MOBILE ASIA EXPO
亚洲移动通信博览会

Shanghai | 26-28 June 2013 ▪ 上海 | 2013年6月26至28日

BUILDING A SMART CITY

TELSTRA AUSTRALIA

MIKE WRIGHT, EXECUTIVE DIRECTOR NETWORKS

IT'S HOW
WE CONNECT

M2M TRENDS ARE EXPLOSIVE ...WHY NOW?

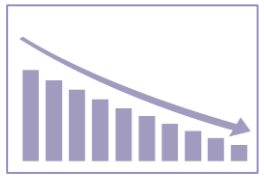
IT'S HOW WE CONNECT

Network Exposure/Integration

Cloud Computing

Data Unit Cost $

Chips/Device $



Extensive Network Coverage
Data & Action Instantly Available

Improving Compute,
Network & Device Economics

Enabling Innovation and Opportunity For the Smart City

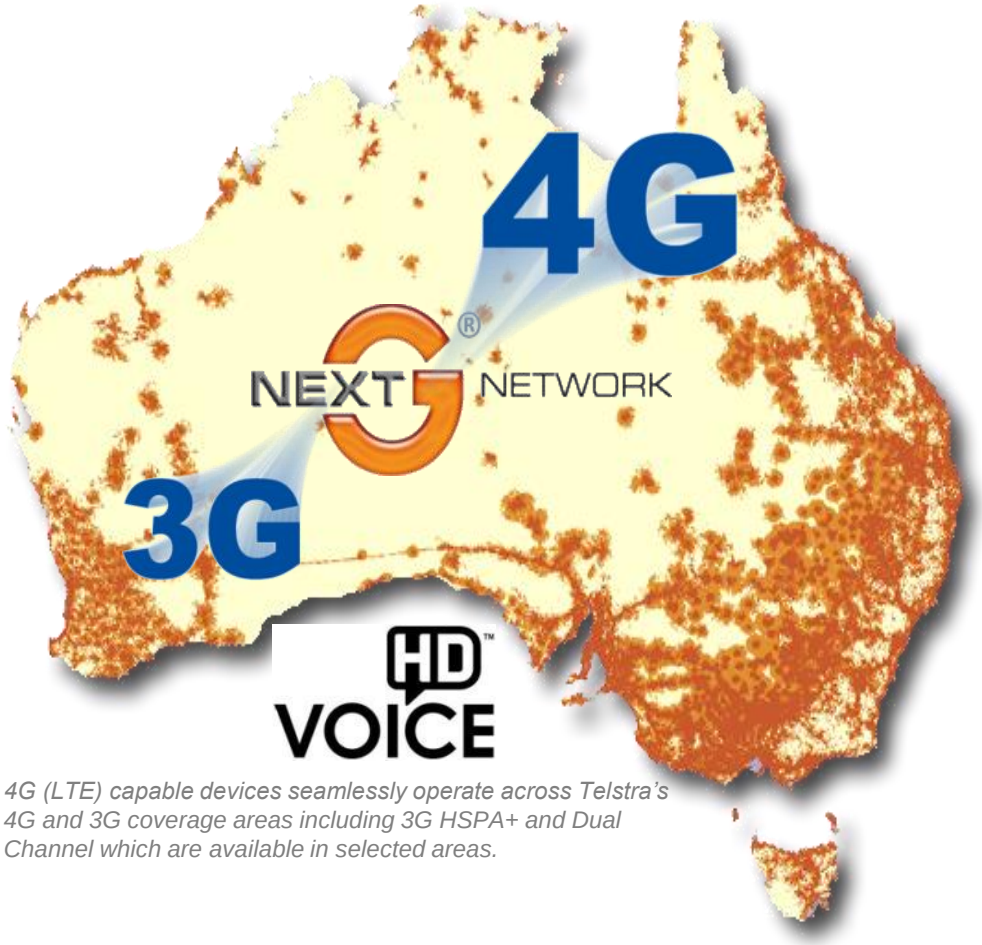
IT'S HOW
WE CONNECT

WE HAVE THE SMART CITY BUILDING BLOCKS

"THE NETWORKS"

The Telstra Network : Broad and Deep Wireless Broadband to underpin M2M and Smart Cities

IT'S HOW WE CONNECT



4G (LTE) capable devices seamlessly operate across Telstra's 4G and 3G coverage areas including 3G HSPA+ and Dual Channel which are available in selected areas.

