GSMA Mobile World Congress 2011

Building the Mobile Broadband Ecosystem for LTE in 1800MHz

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TELSTRA WIRELESS FACTS AND FIGURES

11.5 million wireless customers
> 80% 3G

Over 2.1m MBB subs up 62% in year

Over 120K MID / Tablet devices in 9 months

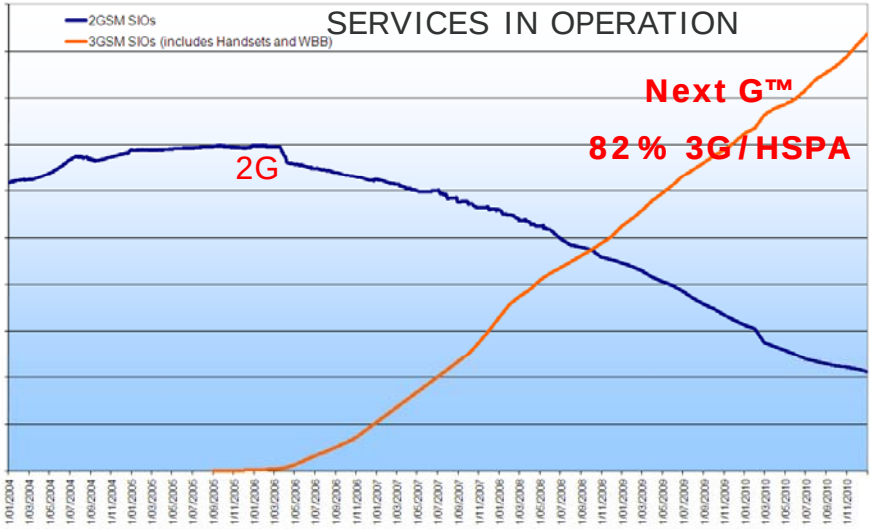
Next G™ Smartphone penetration growing rapidly. Expect Smartphones to exceed standard handsets in first half this year

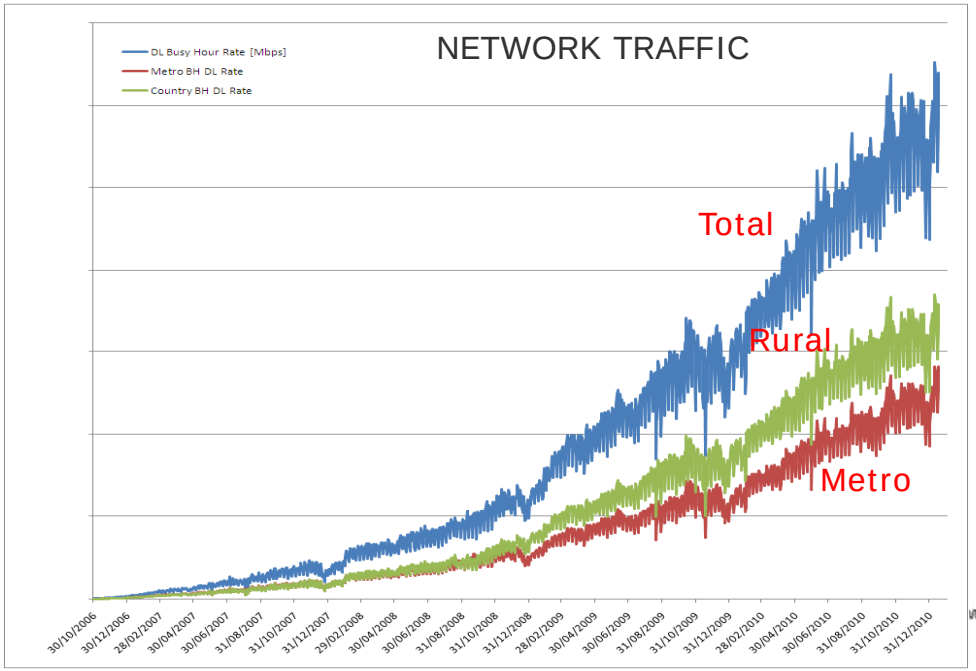
Busy Hour traffic growing strongly,
- doubled in last 12 months

