www.csiro.au

CSIRO:
Australian Science, Australia's Future

Tom Minchin – Client and Infrastructure Services

Desktop Video and Video Conferencing

A Pillar of Our Communications Platform

CSIRO

CSIRO today: a snapshot

Australia's national science agency

One of the largest & most diverse in the world

6500+ staff over 55 locations

Ranked in top 1% in 14 research fields

20+ spin-off companies in six years

160+ active licences of CSIRO innovation

Building national prosperity and wellbeing

Recent achievements

CSIRO astronomers have revealed the hidden face of an enormous galaxy called Centaurus A

The most comprehensive and complex water modelling project ever undertaken in Australia and perhaps the world

Breakthrough research into the genetic blueprint of cows could lead to major improvements in Australia's farming industry

World-first air cargo scanning technology will help protect against illicit and dangerous goods in consolidated air cargo

274 new marine species and 80 undersea mountains discovered

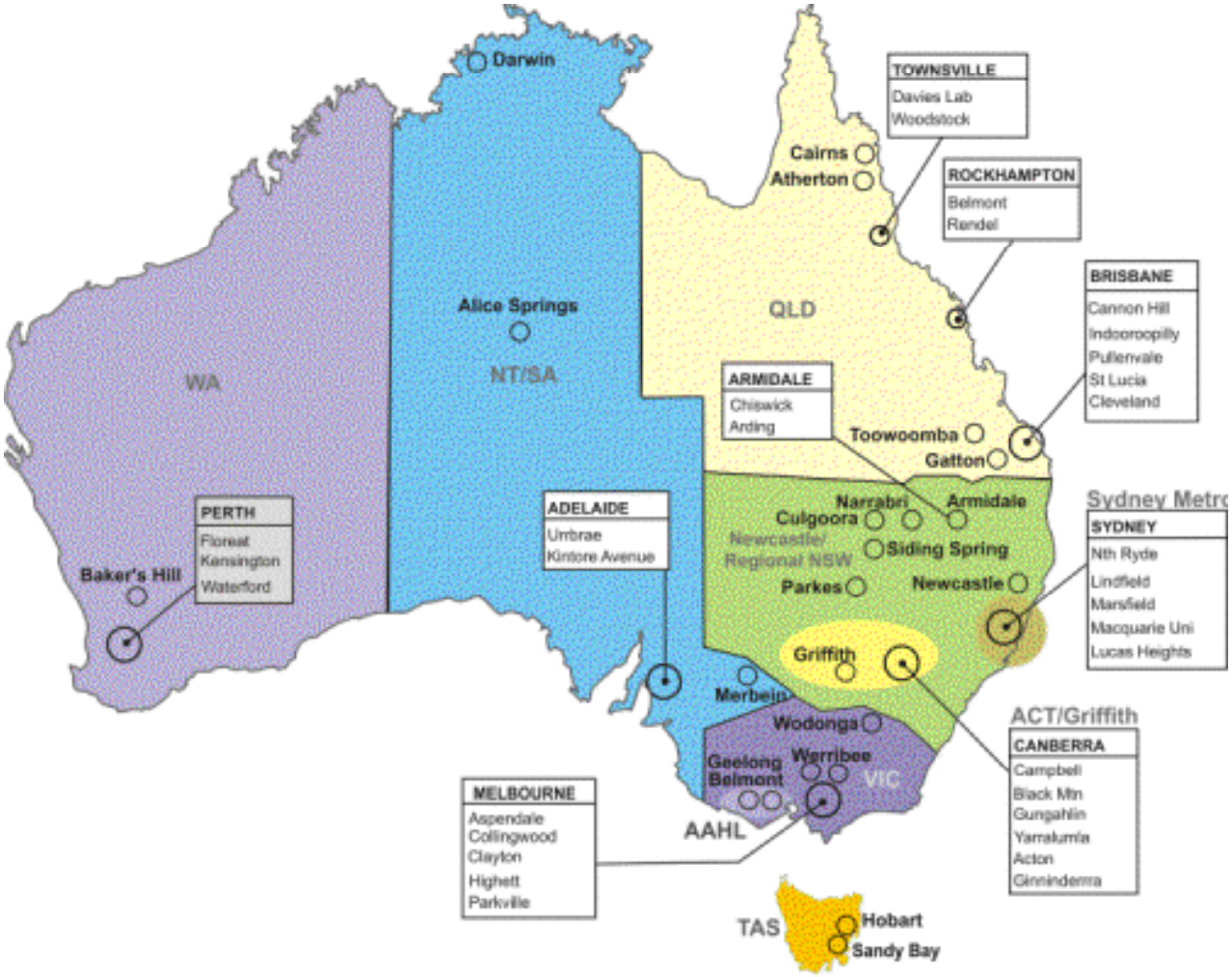
Revenue

89% of funding is directed to Australia's National Research Priorities

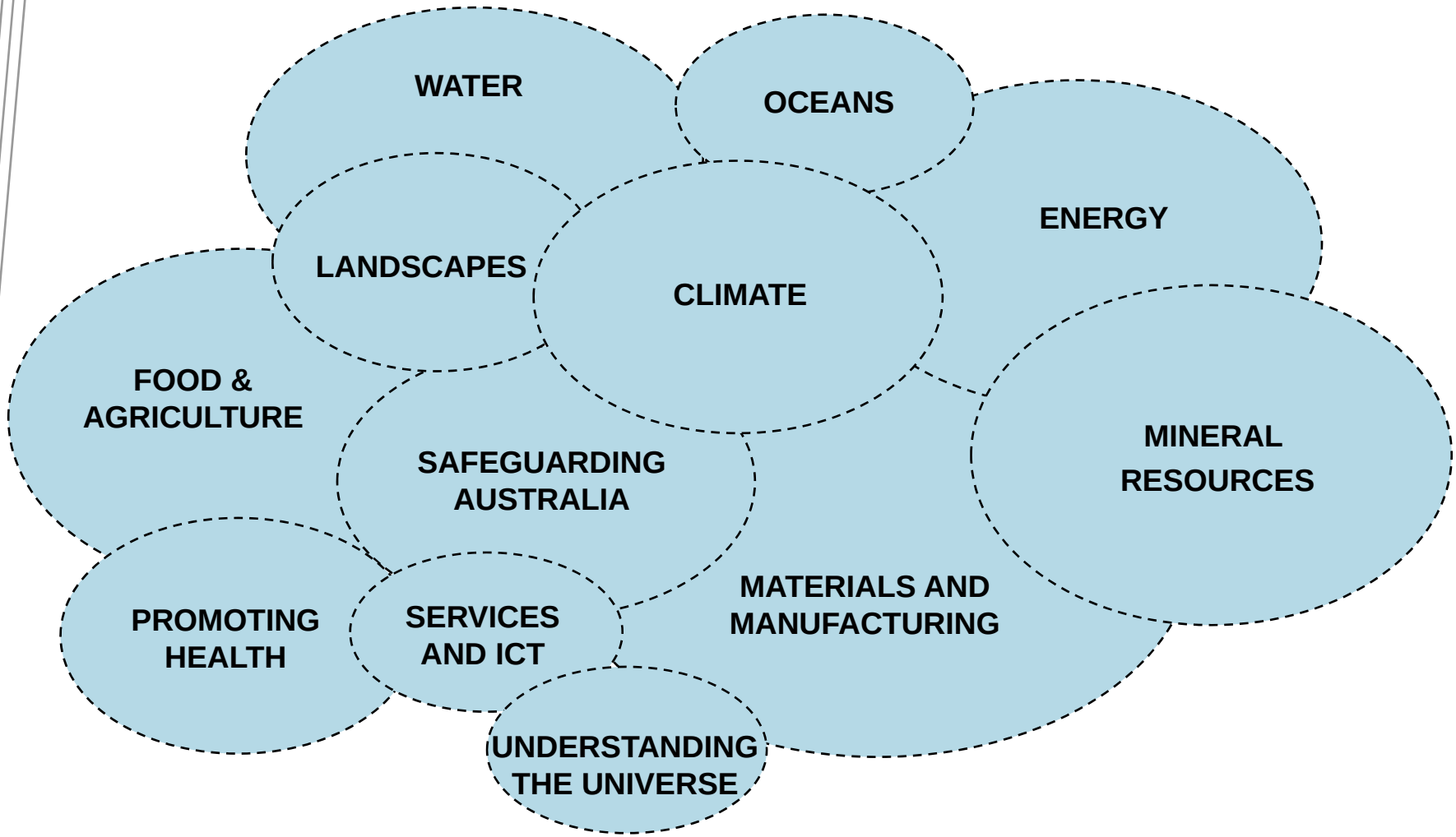
CSIRO in 2008-09:

- Total revenue of $1.3 billion
- Federal funding of $668.1 million
- $634.8 million external revenue
    - With $229.6 million from IP revenue

CSIRO is Australia-wide

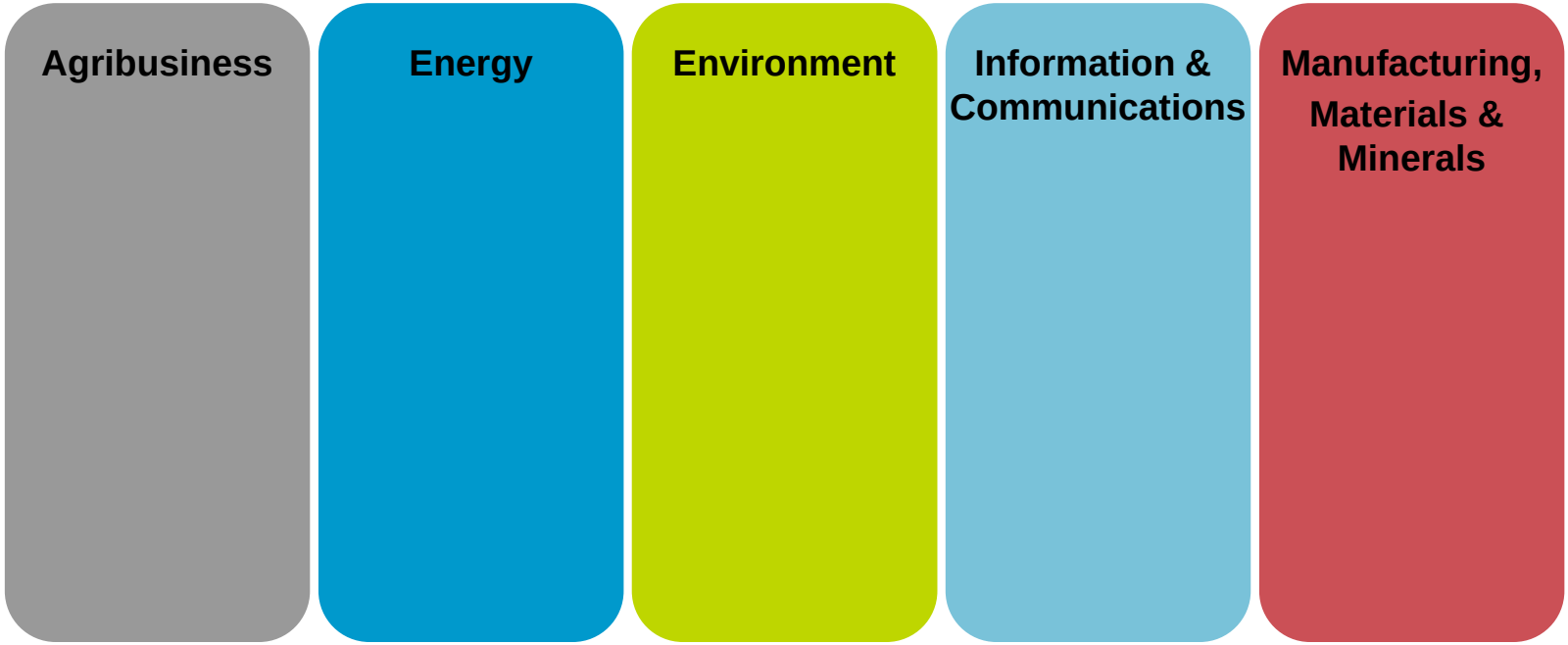


Delivering our science: key outcome domains



Our operating model

CSIRO Research Capabilities



One-CSIRO Support Functions

Leveraging our operating model

CSIRO Research Capabilities

One-CSIRO Support Functions

National Research Flagships

Climate Adaptation

Light Metals

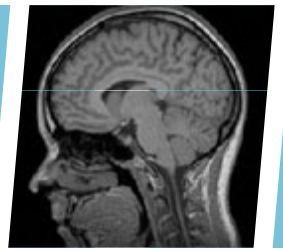
Sustainable Agriculture

Energy Transformed

Minerals Down Under

Water for a Healthy Country

Food Futures



Preventative Health

Wealth from Oceans

Future Manufacturing

Historical View

- CSIRO has had a range of varied technology
- 18,000 Ericsson PABX handsets (only 6200 staff?)
- Every brand of Video Conference unit available
- Some sites had voicemail, others not at all
- Video Conferencing – only for the courageous
- Switch and router fleet non-standard
- AARNET2 and inter site microwave and Telstra DDS
- Range of old and new computers
- 30% of fleet are laptops

Business Requirements of UC

- Video UC must integrate with existing audio (telephony)
- Reducing cost for the organisation and IMT
- Leverage geographically distributed skills and teams
- Ability for self service
- Additional available features
- Integration with other applications and collaboration systems

- There is no magic formula for enabling innovative collaboration – all you can do is encourage and enable

Some past highlights

- Single IP Network for Data and Voice/Video
- Single Dial Plan (6 digits)
- Use of Cisco IP Contact Centre
- Implemented Cisco Meetingplace
- Integration with 120 Polycom SD video conference units
- Email integrated voice mail via Unity
- Cisco Unified Workplace Licensing

