Australian WIGOS

Sue Barrell

Bureau of Meteorology, Australia

RA-V rep

Outline

- Australian WIGOS Demonstration Project
- Outcomes
- WIGOS Coordination process
- Where to from here?

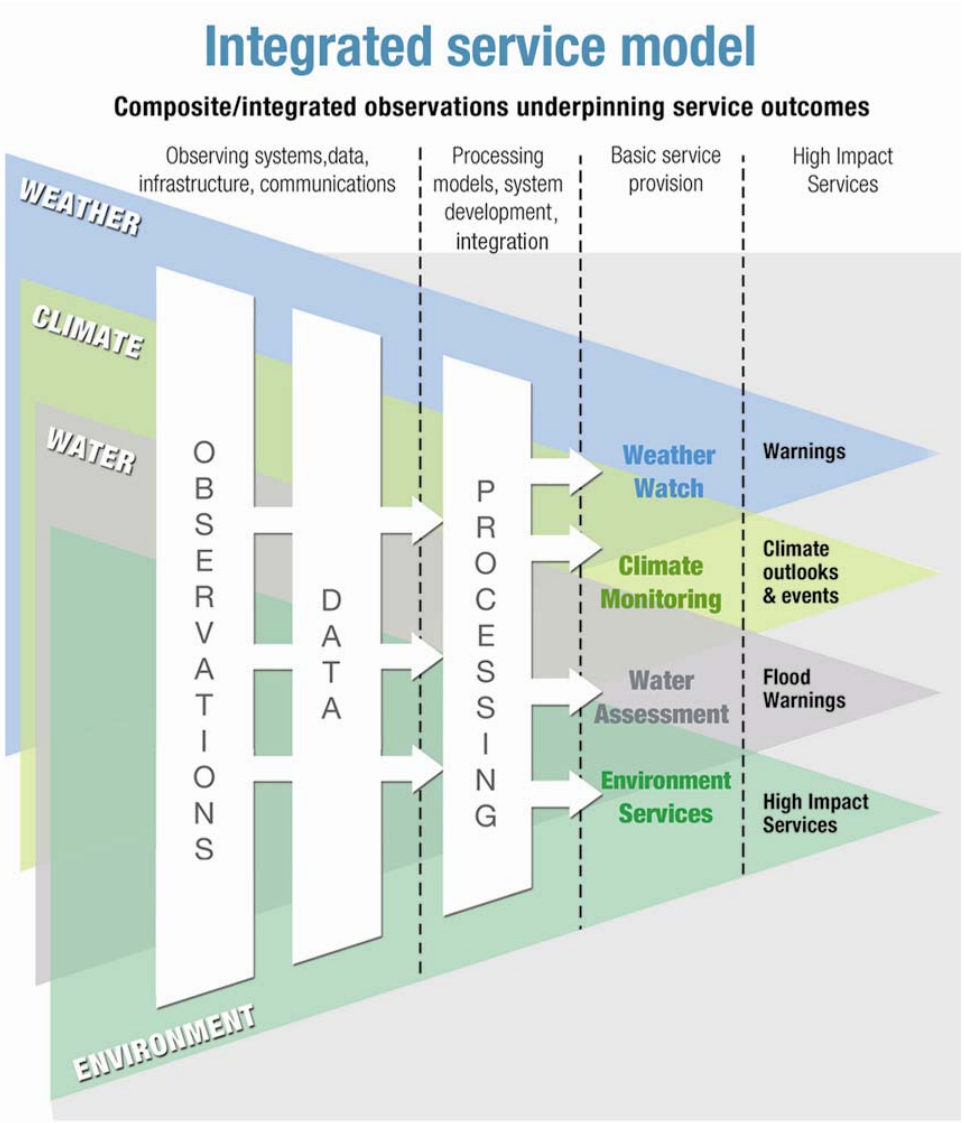
Australian Demonstration Project

- Plan/implement a Composite Observing System strategy
  - Plan - assess current/future user needs; review existing systems and future opportunities; assess adequacy against needs; prioritise; develop strategy; fit to resources
  - Implementation – from plan to reality; document progress; lessons learnt
- Building on Basic Observing Systems Study 2005 (BOSS05)
  - Comprehensive user-needs based observations strategy
  - Evolution and evaluation of technologies
  - Implemented against background of budget realities
- Progress, outcomes and legacy - refer WMO/WIGOS webpage
  - Focus now on strategic themes, esp. surface network-of-networks

Australian Demonstration Project

Some key elements	Status
Changing staffing and technology configurations across upper air network	Underway, complete by 2013; reviewing future upper air strategy
Fit-for-purpose organisational structure	Advanced but tuning; increased project management focus
Nationally consistent operations & practices	Aligned observing and maintenance operations; removed many barriers
Integration of Third Party Data	Data Framework sets context for third party data policy; seen as growth area
Rolling Review of Requirements	Underway; start on climate, aviation
Quality Management Framework	Early steps to ISO9001; business process model under development
Data impact studies	Modest progress on upper air