Over 50% of all MBB traffic is outside Major cities

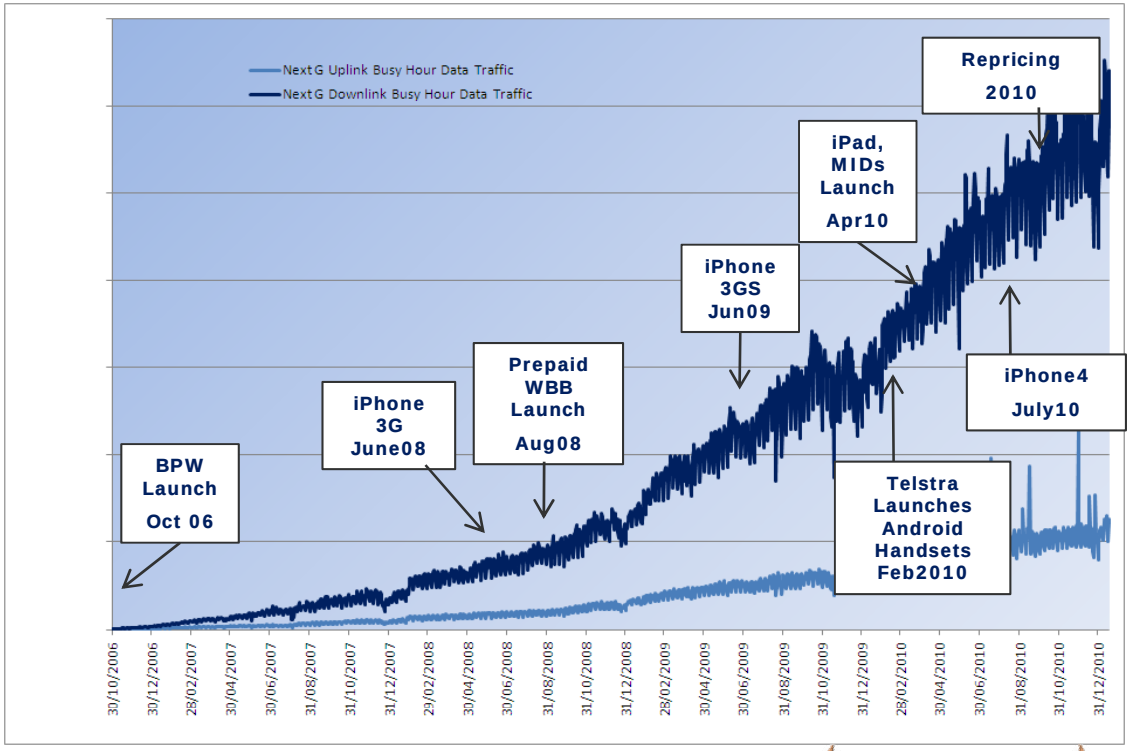
Next G™ -
Over 2 PB of packet data a month
Over 1.5 bil minutes of voice a month