23 Million Population

2.3 Million km² Coverage

99% Population Coverage

- ✓ 99% HSPA/ 66% LTE1800 @ June 2013

High performing Network

- ✓ Multi-Gigabit capable Ethernet fibre to sites covering >93% of pops.
- ✓ Well under 1% voice drop rate
- ✓ World's largest HD Circuit Voice footprint
- ✓ Low band 850 MHz HSPA for wide and deep coverage, LTE 1800 to 66% pops
- ✓ New APT700 Band for LTE

High performing business

- ✓ Low churn rate
- ✓ > 2.1M 4G services.
- ✓ 230% growth 6M to Q1 13
- ✓ 13% PostP H/H ,17% MBB pen of LTE

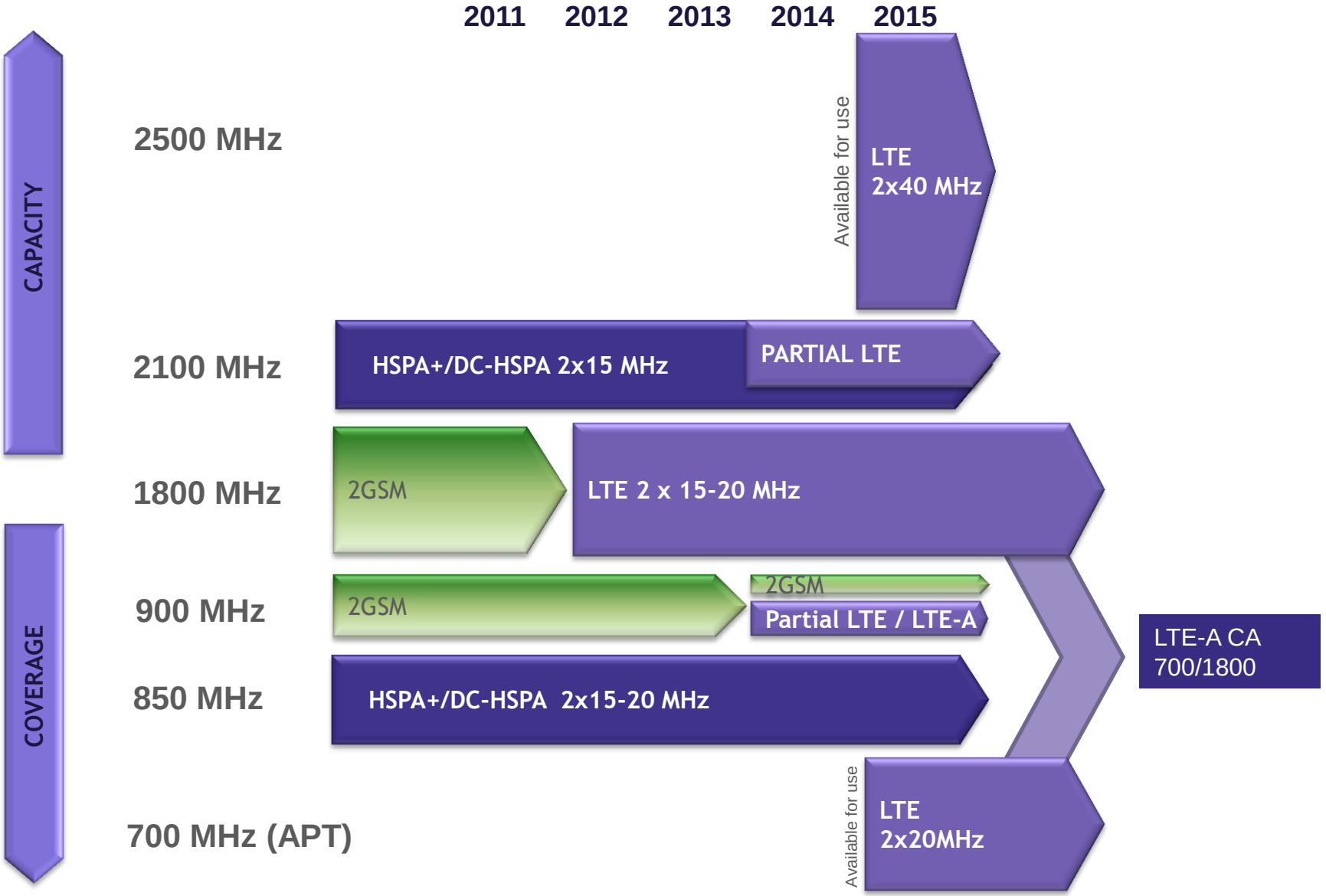
. http://www.telstra.com.au/mobile/networks/