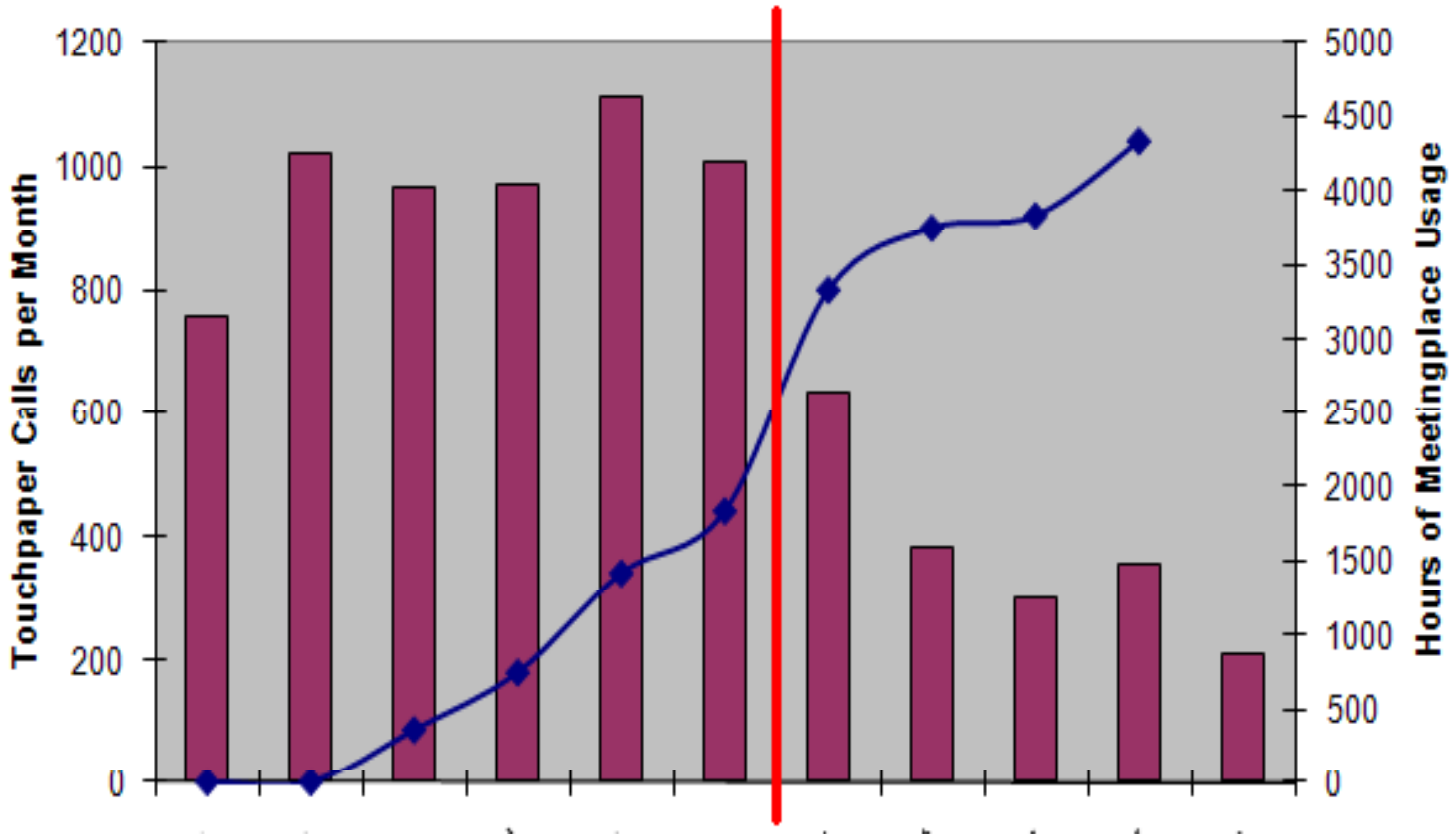
- Standard switch and router rollout
- AARNET3 and National Optical Network

- Network Bandwidth – QoS or not
- Latency, packet loss and jitter reductions
- VC reliability and quality using H.239
  - Leveraging IP network, no more ISDN
- Content sharing using Meetingplace
- VC scheduling using Meetingplace Outlook Plugin

- How do we know it's working?
  - 8400 hours a month of Video (36%) and Audio Conferencing (44%)
  - Range of collaboration types: tenders, job interviews, remote equipment servicing, conferences, lectures, training, budget planning, science papers review, lab results, telemetry…

VC Scheduling

Cutover from Concierge VC Bookings to Meetingplace Self Service



Work in progress and current challenges

- Moving to Cisco IP Telephony (70% completed – 86% by EOFY)
- Deployment of Cisco Video Advantage (1500)
  - For both video conferences as well as ad hoc point to point video calls
- 15 HD video conference units

- Green IT
- Power Infrastructure
- Numerous “low value” handsets
- Reduction in carrier voice costs
- Problems with CVA vs Windows
- “Alternative technologies” – eg Skype, EVO

Future Projects

- Broaden video collaboration to include telepresence features:
  - Immersive
  - Room based
  - Desktop
- Desktop collaboration:
  - Cisco MOC vs Personal Communicator
  - Both?
  - Remote Access
- QoS – for video in particular

Tom Minchin
Client & Infrastructure Services
CSIRO IM&T

Phone: 02 6124 1497
Email: tom.minchin@csiro.au
Web: www.csiro.au/

www.csiro.au

Thank you

Contact Us
Phone: 1300 363 400 or +61 3 9545 2176
Email: enquiries@csiro.au Web: www.csiro.au

CSIRO