Next G™ covers 99% of the Australian Population and over >2.1mil square kms





THE WIRELESS DATA GROWTH STORY

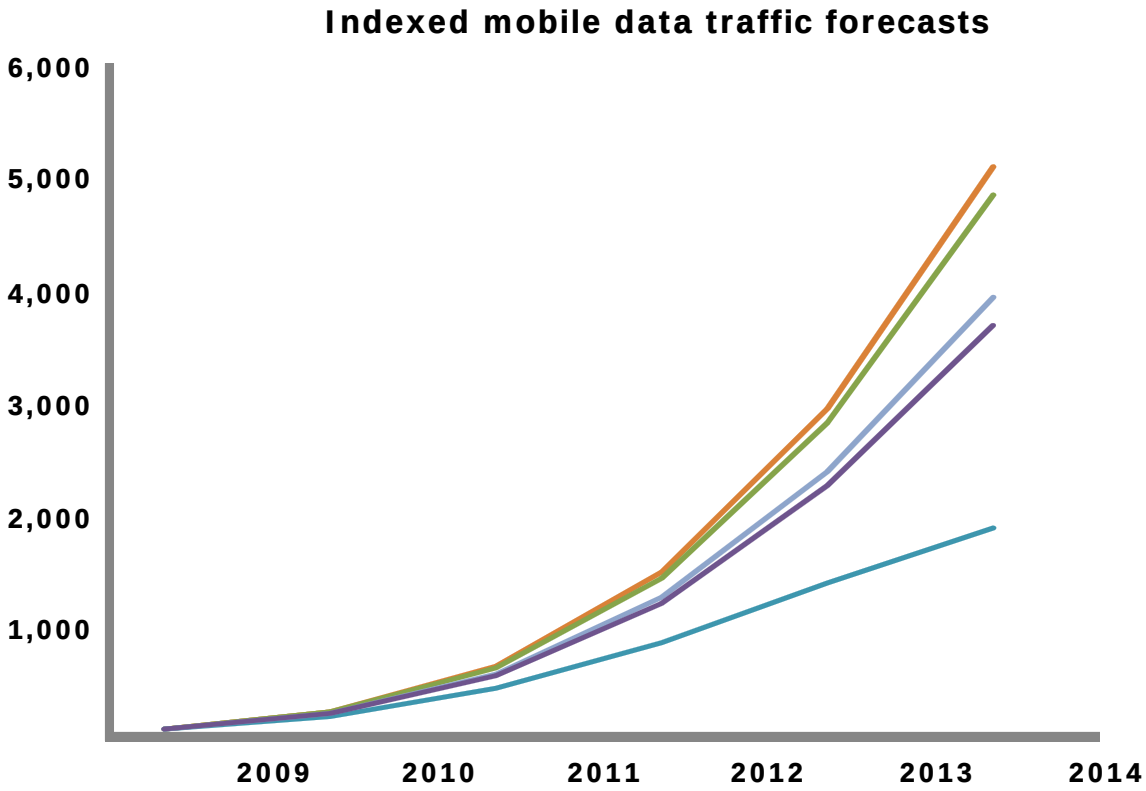


Data Traffic has continued to double every 6-12 months since launch of Next G™ in 2006

Data Card Feature phone Era

Data Card Smartphone Tablet, M2M Era

When combined, the trends of fixed to mobile, and voice to data, will lead to continued rapid growth in mobile data volumes

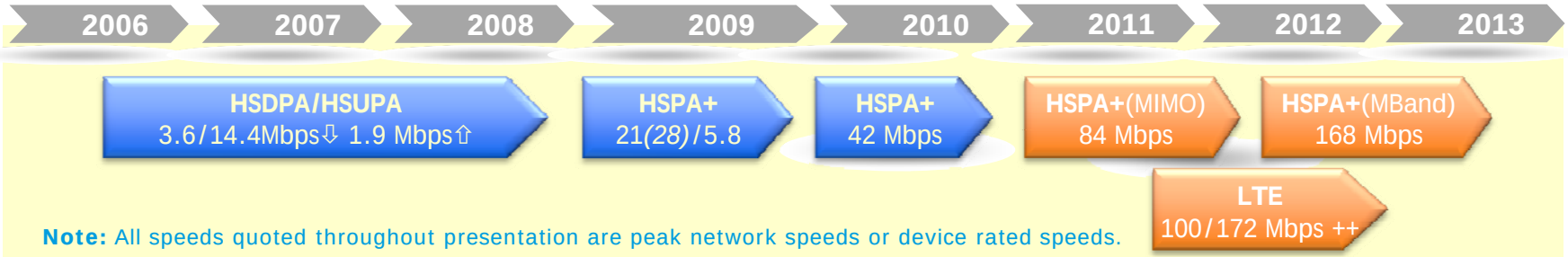


	CAGR 2009-2014
Asia Pacific	119%
USA	117%
Global	108%
Europe	106%
Japan	80%

Notes: Telstra 2014 number not provided; CAGR calculated for 2009-2013 and applied to get 2014
* Telstra CAGR is from 2009 - 2013
Source: Cisco Global Mobile Data Traffic Forecast Update 2009-2014 (Feb 9 2010); Telstra data provided by Lloyd Grooby

