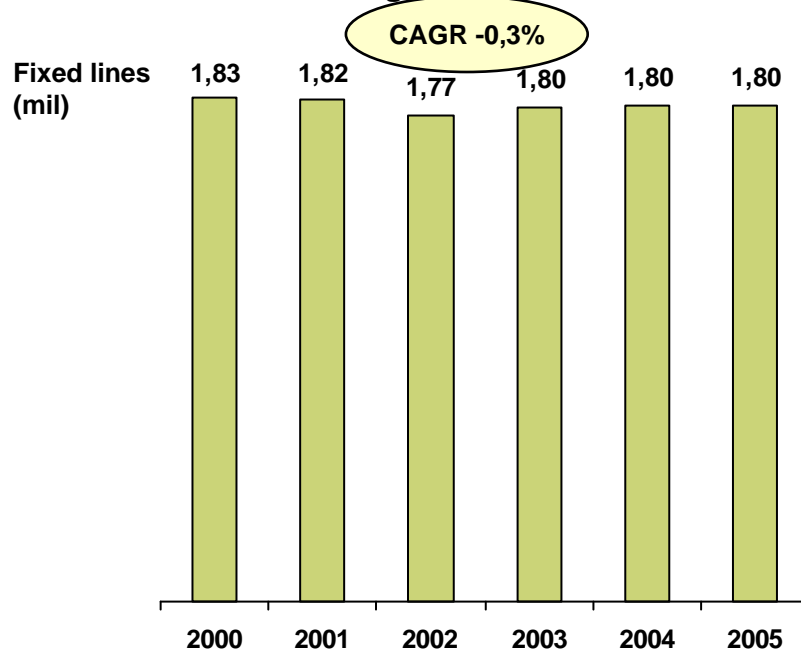


The structure of total subscriptions to be analyzed further

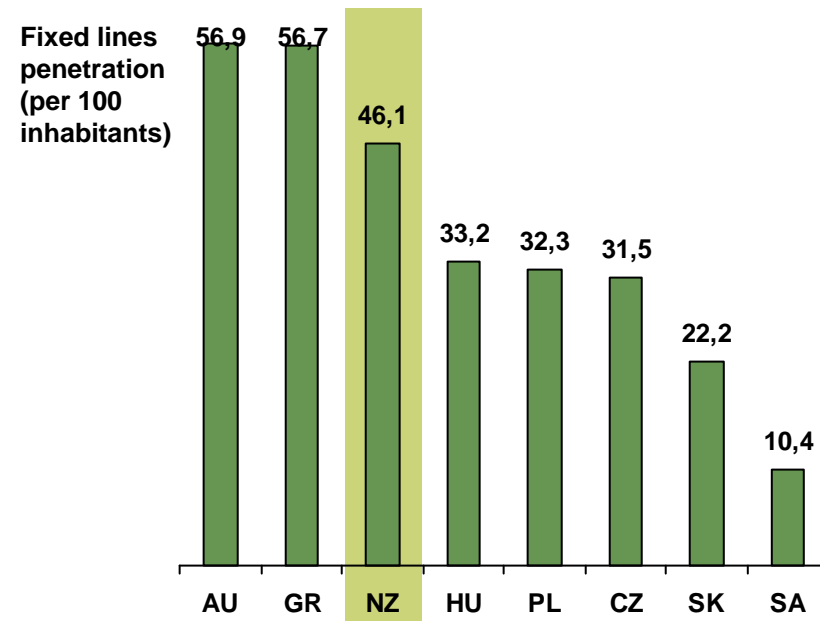
AFTER THE DROP IN 2002 THE NUMBER OF FIXED LINES STARTED TO GROW AGAIN, LIKELY THANKS TO ADSL

The Penetration Is Higher Than In Client's Countries Except Of Greece

Evolution of the number of fixed lines reverted, after the drop in 2002 the number started to grow again, remaining almost constant overall



New Zealand ranks behind Greece in fixed line penetration, but ahead of other countries served by Client

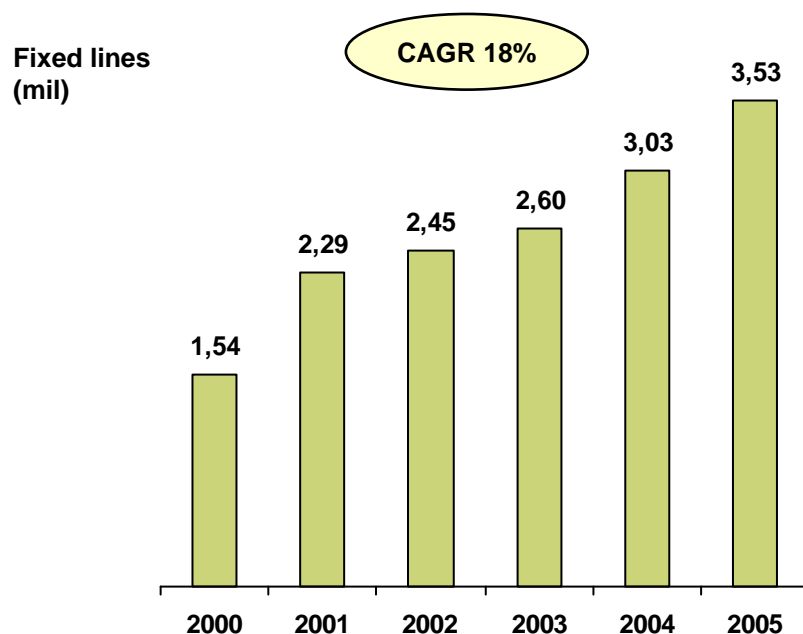


Constant number of lines combined with growing population results in declining penetration

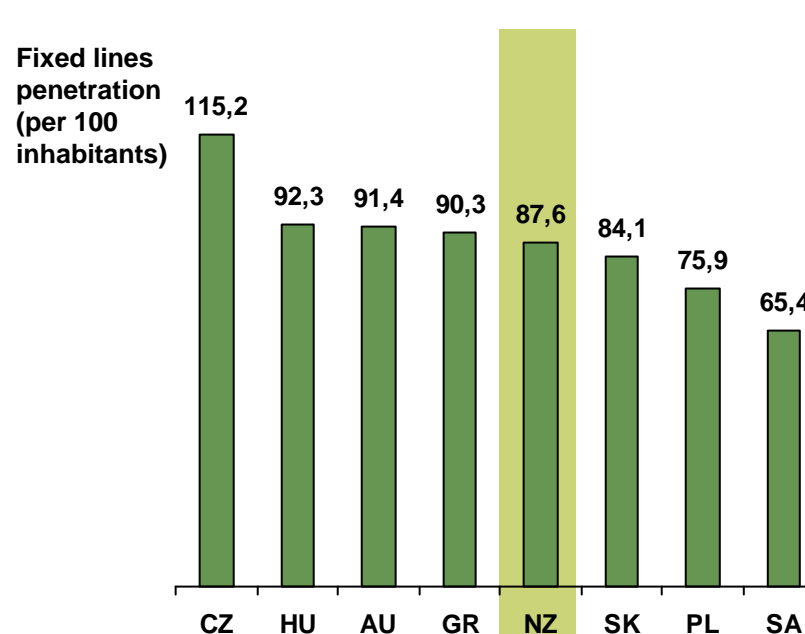
ALL THE PHONE SUBSCRIPTIONS GROWTH TO BE ATTRIBUTED TO MOBILE PHONES GROWING AT 18% CAGR

Unlike in CZ, The Strong Growth Did Not Lead To Fixed Lines Decline

Number of mobile phones rising sharply in last five years at 18% CAGR



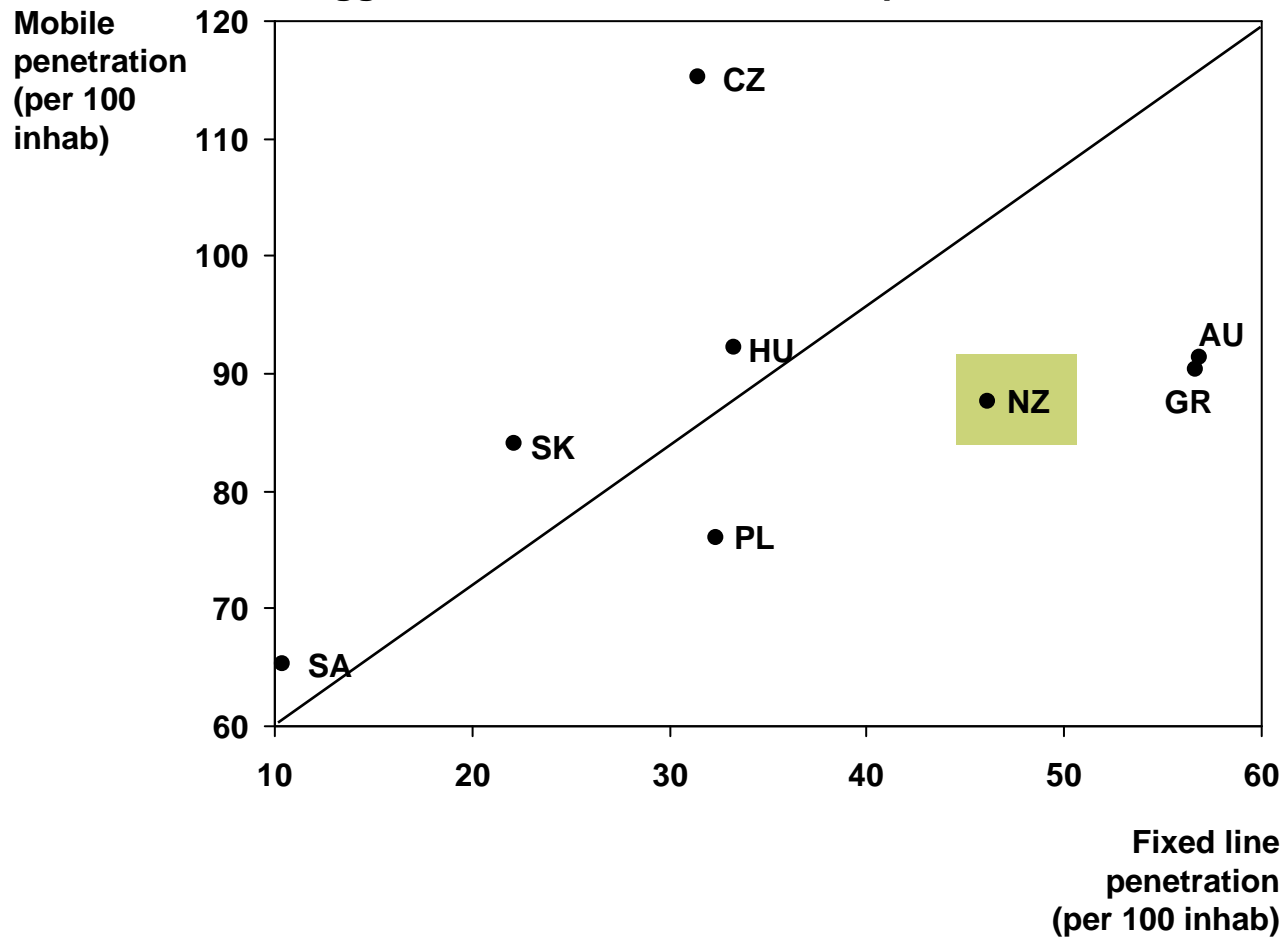
Mobile phones penetration far behind the Czech Republic despite the strong growth



Mobile phones are not substituting fixed lines in New Zealand

DESPITE THE GROWTH OF MOBILE PHONES, NZ MORE FIXED LINE ORIENTED COMPARED TO OTHER COUNTRIES

New Zealand with far bigger share of fixed line subscription than most of the Client's countries



AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- **Broadband situation**
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

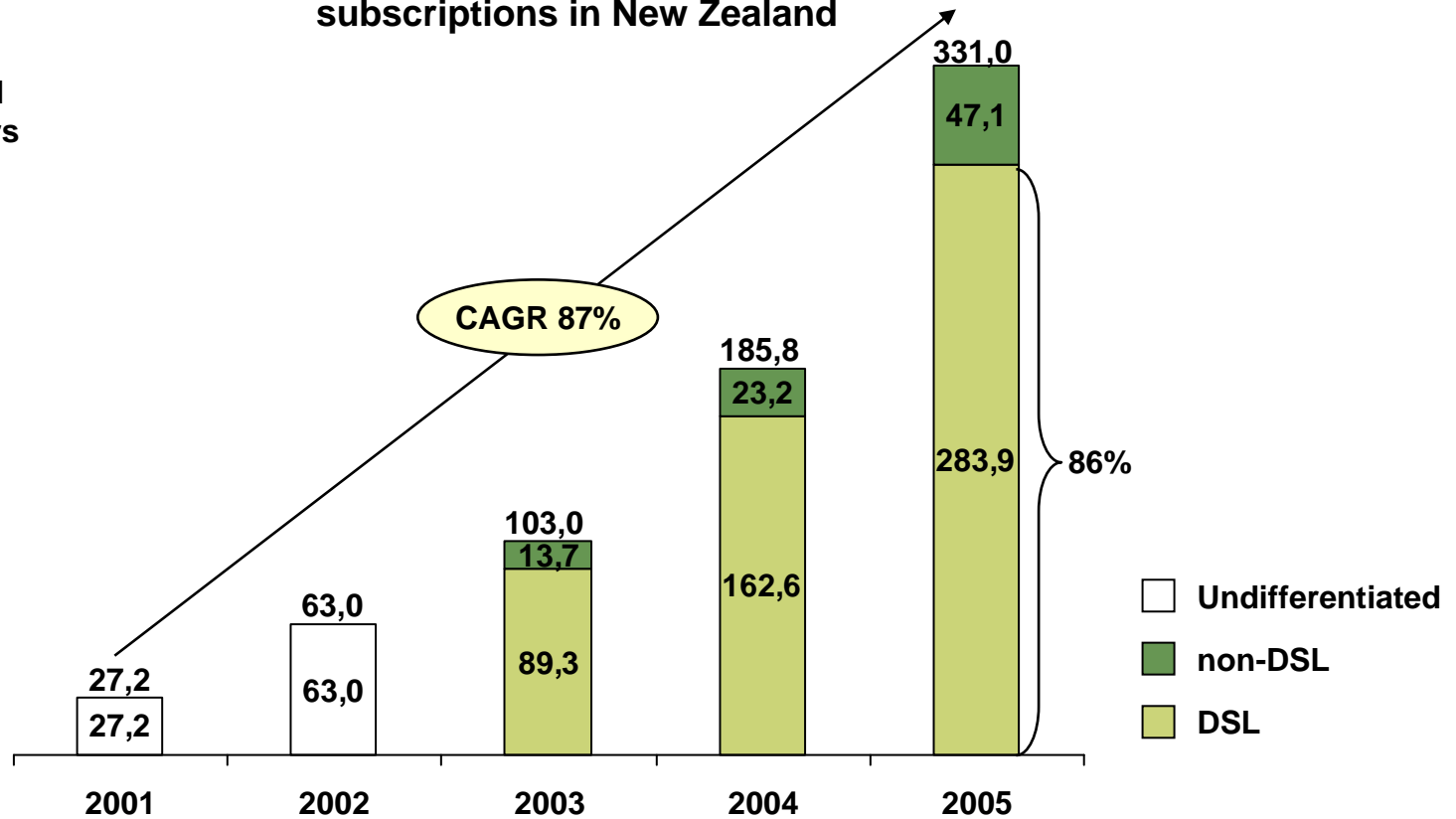
Conclusions and next steps

Appendices

BROADBAND GROWING AT 87% CAGR IN PAST FOUR YEARS WITH DSL AS THE MAIN TECHNOLOGY

DSL technologies representing over 85% of total broadband subscriptions in New Zealand

