

 [Print this page](#)
**Miscellaneous**

\* Asterisks denote mandatory information

|   |                      |
|---|----------------------|
| Name of Announcer *                         | SINGTEL              |
| Company Registration No.                    | 199201624D           |
| Announcement submitted on behalf of         | SINGTEL              |
| Announcement is submitted with respect to * | SINGTEL              |
| Announcement is submitted by *              | Chan Su Shan (Ms)    |
| Designation *                               | Company Secretary    |
| Date & Time of Broadcast                    | 20-May-2013 07:48:26 |
| Announcement No.                            | 00014                |

**>> Announcement Details**

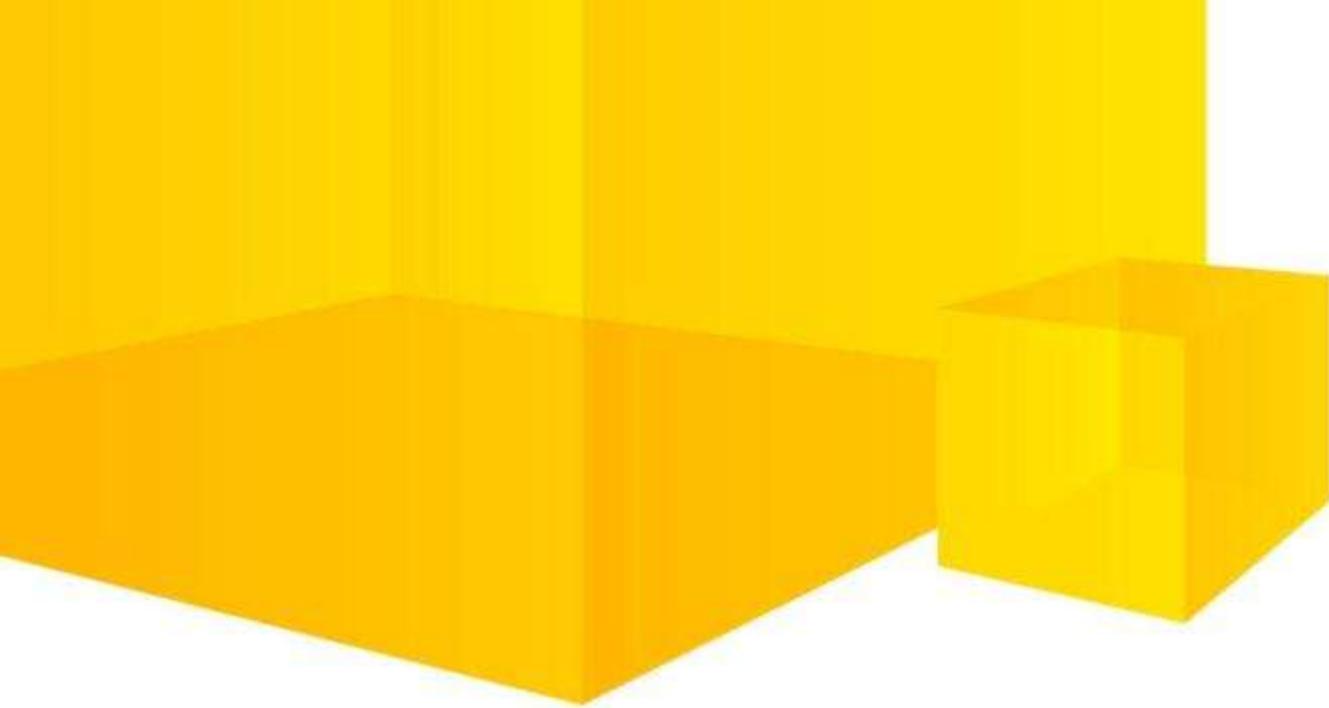
The details of the announcement start here ...

Announcement Title \*

Description

**Attachments**

 [NetworkUpdate-presentation-May2013.pdf](#)  
 Total size = **1657K**  
 (2048K size limit recommended)



# The Optus Network Today, Tomorrow and Beyond

May 20<sup>th</sup> 2013

Guenter Ottendorfer, Managing Director of Networks  
Andrew Smith, Vice President – Mobile Radio Engineering





# Agenda

## The Optus Network:



Today



Tomorrow



Beyond





# The Optus Network today



**Enhanced 3G coverage from coast to coast** with upgrades to over 4,000 sites across the country.



**Expanded our 4G network** in Sydney, Melbourne, Perth, Brisbane, Adelaide, the Gold Coast, Sunshine Coast, Coffs Harbour, Byron Bay, Toowoomba, and the Newcastle/Hunter regions.