USING 3GPP EVOLUTION TO MANAGE DEMAND & PERFORMANCE

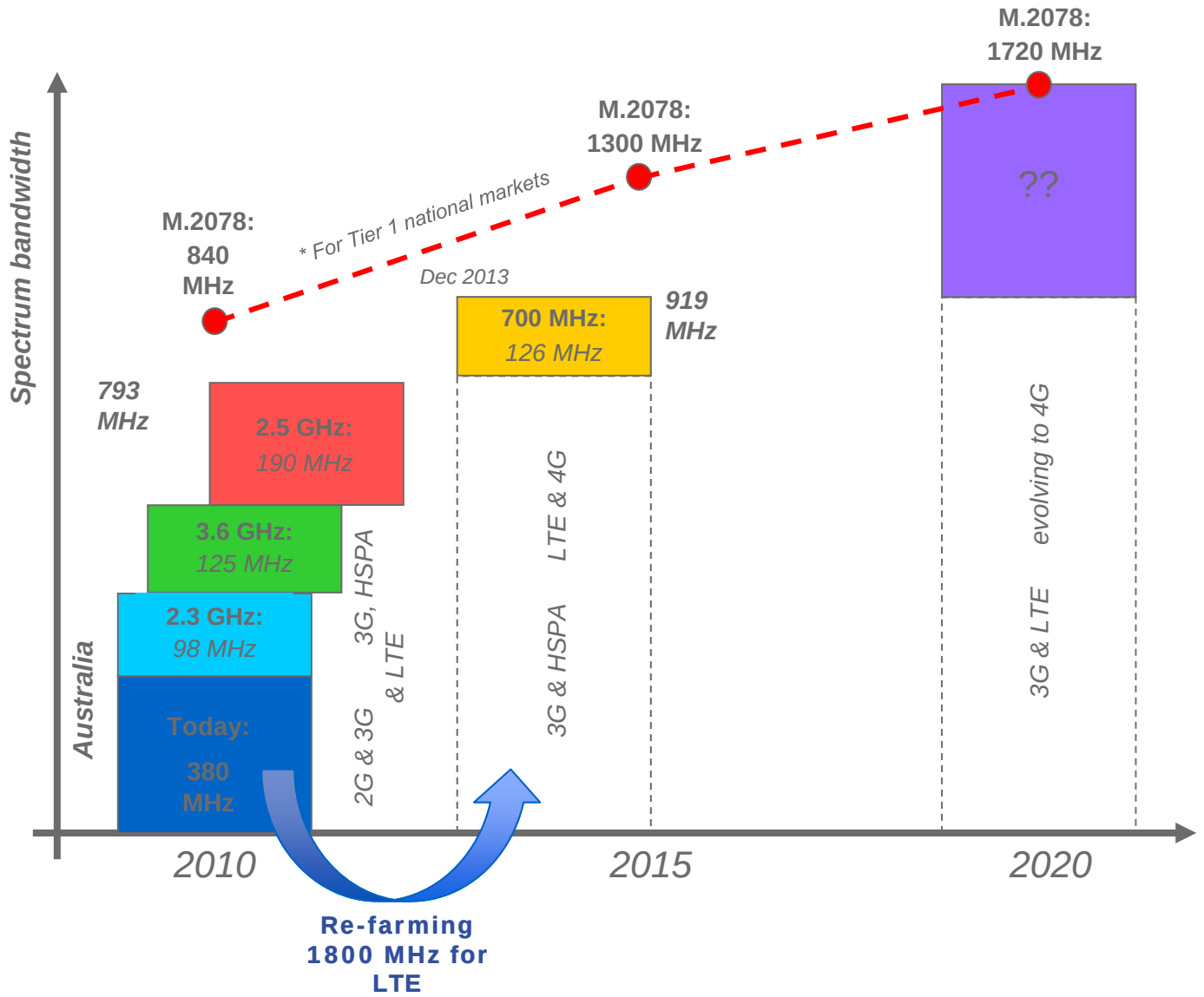
3GPP Proposed Evolution Path for Telstra



Note: All speeds quoted throughout presentation are peak network speeds or device rated speeds. Customer download speeds are lower.