•*Network performance stats are based on Telstra's National Field Testing #9 conducted in July 2012*

Rankings based on Q1 2013

SPECTRUM & TECHNOLOGY ROADMAP TO SUPPORT SMART CITY DEMANDS

IT'S HOW WE CONNECT



IT'S HOW WE CONNECT

WE HAVE THE SMART CITY BUILDING BLOCKS

"THE EMERGING APPLICATIONS"

TELEMETRY & MONITORING

IT'S HOW WE CONNECT

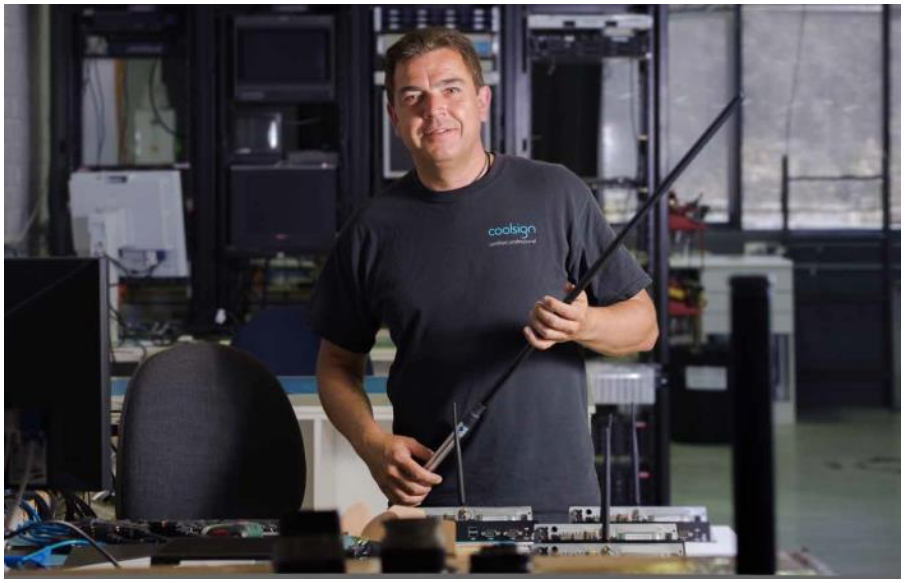
M2M HELPS BAKERS PROTECT THE QUALITY OF THEIR DOUGH

