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# Future ATNF Operations

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A wide-angle photograph of a remote desert station. In the center, a small white trailer is equipped with solar panels on its roof and a satellite dish. A white SUV is parked nearby. The station is situated in a flat, arid landscape with sparse vegetation. In the background, a prominent red rock cliff or mesa stretches across the horizon under a bright blue sky filled with large, white, fluffy clouds.

Why change?

ASKAP is coming!  
Limited operations funding

# Goals

- Continue to operate all current facilities for world-class research
- Maintain our strong international user base
- Continue to provide hands-on observing experience
- Be ready for ASKAP
- Maximise value of ASKAP as a pathfinder for SKA



# Background

- 2001 ... NTD, xNTD, ...
- 2005 Decadal Plan

*By 2012, the Australia Telescope National Facility will be operating four world-class observatories ensuring its continued status as a leading global contributor to the understanding of the universe.*

- 2006 ATNF operations review
- 2007 Capital funding for ASKAP increased to
- ~ \$100 million

# Planning & consultation

- 2007

- Future operations planning
- Two working groups formed
- Nov: ATUC presentation
- Dec: Report and discussion with Steering committee

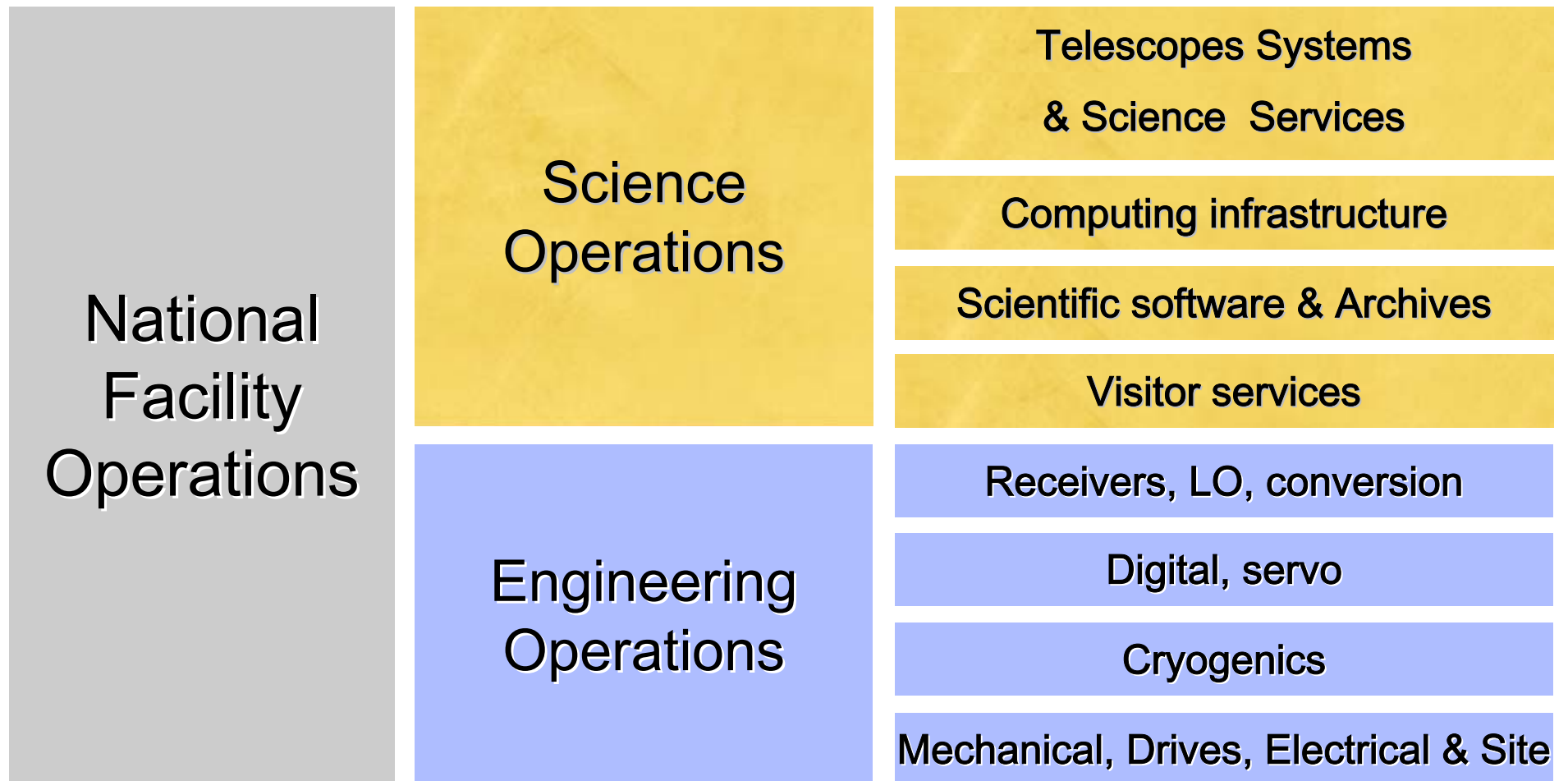
- 2008

- Feb-March User consultation
- June: AAS meeting in US

# Future Operations: Overview

1. Restructure Operations into Science Operations & Engineering Operations
2. Establish Science Operations Centre (SOC) at central location (initially Marsfield)
3. Streamline scheduling and observing modes

# ATNF Operations Structure



# Science Operations Centre

- Located at Marsfield
- Fully supported observing available at SOC only
- DA-type support provided for ATCA, Mopra & Parkes
- Access to ATNF staff and visitors facilities for data reduction/archives etc
- Comprehensive computer, visual and auditory monitoring



# Observing model

- 'Most' observing from SOC
- Observing from Observatories when necessary
- Student observing and training at sites **will** be supported
- Some fully remote observing allowed
- ASKAP observing from SOC, but with paid operators

# Streamlining operations

- Coordinate scheduling and maintenance blocks
  - *Proposed - but user input sought*
- Fewer ATCA reconfigurations
- Fewer receiver changes at Parkes
- Some instruments to be decommissioned
- Christmas shut down
- Restrict Mopra as single dish to 6 months (but VLBI all year)
- Restrict ATCA 3-mm to 6 months

# Tidbinbilla 70-m

- Several hundred hours/year allocated through Host country agreement.
- ~80% used for 12-m single dish spectroscopy (prior to pointing problems)
- New Parkes 12-m receiver in 2008 – less sensitive for single pointings but more time available
- Continue single dish support for Tidbinbilla?

# Development projects

- **1. Coordinated scheduling**
  - Software development collaboration with CMIS.
  - Will use information from OPAL.
- **2. Construction of SOC**
  - Building, power, networks, (accommodation)
- **3. Telescope Automation and Safety**
  - Substantial project, especially for Parkes. Safety audit and detailed costing in 2008 before decisions finalised.

# User input

- University visits
- AAS meeting in US, June 2008
- Send comments to ATUC
- Use the web forum and see information on
- <http://www.atnf.csiro.au/observers/planning>
- ATNF Open Forum 19 March 2008
- Contact any member of ATNF Leadership team directly
- We will provide a summary of the comments received and a response.