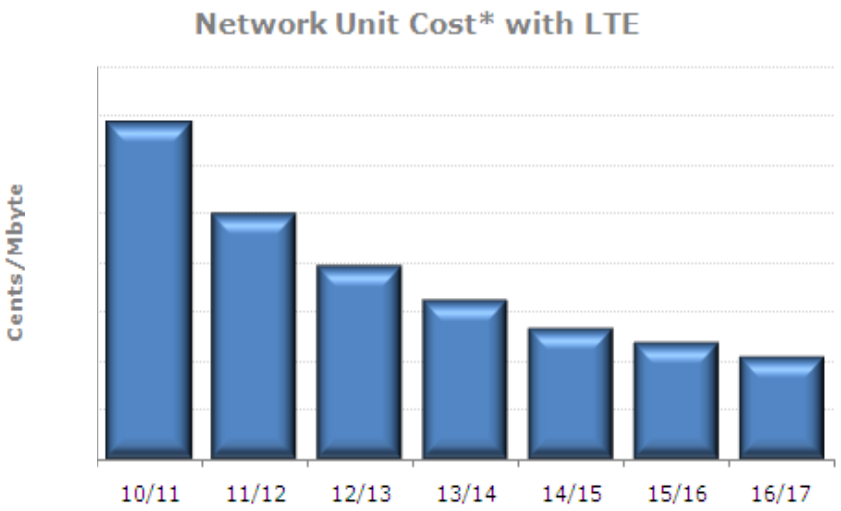
- Evolution through the 3GPP roadmap enables greater cell efficiency, lower costs and enhanced user experience.
- Penetration of devices is the key to releasing network efficiencies
- Evolution to a hybrid LTE/HSPA+ network is a logical extension of this strategy
- Early start-up and penetration of LTE devices can be used to optimally balance loading