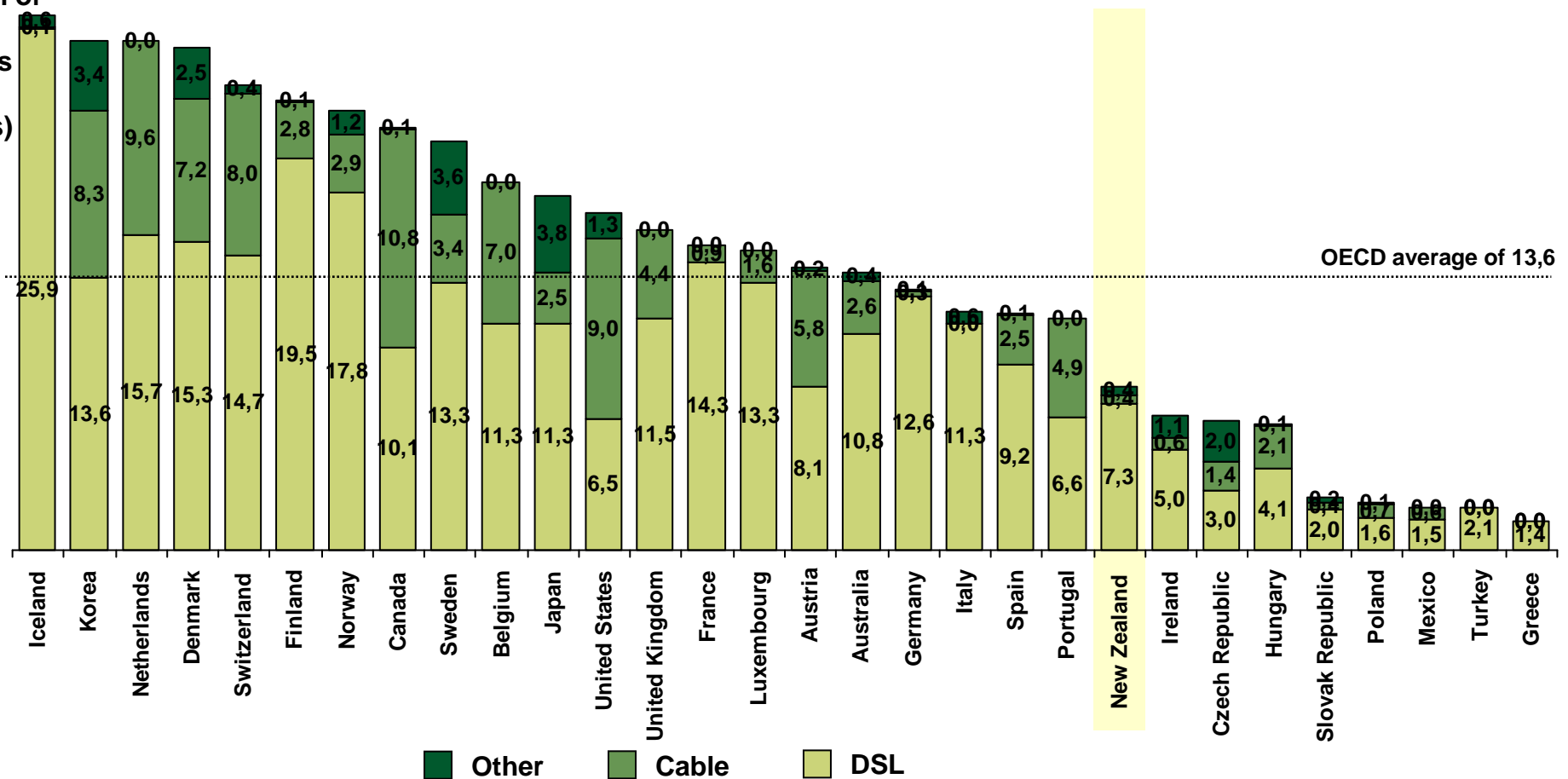
Number of broadband subscribers



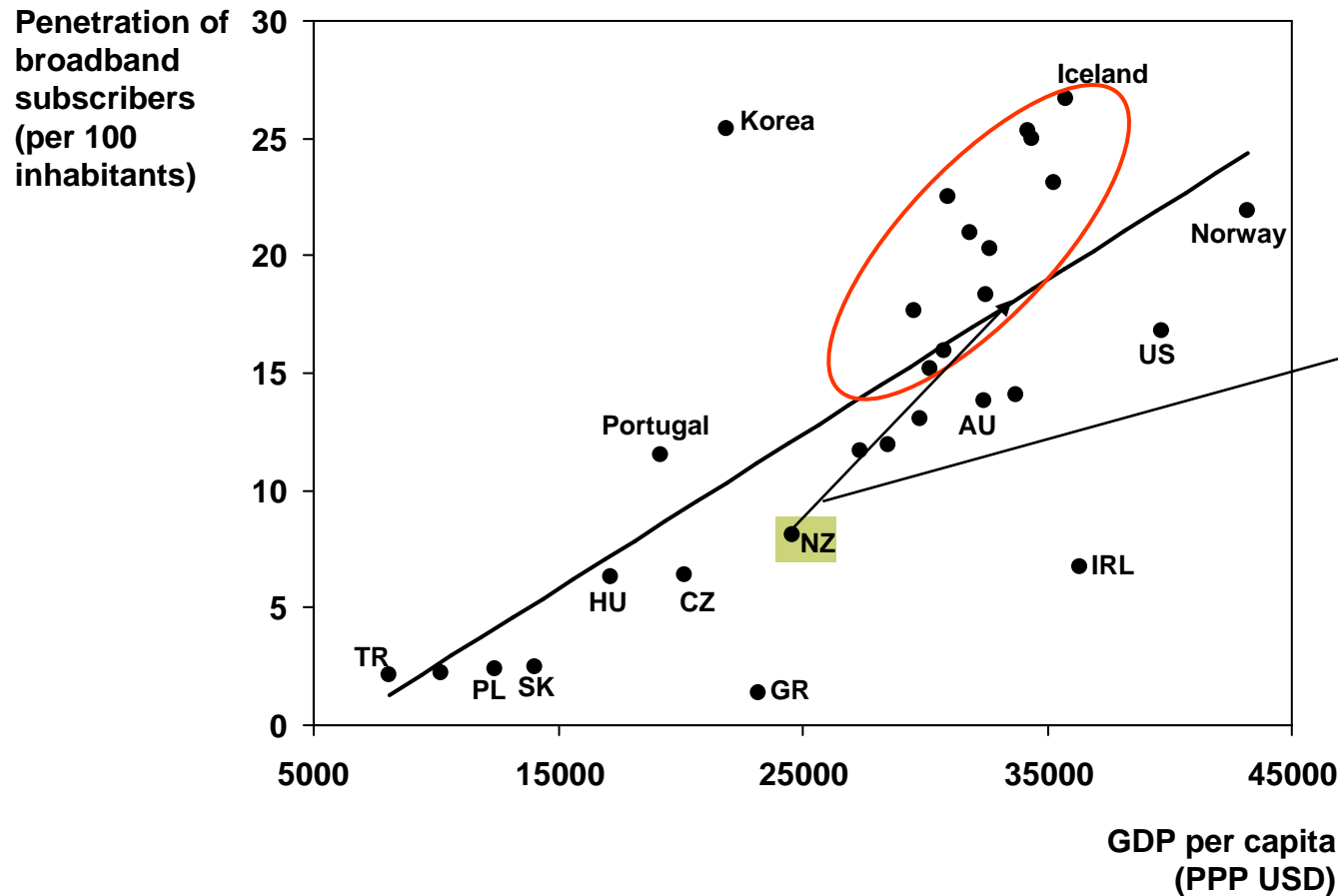
BROADBAND PER CAPITA PENETRATION IN NEW ZEALAND SLIGHTLY AHEAD OF CEE COUNTRIES But Still Far Below The OECD Average Or Top EU Countries

New Zealand with smaller proportion of other than DSL broadband technologies

Penetration of
broadband
subscribers
(per 100
inhabitants)



NEW ZEALAND FAR BELOW THE LEVEL OF BROADBAND PENETRATION SUGGESTED BY ITS GDP PER CAPITA

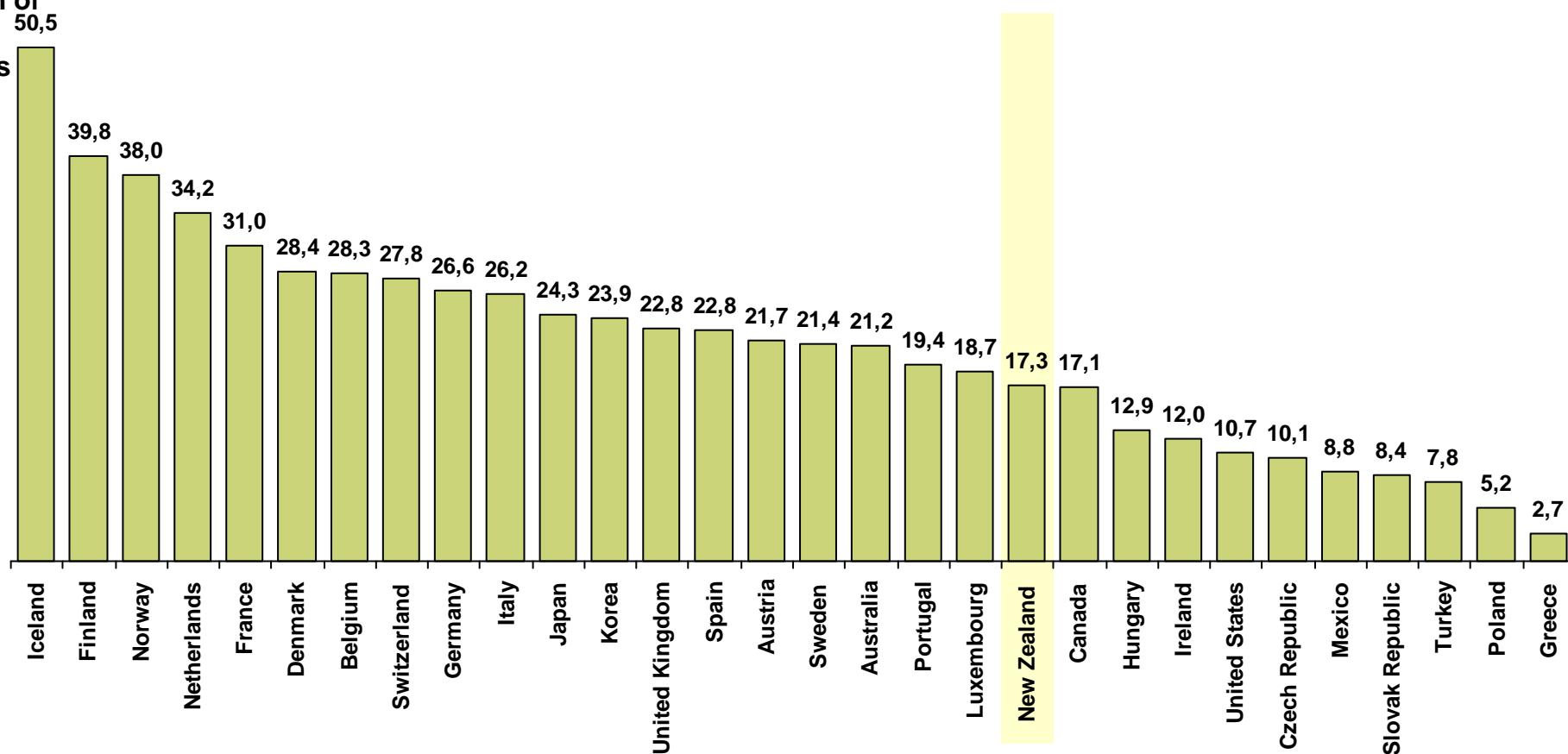


Suggested potential for further market growth

Moving Towards The Line And Further GDP per capita Growth Suggest Further Potential for broadband penetration

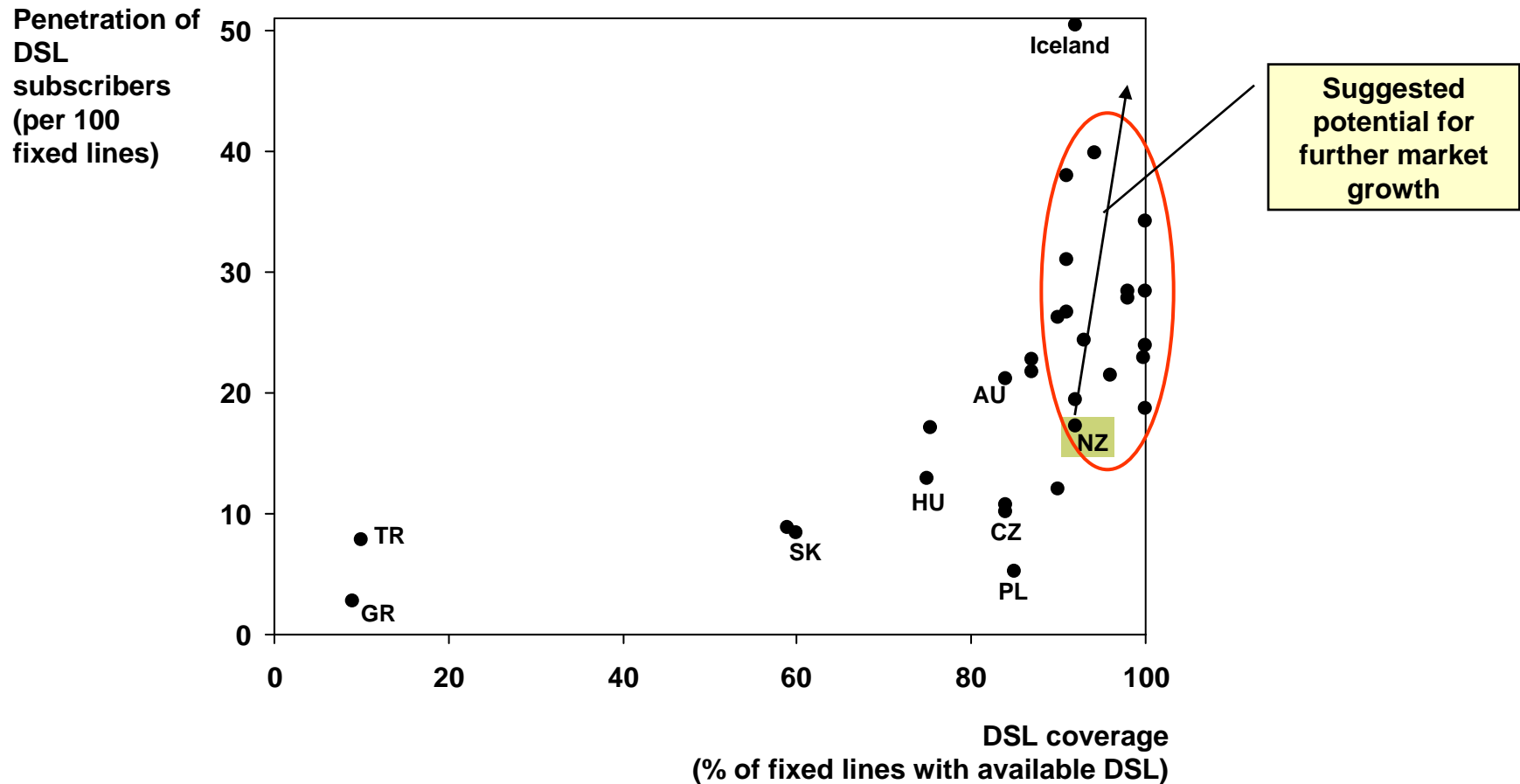
ONLY ABOUT 17% FIXED LINES WITH BROADBAND SUBSCRIPTION, BELOW OECD AVERAGE, BUT ABOVE CEE

Penetration of DSL subscribers (per 100 fixed lines)



NEW ZEALAND ONE OF THE LEAST PENETRATED MARKETS WITH HIGH DSL ENABLEMENT

Enablement Represents % Of Fixed Lines Where DSL Can Be Implemented



Given that most of the line are DSL enabled, further penetration into levels of more advanced countries can be expected

RECENT LOCAL STUDY MARKED NEW ZEALAND WITH A D-MARK FOR ITS BROADBAND VALUE

Especially For LLU Absence, Low Speed And Low Data Caps

Country	Grade	Ranking	Business	Residential	OECD Ranking ¹¹	e-readiness ¹²	
Sweden	A	1	1	2	9	4	
Netherlands	B	2	4	8	3	6	
Norway		3	8	3	7	11	
Canada		4	5	10	8	9	
Germany		5	13	4	18	12	
United States		6	3	6	12	2	
Spain		C	7	6	5	20	23
Slovakia	8		11	9	26	36	
Finland	9		7	7	6	7	
Portugal	10		2	14	21	25	
Czech Republic	11		10	11	24	29	
France	12		25	1	14	19	
Iceland	13		9	23	1	-	
Belgium	14		16	15	10	17	
Denmark	15		12	16	4	1	
Italy	16		18	12	19	24	
Australia	17		21	13	17	8	
Austria	18		17	24	16	14	
Switzerland	D		19	14	17	5	3
United Kingdom			20	23	19	13	5
Hungary			21	15	26	25	30
New Zealand			22	24	18	22	14
Luxembourg			23	22	21	15	-
Ireland			24	20	20	23	15
Poland		25	19	25	27	32	
Mexico		26	26	22	28	39	