**Acquired Vivid Wireless** positioning us to offer the highest capacity 4G network in Australia.

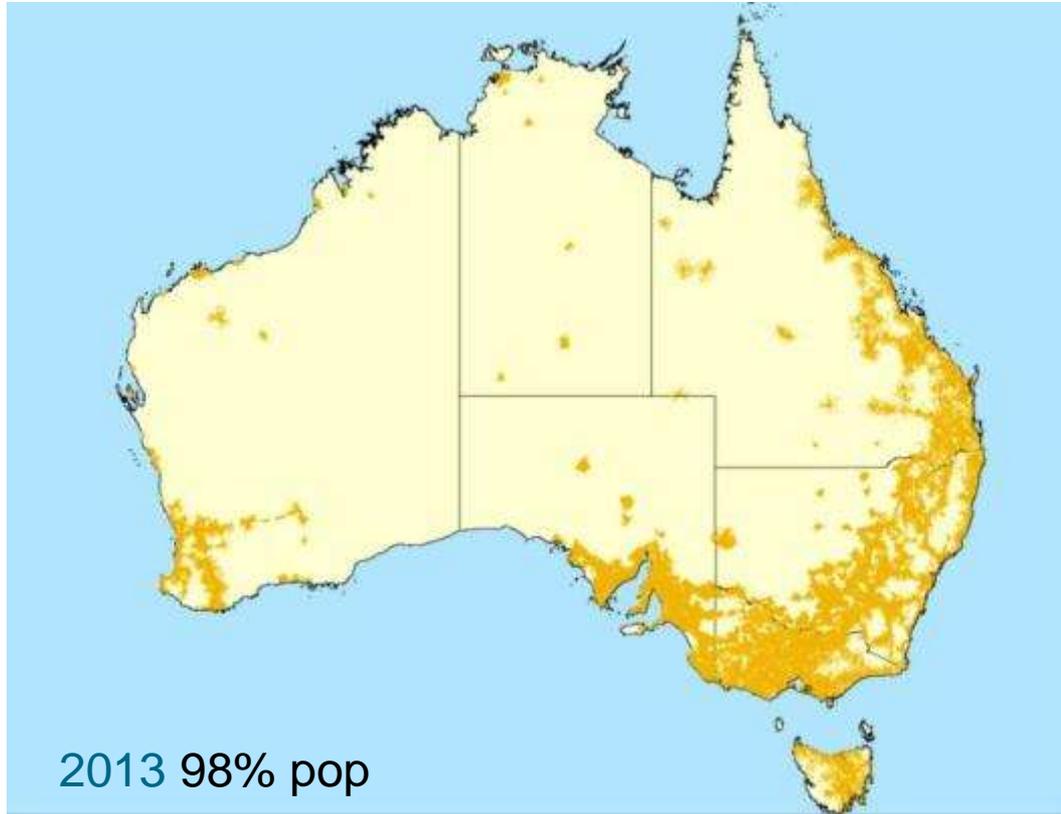


**Led the project that delivered coverage in hard to reach places** like our Sydney City Rail Tunnels project.





# We enhanced 3G coverage from coast to coast



**Like for Like: 98.5%**



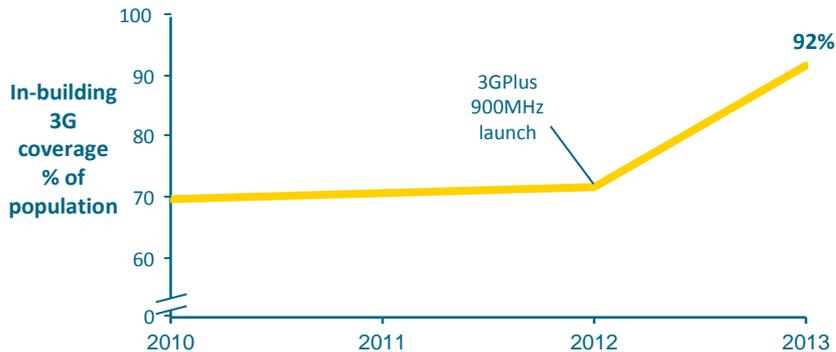


# We're nearing the finish line on 3GPlus

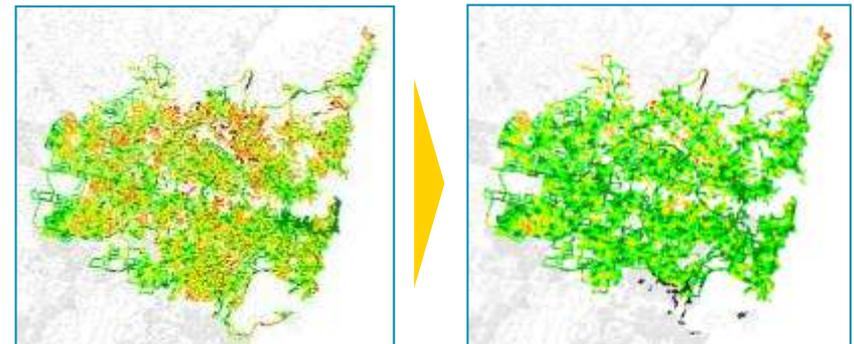
Our 3GPlus program in FY12 delivered a significant lift in coverage and data performance. Customers have benefited from:

1. Increased depth of 3G coverage
2. More time connected to 3G
3. Better calling, browsing and streaming

## 3GPlus - more signal in more places



## 3G coverage depth in Sydney – pre vs. post 3GPlus



Before

After

Source : Sydney –  
pre/post U900  
Drives Aug12

### Signal





Today

# Optus had an incredible 4G race last year

Optus announces  
4G  
September 2011

Newcastle/  
Hunter region  
April 2012

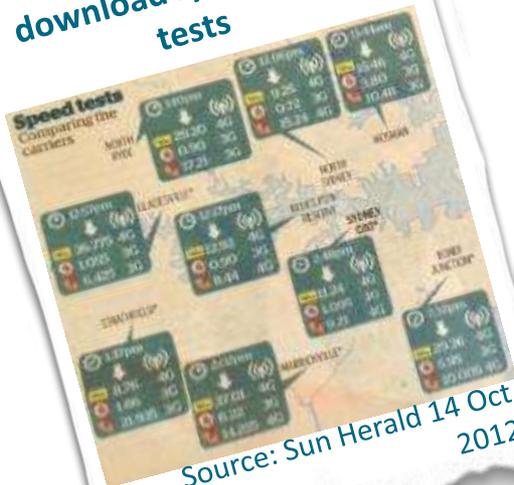
Sydney & Perth  
July 2012

Melbourne  
Sept 2012

Brisbane CBD  
Dec 2012

Adelaide CBD  
Dec 2012

Optus shows fastest  
download speed in 4G  
tests

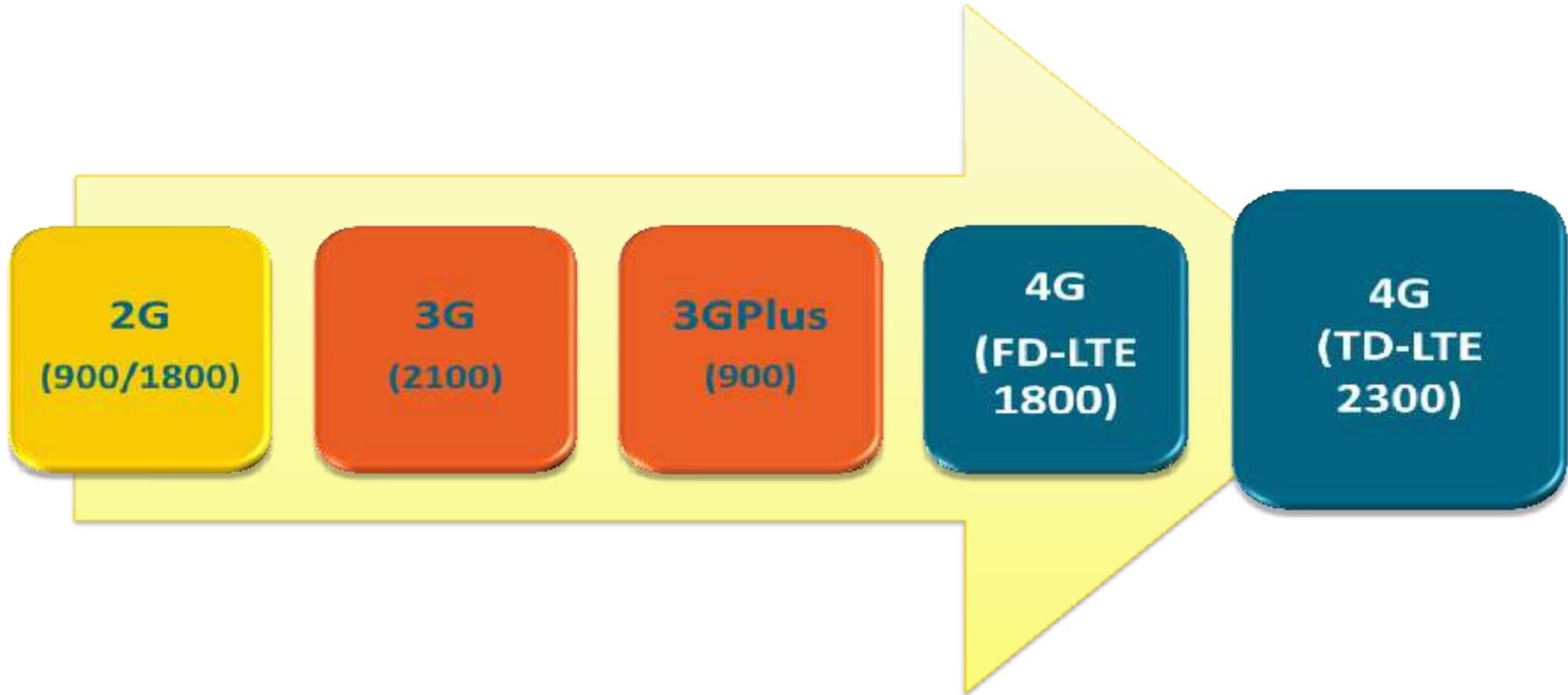


Nov 12  
Quad Core  
Android Handsets  
Better Battery Life





# The Optus Network tomorrow





# Our network investment is about building a network where and when customers want it

- We are listening to our customers and building a network to respond to their needs.
- The top three drivers of a great network experience for our customers are:



Coverage in the home



Coverage when on-the-go



Data speeds to meet their needs



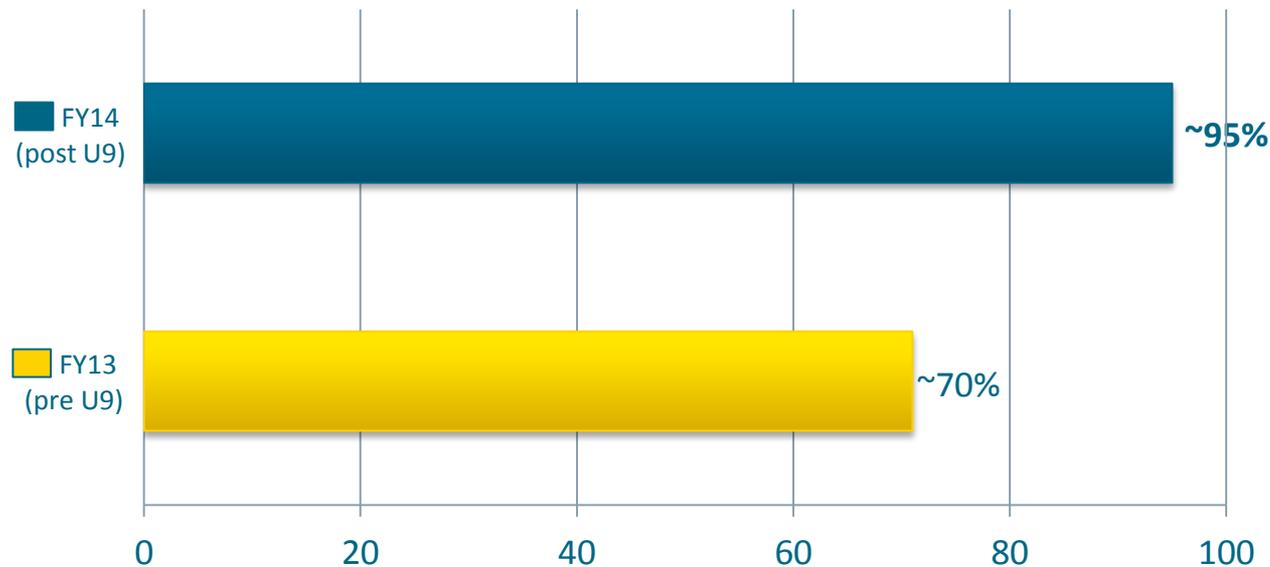


# Better coverage in the home

- We're continuing rollout by activating over 1,000 3GPlus sites across the country over the next 24 months.
- We're delivering our 3GPlus program to Adelaide, Central Coast, Wollongong and Canberra.