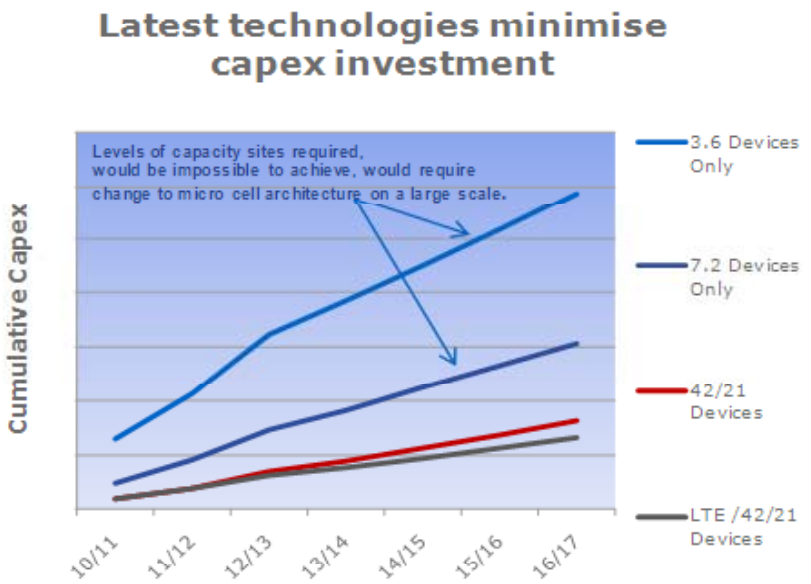
FORECAST NEW SPECTRUM THERE IS A LIKELY SHORTFALL SO REFARMING MAKES SENSE



Source: ITU-R Report M.2078 (2007) Demand Forecast 2010-2020

….. AND TO LOWER COSTS

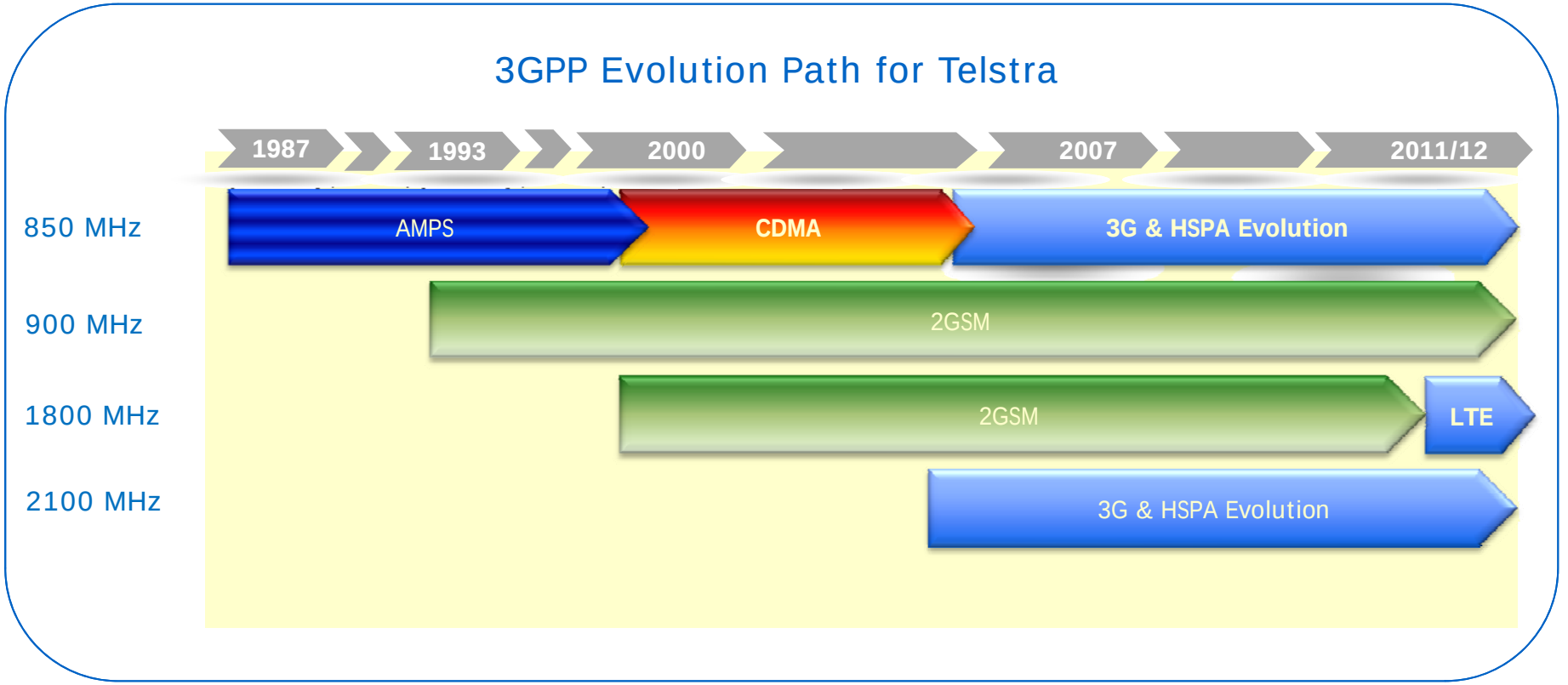




** Telstra derived network unit costs per MByte (excluding OSS/BSS)*

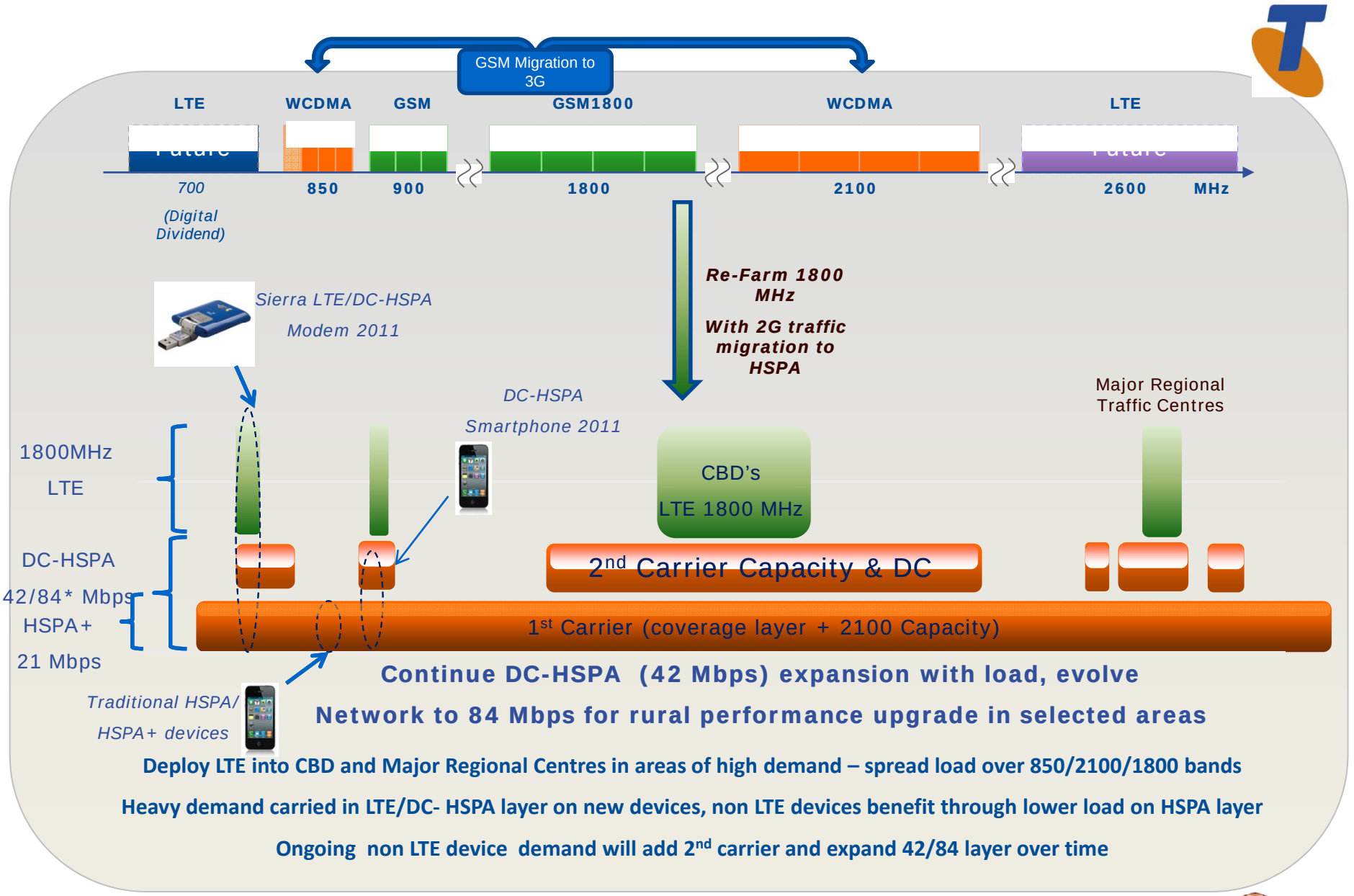
Comparable theoretical capex to meet forecast demand using these technologies only

TELSTRA HAS A LONG HISTORY OF REFARMING SPECTRUM



- Telstra has re-farmed spectrum and even closed networks to do so in the past
- Evolution to a integrated HSPA+/LTE network is a logical extension of this strategy