New Zealand

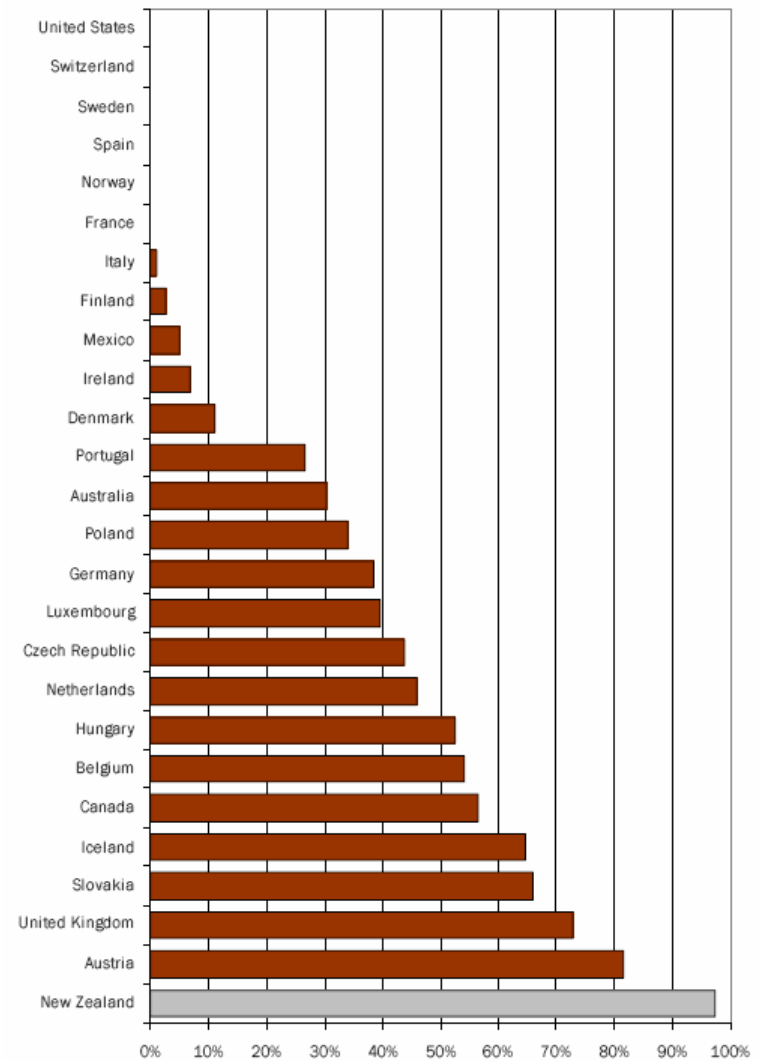
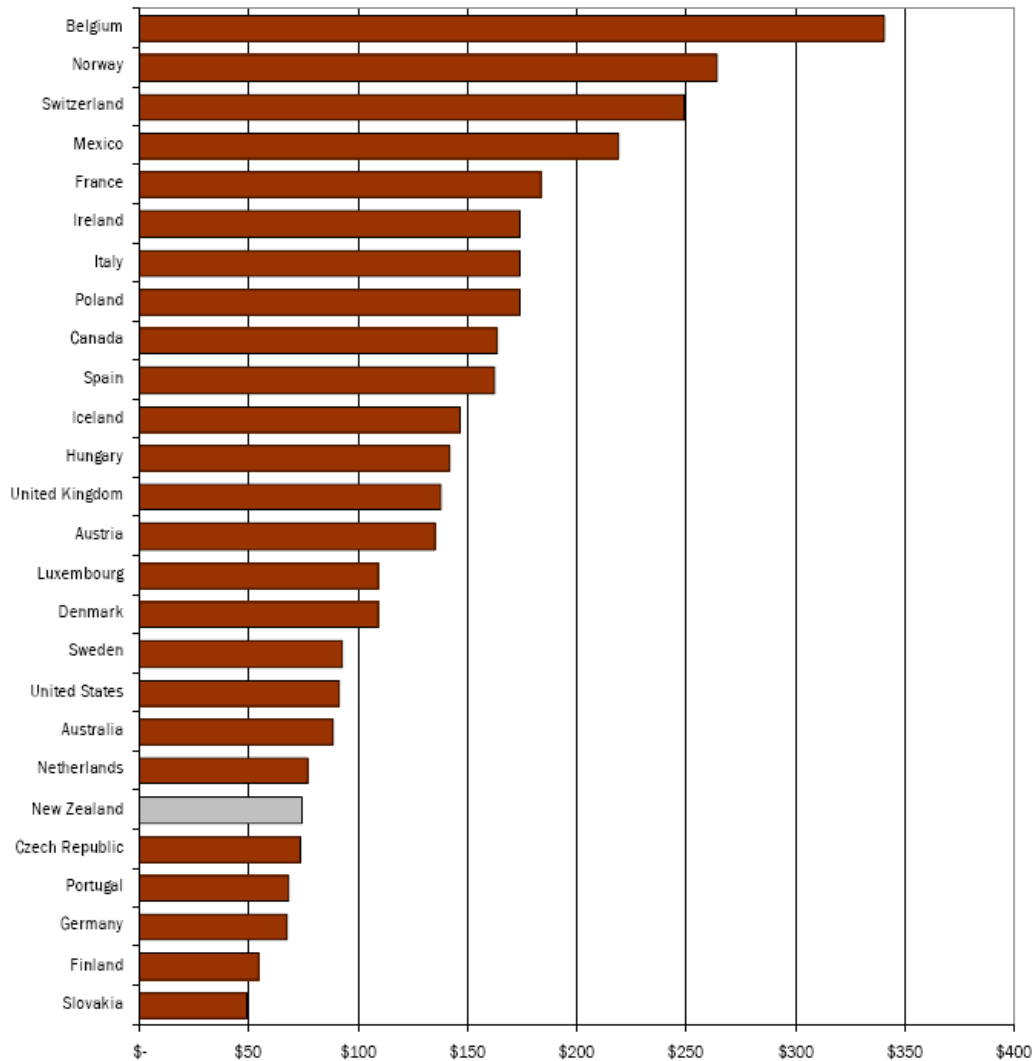
New Zealand has limited regulatory intervention in broadband and has not implemented LLU. New Zealand has high internet usage but the transition from dial-up to broadband has been poor, with the country currently in 22nd place in the OECD rankings. The New Zealand dataset includes 110 products from 11 different providers. This includes six satellite-based products and 30 wireless, with the remainder DSL based products. New Zealand is a market of two key products – Telecom New Zealand’s DSL ‘Jetstream’ service, re-sold through most ISPs, is the only DSL offering. Broadcast Communications Limited’s (BCL) wireless (802.11) service is re-sold by a number of ISPs as well.

New Zealand performs poorly in terms of speed and particularly badly in terms of usage restrictions (it has more products with data caps than any other country), although Telecom’s reduction of speed to dial-up equivalents now applies at higher levels than previously seen (typically 1GB and 5GB per month). New Zealand does compete well on price but has a poor selection of products on offer, particularly for businesses. Overall, New Zealand ranks 22nd out of the 26 countries surveyed, the same as its OECD broadband ranking.

NEW ZEALAND ALIGNED WITH THE CZECH REP FOR THE MONTHLY COST, BY FAR EXCEEDS OTHERS IN DATA CAPS

Monthly subscription cost

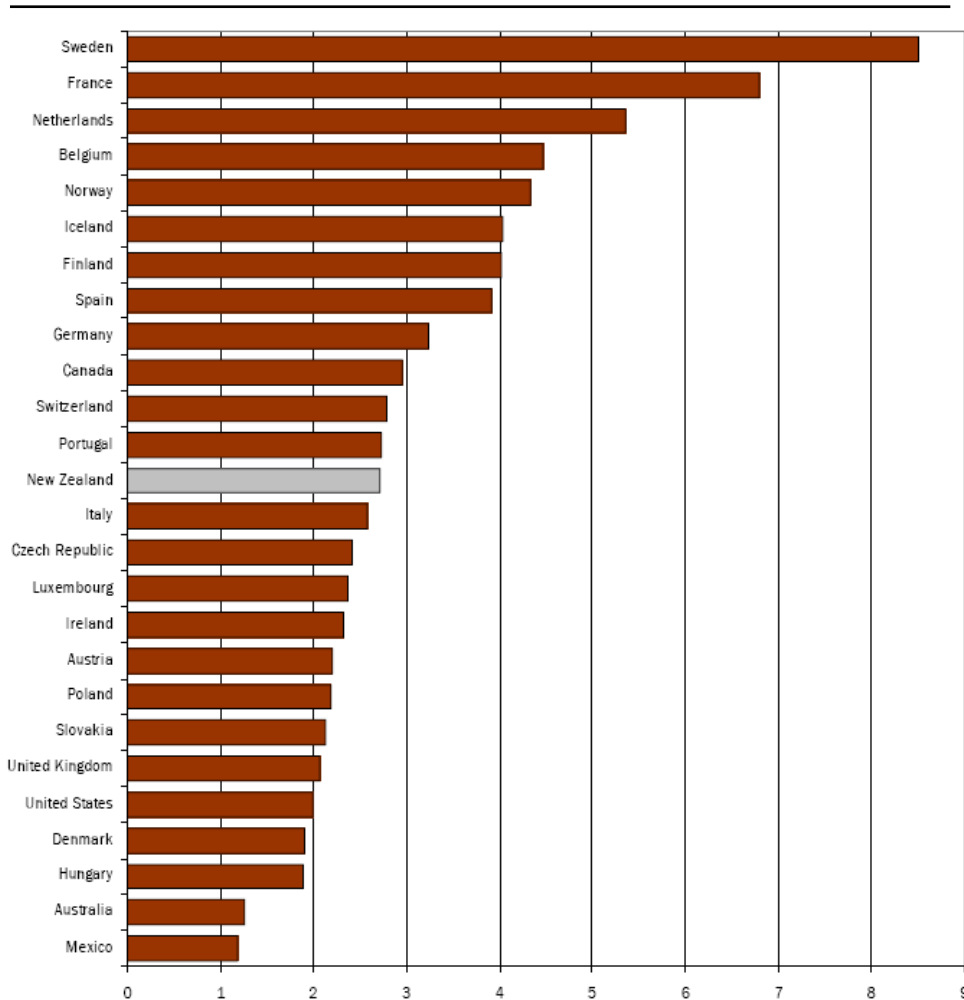
Data caps (% of plans limited by a cap)



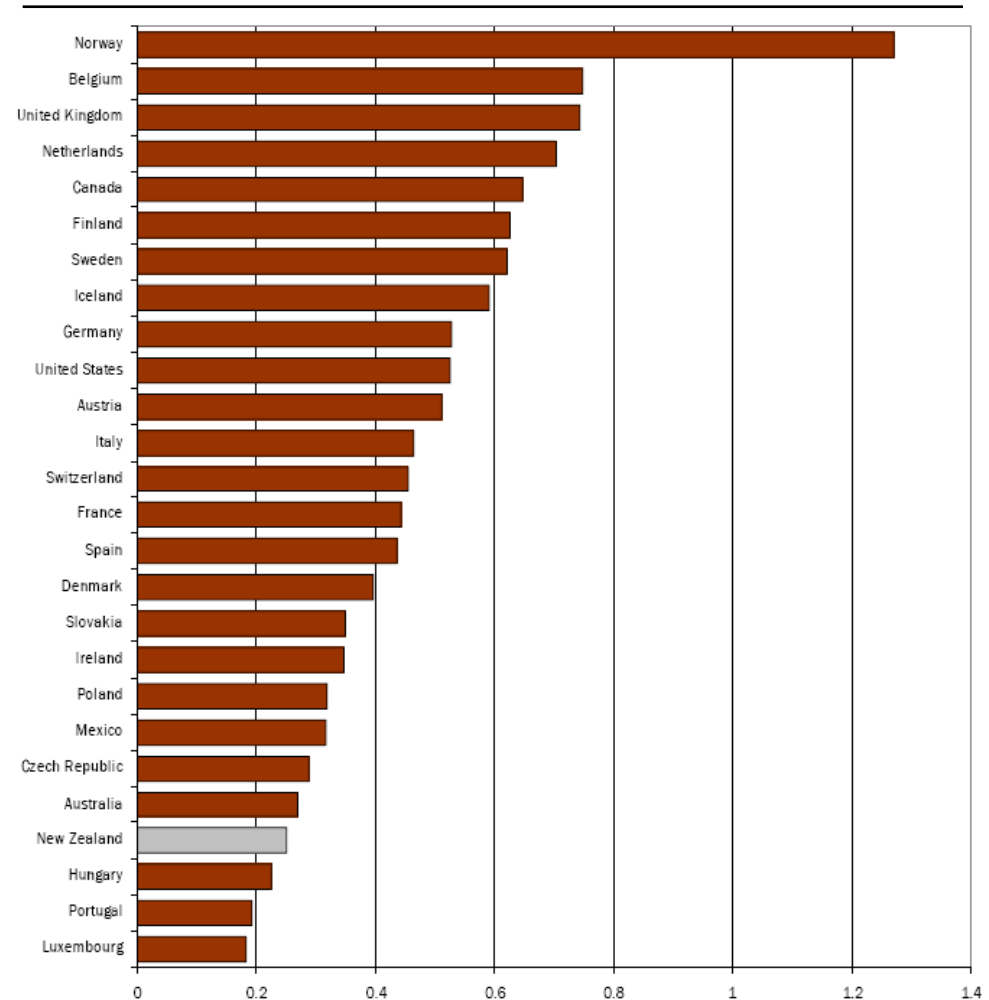
DSL SPEEDS IN NZ APPROXIMATELY ALIGNED WITH SPEEDS COMMON IN CENTRAL EUROPE

Higher Speeds Expected With LLU Coming At The End Of 2005

Download speeds



Upload speeds



AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- **Competitive landscape & main players**
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

Conclusions and next steps

Appendices

NZ TELECOMMUNICATION COMPETITIVE LANDSCAPE DOMINATED BY TELECOM NEW ZEALAND

Two Mobile Operators and Limited Number Of Alternative Fixed Operators

Telecommunication market dominated by Telecom New Zealand, the former incumbent

- Virtual monopoly in fixed lines and broadband
- #2 mobile network operator
- Other ISPs either resell Telecom's ADSL or offer competitive technologies in minor scale

TelstraClear is the second largest telecommunication company in New Zealand, but with limited options of challenging the former incumbent

- Built its own network in largest cities, which is used for services for businesses
- Resells Telecom's ADSL while it hopes for LLU to increase the competition, besides ADSL it offers cable broadband
- It runs its MVNO using the network of Vodafone NZ – minor scale

Vodafone NZ managed to overcompete Telecom NZ and become #1 mobile operator



- Its data plans are rather expensive and limited by very low data caps, therefore they are not competitive with either ADSL offerings nor dial-up connection

LLU planned for the end of 2006 in order to increase competition in the fixed line market and especially improve the current broadband situation

- Telecom opposes this plan, therefore the implementation may be delayed

TELECOM NEW ZEALAND DOMINANT IN THE FIXED TELECOM MARKET, FOLLOWED BY TELSTRA

Other Alternative Operators With Marginal Role

Telecom New Zealand	Telstra Clear	Other fixed operators - established																																								
<p>Former incumbent</p> <ul style="list-style-type: none"> Established 1987 (Post office spin-off) Privatized 1990 Public Limited Company No majority owner 	<p>Fully owned by Australian Incumbent</p> <ul style="list-style-type: none"> Mother company owned 50% by Australian Government 	<table border="0"> <tr><td>Trans Power New Zealand</td><td>1992</td></tr> <tr><td>New Zealand Rail</td><td>1993</td></tr> <tr><td>CityLink</td><td>1996</td></tr> <tr><td>Globalstar New Zealand</td><td>1997</td></tr> <tr><td>The Internet Group</td><td>1998</td></tr> <tr><td>Vodafone New Zealand</td><td>1999</td></tr> <tr><td>Vector Communications</td><td>2000</td></tr> <tr><td>Econet Wireless New Zealand</td><td>2002</td></tr> <tr><td>Counties Power</td><td>2002</td></tr> <tr><td>FX Networks</td><td>2003</td></tr> <tr><td>Inspired Networks</td><td>2003</td></tr> <tr><td>ThePacific.Net</td><td>2004</td></tr> <tr><td>NetSmart</td><td>2005</td></tr> <tr><td>Smartlinx 3</td><td>2005</td></tr> <tr><td>Civic Enterprises</td><td>1989</td></tr> <tr><td>Sky Network Television</td><td>1990</td></tr> <tr><td>Broadcast Communications</td><td>1990</td></tr> <tr><td>Pacificom</td><td>1992</td></tr> <tr><td>Barryvision</td><td>1995</td></tr> <tr><td>Far North Cable TV</td><td>1995</td></tr> </table>	Trans Power New Zealand	1992	New Zealand Rail	1993	CityLink	1996	Globalstar New Zealand	1997	The Internet Group	1998	Vodafone New Zealand	1999	Vector Communications	2000	Econet Wireless New Zealand	2002	Counties Power	2002	FX Networks	2003	Inspired Networks	2003	ThePacific.Net	2004	NetSmart	2005	Smartlinx 3	2005	Civic Enterprises	1989	Sky Network Television	1990	Broadcast Communications	1990	Pacificom	1992	Barryvision	1995	Far North Cable TV	1995
Trans Power New Zealand	1992																																									
New Zealand Rail	1993																																									
CityLink	1996																																									
Globalstar New Zealand	1997																																									
The Internet Group	1998																																									
Vodafone New Zealand	1999																																									
Vector Communications	2000																																									
Econet Wireless New Zealand	2002																																									
Counties Power	2002																																									
FX Networks	2003																																									
Inspired Networks	2003																																									
ThePacific.Net	2004																																									
NetSmart	2005																																									
Smartlinx 3	2005																																									
Civic Enterprises	1989																																									
Sky Network Television	1990																																									
Broadcast Communications	1990																																									
Pacificom	1992																																									
Barryvision	1995																																									
Far North Cable TV	1995																																									
Operates fixed as well as mobile network	Operates its own network in largest cities as well as resells products of Telecom New Zealand																																									
No LLU yet, alternatives resell its services	Claims to have best IP Network in New Zealand																																									
<p>Fixed lines: 1,790,000</p> <p>Revenue: NZ\$5,605 mil</p> <p>Capital Expenditure: NZ\$703 mil</p>	<p>Own fixed lines: 62,000</p> <p>Focused mainly on businesses and international businesses</p>																																									
Operates also in Australia	www.telstraclear.co.nz																																									
<p>www.telecom.co.nz</p> 																																										

BROADBAND ISP MARKET DOMINATED BY TELECOM'S DSL, OTHER TECHNOLOGIES AND OPERATORS MINOR

Higher Broadband Penetration Is Slowed Down By Dial-Up Popularity

XTRA (Telecom)

Has virtual monopoly in DSL products

- Alternative DSL providers resell its products

Acused for abusing the monopoly and underdelivering on its promises

ADSL lines: 297,000

LLU unbundling planned for the fall seen as a way to improving the situation – obviously refused by XTRA

www.telecom.co.nz



Telstra

Both resells XTRA's DSL broadband products and markets its own broadband cable services

Expecting LLU as a market opening

www.telstraclear.co.nz



Others (technology used)

Either limited to reselling Telecom products (Xtra) or running their own small scale networks in limited areas.