Integration



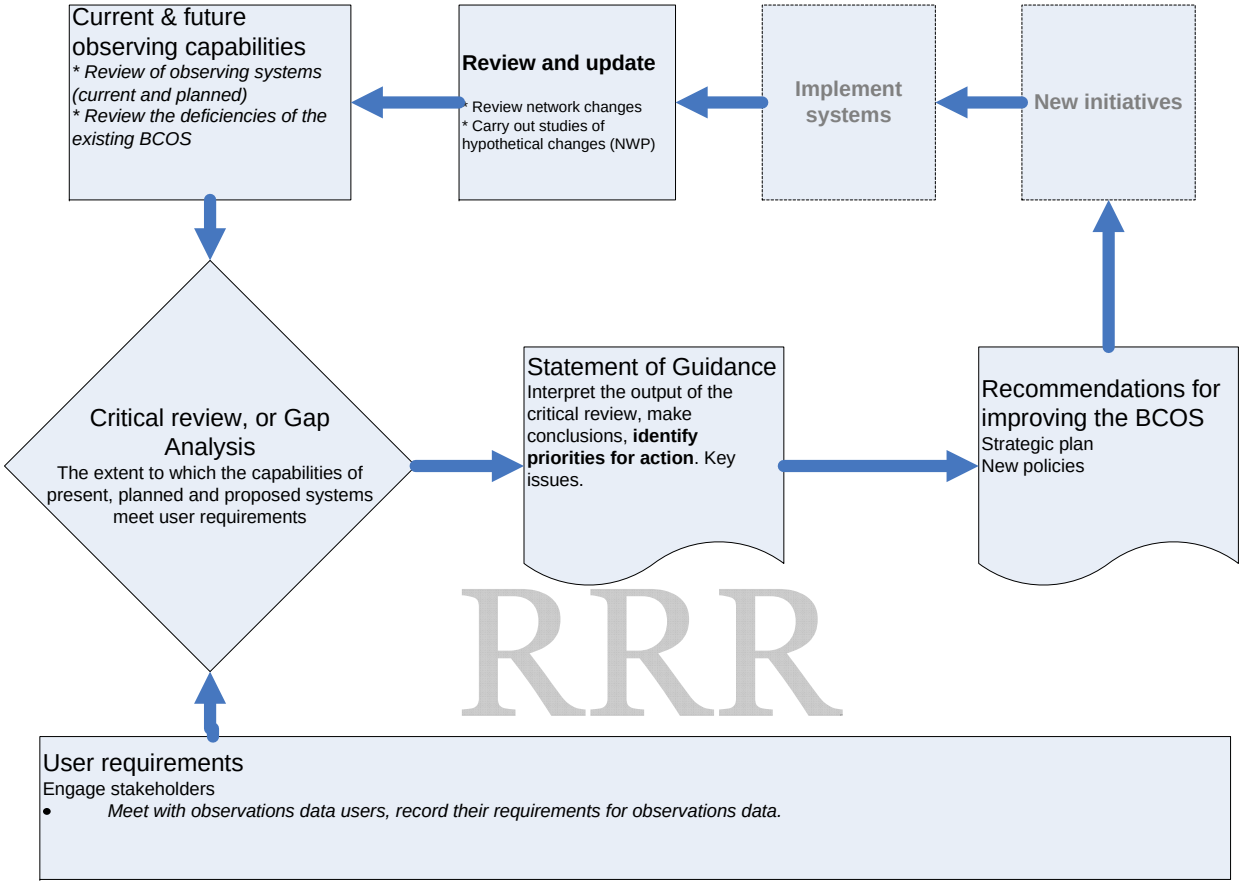
- Composite systems, ‘network of networks’
- Integration through various aspects
  - Support for diverse user needs
  - Systems optimised for efficiency and effectiveness
  - Integration of data through NWP
  - End-to-end service delivery model

Integration (2)

- Network of networks
  - Owned ‘core’ and contributed ‘third party’ networks
  - Policy and management framework
    - Tiered approach to quality, observations, networks, data management, operational support, replacement, etc
    - Partnership and/or collaboration mechanisms
    - End-to-end data framework – principles, policies, processes
- Integration NOT ‘one size first all’
- Coordination → communicating, sharing, optimising
- Interoperability → key to turning observations into effective data that meets real needs

Plan and Design

- Data impact assessment, OSE/OSSE's (regional or national)
- National Rolling Review of Requirements



Observations and Engineering Strategic Framework

Our Vision	To provide environmental observations for the safety, sustainability, well-being and prosperity of Australians						
Our Mission	• National leadership in environmental monitoring • An integrated network of networks approach • A skilled, diverse, innovative and sustainable workforce • A culture of commitment to process improvement • Proactive engagement with users and stakeholders						
Observing System Strategies	**Surface**	**Upper Air**	**Satellite**	**Radar**	**Marine**	**Atmospheric Composition**	**New Environmental Information**
Enabling our Operations	Rolling Review of Requirements						
	Composite Network Design						
	Lifecycle Management						
	Data Framework						
Enabling our Business	Business Process Model						
	Workforce						
	Leadership Culture						
	Safe Working						
	Communication						