USING LTE 1800 MHz TO MAINTAIN USER EXPERIENCE 2011



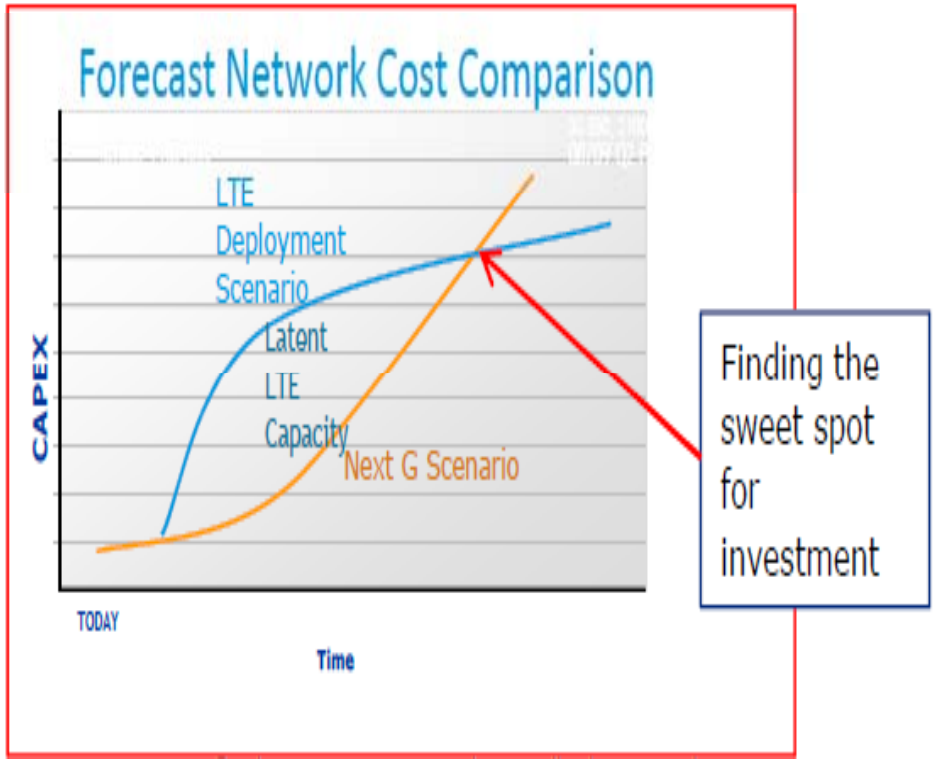
PREPARATION FOR LTE: 3 TRIALS IN AUSTRALIAN CONDITIONS

Urban and rural evaluation of LTE technology, reflecting our track record of servicing rural Australia

- **June 2010**: World's longest LTE data call
  - Peak speeds of 100Mbps download and 31Mbps upload over 75kms in regional Victoria
- **July 2010**: Australian first demonstrated LTE technology operating on 1800MHz spectrum
- **2010**: Demonstrated video calling between Sydney & Brisbane over an integrated HSPA and LTE network.

EVOLUTION TO A HYBRID HSPA+/LTE “4G” NETWORK

- With a National HSPA+ enabled network we are able to deliver a ‘4G like’ experience today
- The move to LTE is being driven by optimisation of demand management & investment
- An LTE network rollout will focus on:
  - Maintaining user experience in terms of coverage and speed
  - Leveraging common network capabilities & products across the packet core
  - Penetration of Dual Mode LTE/HSPA capable devices (highest demand first)



KEY LTE DEVICES NEED TO BE AVAILABLE

Device penetration is fundamental to utilisation of network capability

Data Cards: 80% of network data traffic comes from data cards and routers

- Data cards offer early availability and therefore ability to penetrate the network base for improved efficiencies.
- Sierra Wireless has been the device partner for advanced technologies (including 21 & 42Mbps DC launches. Its LTE portfolio meets Telstra's LTE requirements including support for 1800 and future 2600 MHz spectrum operation and fallback to DC-HSPA 42 Mbps).
- LTE Device model: AirCard320U* - same form factor as existing 42 device
  - LTE Cat 3 (100Mbps DL and 50Mbps UL in 20MHz**) USB modem
  - Multi-mode with DC HSPA+ and UMTS with Type 3i Rx Diversity
  - LTE: 800, 1800, 2600 MHz + 3G-UMTS 850 / 1900 / 2100 MHz +Quadband 2G/EDGE
  - Future support for LTE in 2600 maximising load balancing flexibility

Handsets/Smart-phones :

- Discussions commenced with key smart-phone vendors for early access to LTE enab these typically follow data cards by 12 months.

LTE/HSPA+ : USING THE ‘GAS’ IN THE HSPA TANK & MOVING TO AN INTEGRATED NETWORK