Their importance may increase with planned LLU.

ihug	ADSL
WISE Net	ADSL, WiFi
Broadcast Comm. Ltd	WiFi
Woosh	WiFi
Vector Communications	FTTH
Wired Country	FTTH, WiFi
Citylink	FTTH
Advanced Network	FTTH
ICONZ	DSL, FTTH
Orcon	DSL, FTTH

MOBILE MARKET LANDSCAPE INFLUENCED BY DIFFERENT TECHNOLOGIES USED BY THE TWO NETWORKS

Limited Operator Switching Options

Vodafone NZ

NZ largest mobile operator

Part of the Vodafone Group

Using GSM technology
3G enabled – UMTS

Subscribers: 2,02

Offering data plans with very low monthly data caps

www.vodafone.co.nz



Telecom Mobile

Mobile division of the telecom incumbent

Using CDMA technology
3G enabled – CDMA EV-DO

Lost market leadership in 2003

Subscribers: 1,601,000

Offering also data plans with very low monthly data caps

www.telecom.co.nz



MVNOs

Playing marginal role, hardly visible in the market

Telstra Clear
(through Vodafone Network)

Operated by fixed operator TelstraClear

www.telstraclear.co.nz

Boost Mobile
(through Telecom Network)

Operated by Telecom itself

www.boostmobile.co.nz

Limited competition visible from the lack of data plans and rather high rates reflected by remaining high popularity of fixed services

AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

Conclusions and next steps

Appendices

GENERAL POSITION OF PHONES AND ADSL MODEMS AS A CATEGORY

Telecommunication devices require authority approval before plugged into the NZ networks – so called telepermit

Fixed phones are sold by both telcos, as part of their service offering, and retailers

- Price ranges are similar except of special offers or subsidized offers by the telcos with longer term subscription

Despite the popularity of fixed line service, similarly to CEE, fixed phones are not a hottest item to be bought at electronics retailers, which is reflected by their position in the shops and catalogues

- Electronics retailers would usually have on stock a limited range of models, which are most often displayed in secondary display areas
- Some electronics retailers would fail to sell fixed phones as such
- In the mailers, leaflets and catalogues fixed phones are mostly hidden among the broad offer of mobile phones and either shown at the end of „phone“ page or not shown at all

Often the phones are equipped with answering machine as calling to fixed line is very common despite the spread of mobile phones

Cordless phones and multiple phone models are common as people usually live in larger houses and have their gardens, therefore need further reach of their fixed line

New Zealand uses Annex A technology

ADSL modems and routers are mostly supplied by the service providers as a part of their service offering and at subsidized prices, with the basic models being for free with a minimum time subscription. Offer of ADSL modems/routers is rather rare, as the after market is not highly developed yet

Personal experience suggests that people go for basic cheaper models, as the density of WiFi signal in the cities is very weak

FIXED PHONES MARKET DOMINATED BY PANASONIC, DORO AND TWO LOCAL BRANDS – UNIDEN AND ORICOM

Uniden A Strong Player While Oricom Still Failing To Reach Share In NZ

Uniden 

Japanese manufacturer of a large scale of cordless and corded fixed phones, PMRs, GSM navigation and wireless networking products

World's leading manufacturer of cordless phones

#1 cordless phones seller in New Zealand

In New Zealand present since 1989

Highly innovative company

Contracts directly with the retailers and telcos, its main stockists include:

- Telecom NZ
- Harvey Norman
- Noel Leeming
- Dick Smith, Farmers
- Bond Bond, Smith City and OfficeMax

Oricom 

Australian brand of DECT and corded fixed phones, 2-way UHF radios (Motorola) and IP phones

Established only in 2003

Business model similar to Clients – manufacturing outsourced in Asia (claims to use renowned manufacturers), ensures distribution and channels in Australia and New Zealand

More limited retail distribution than Uniden:

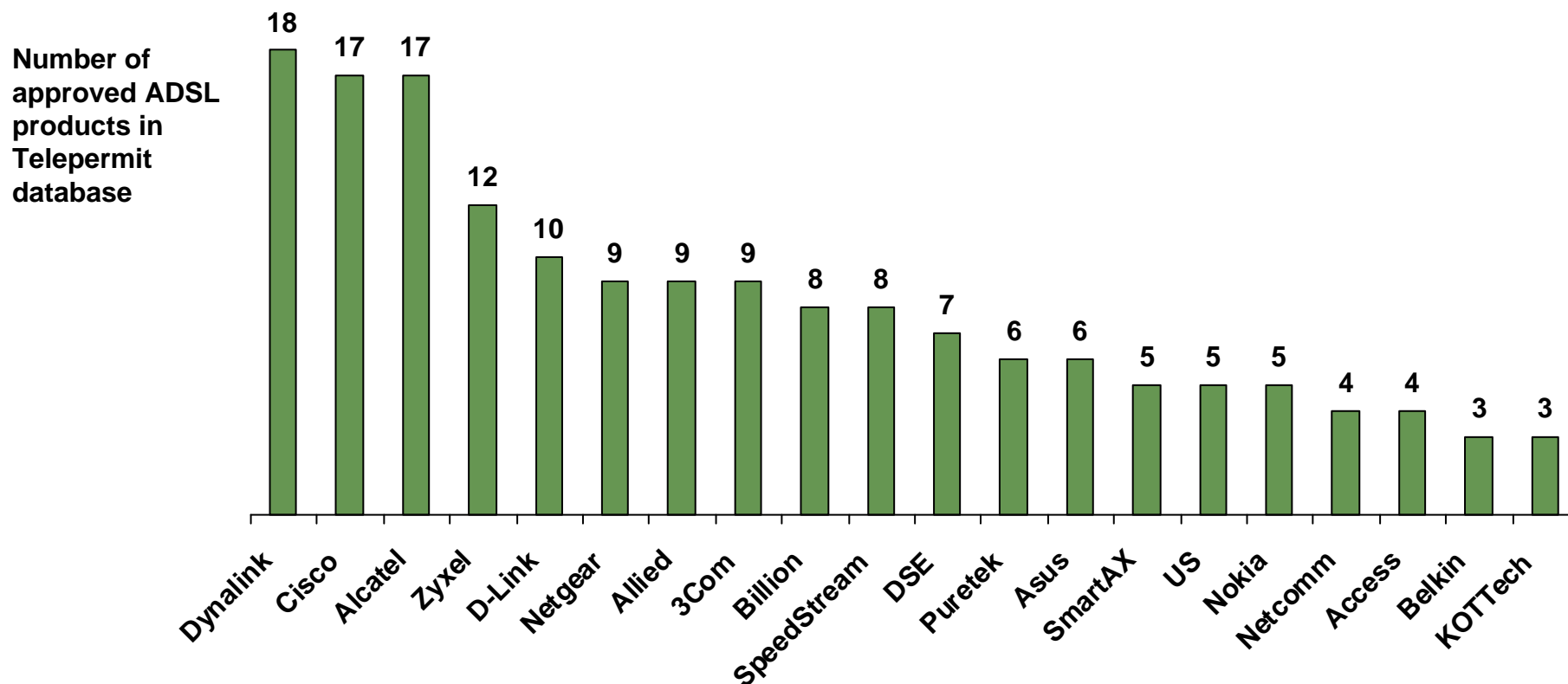
- TelstraShop
- Harvey Norman
- Betta Electrical

EXAMPLES OF PHONE MODELS: ANALOG AND DIGITAL, MOSTLY CORDLESS, OFTEN WITH ANSWER MACHINE

Telco offers		Retailer offers	
<p>Oricom P80</p> <p>\$59.95</p> <ul style="list-style-type: none"> • Digital cordless • Popular • Feature Packed • Caller display capable • Phonebook 	<p>Uniden XS215</p> <p>\$89.95</p> <ul style="list-style-type: none"> • Analogue cordless • 2.4GHZ SCR • Caller display capable • Headset capable 	<p>Panasonic 1805</p> <p>\$59.99</p> <ul style="list-style-type: none"> • 1.8ghz long range phone • Gap compatible • Multi handset compatible (up to 6 handsets) • Caller id compatible • Handset alphanumeric lcd - 3 lines 	<p>Uniden 1825</p> <p>\$69.99</p> <ul style="list-style-type: none"> • 1.8GHz DECT Digital Technology • Multi Handset Capable - up to 6 handsets using one phone socket • Two-way communication between handsets anywhere without the base • Intercom/announce call transfer 
<p>Uniden FP203</p> <p>\$69.95</p> <ul style="list-style-type: none"> • Corded phone • Caller display capable • Handsfree capable 	<p>Uniden 2315 twin pack</p> <p>\$149.95</p> <ul style="list-style-type: none"> • Digital cordless • Popular • Feature Packed • 2.4GHZ WDECT • Caller display capable • Handsfree capable • Headset capable 	<p>Doro 850</p> <p>\$118</p> <ul style="list-style-type: none"> • Digital DECT • Color display • Multi handset compatible (up to 6 handsets) • Caller id compatible 	<p>Doro</p> <p>\$88</p> <ul style="list-style-type: none"> • Digital DECT • Digital answering machine • Multi handset compatible (up to 5 handsets) • Caller id compatible 
<p>Panasonic 1810</p> <p>\$89.95</p> <ul style="list-style-type: none"> • Digital cordless • Special offer • Caller display capable • Handsfree capable 	<p>Uniden DSS7815 + 1</p> <p>\$199.95</p> <ul style="list-style-type: none"> • Digital cordless • Feature Packed • 5.8 GHZ DECT • Caller display capable • Handsfree capable • Headset capable 	<p>Oricom 2400</p> <p>\$139.99</p> <ul style="list-style-type: none"> • Digital cordless • Stylish • Built in Digital Answer Machine • Caller display capable • Phonebook 	

MULTIPLE ADSL PRODUCT BRANDS PRESENT IN THE MARKET AS SUGGESTED BY THE APPROVAL STATISTICS

Alcatel Lead The Statistics Till 2004, Recently Not Introducing New Products



This statistics does not reflect the sales popularity of individual products








ADSL EXAMPLES: TELECOM NEW ZEALAND RELIES SOLELY ON D-LINK

Alternatives And Retailers Use Other Brands

Telco offers		Retailer offers	
<p><u>D-Link 502T</u> \$99.95, free with self-install kit</p> <ul style="list-style-type: none"> • Single port ADSL modem • ADSL or ADSL2 Modem • USB or fast Ethernet port connection 	<p><u>D-Link 504T</u> \$159.95, \$60 with self-install kit</p> <ul style="list-style-type: none"> • ADSL or ADSL2 4-port Modem • 4 port 10/100 ethernet router 	<p><u>Belkin ADSL</u> \$99.99</p> <ul style="list-style-type: none"> • Wireless ADSL router • 4-port 10/100Base-T 	<p><u>Belkin ADSL2+ Wireless router</u> \$299.99</p> <ul style="list-style-type: none"> • Wireless ADSL router • 4-port Wireless Router. 
<p><u>D-Link 604T</u> \$199.95, \$100 with self-install kit</p> <ul style="list-style-type: none"> • ADSL or ADSL2 Wireless Modem • Connect wireless enabled devices together and to the internet 	<p><u>Dynalink 1025W</u> \$244.90, \$179.95 with self-install kit</p> <ul style="list-style-type: none"> • 4-port wireless ADSL router • Built in firewall • 4x 10/100Mbps Ethernet port  <p>WISE Net</p>	<p><u>D-Link 604T</u> \$219.99</p> <ul style="list-style-type: none"> • ADSL or ADSL2 Wireless Modem • Connect wireless enabled devices together and to the internet 	<p><u>D-Link 604T</u> \$218.00</p> <ul style="list-style-type: none"> • ADSL Wireless Router • Connect wireless enabled devices together and to the internet 

Note: All prices are in NZD, including GST
 Source: Company websites, shop visits

SEVERAL LARGE CHAINS DOMINATE THE MARKET OF ELECTRONICS RETAILERS

 <p>Noel Leeming Computer City A great deal more!</p>	<ul style="list-style-type: none"> • New Zealand largest electronics retailer • Founded as NZ company, currently owned by a private equity group • Sister chain of Bond and Bond with total of more than 90 stores through New Zealand • Operates large electronics stores on the suburbs of large cities and also an e-shop 	www.noelleeming.co.nz
 <p>Harvey Norman COMPUTERS & COMMUNICATIONS</p>	<ul style="list-style-type: none"> • Australian electronics chain expanding to other countries (including Slovenia in Europe) • Operates large stores with electronics, furniture and home equipment in Suburbs of largest cities • 21 stores in New Zealand 	www.harveynorman.co.nz
 <p>BOND and BOND</p>	<ul style="list-style-type: none"> • New Zealand chain, co-owned with Noel Leeming • Chain of smaller electronics retail outlets, usually on main streets of large cities • Smaller inventory compared to larger stores, but more prominent location of the stores • At the moment 33 outlets in New Zealand 	www.bondandbond.co.nz
 <p>DICK SMITH ELECTRONICS That's where you go!</p>	<ul style="list-style-type: none"> • Australian retail chain with electronics • 52 locations around New Zealand • Mid-size stores in wide range of NZ cities 	www.dse.co.nz
 <p>Smiths City Has it all!</p>	<ul style="list-style-type: none"> • NZ retail chain with Furniture, Furnishings, Appliances, Sporting Goods and Outdoor Products • 17 homeware stores in the South Island of New Zealand 	www.smithscity.co.nz
 <p>OfficeMax The new name for Boise</p>	<ul style="list-style-type: none"> • Part of the office products world's leading company • Business oriented supplier with catalogue, phone ordering as well as its own stores • 18 locations in the largest cities of New Zealand • Mid-size stores in central locations 	www.officemax.co.nz
 <p>WAREHOUSE STATIONERY BUY AT FULL PRICE? - LOW PRICES GUARANTEED!</p>	<ul style="list-style-type: none"> • Part of the Warehouse retail chain – NZ largest discount general retailer • Together over 85 locations Nationwide • Large hypermarket stores in suburbs of large cities 	www.warehousestationery.co.nz

AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

Conclusions and next steps

Appendices

MARKET SPECIALTIES (I)

Fixed Line Remaining Very Popular, Dial-up Slowing The Growth Of Broadband Connections

Fixed line popularity

As the charts in previous chapters show, the introduction of mobile phones never really meant sharp decrease of fixed line, despite the virtual monopoly

The attractiveness of fixed line service lies primarily in Telecom's free local calls offering

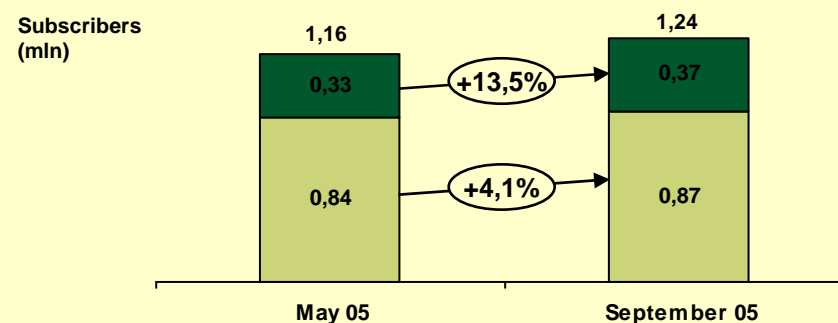
Savvy Kiwis then very often rather use fixed line to fixed line calling, despite all its disadvantages, instead of calling from mobile phone or even sending SMS

This applies for young subscribers and students as well, actually this target group is very strong in NZ, unlike in Czech republic

Dial-up competing with broadband thanks to FRIACO

NZ ISPs offer flat rate unlimited (without both time limit and data cap) dial-up connection for very affordable price

Given the rather slow speeds of ADSL, there is a little reason for the dial-up users to switch to ADSL, actually the number of dial-up users was growing in 2005



Popularity of fixed line is a strong prerequisite for ADSL growth

MARKET SPECIALTIES (II)

Phone Devices Often Equipped With An Answering Machine, All CPE Devices Need Authority Approval

Answering machine requirement

The popularity of the fixed line requires solutions to its disadvantages – high possibility that the called person is not at home

Despite the offering of voice mailbox by the operators, many residents require their phone device to be equipped with answering machine or buy a separate answering device

Therefore many corded as well as cordless phone devices are equipped or bundled with an answering machine feature

Authority approval of CPE devices - homologization

All CPE devices intended to be plugged into NZ telecommunication network require so called Telepermit – process similar to former homologization of products in Czech Republic

This applies to both ADSL modems and fixed telephones

As most current suppliers to NZ are likely to use similar components as Client, there is no doubt the Telepermit would mean only a time and effort complication, but should not prevent the possibility of introducing Clients products in NZ

MARKET SPECIALTIES (III)

Despite The Popularity Of Fixed Line, The Fixed SMS Service Is Not Offered, LLU Seen As Potential Impulse For Further Market Boost

Fixed SMS service

Despite the popularity and common use of the fixed line, no fixed SMS service is offered and none of the producers supplies SMS enabled phone devices (at least they do not promote them)

