SmartSat CRC R&D Program

Research Program 1
- Communications, Connectivity & IoT technologies
- Artificial Intelligence
- Cyber Security & Resilience

Research Program 2
- Smart satellite systems

Research Program 3
- Earth Observation Data Services
- Space Governance

Theme 1
- Agriculture & Farming
- Mining & Resources

Theme 2
- Defence & Security
- Transport & Logistics

Theme 3
- Experimental Sovereign Space Flight Program
Advanced Ground Stations

◆ Challenges and Opportunities
  – Exponential increase in data to and from Space
  – Rapidly Increasing Number of Satellites
  – Technologies
    – Flat Panel and Distributed Array Antenna
    – Laser optical communications
    – Intelligent Systems (optimisation of data links)

◆ Nova Ground Network
  – Site with RF Licences in Development
  – R&D Test Beds
  – RF Service Provisions (communications back bone)
  – Support Optical Systems

◆ Ground Station R&D Infrastructure (Concept)
  – Develop a World Class National Ground Station R&D Capability
  – Hybrid RF and optical Capabilities
  – Distributed Test Sites West, Central and East & Networked with other capabilities
  – National Collaborative Research Infrastructure Strategy (NCRIS)
Local & Global Partnerships

- 85 Participants
- $110 million Partner and Gov Funds
- $130 million Staff and In-kind
- Australia’s top research concentrations

~ $240 million of Research Effort

Industry Focused

- Industry Cluster
- Australian Space start-up industry Cluster (ASISC)