Monitoring Ingredients for Bread

Monitoring The Great Barrier Reef 100km to Sea

VIDEO MONITORING & DISTRIBUTION

IT'S HOW WE CONNECT



Video Monitoring for Remote farming

Video Media Distribution To signage

ASSET & FLEET TRACKING

IT'S HOW WE CONNECT

M2M HELPS TRACK AND MANAGE TRAILER AND UTE HIRES ACROSS THE COUNTRY

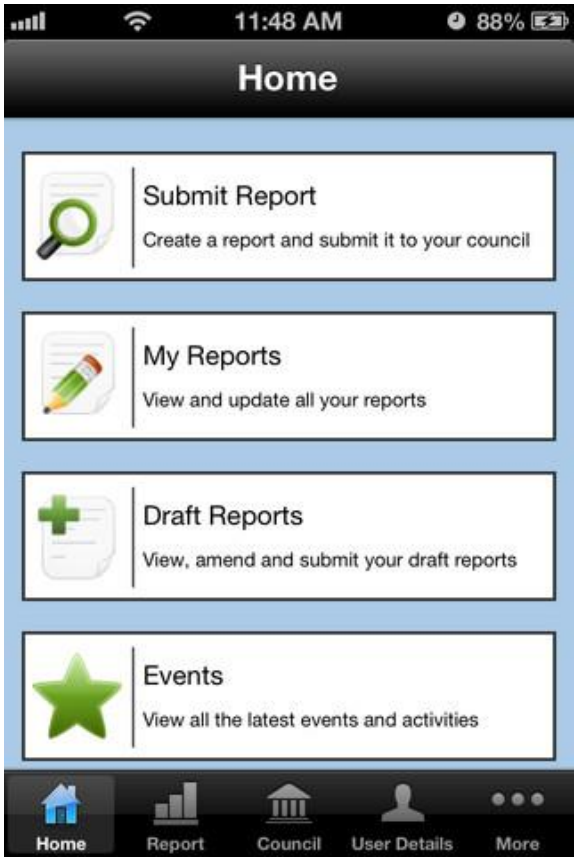
TELSTRA CONTROL CENTRE PUTS PROCON IN THE DRIVER'S SEAT

Tracking commercial Hire

Tracking & Monitoring Fleets

ENABLING CONSUMERS TO INTERACT WITH LOCAL COUNCIL

IT'S HOW WE CONNECT



My Council Service

CITY OF PERTH – SMART TICKETING

IT'S HOW WE CONNECT

City of Perth

City of Perth Parking

THE CHALLENGE

120,000 people/day parking

Antiquated meter technology

Up to 200 fault reports/day

Long down times

M2M Enabled Smart Meters

THE SOLUTION

Deployed smart ticketing machines equipped with SIM cards and modems that connect directly with the Telstra M2M Control Centre.

- Proactive management of equipment
- Improved customer experience
- Increased productivity and efficiency

"Previously, we had to go and check each and every one, but now that it's automated we just get the information sent to us and we just react in a more efficient manner."

City of Perth, Field Technician, Surindar Singh

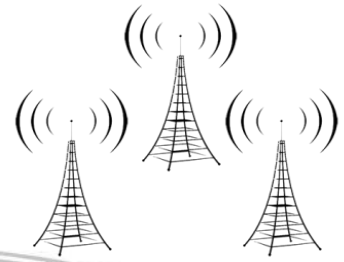
IT'S HOW
WE CONNECT

WE HAVE THE SMART CITY BUILDING BLOCKS

"THE VISION"

INTELLIGENT TRANSPORT SYSTEMS

IT'S HOW WE CONNECT



Location
Traffic flow
Environment

External server

Road environment data

- **TRAFFIC FLOW MANAGEMENT**
- **ALERTS**
- **COLISSION AVOIDANCE**
- **SMART TRANSPORT**
- **EMERGENCY RESPONSE**
- **TRAFFIC & TRANSPORT PLANNING**

CITY OF MELBOURNE SMARTSTARTCITY

SmartStartCity is an entrepreneurial program designed to help start-ups create profitable new business models that address urban challenges identified by the City of Melbourne

Extract from http://smartstartcity.com/

SMARTSTARTCITY – KEY MILESTONES

IT'S HOW WE CONNECT

1

Establish shared resolve, intent and understanding

2

We are here!

- Create interest in the media
- Invite organisations to participate
- Provision of Data

3

- Launch
- 10 Week Entrepreneurship Program

4

- Validated Business Models
- Launch Ready Businesses
- Invigorated Entrepreneurial Ecosystem in Melbourne
- Replicable model for future collaborative development