Question is whether the fixed SMS service could compete with free local calling in combination with answering machines

SMS service is not vastly popular among the users, even though free texting on weekends and low priced SMS package of Vodafone may support its growth

If Client decided to enter the market it would either have to introduce the SMS service simultaneously or find another feature of its products to promote

Local Loop Unbundling (LLU)

LLU intended to be implemented at the end of 2006 as a part of a broader regulatory package directed towards boost of further competition and broadband penetration

As the Internet access penetration is rather high, the main goal is to induce offerings that would shift the users from dial-up connections to ADSL

Together with LLU the planned package contains also introduction of naked DSL and unfettered UBS together with QoS and speed caps removal

These steps are seen as revolutionary and should bring New Zealand to levels common in other OECD countries with similar level of GDP per capita

As the incumbent opposes the suggested reforms, the actual implementation may be delayed

SMS feature of products may not be usable as a competitive advantage without the service introduction

MARKET SPECIALTIES (IV)

WiFi Coverage Rather Low Throughout NZ Cities, In General Price Competition Not Very Common In New Zealand

WiFi coverage

Unlike in the Czech Republic, probability of connecting to someone else's WiFi network is lower in New Zealand cities

This suggests that although the broadband penetration is slightly higher, people prefer cheaper CPE devices, which bring them the basic functionality, most often for free as a part of the provider package

As the market matures, people will soon discover a need for more advanced networking products, especially as Kiwis live in houses and like flat-mating, therefore should soon need higher coverage of their home

These products will be mostly sought in the aftermarket, most often supplied by retailers

Low price competition

The very last specialty is related to the market in general

In New Zealand, the price competition is very rarely seen. Most competitive services or products are priced equally, which is valid for gas at petrol stations, restaurants as well as broadband services

This situation suggests, that entering the market other than price elements need to be used in order to win the market share over competition

Advanced ADSL products for the aftermarket could mean an opportunity

AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

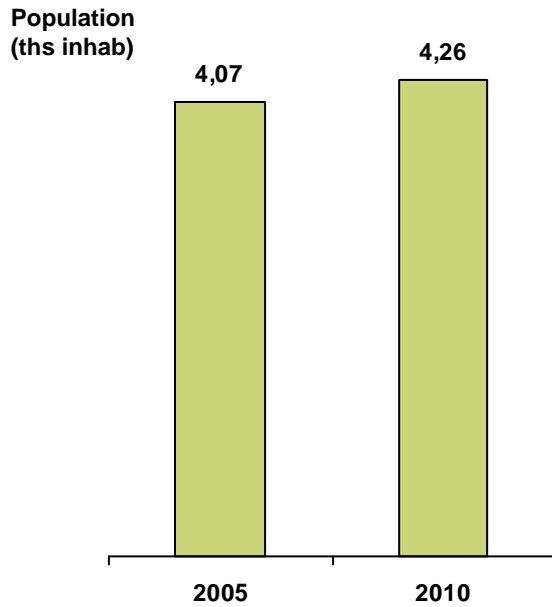
Conclusions and next steps

Appendices

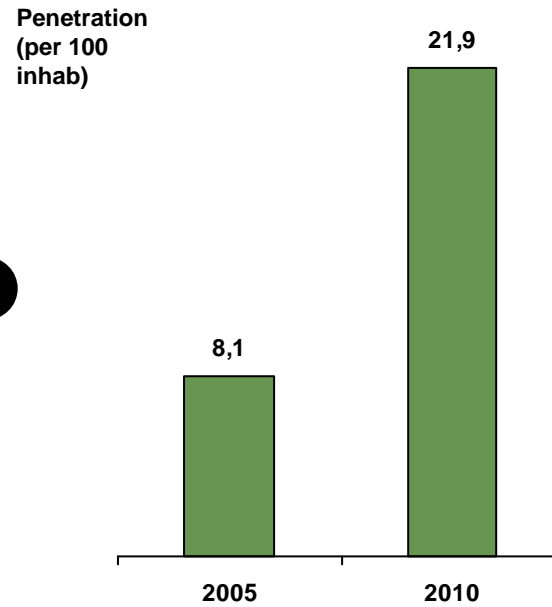
PROJECTION OF THE MARKET SIZE SUGGESTS 600 THS NEW BROADBAND CONNECTIONS TO BE INSTALLED TILL 2010

Assuming New Zealand Reaches Current Level Of Norway Till 2010

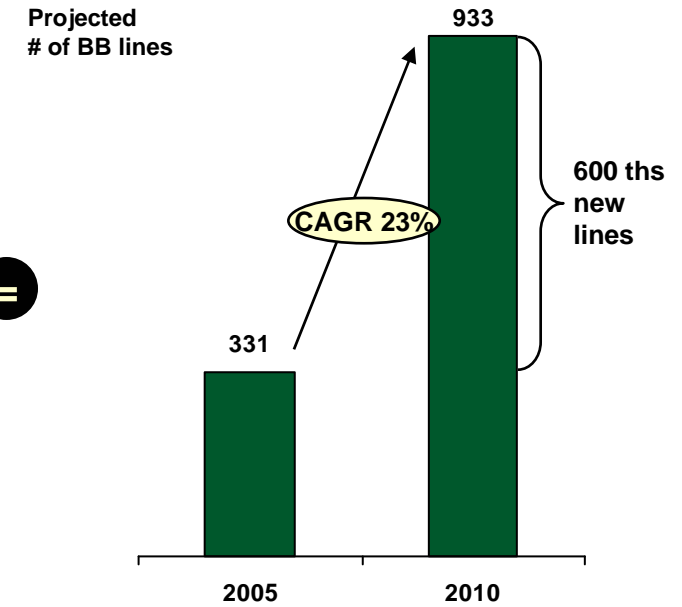
Population projected to grow to 4,26 mil till 2010⁽¹⁾ ...



... multiplied by current BB penetration of Norway⁽²⁾ ...



... results in projected 600 ths new BB lines till 2010



At average price of 50 NZD per ADSL CPE the market is in total worth 30 mil NZD over the next five years

(1) Mean estimate of the Statistics New Zealand
 (2) Norway chosen as a country with simimilar number of inhabitants and density

AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

Conclusions and next steps

Appendices

PROS AND CONS OF ENTRY TO NEW ZEALAND MARKET

Broadband Market Further Penetration Will Require Corresponding Products, Fixed SMS Representing Threat As Well As Opportunity

Pros of the NZ entry

Developed country with lower than average penetration of broadband

- 600 ths new ADSL lines projected for next 4 years
- Significant aftermarket could be opening up
- Large number of dial-up users to be migrated to ADSL if proper advantage offered
- LLU might boost ADSL in New Zealand

Fixed line service is very popular opening the space

Decent distance from Asia favoring direct shipments at lower cost

Absence of SMS service offering an opportunity of entering the market together with fixed SMS service

Market dominated by Telecom New Zealand and several retailers – market could be to a large extent covered by supplying the incumbent and some retailers

Cons of the NZ entry

Rather isolated market with a population of 4,5 million inhabitants – lower than Slovakia

Distance from CZ headquarters not allowing full control

No current presence nor experience in the market

- Entry without established partner might be difficult

Several local competitors already challenging major brands like Panasonic

- The market niche for non-branded products could be already taken
- Some of the vendors may be using same product designs as Client in CEE thus prohibiting entry to the market with some of products

No fixed SMS service taking away one of Client's products competitive advantages

Should Client decide to go forward with the market entry, further analysis will be required

RECOMMENDATION AND NEXT STEPS

Given the size and current situation, New Zealand market seems to be worth considering as an option of market entry

- Especially if considered together with Australia market entry

Detailed findings besides those outlined in this report should be discussed in person

If the Client decides to pursue the option of market entry to New Zealand, several further analysis will have to be carried

- Analysis of business potential of NZ market entry
- Conduct further research as to potential partners and distributors
- Outline entry strategy regarding the sought competitive advantage of Client's products and introduction of fixed SMS
- Seek anchor partner – a telco or retailer – upon which the initial business could be based
- Decide under which brand to supply – current or other brand for local market

Juppa Management Consulting would be more than happy to help with this further issues

AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

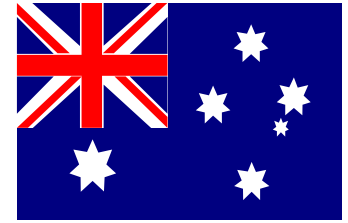
Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

Conclusions and next steps

Appendices

AUSTRALIA SUMMARY



Australia is a highly developed country with double the population of Czech Republic, vast area of two thirds of Europe and 50% higher GDP than Czech Republic

Further growth of the population (especially thanks to immigration of skilled migrants) as well as of the economy is forecasted

Australia is ahead in the fixed line penetration of CEE countries, and in line in mobile phone penetration – broadband penetrations is higher than that of CEE countries and New Zealand, but still lower than the GDP per capita level would suggest

Market is still characterised by a strong position of the former monopoly Telstra, but thanks to early privatisation, deregulation and LLU several strong competitors in all market areas have emerged

Optus, AAPT (Telecom New Zealand) and Primus Telecom are the major competitors in fixed lines and broadband

On the other hand the dominance of the market by one strong player allows covering the market by one partnership, if properly managed

AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

Conclusions and next steps

Appendices

AUSTRALIA WITH TWICE THE POPULATION OF THE CZECH REPUBLIC AND AREA OF 2/3 OF EUROPE'S

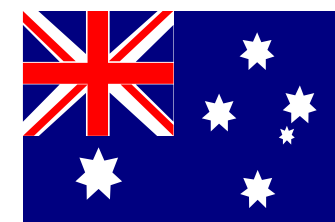
The GDP per Capita Higher by One Half

Main indicators (I)

	2005	2000	CAGR %
Total population (mil)	20,44	19,27	1,2
Area (sq km)	7 617 930		
Density of population	2,68	2,53	
GDP (AUD mil)	859 192	738 123	3,1
GDP per capita (AUD)	42 511	38 764	1,9
Average weekly earnings (AUD/week)	1028	803	5,1
Population growth (%)	1,14		
Unemployment (%)	5,5		
CPI index (%)	2,5		
Exports (as % of GDP)	18,1		

Main indicators (II)

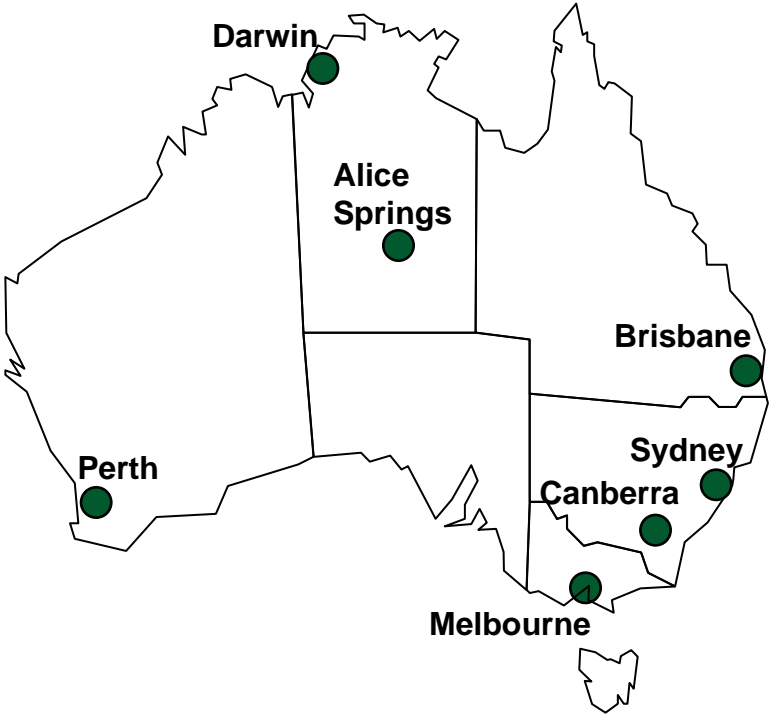
	2005	2000	CAGR %
Number of employing businesses	837 078	814 955	0,9
Retail sales (mil AUD)	204 536	149 422	6,5



CITIES: SYDNEY AND MELBOURNE WORLD METROPOLES

Brisbane, Perth And Adelaide With More Than 1 Mil Inhabitants

Map of Australia

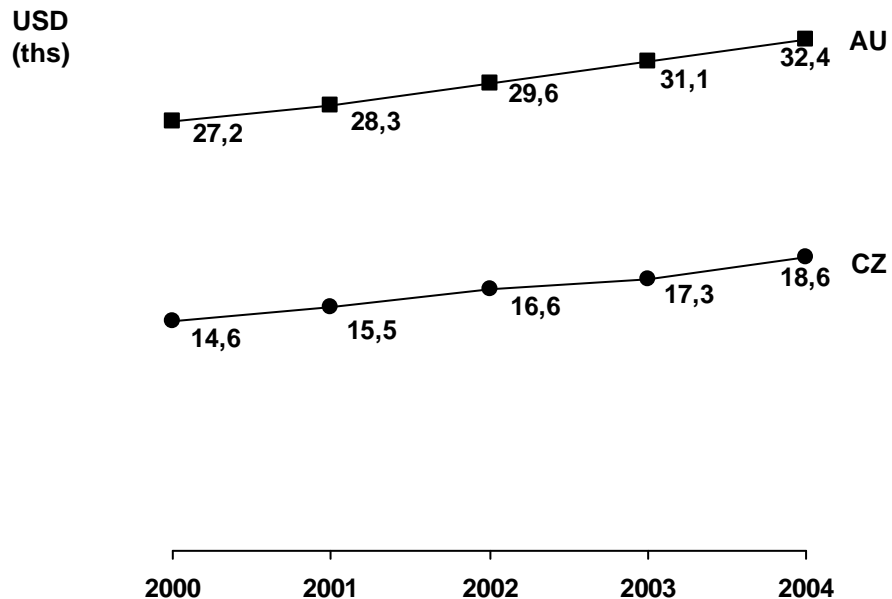


Largest urban areas of Australia with # of inhabitants

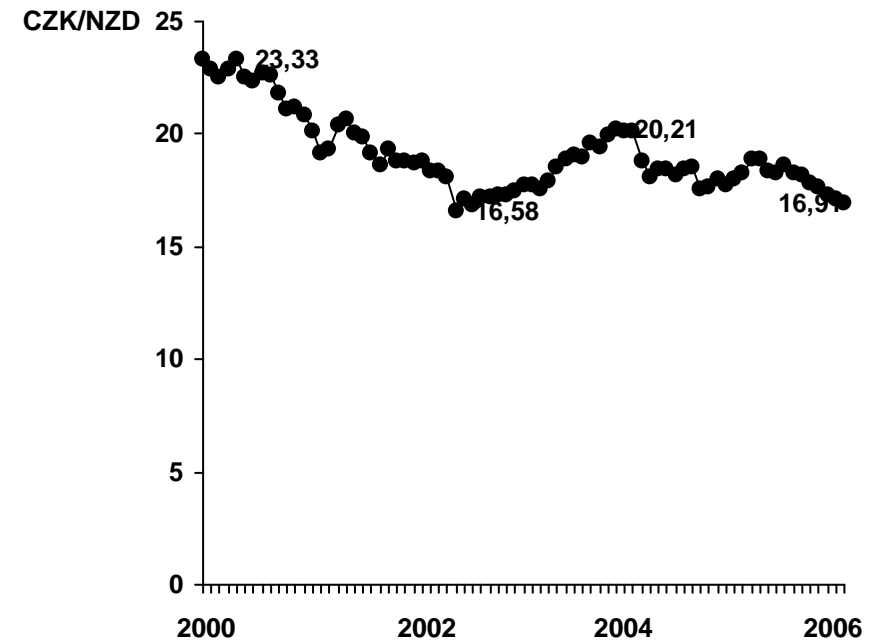
<u>Urban area</u>	<u>Inhabitants</u>
Sydney	4280900
Melbourne	3353300
Brisbane	1544300
Perth	1390800
Adelaide	1130100
Newcastle	485100
Gold Coast	381300
Canberra	322700
Wollongong	266200
Sunshine Coast	227800
Hobart	205200
Geelong	156200
Townsville	137300
Cairns	126000
Launceston	103700

GDP PER CAPITA GROWING STEADILY, EXCHANGE RATE DROPPED RATHER SHARPLY IN 2006

Australia overgrows CZ with GDP per capita PPP, staying far ahead



The exchange rate vs. CZK decreasing continuously, drop in the first half of 2006 gets the rate back to historic minimums



AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

Conclusions and next steps

Appendices

NEW ZEALAND TELECOMMUNICATION MARKET OVERVIEW

Total number of telephone subscribers growing at 10% a year

- **Number of fixed lines slowly growing thanks to broadband applications**
- **Majority of the growth of subscription can be attributed to mobile phones, which complement fixed lines rather than substitute them**

Compared to most of the countries served by Client, Australia is at the top of both fixed line and mobile penetration and its position is very similar to that of Greece

Fixed line penetration favors the broadband implementation, doubling every year at 100% a year growth rate, but still the total penetration is right between the CEE countries and the developed European countries

- **13,8 broadband connections per 100 inhabitants, 80% of which are DSL lines**
- **Only around 85% of fixed lines are DSL enabled, which makes Australia one of the most penetrated countries at its level of DSL enabled fixed lines**
- **Further growth could benefit from increased DSL enablement**