## In-Building Coverage Metro post 3GPlus upgrades (across Adelaide, Central Coast, Wollongong, Canberra)

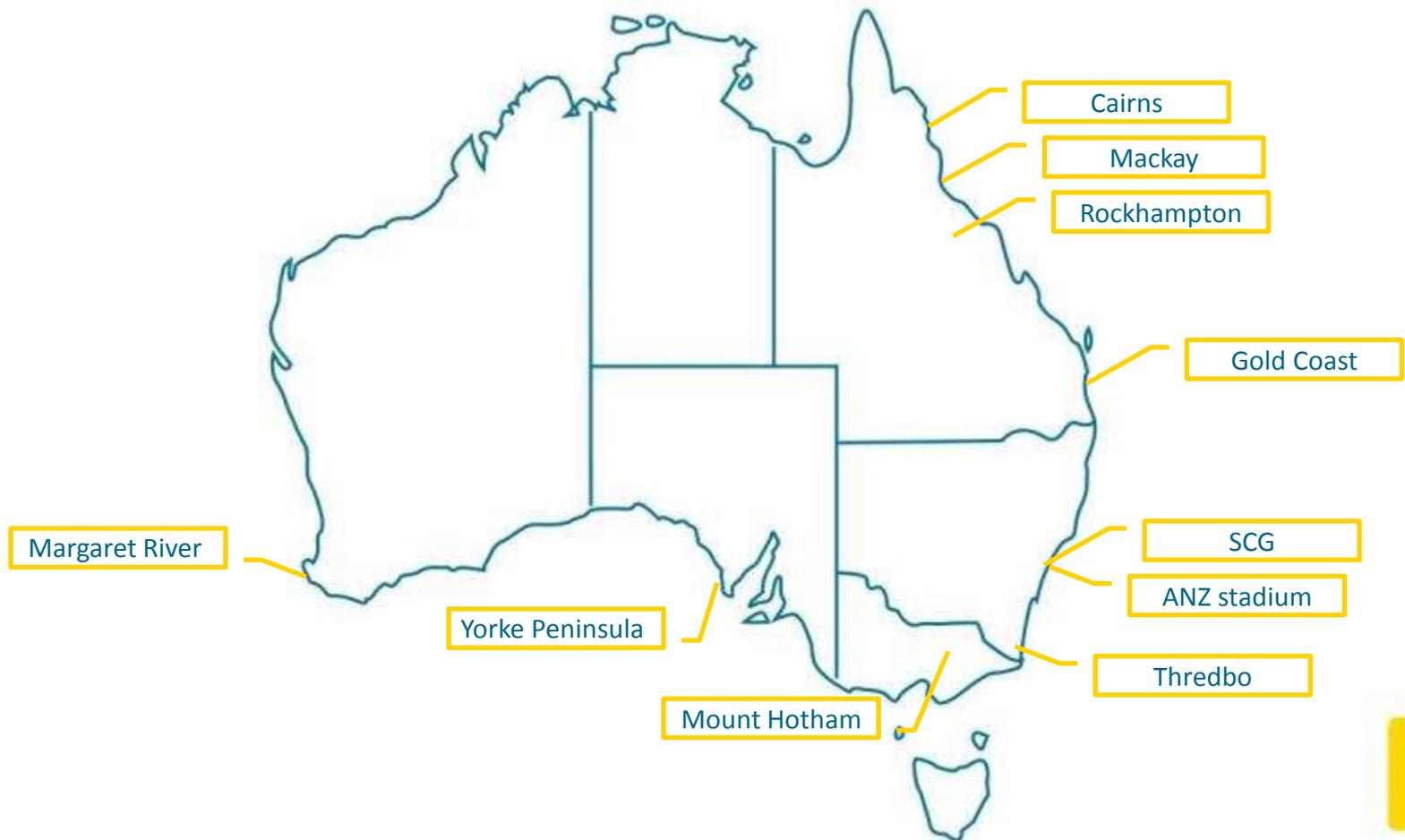
---





## Better coverage on-the-go

- Over the next 24 months, we'll invest in our network by improving mobile coverage in areas where customers frequent, such as sports and music venues and holiday hotspots.

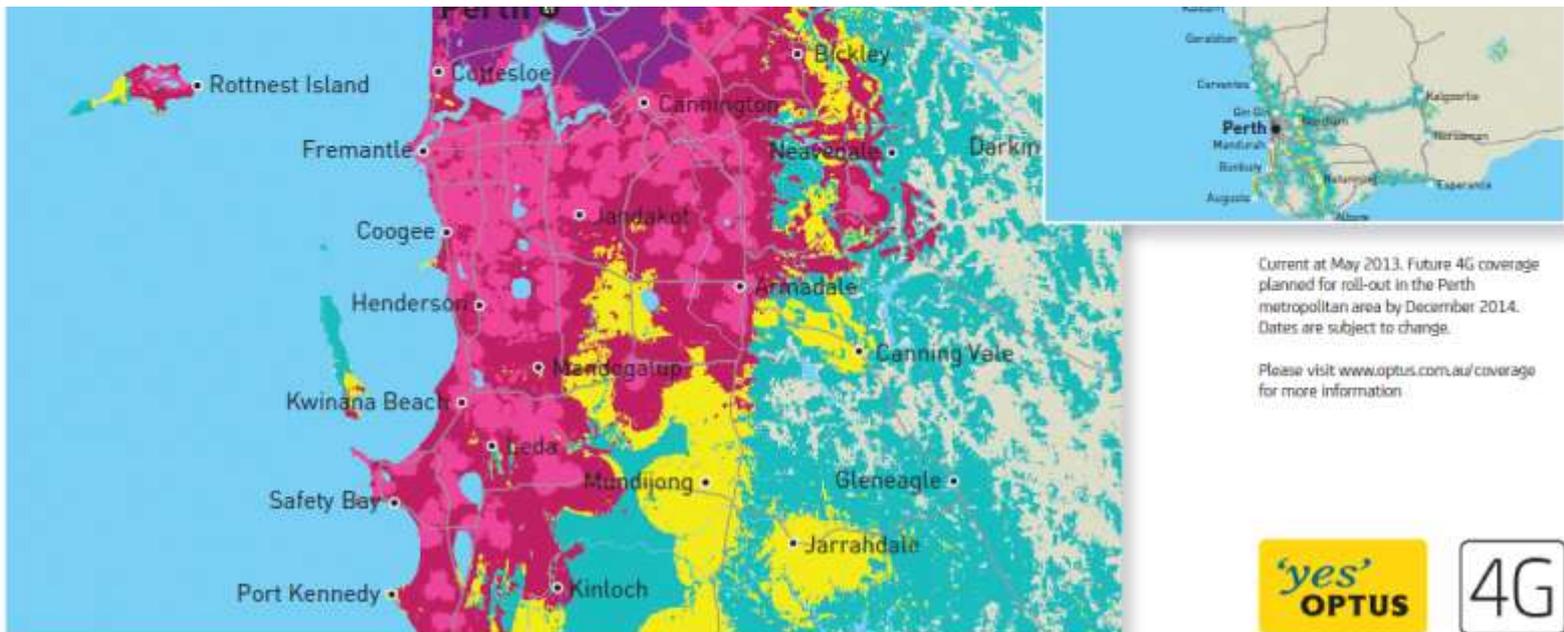




# Data speeds to meet your needs



- We're expanding our 4G rollout around the country.
- Over 70 per cent of the Australian metro population will be able to access our 4G network by mid 2014.



