

**“POTS to PANS (5G)”**  
Journey to Future USO  
ACCAN Workshop  
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# Summary – The Journey

- POTS (the STS) – the future?
  - Regional Reviews!
- The NBN and mobile – the new USO context
  - The Vertigan report observations
- Future USO
  - Converged Fixed/mobile – 5G!
- Reform journey
  - Stages 1 to 3 – from STS to NBN Co to 5G
- Observations
  - Convergence of USO with 5G future



# ‘PSTN to 5G’ – the Journey

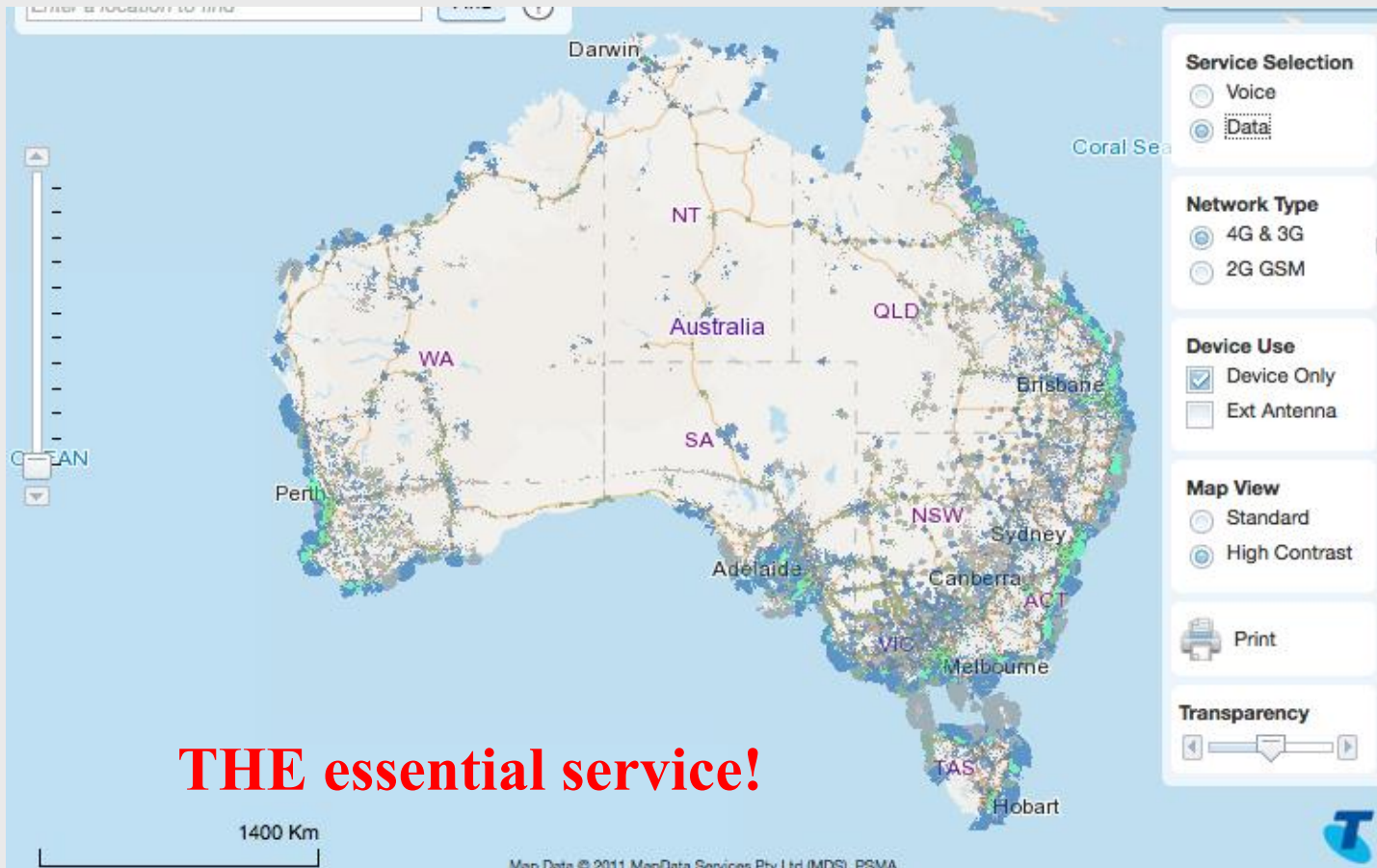
- Technology and Market trends
  - Voice (the STS) no longer the ‘essential service’
  - Internet and mobile have changed everything!
  - Mobile Broadband the answer? Role of WiFi?
- Regional telecommunications reviews!
  - Easten’s Review (2002)
  - Glasson Review (2008)
  - Sinclair Review (2012)
- NBN Co – Telstra roles
  - USO role change
- NBN and the bush - bipartisan
  - ‘equivalent broadband USO’
    - Vertigan report - \$230 million per annum (my estimate)

*NGN/5G Perspective*

*Is Government deaf?*



# 'Mobile' and the USO?



**THE essential service!**

Telstra says

- >99% of the population
- 30% of the land area

Optus, Vodafone

- 96-98% of the population
- < 15% of the land area

Mobile Blackspots

Programme

- Strong demand!



# The NBN, Mobile - the new USO context

- **NBN Co and Telstra Roles**
  - NBN Co to 'take-over' the Telstra copper
  - Telstra NOT the ongoing USO provider?
  - NBN Co can provide STS via satellite/fixed wireless
- **Fixed and Mobile Broadband**
  - Fixed broadband and mobile broadband
  - Competition AND complementary
  - Backhaul critical for both
  - Shared infrastructure NOW encouraged
- **Key Criteria for the USO**
  - Availability – coverage/competition
  - Reliability – in debate
  - Affordability - mobile
  - Emergency access – making progress

**Mobile broadband?**



# Stage 1 – NBN STS Variant

- NBN Co – the USO wholesaler
  - Modify the STS and payphone (Free WiFi)
    - LTSS satellite and fixed wireless
    - Competitive USO retail (USO funded)
    - Copper retirement plan!
- Mobile Black-spots program
  - Review un-met coverage demand
  - Opportunities for reduced cost
    - Backhaul opportunity assessment
    - Shared infrastructure
- Option – Combine through NBN Co

*Greater industry acceptance!*



## Stage 2 - Mobile - Broadband Fund

- Review of stage 1
  - NBN Co the USO wholesaler – retail ‘alternatives’
  - Mobile Black-spots Program
    - Consider ongoing funding
  - Further NBN Co synergy with MNOs
- Universal Service Fund alternative to a USO?
  - Regional diversity
  - Funding alternatives
  - Role of NBN Co?

*Many challenges!*



# Observations

- NBN is a “game changer” - the USO reconsidered
  - “equivalent (fixed) broadband USO”
- Mobile service MUST be included as an objective
  - Coverage, competition and quality key for ‘access’
- USO Reform is a Staged Journey
  - Stage 1 – NBN STS variant
    - NBN Co becomes the USO wholesaler with retail competition
    - Mobile Black-spots delivery, audit & review
  - Stage 2 – Mobile - Broadband Fund
    - Includes mobile expansion
    - ‘smart subsidies’ – (reverse auction!)
    - Regional differences
  - Stage 3 - Converged USO consistent with 5G