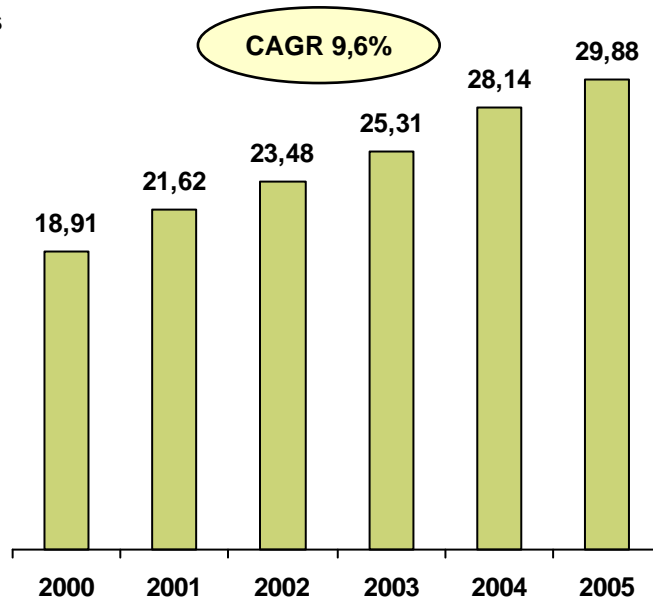
Further development of the market is being influenced by several factors

- **Free local calls make a fixed line a must have for most of the Australians**
- **Unlimited dial-up connection for a flat fee slows down broadband growth and makes mobile data plans inferior**

NUMBER OF PHONE SUBSCRIPTIONS RISING STEADILY, AUSTRALIA WITH HIGHER PENETRATION THAN CEE 148 Phone Subscriptions per 100 Inhabitants

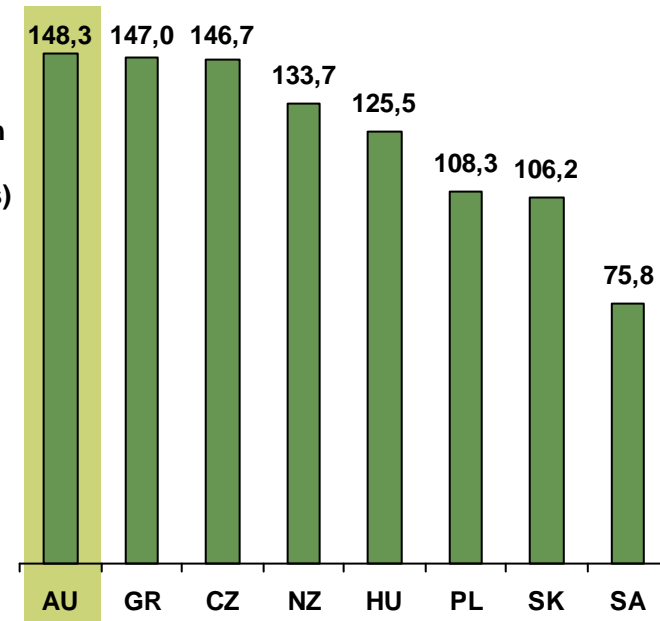
Australia number of phone subscriptions rising steadily at 9,6% a year on average

Fixed lines + mobile phones (mil)



Australia aligned with Czech Republic and Greece in the total subscriptions penetration

Fixed lines + mobile phones penetration (per 100 inhabitants)

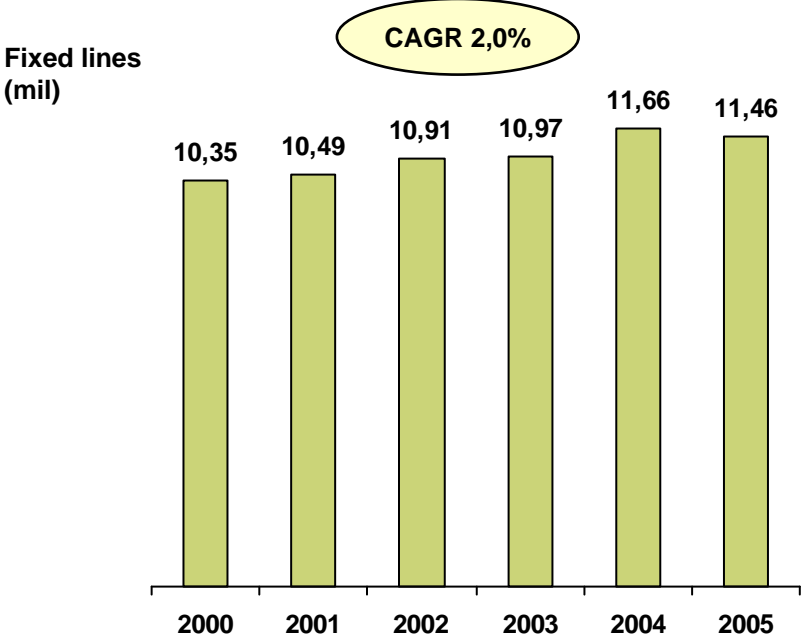


The structure of total subscriptions to be analyzed further

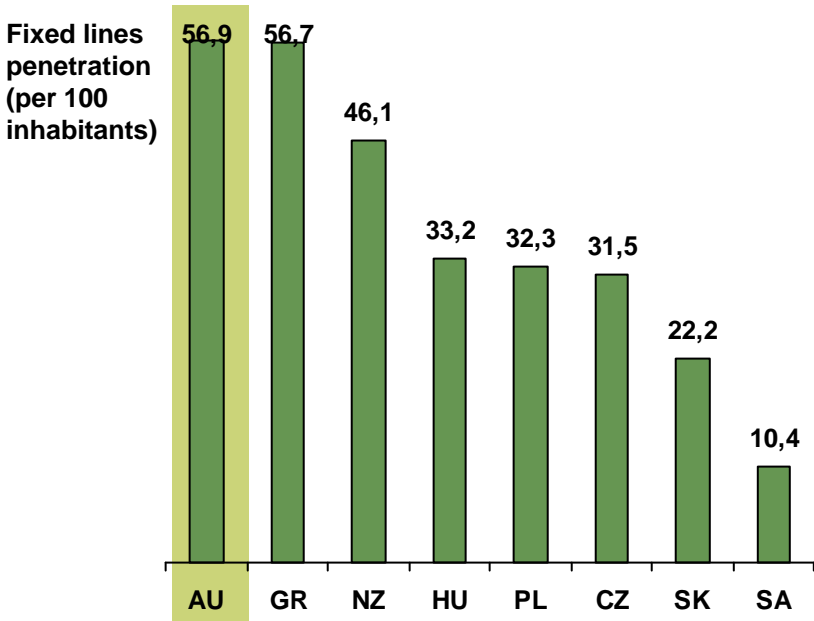
TILL 2004 THE NUMBER OF FIXED LINES WAS DECENTLY GROWING, DROP IN 2005 MAY MARK FUTURE TREND

The Penetration Is Higher Than In Client's Countries Except Of Greece

Number of fixed lines growing till 2004, in 2005 first drop experienced, further trend yet unclear



Only Greece has similar fixed line penetration to Australia, other Client's countries lag behind

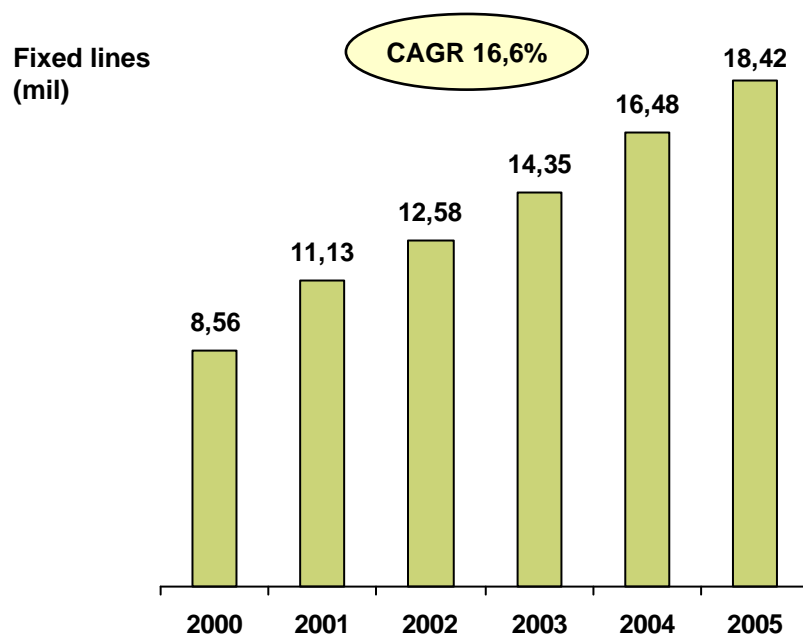


Constant number of lines combined with growing population results in declining penetration

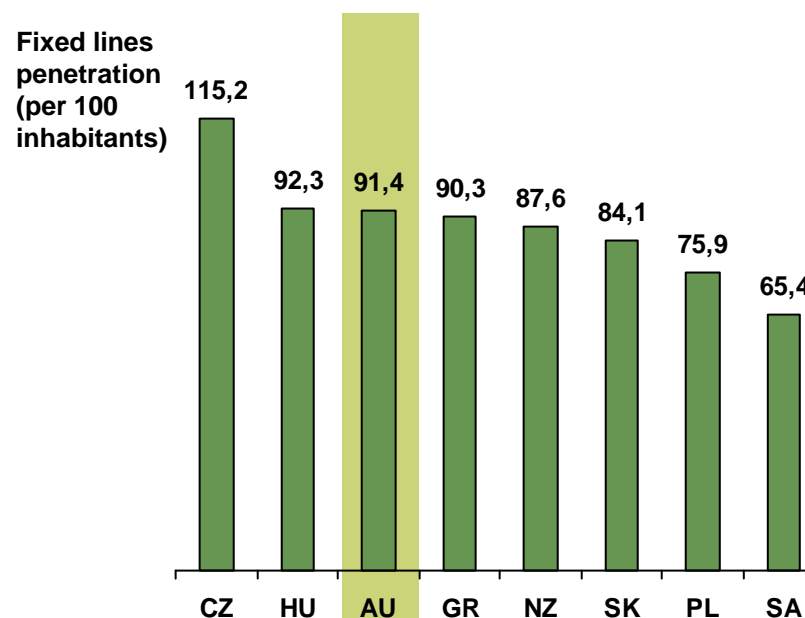
MOBILE PHONES OVERGROWING FIXED LINES AT 18% CAGR, PENETRATION MAY BE REACHING ITS MAXIMUM

Unlike in CZ, The Strong Growth Did Not Lead To Fixed Lines Decline

Number of mobile phones rising sharply in last five years at 16,6% annually



Mobile phones penetration behind the Czech Republic, levelled with Hungary and Greece

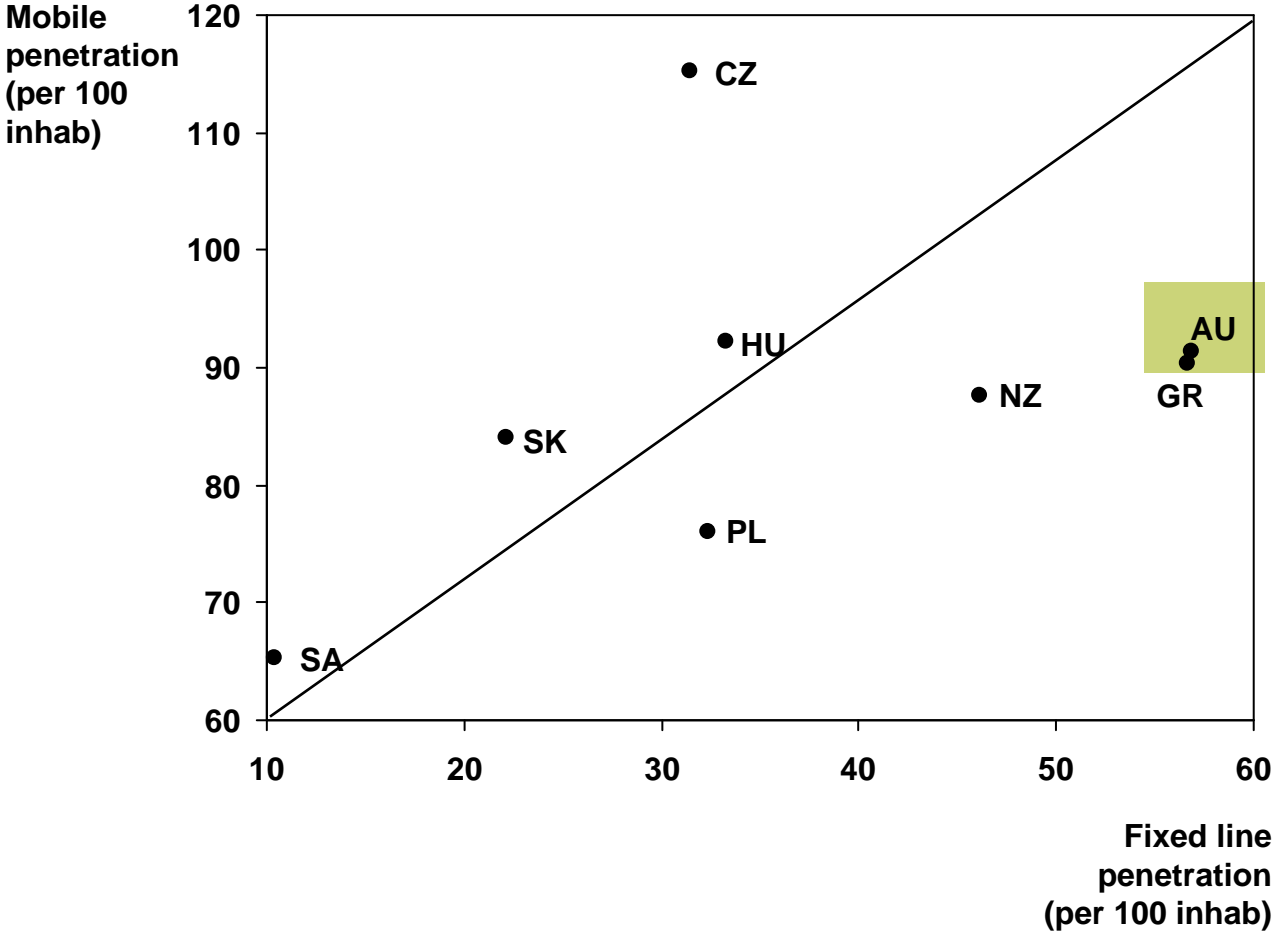


Mobile phones are not substituting fixed lines in Australia

AUSTRALIA IN VERY SIMILAR POSITION TO GREECE REGARDING THE FIXED/MOBILE PENETRATION

Both Markets Likely To Show Common Characteristics

Australia with far bigger share of fixed line subscription than most of the Client's countries



AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

Conclusions and next steps

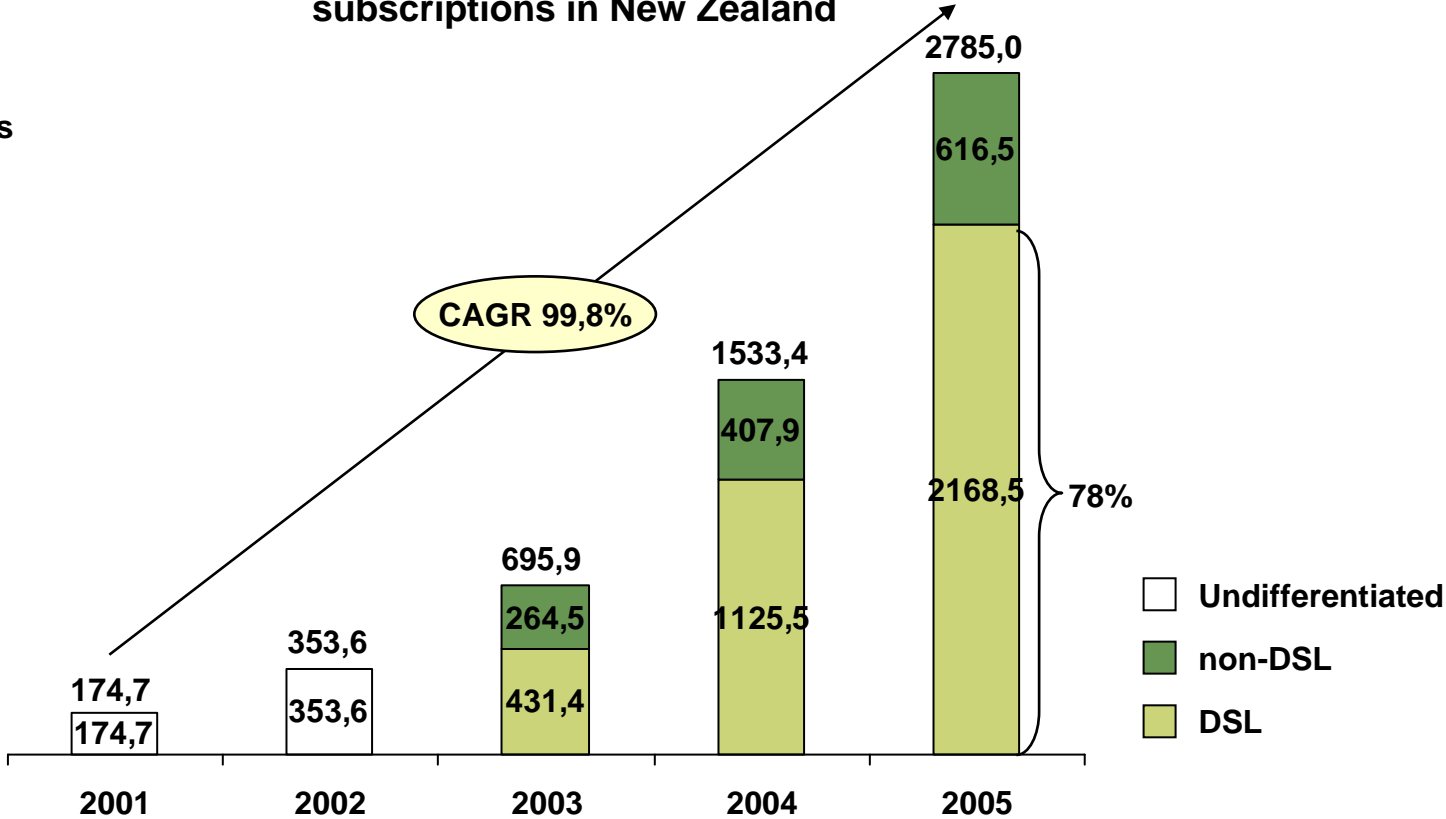
Appendices

NUMBER OF BROADBAND CONECTIONS HAS BEEN DOUBLING EVERY YEAR SINCE 2001

With DSL As The Main Technology

DSL technologies representing over 85% of total brodband subscriptions in New Zealand