# TD-LTE 2300: live in Canberra





# Next generation 4G: Canberra TD-LTE 2300 pilot

- In an Australian first, today we're introducing TD-LTE 4G technology on 2300 MHz to Canberra.





# Canberra TD-LTE 2300 in action





# New 4G mobile broadband devices



- **Optus E3276 v2 Premium Modem** will be available in Canberra in early June
- 4G Single Band and Dual Band network compatible
- 3G HSPA+ compatible

- **Optus E5776 WiFi Modem** will be available in ALL stores/areas in early June
- Supports up to 5 WiFi connections at the one time
- LCD screen
- 4G Single Band and 4G Dual Band network compatible
- 3G HSPA+ compatible





# FD-LTE + TD-LTE : Coverage + Capacity

## FD – Frequency Division

Dedicated Pipes for Upload & Download

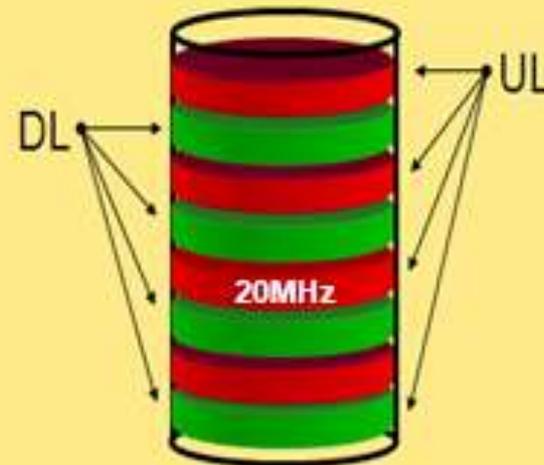


*Devices Upload / Download on dedicated but smaller pipes*

**Paired Spectrum**

## TD – Time Division

Single Shared Pipe for Upload & Download



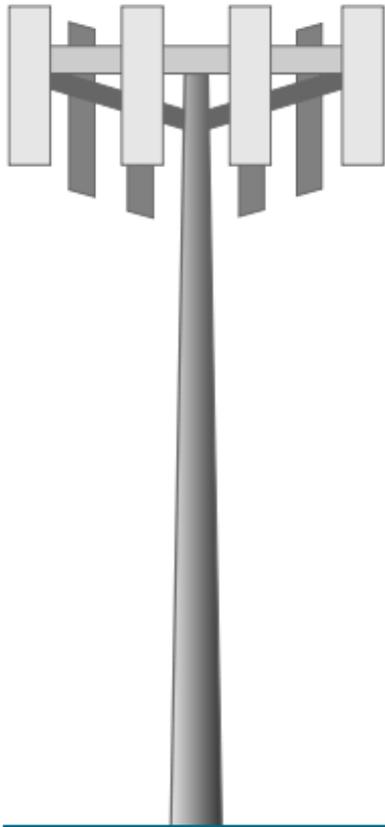
*Devices Upload / Download during a fraction of the time using a larger pipe*

**Unpaired Spectrum**



# The Optus 4G network beyond 2014

- Optus is rolling out Australia's first multi-band 4G network.



