Australia's Satellite Sector:

Where to now?
CommsDay Congress
Melbourne
10 -11th October 2017



Telco Subject Matter Expert











Presented by Professor Reg Coutts

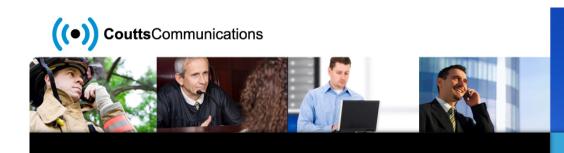




Come Share The Journey

- Opportunity is now the stars are aligned!
- Believe me why?
- Australia has the 'credibility'
- Our comparative advantage
- Satellite communications oops!
- What we are going to do?
- Overcoming the barriers

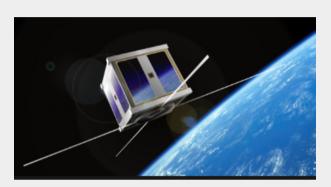






Opportunity is *now*

- Space industry dramatic change!
 - Space 2.0 changes (eg cubesats)



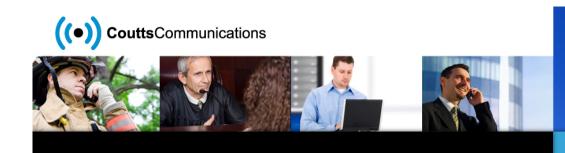
- Political bipartisan support (eg unlike NBN)
 - Background to space agency decision (eg even NZ!)
 - State governments collaborating (eg SA, ACT and NT agreement)
- Synergy with Innovation agenda
 - Recognition of contribution to economic growth
 - Promising 'start ups' (eg Mariolta) kicking goals





Believe me - why?

- Satellite communications sector in Australia?
 - Lessons learnt
- My experience informs my perspective
 - Telstra TRL and satellites
 - ITU and satellite
 - NBN and role for satellite for the 3% ('Sky Muster'?)
 - USO and satellite (replace copper in the bush?)
- Industry/Universities Role & Commercialisation
 - Communications Alliance Group (CASSG)
 - Challenges of universities & commercialisation





Australia has 'credibility' in Space

Note: IAC 2017 Conference in September hosted in Adelaide

- Demonstrated achievements in Space
 - 3rd to put rocket into space (after USSR and US)
 - WRESAT (50th anniversary) and Woomera
- Our unique contributions
 - Moon landing (remember 'the dish')
 - Radio astronomy and CSIRO (now SKA!)
- CSIRO and commercialisation
 - WiFi patent out of Radio Physics





Our comparative advantage

- Need & opportunity
 - large continent, low population, developed economy
 - Situated in region of high growth
 - Applications to future growth regions (eg Africa)
- Space science sector with depth
 - CSIRO expertise
- Key industry potential
 - Mining
 - Agriculture
 - Remote communications

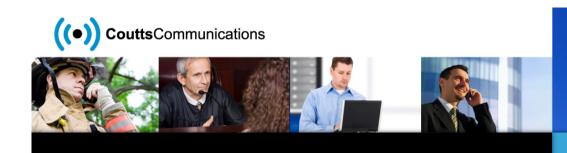






Satellite Communications - lessons learnt

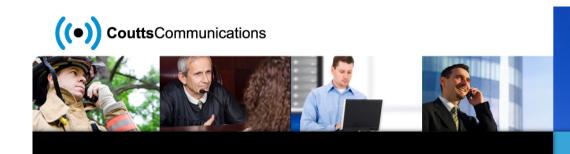
- Aussat and telecommunications history
 - Confused satellite role in competition agenda
 - DRCS was not a 'satellite' substitute
- ABG program a good start
 - ISS service prior to NBN satellites excess demand!
- NBN and Sky Muster
 - Ka band satellites recommended by Expert Panel
 - NBN Co implementation poor
 - Over reliance on overseas expertise & use of local expertise
 - System design eg traffic management
- Indigenous phone program a success!!!!





What are we going to do?

- Space agency unique role underway!
 - Key intelligent crafting by the expert panel required
- Integrate satellite communications better
 - Listen better to the market (eg remote users)
 - Resolve 'conflicts of interest' in CA SSG
- Continue to encourage collaboration
- Scope a National Space Innovation Hub©
 - Attract funding & share learning
 - Commercialisation acceleration





Overcoming the barriers

- Maintain & Sustain government momentum
 - Ongoing bipartisan support (eg unlike the NBN)
 - State & federal collaboration
- Industry and government collaboration
 - Need to *craft* unique space agency role (ie don't just copy) – Expert panel to report in March 2018
- Overcome current culture
 - Parochial fiefdoms can impede growth
 - Overly 'supply focused' industry





REACH FOR THE STARS

WE CAN DO IT!