Number of broadband subscribers

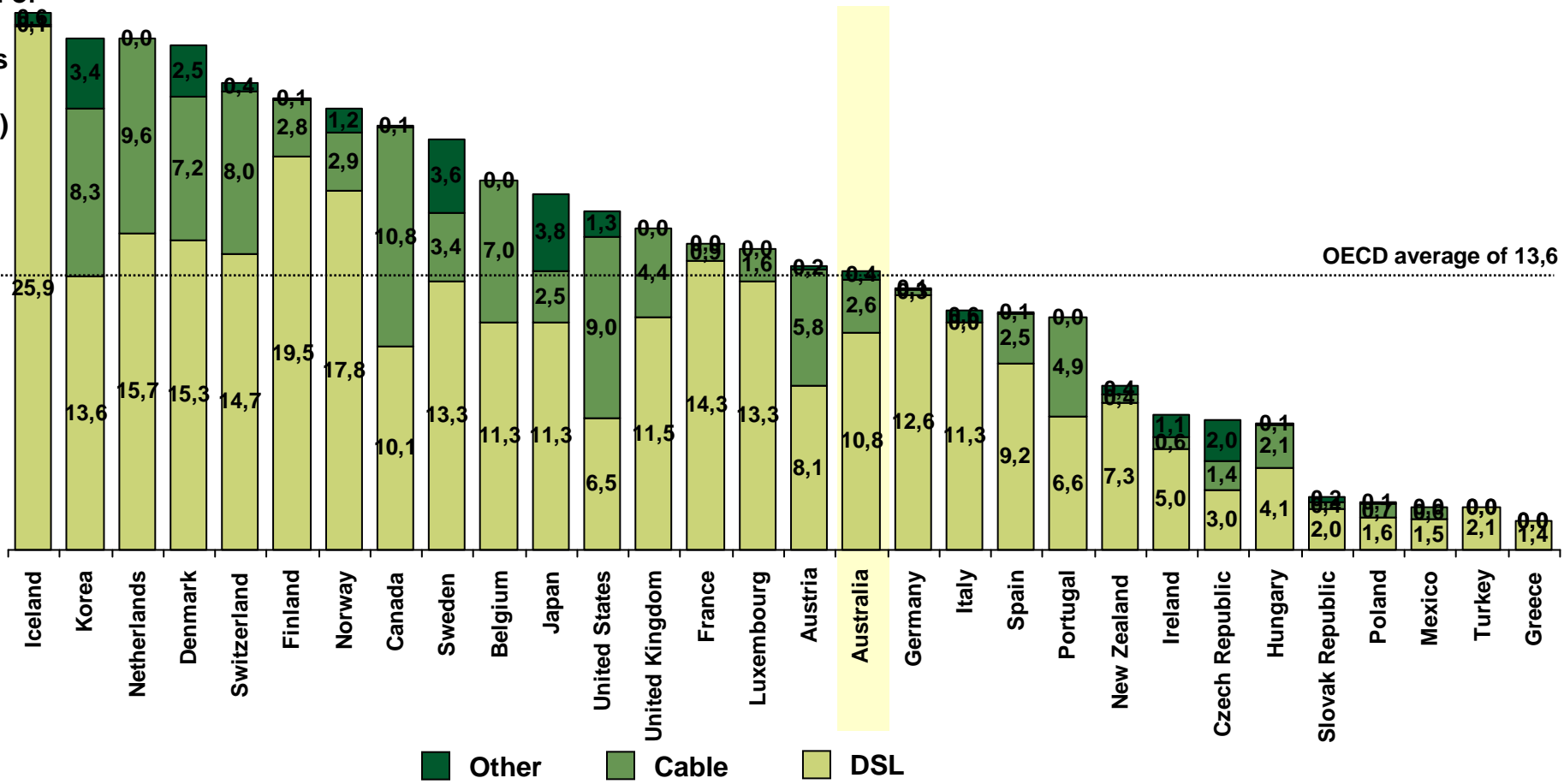


AUSTRALIA EXCEEDS GERMANY, ITALY AND SPAIN IN BROADBAND PER CAPITA PENETRATION

But Still Far Below The OECD Average Or Top EU Countries

Australia with fair share of other than DSL broadband technologies

Penetration of broadband subscribers (per 100 inhabitants)



OECD average of 13,6

Other Cable DSL

Australia

AUSTRALIA FAR BELOW THE LEVEL OF BROADBAND PENETRATION SUGGESTED BY ITS GDP PER CAPITA

Penetration of broadband subscribers (per 100 inhabitants)

GDP per capita (PPP USD)

Country	GDP per capita (PPP USD)	Broadband penetration (per 100 inhabitants)
TR	~8000	~2
PL	~12000	~2
SK	~14000	~2
HU	~16000	~6
CZ	~18000	~6
GR	~24000	~1
NZ	~26000	~8
Portugal	~18000	~12
Korea	~24000	~26
AU	~34000	~14
IRL	~38000	~7
US	~40000	~16
Norway	~44000	~22
Iceland	~36000	~27

Suggested potential for further market growth

Moving towards the line and further GDP per capita growth suggest further potential for broadband penetration

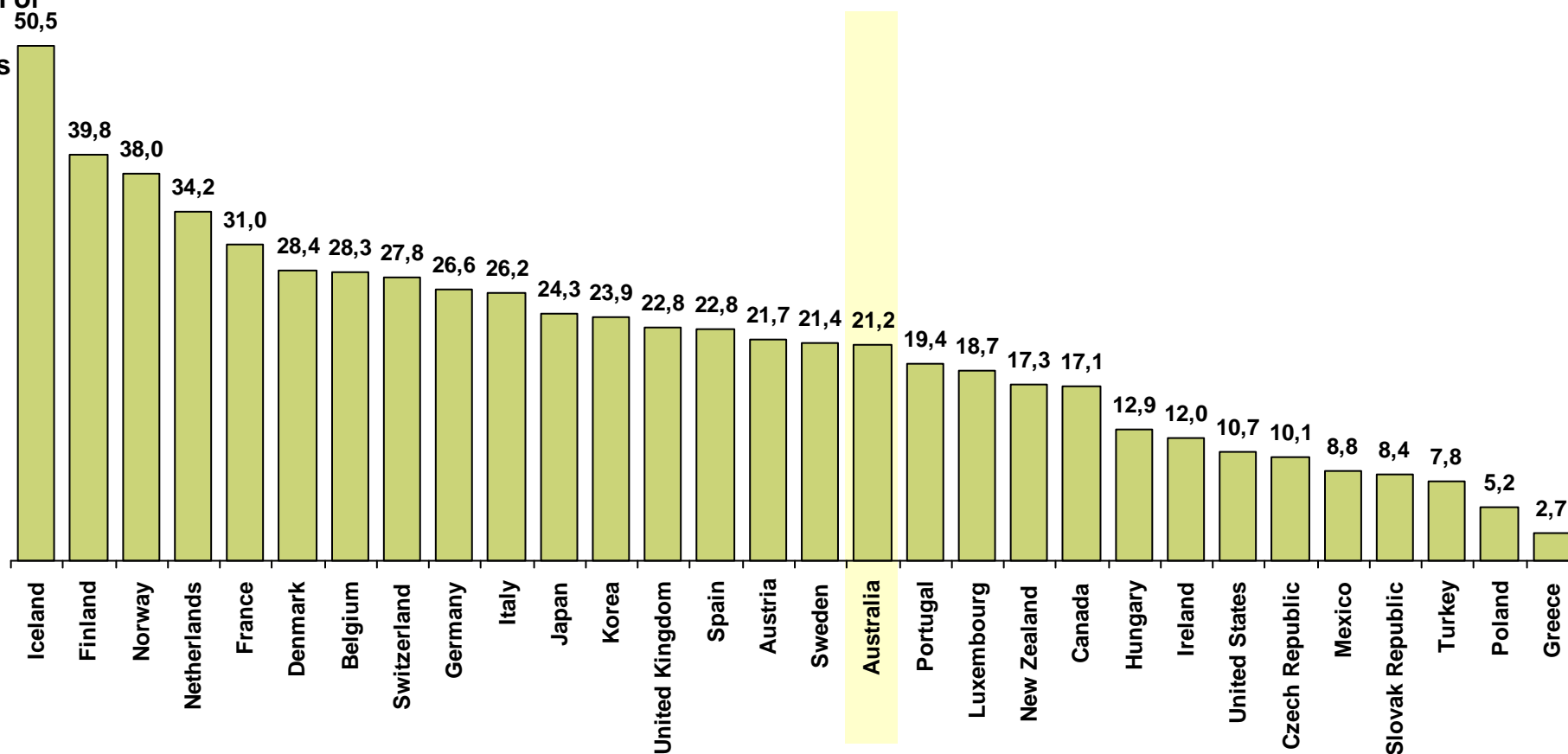
Source: OECD Broadband statistics

Strategy · Marketing · Finance

- 64 -

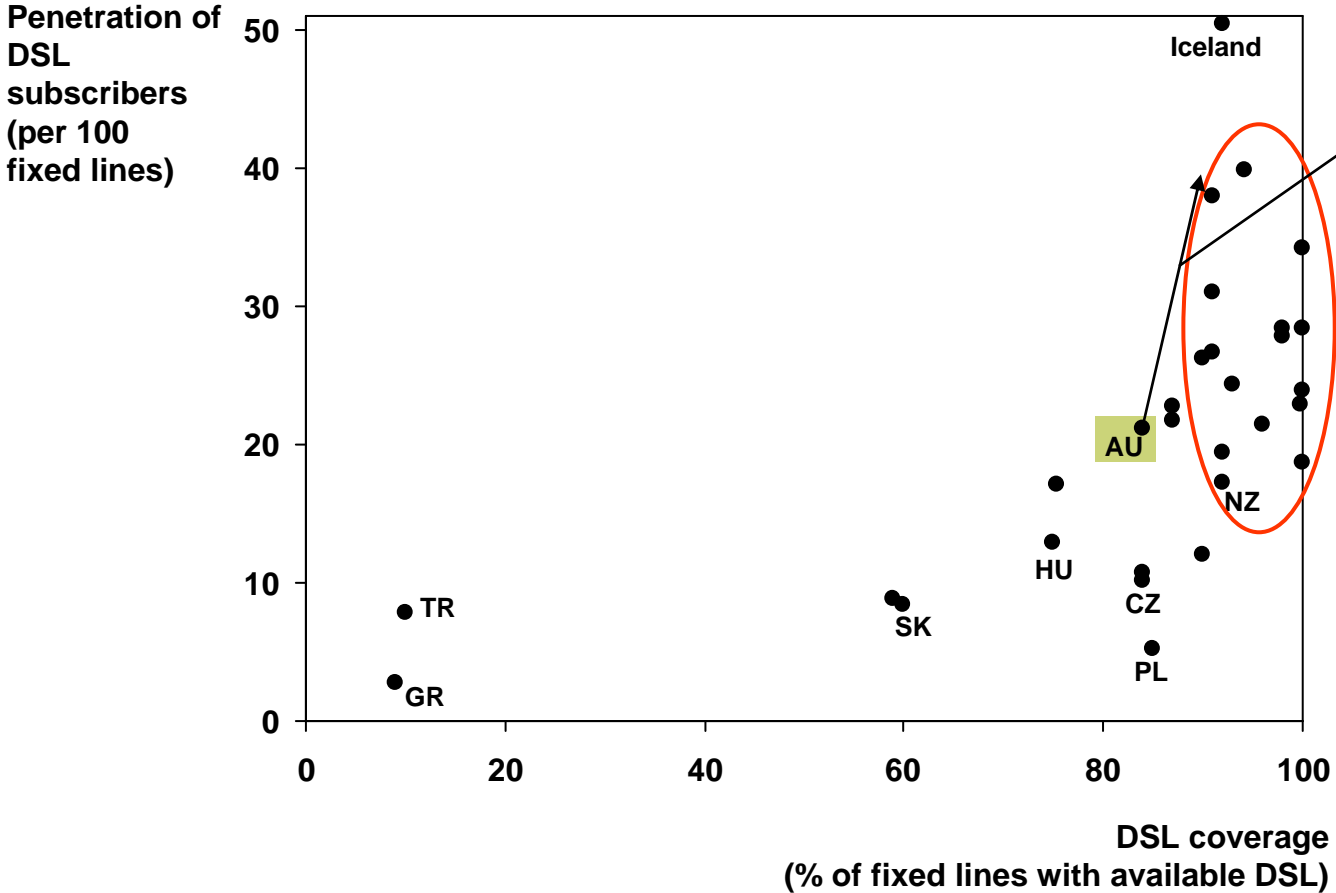
ONLY ABOUT 21% FIXED LINES WITH BROADBAND SUBSCRIPTION, CLOSE TO OECD AVERAGE

Penetration of DSL subscribers (per 100 fixed lines)



AUSTRALIA ONE OF THE MOST PENETRATED MARKETS AT ITS LEVEL OF ENABLEMENT

Much Higher Penetration Than CZ At The Same Level Of Enablement



Suggested potential for further market growth

Further enablement and penetration into levels of more advanced countries can be expected

RECENT LOCAL STUDY MARKED NEW ZEALAND WITH A C-MARK FOR ITS BROADBAND VALUE

Especially For Its Prices And Service Performance

Country	Grade	Ranking	Business	Residential	OECD Ranking ¹¹	e-readiness ¹²	
Sweden	A	1	1	2	9	4	
Netherlands	B	2	4	8	3	6	
Norway		3	8	3	7	11	
Canada		4	5	10	8	9	
Germany		5	13	4	18	12	
United States		6	3	6	12	2	
Spain		C	7	6	5	20	23
Slovakia	8		11	9	26	36	
Finland	9		7	7	6	7	
Portugal	10		2	14	21	25	
Czech Republic	11		10	11	24	29	
France	12		25	1	14	19	
Iceland	13		9	23	1	-	
Belgium	14		16	15	10	17	
Denmark	15		12	16	4	1	
Italy	16		18	12	19	24	
Australia	17		21	13	17	8	
Austria	18		17	24	16	14	
Switzerland	D		19	14	17	5	3
United Kingdom			20	23	19	13	5
Hungary		21	15	26	25	30	
New Zealand		22	24	18	22	14	
Luxembourg		23	22	21	15	-	
Ireland		24	20	20	23	15	
Poland		25	19	25	27	32	
Mexico		26	26	22	28	39	

Australia

The Australian market is disappointing both in terms of price and service performance. Australia ranked 17th overall in terms of value and the data produced particularly poor results for business-oriented packages, where it ranked 21st. Australia has a wide variety of plans available and a number of high speed options are starting to emerge. However, these are limited and overall performance levels are poor. This was particularly the case for upload speeds, where Australia ranks worst out of all 26 countries. Though only around 30% of plans employed data caps, where they were used they tended to be low and have a high cost implication for exceeding them.

