



# SKA roles – May 2018

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# IGO: progress of negotiations

- Convention documents and Final Record now agreed
- Italian presidency opened the documents for initialing last week
- Formal signing in Rome in September/October: Ministerial level
- Convention into force when 5 countries ratify
- Cabinet approval needed to sign Convention and release NISA funds



# Pre-construction

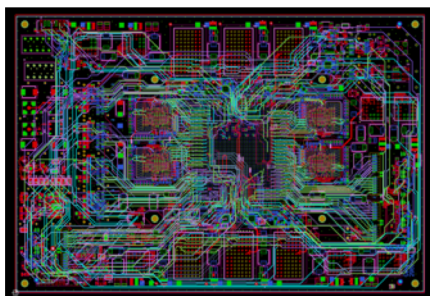
- Design phase for SKA: international consortia
- Consortia moving to Critical Design Reviews
  - System CDR expected early 2019
- CSIRO contributions well received:
  - Central Signal Processing conditionally passed sub-element CDR
  - Infrastructure Australia passed readiness review, all documents submitted
  - Signal and Data Transport conditionally passed CDR

# Bridging

- Consortia will be dissolved after their CDRs
- Significant work still to be done for system CDR and towards construction tenders
- SKAO proposed 'bridging' period
  - Identified staff to work with SKAO directly
  - Still some negotiation to take place on this
- Will request funding from DIIS
  - For SKAO requirements, and other Australian requirements



# Early production array



- Build 4-6 SKA Low stations and associated signal chain
- Major de-risking exercise
  - Antenna testing
  - Interfaces
- Discussed at SKA Board
  - Concerns from Italy, Netherlands, Canada, UK
  - Prefer to start once IGO is established
- Looking at models to start infrastructure early

# Construction planning

- SKAO circulated request for information to member countries
- Identify areas of interest for construction
- DIIS prepared Australia response
  - Consulted with CSIRO, ICRAR, Swinburne, WA Gov, Geraldton industry
- Potential CSIRO key roles:
  - Overall management of **SKA Low assembly and integration**
  - Leadership of **SKA Low infrastructure**
  - Leading **correlator and beamformer** construction for SKA Low

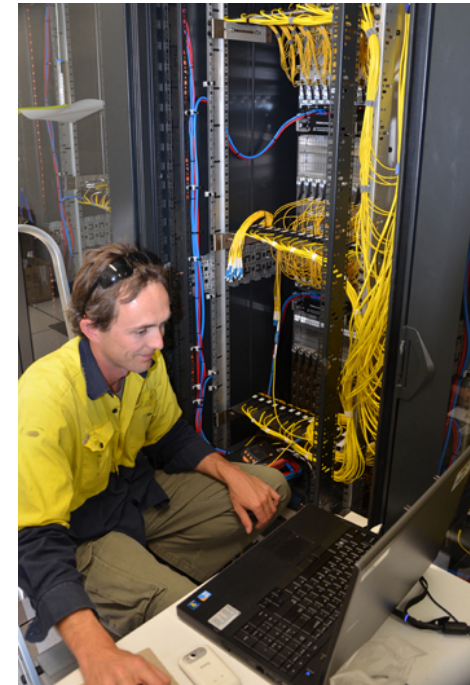
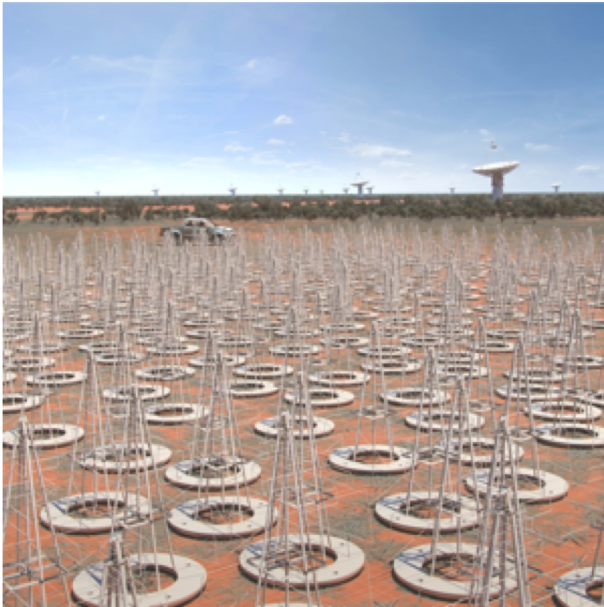
# Site Entity

- Site entity - Responsible for Australian site
- Key agreements
  - Lease
  - Site Entity contract
  - Collaboration Agreement between WA gov and DIIS
  - Hosting Agreement
  - ILUA



# SKA Operations partner

- On behalf of international Observatory
- Operations review proposed a new model
- Face to face discussions early June





# Australian SKA Regional Centre

- Members will establish SKA Regional Centres to help support SKA science.
- Provide processing, storage, user support etc.
- Collaborative work with ICRAR
  - Joint workshop in November to establish science requirements
  - Two joint workshops with industry – Perth and Sydney
  - Technical ‘hackathon’ in Shanghai in April
  - Focus on needs of ASKAP and MWA initially
  - Technical work - Rialto
- Small management committee established
  - Chaired by UWA/ICRAR
  - Members CSIRO, ICRAR, ASKAP, MWA, Pawsey





# Visit to Australia by SKA Board Chair



# Science Working Groups & Focus Groups

SWGs and FGs	Co-Chairs
Extragalactic (non-HI) Spectral Line	Rob Beswick, Francoise Combes
Our Galaxy	Grazia Umana, Erik Rosolowsky
Solar, Heliospheric & Ionospheric Physics	Eduard Kontar, Divya Oberoi
Epoch of Reionization	Garrelt Mellema, Gianni Bernardi
Cosmology	Richard Battye, <b>Laura Wolz</b>
Extragalactic Continuum	Mark Sargent, <b>Natasha Hurley-Walker</b>
Cradle of Life	Izaskun Jimenez-Serra, Doug Jonstone
HI galaxy science	Sarah Blyth, Lourdes Verdes-Montenegro
Magnetism	Ann Mao, <b>George Heald</b>
Pulsars	Ingrid Stairs, Willem van Straten
Transients	Michael Rupen, Jason Hessels
VLBI	<b>Cormac Reynolds</b> , Tao An
High Energy Cosmic Particles	Justin Bray, <b>Clancy James</b>

# OzSKA and SKA Fellowships

- Next OzSKA meeting planned to be held at Mt Stromlo on Tuesday 18<sup>th</sup> and Wednesday 19<sup>th</sup> September
  - (This will be 4<sup>th</sup> OzSKA meeting, after 2015 Melbourne, 2016 Perth, and 2017 Sydney)
- Next call for Australian SKA Fellowships expected around July. Fellows spend 2~3 months working at the SKAO. The fellowship covers airfares and accommodation.

*We acknowledge the Wajarri Yamatji people as the traditional owners of the Murchison Radio Observatory site.*

# Thank you

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