Architecture

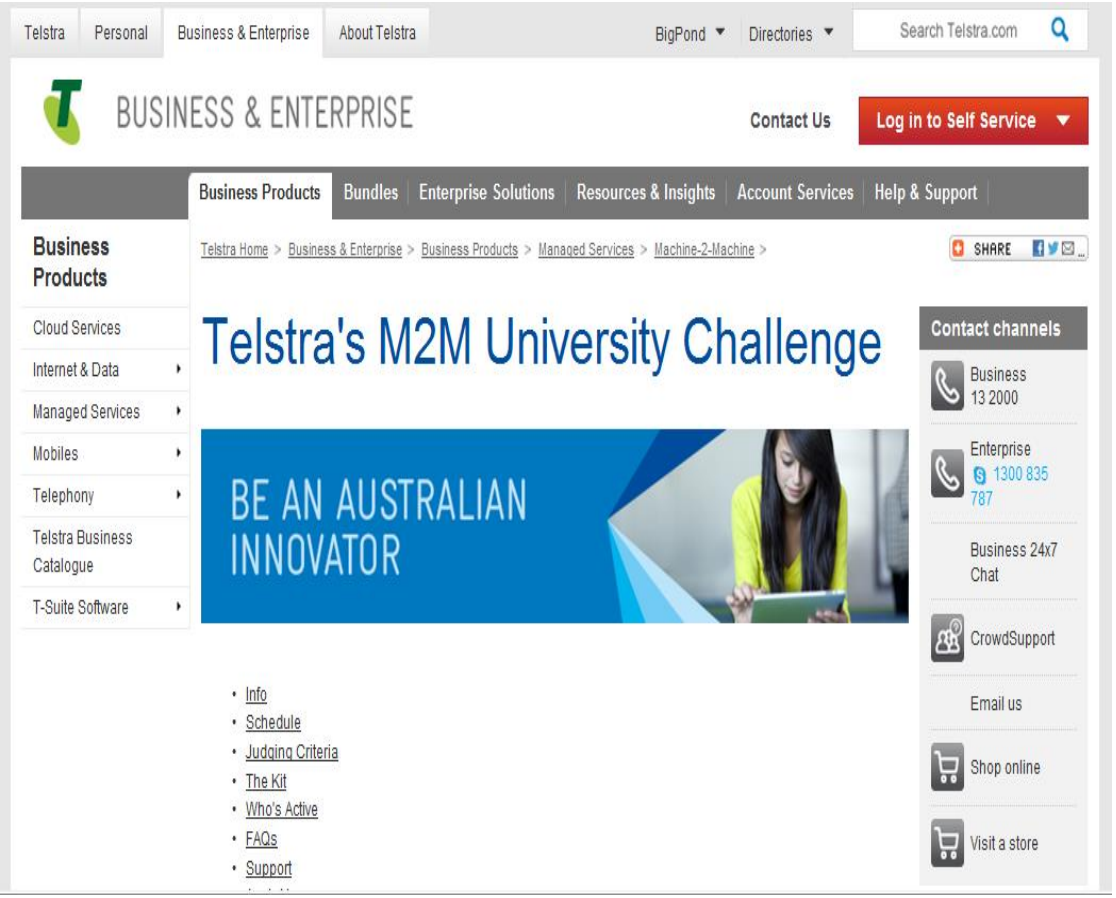
Telstra Technical Capability & Platform
Requirements, Business Model and Business Case

Telstra Funding Decision

March / April / May ---- June / July ---- July / August / Sept / October ---- November 2013 ---->

SEEDING THE NEXT GENERATION OF M2M & SMART CITY DEVELOPERS

IT'S HOW WE CONNECT



TELSTRA M2M University Challenge with:

Access to technical support from a Telstra Subject Matter Expert.

An M2M Development Kit (Raspberry Pi® device)

A Next G® USB dongle and a Telstra M2M SIM card

Access to the Telstra Wireless M2M Control Centre

IT'S HOW
WE CONNECT

WE HAVE THE SMART CITY BUILDING BLOCKS

"THE ASPIRTION"

OUR ASPIRATIONS – ENABLING & INTEGRATING WITH A SMART CITY

IT'S HOW WE CONNECT

TELEMETRY	SMART METERS	SMART GRIDS
SMART TRANSPORT	EMERGENCY MANAGEMENT	ASSET MANAGEMENT
ENVIRONMENT MONITORNG	COMMUNITY ENGAGEMENT	CONNECTED EDUCATION
FUTURE WAYS OF WORKNG	SMART HEALT	SMART SERVICES