**4G 700 MHz**  
(available from 2015)

**4G 1800 MHz**  
(available now)

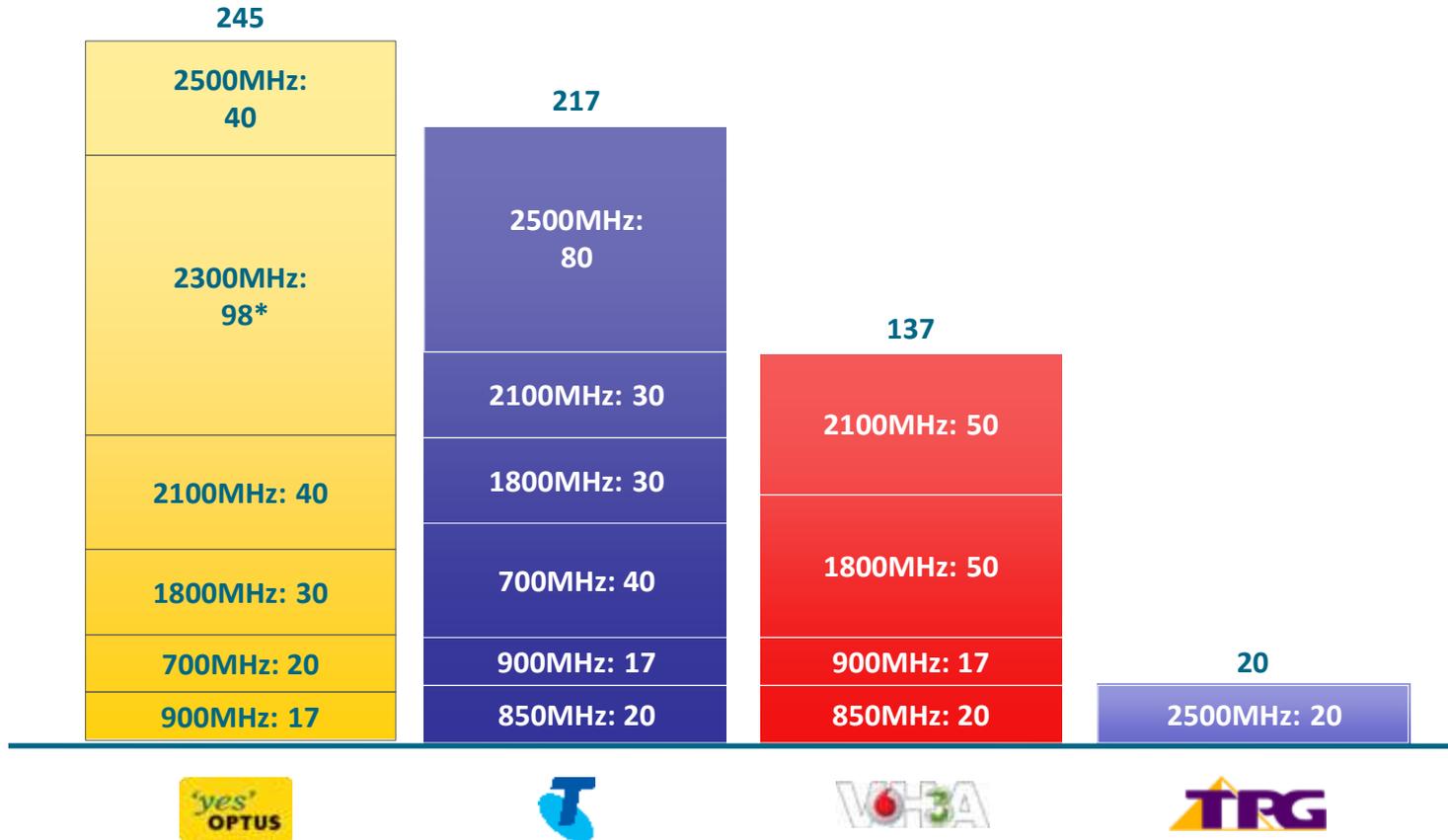
**4G 2300 MHz**  
(live in Canberra now,  
expansion in progress)