Australia

AUSTRALIA SLIGHTLY ABOVE THE CZECH REP FOR THE MONTHLY COST, PERFORMS RATHER WELL IN DATA CAPS

Monthly subscription cost Data caps (% of plans limited by a cap)

Country	Monthly subscription cost (\$)
Belgium	340
Norway	265
Switzerland	250
Mexico	220
France	185
Ireland	175
Italy	175
Poland	175
Canada	165
Spain	160
Iceland	145
Hungary	140
United Kingdom	135
Austria	135
Luxembourg	110
Denmark	110
Sweden	95
United States	90
Australia	85
Netherlands	80
New Zealand	80
Czech Republic	75
Portugal	70
Germany	70
Finland	55
Slovakia	50

Country	Data caps (% of plans limited by a cap)
United States	0
Switzerland	0
Sweden	0
Spain	0
Norway	0
France	0
Italy	2
Finland	5
Mexico	8
Ireland	10
Denmark	12
Portugal	28
Australia	32
Poland	35
Germany	38
Luxembourg	40
Czech Republic	45
Netherlands	48
Hungary	55
Belgium	55
Canada	58
Iceland	65
Slovakia	68
United Kingdom	75
Austria	82
New Zealand	95

Source: InternetNZ Report – Comparison of OECD Broadband markets

Strategy · Marketing · Finance

- 68 -

Australia

AUSTRALIA PERFORMS VERY POORLY IN TERMS OF ADSL SPEEDS, ESPECIALLY ON DOWNLOAD SIDE

Download speeds

Country	Download Speed (approx.)
Sweden	8.5
France	7.0
Netherlands	5.5
Belgium	4.5
Norway	4.3
Iceland	4.0
Finland	4.0
Spain	3.9
Germany	3.2
Canada	3.0
Switzerland	2.8
Portugal	2.7
New Zealand	2.7
Italy	2.6
Czech Republic	2.4
Luxembourg	2.4
Ireland	2.3
Austria	2.2
Poland	2.2
Slovakia	2.1
United Kingdom	2.1
United States	2.0
Denmark	1.9
Hungary	1.9
Australia	1.2
Mexico	1.1

Upload speeds

Country	Upload Speed (approx.)
Norway	1.25
Belgium	0.75
United Kingdom	0.75
Netherlands	0.70
Canada	0.65
Finland	0.62
Sweden	0.62
Iceland	0.60
Germany	0.55
United States	0.55
Austria	0.52
Italy	0.48
Switzerland	0.48
France	0.45
Spain	0.45
Denmark	0.40
Slovakia	0.35
Ireland	0.35
Poland	0.32
Mexico	0.32
Czech Republic	0.30
Australia	0.28
New Zealand	0.25
Hungary	0.22
Portugal	0.20
Luxembourg	0.20

Source: InternetNZ Report – Comparison of OECD Broadband markets

Strategy · Marketing · Finance

- 69 -

AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

Conclusions and next steps

Appendices

AUSTRALIAN TELECOMMUNICATION MARKET INCURS HIGH FIXED-MOBILE INTEGRATION

The Largest Players Offer All – Fixed Line, Mobile, Broadband And Content

Telecommunication market dominated by Telstra, the former incumbent

- Despite the LLU and deregulation it still dominates the fixed line market
- It overcompetes other players also in the mobile market being Australian number one
- Other ISPs either resell Telstra's ADSL or offer competitive technologies in smaller scale
- LLU enabled several alternative Telcos offer far faster connection than the incumbent

Optus is the second largest telecommunication company in Australia

- Built its own network in largest cities, which is used for services for businesses
- Resells Telstra's ADSL while also offering its own smaller ADSL network and cable broadband
- It challenges Telstra also in the mobile market, being number two ahead of Vodafone and Three

Through AAPT Telecom NZ challenges Telstra in its home field, protecting its home market

- So far it is number three fixed operator offering voice and broadband services

LLU since 1999, despite this fact Telstra still dominates the market with its retail and wholesale offerings and is criticised for slow development of ADSL – slow speeds with upper limits and rather low data caps

FIXED MARKET FULLY DEREGULATED IN 1997

Several Well Established Competitors Challenging Incumbent Telstra

Telstra (Telecom Australia)

Former incumbent

- Founded on 1975 as postal spin-off
- Partly privatized in 1997
- Public Limited Company
- 51,8% still owned by the government, further privatisation expected

Operates fixed as well as mobile network

Owns all copper line PSTN service in Australia

Most revenues come from fixed service

Fixed lines: 10,2 mil
Revenue: AUD 20 737 mil
Capital Expeniture: AUD 3 757 mil

Operates also in New Zealand

www.telstra.com.au



Optus

Second largest Australian telecommunications company

100% daughter company of Singapore Telecom (Singtel)

Operates its own network in largest cities as well as resells products of Telstra

Own fixed lines: 1,28 mil
Revenue: AUD 7 192

Offers broad scale of telecommunications services

www.optus.com.au



AAPT

Third largest Australian telecommunications company

100% owned by Telecom New Zealand

Fixed lines: 0,45 mil



www.aapt.com.au

Primus Telecom

Fourth largest full service carrier

US based fixed operator claiming to define standards of service excellence in Australia

www.aapt.com.au



BROADBAND ISP MARKET DOMINATED BY TELECOM'S DSL, OTHER TECHNOLOGIES AND OPERATORS MINOR

Higher Broadband Penetration Is Slowed Down By Dial-Up Popularity

BigPond (Telstra)

Owns majority of the infrastructure and is the dominant provider of the DSL

- Alternative DSL providers resell its products

Offers also cable and satellite broadband

Critised for limiting the ADSL speed to 1.5 Mbps downstream

Legally obliged to offer its service for wholesale

ADSL lines: 1 173 000

LLU unbundling done in 1999, impact on the ADSL market questionable

www.bigpond.com



OptusNet

Number 2 broadband provider

Offers cable connection, DSL connection through its own network a resells Telstra's DSL on existing phone lines

Broadband connections:

ADSL 257 000

Cable 289 000

www.optusnet.com.au



Others

Either limited to reselling Telecom products (Telstra), using different than DSL technologies or running their own small scale networks in limited areas.

Since 1999 can utilize LLU.

iiNet own DSLAMs

Primus

TPG Internet

Westnet

AAPT (Telecom NZ)

People Telecom

Internode

Exetel

Netspace

Dodo

Comindico

TWO LARGEST FIXED TELCOS LEAD ALSO THE MOBILE MARKET, 3G ALREADY IMPLEMENTED BY ALL OPERATORS

Significant Fixed-Mobile Integration Present In The Market

Telstra Mobile

Former telco incumbent, number 1 mobile operator

Operates GSM, CDMA and 3G network covering entire Australia

Subscribers: 8 572 000

Offers mobile broadband services in its 3G network

Plans to replace all its three networks with a single WCDMA network

www.telstra.com.au

Optus

Number two mobile operator

Daughter company of SingTel

Operates GSM and 3G network

Subscribers: 6 486 000

Rents its network to Virgin Mobile MVNO

www.optus.com.au

Vodafone

Number 3 Australian mobile operator

Part of the largest worldwide mobile group

Operates GSM and 3G network

Subscribers: 3 126 000

www.vodafone.com.au

3 (Three)

Number four mobile operator

Owned by Hutchinson Telecom, operating mobile networks in other countries of Europe and Asia

Formerly known as Orange

Operating only 3G network, abandoned its previous CDMA network after migrating customers

Subscribers: over 1000000

www.three.com.au



AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

Conclusions and next steps

Appendices

GENERAL POSITION OF PHONES AND ADSL MODEMS AS A CATEGORY

Fixed phones are sold by Telstra (through its TelstraShops) as part of its service offering and through retailers

- Other telcos do not sell fixed telephones
- Price ranges are similar except of special offers or subsidized offers by the telcos with longer term subscription

Most common CPE brands similar to New Zealand (Uniden, Oricom, Panasonic), Telstra brands some of the fixed phones with its own name

Despite the popularity of fixed line service, similarly to CEE, fixed phones are not a hottest item to be bought at electronics retailers, which is reflected by their position in the shops and catalogues

- Electronics retailers would usually have on stock a limited range of models, which are most often displayed in secondary display areas
- Some electronics retailers would fail to sell fixed phones as such
- In the mailers, leaflets and catalogues fixed phones are mostly hidden among the broad offer of mobile phones and either shown at the end of „phone“ page or not shown at all

Often the phones are equipped with answering machine as calling to fixed line is very common despite the spread of mobile phones

Cordless phones and multiple phone models are common as people usually live in larger houses and have their gardens, therefore need further reach of their fixed line

SEVERAL LARGE CHAINS AND GROUPS DOMINATE THE MARKET OF ELECTRONICS RETAILERS

	<ul style="list-style-type: none"> • One of largest Australian electronics retailers • Part of Woolworths Limited Group • Operates around 190 large electronics stores countrywide 	www.dse.com.au
	<ul style="list-style-type: none"> • Australian electronics chain expanding to other countries (including Slovenia in Europe) • Licenses franchises for large stores with electronics, furniture and home equipment in Suburbs of largest cities • At the moment with 527 franchise stores in Australia 	www.harveynorman.com.au
	<ul style="list-style-type: none"> • Australian chain of discount electronics warehouses • Operates large warehouses in large cities 	www.goodguys.com.au
	<ul style="list-style-type: none"> • Australian retail chain with over 120 discount department stores • Carries also electronics items • Part of Woolworths Limited group • Turnover of 2,9 billion AUD in 2005 	www.bigw.com.au
	<ul style="list-style-type: none"> • One of largest Australian electronics chains in New South Wales • 35 stores mostly in Sydney area • Founded in 1958 	www.binglee.com.au
	<ul style="list-style-type: none"> • Australian network of independent franchised electronics stores • United under one brand in order to remain competitive against largest players and obtain volume discounts from its vendors • Runs also its own branded stores • Currently 41 own stores, 260 franchised stores and 100 independent stores 	www.betta.com.au
	<ul style="list-style-type: none"> • Member of Coles Myers Group • Australian electronics retail chain • One of top 5 IT resellers • Supplies all major IT brands • 8 large businesses centers 	www.ht.com.au

AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

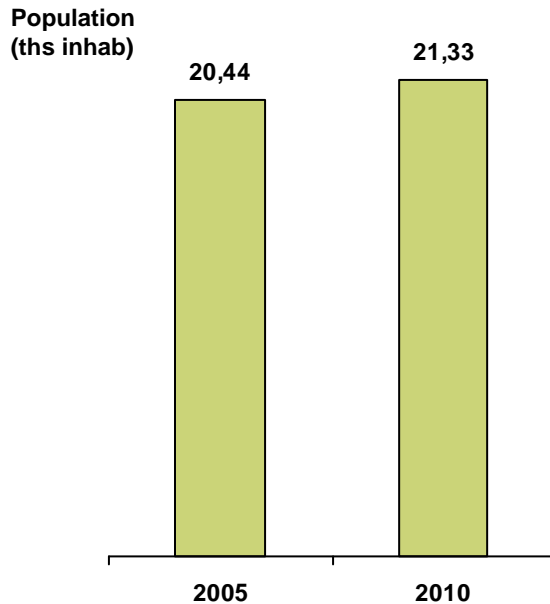
Conclusions and next steps

Appendices

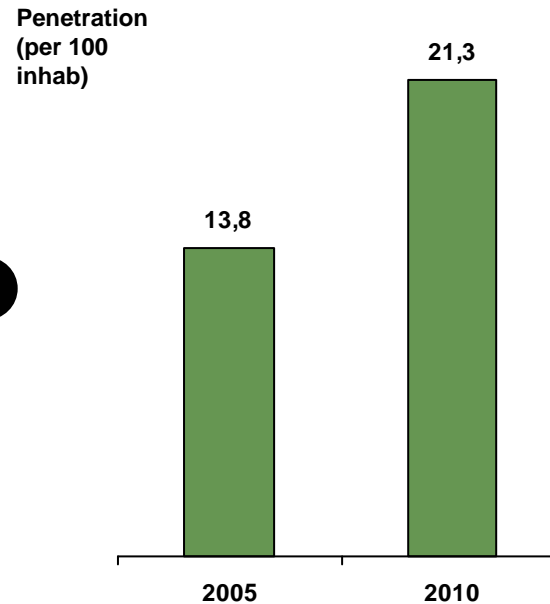
PROJECTION OF THE MARKET SIZE SUGGESTS 1 785 THS NEW BROADBAND CONNECTIONS TILL 2010

Assuming Australia Reaches Current Penetration Level Of Canada Till 2010

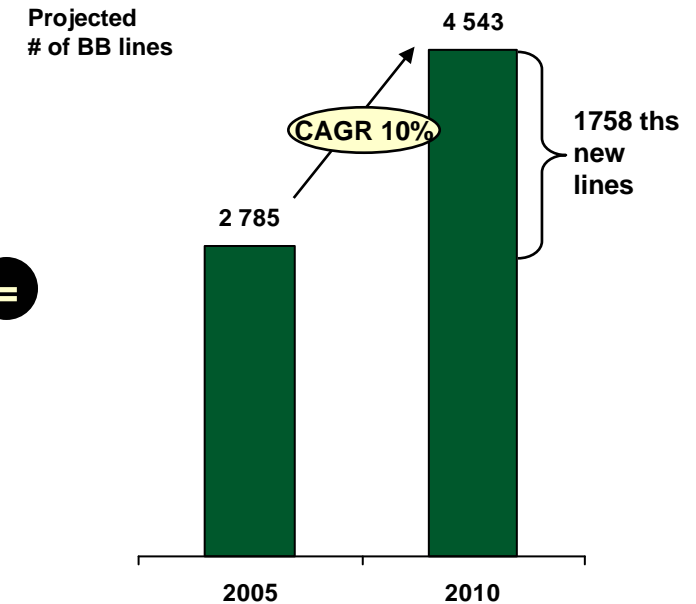
Population projected to grow
 to 21,33 mil till 2010⁽¹⁾ ...



... multiplied by current BB penetration
 of Canada⁽²⁾ ...



... results in projected 1 785 ths new BB
 lines till 2010



At average price of 50 AUD per ADSL CPE the market is in total worth 88
 mil AUD over the next five years

(1) Mean estimate of the Australian Bureau of Statistics

(2) Canada chosen as a country with similar number of inhabitants and density

AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

Conclusions and next steps

Appendices

FIXED SMS SERVICE OFFERED IN AUSTRALIA BOTH RETAIL AND WHOLESALE

Dominant operator offers the Fixed SMS service as both retail and wholesale offering since 2004

The fixed SMS messages are delivered in a similar way as in the Czech Republic

- **As a text to SMS enabled fixed phones or terminals**
- **As voice to the devices without the functionality (marketed under Voice Text™ brand name)**

The service enables mobile originated as well as fixed line originated messages and sending to both fixed and mobile numbers

Other operators use Telstras wholesale offering for tailoring their own services

Introduction of the service was followed by the emergence of fixed SMS enabled services

The cost of retail Telstra offering is 0,25 AUD per SMS sent to Australian number, 0,35 AUD for SMS sent worldwide

Client can benefit from this fact as a market follower with its fixed SMS enabled devices

PROS AND CONS OF ENTRY TO NEW ZEALAND MARKET

Broadband Market Further Penetration Will Require Corresponding Products, Attractive Market To Be Characterised By Tough Competition

Pros of the Australia entry

Developed country with lower than average penetration of broadband

- 1785 ths broadband connections projected for next 4 years
- Significant aftermarket could be opening up
- Removing speed limits and data caps could boost further competition and growth

Fixed line service is very popular opening the space

Decent distance from Asia favoring direct shipments at lower cost

Presence of SMS service enables the Client to utilize competitive advantage of its products

Market dominated by Telstra and several retailers – market could be to a large extent covered by supplying the incumbent and some retailers

Cons of the Australia entry

Given its size, development and proximity to Asia, the market is likely to be highly competitive

Distance from CZ headquarters not allowing full control

No current presence nor experience in the market

- Entry without established partner might be difficult

Several local competitors already challenging major brands like Panasonic

- The market niche for non-branded products could be already taken
- Some of the vendors may be using same product designs as the Client in CEE thus prohibiting entry to the market with some of products

Presence of fixed SMS service making it harder for the Client to offer its own fixed SMS center

Should the Client decide to go forward with the market entry, further analysis will be required

RECOMMENDATION

Given the size and current situation, Australia market seems to be a very attractive option of market entry

- **New Zealand entry could be considered simultaneously to benefit from mutual synergies (partners, customers, processes)**

Detailed findings besides those outlined in this report should be discussed in person

If the Client decides to pursue the option of market entry to Australia, several further analysis will have to be carried

- **Analysis of business potential of Australian market entry**
- **Conduct further research as to potential partners and distributors**
- **Outline entry strategy regarding the sought competitive advantage of products**
- **Seek anchor partner – a telco or retailer – upon which the initial business could be based**
- **Decide under which brand to supply – current or other brand for local market**

Juppa Management Consulting would be more than happy to help with this further issues

AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

Conclusions and next steps

Appendices

CONCLUSIONS AND NEXT STEPS

Both New Zealand and Australian CPE markets were found attractive enough to be worth considering the market entry

- **Applies to broadband products as well as telephones**

I would like to present and discuss the findings of this report and further details not covered in person at the final presentation of the research outcome

Before any decisive actions are taken, several further analysis have to be carried on

The entry is unlikely to be successful without finding a corresponding partner at the target markets

AGENDA

New Zealand

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in New Zealand
- Market specialties
- Projection of development
- Conclusions

Australia

- General & economy information
- Fixed line market overview
- Broadband situation
- Competitive landscape & main players
- CPE market in Australia
- Projection of development
- Conclusions

Conclusions and next steps

Appendices

APPENDICES

I. Telco and retailer catalogues and leaflets

II. Independent reports

- **WC - Comparison of OECD broadband markets**
- **OECD - Benchmarking broadband prices**
- **ISCR - telecommunications usage in New Zealand**
- **IDC EVENT FLASH - New Zealand Telco Sector Metamorphosis: Government Invokes Extensive Portfolio of Telecommunications Regulation**
- **Datamonitor - Fixed Line Telecoms In Australia**
- **Datamonitor - Communications Equipment in Asia-Pacific**
- **BAG - Australias Broadband Connectivity**
- **DCITA - Australia's broadband strategy**
- **DCITA - Overview of the Australian ICT industry**

III. Press articles

IV. Statistics