**4G 2500 MHz**  
(available from 2015)



# Optus in prime spectrum position

## Metro (Unpaired MHz)



Note: Excludes Optus' 3.5GHz spectrum holdings

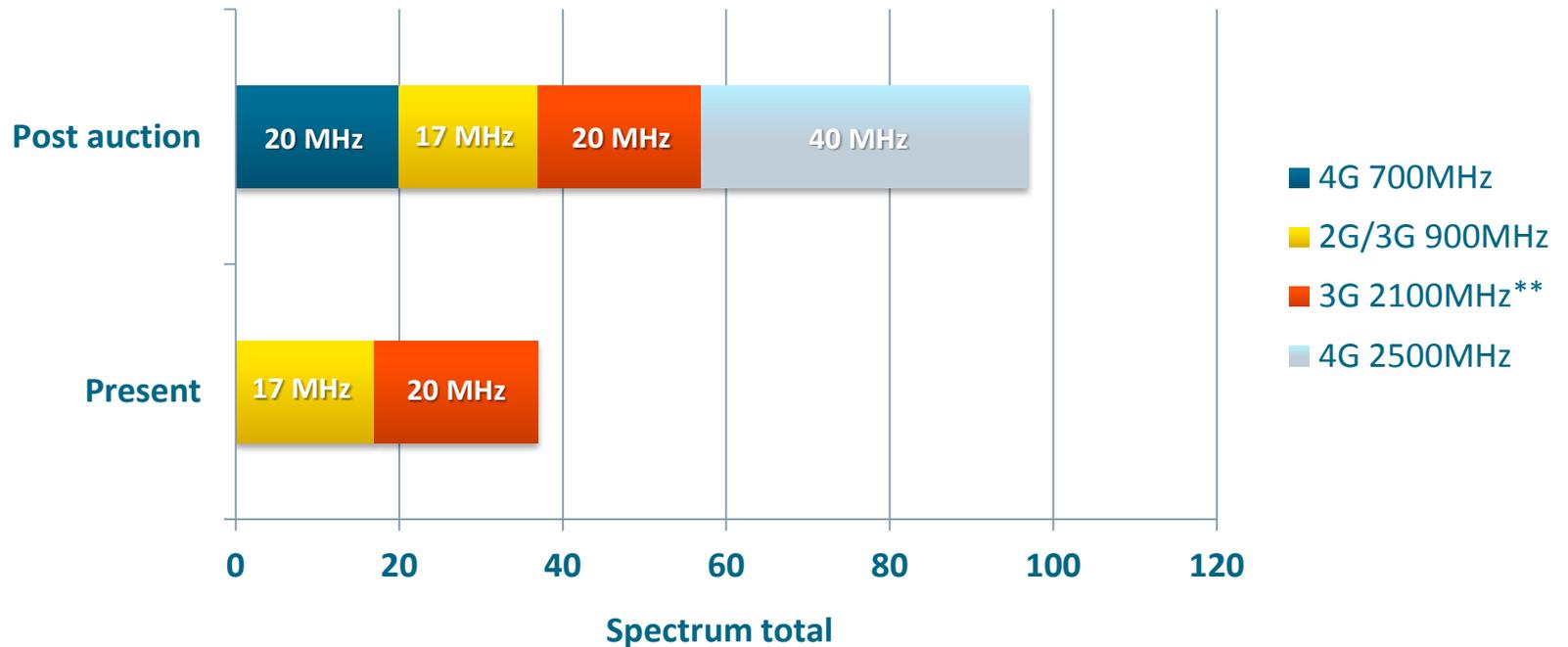
\* Up to 98MHz





# Significantly boosting our regional spectrum

## Optus regional (Unpaired MHz)



Note: Excludes Optus' 3.5GHz spectrum holdings

\*\* 10 MHz licence and up to 20 MHz apparatus licence in some areas (assumed average of 20 MHz)





# Multi-band 4G globally

- Multiband 4G carriers around the world include:



CHINA MOBILE



## 3UK, EE in talks over combined 800-MHz network

By Nick Wood, Total Telecom  
Thursday 16 May 2013

The two operators each acquired 2x5 MHz chunks of 800-MHz spectrum in February's LTE auction. While the 800-MHz band is good for providing coverage indoors and over long distances, 2x5 MHz is an insufficient amount of capacity to support data-intensive LTE services. Instead, operators typically require at least 2x10 MHz of spectrum.

With 2x10 MHz, "there is an opportunity for putting faster speeds through a bigger pipe," said Dyson, during a press conference in London.





## Optus will deliver on



Strengthening  
our 3G network

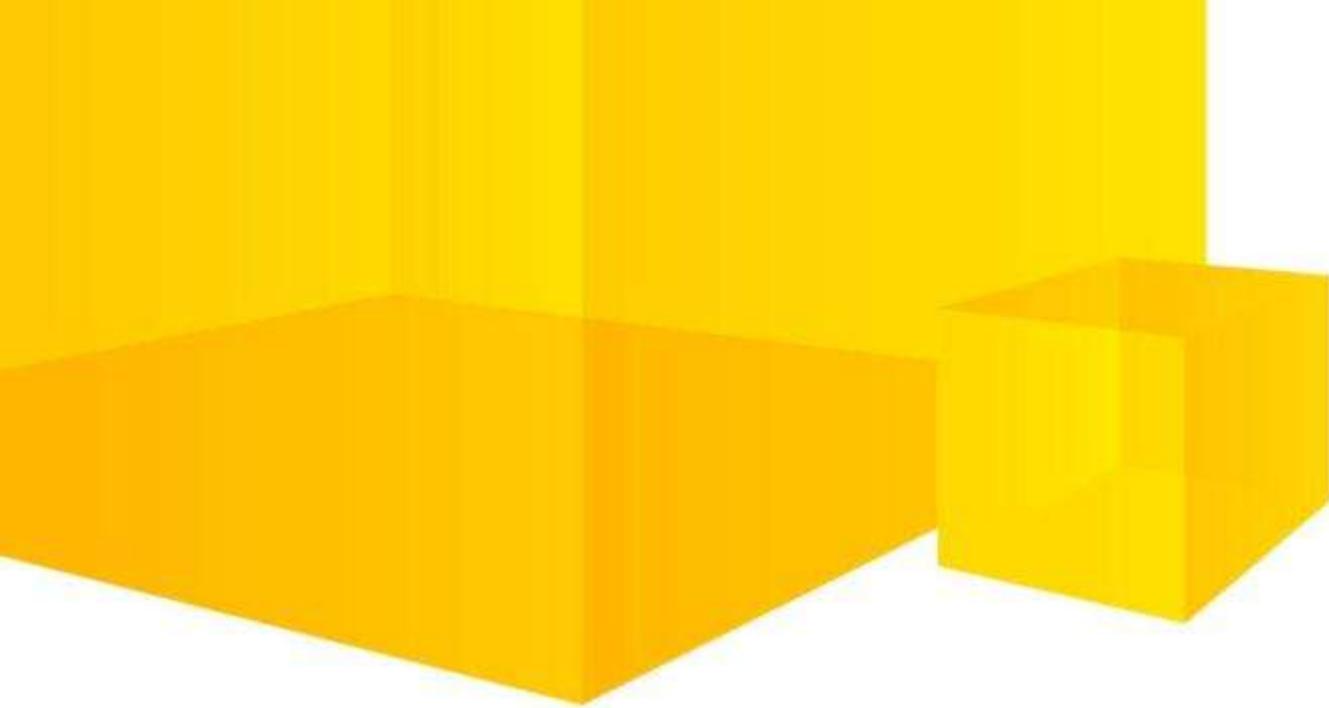


Growing our  
4G footprint



Expanding our  
4G technologies





Questions?

