

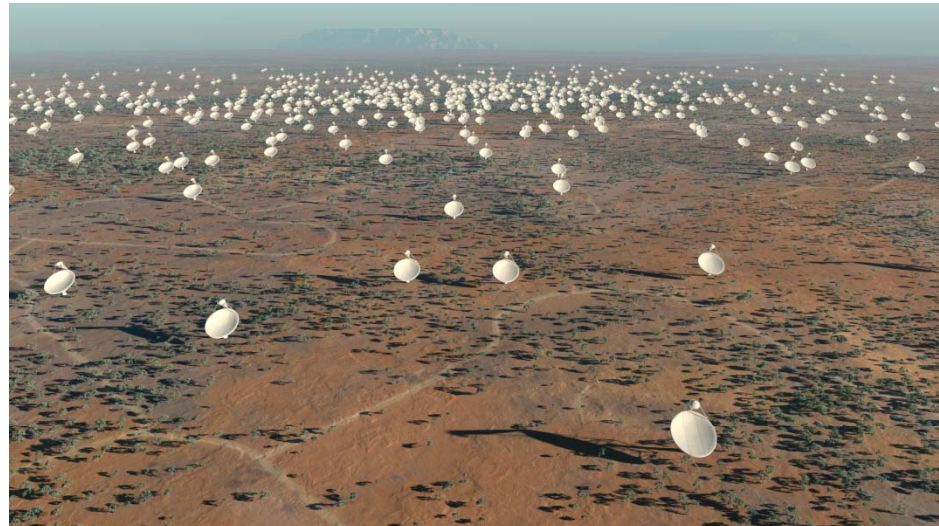


Welcome and overview of the Dish Array Concept Design Review

Dish Array CoDR



- One of a series of CoDRs arranged by the SKA Program Development Office.
- In this case most of the organisation has been done by DRAO: Donna Morgan and Lisa Ladouceur.
- Thanks!



Exploring the Universe with the world's largest radio telescope



- The aim of the CoDR is to confirm that the ‘problem’ has been thoroughly explored and is well understood.
- This is important to be able to move forward to the next phases of the project where technology options will be investigated and selections made.
- The review will also focus on whether the first order solutions that have been identified are appropriate and will ensure that agreement is reached on the option(s) to be carried forward.
- *Eliminate options that are clearly no good.*
- *Make sure that the options that are pursued are going to be investigated properly.*

What is being reviewed?



- Dish options.
- Single pixel feed payload options.
- Phased array feed options.
- Single pixel feed receivers: requirements and risks only.

Review panel



- Trevor Bird – Antengenuity/CSIRO
- Peter Dewdney – SPDO
- Roger Norrod – NRAO (chair)
- Bob Plemel – SED Systems
- Tony Willis – NRC-HIA

Questions to the panel (1)



- Are the requirements complete, and sufficiently defined for this stage of the project?
- At the concept level, is the element/subsystem presented capable of meeting the requirements?
- Have interfaces to other aspects of the system have adequately identified and defined at this stage of the program?
- Are the options proposed to be carried forward credible and are the presented data and information in support of each option credible?

Questions to the panel (2)



- Have all the necessary aspects of the specific element/subsystem been considered and addressed during the review or are there gaps and/or shortcomings?
- Does the risk profile appear reasonably detailed and assessed for this stage of the program?
- Do the stated risk controls and proposed mitigations appear reasonable and executable?
- Is the overall plan (including the identification of the tasks, effort, resources, costs, schedule and risk mitigation needed) to complete the subsequent project phases credible?
- Are there dish and/or feed options that have not been considered, but should be.

Review process



- Documents have been distributed to the panel during the past month.
- Presentations will summarise the document contents.
- Review panel only to raise questions during the sessions (general discussion time during refreshment breaks and lunch).
- Brief response from the panel on Friday afternoon.
- Panel report to follow.

SKA timeline



- 2024 Full science operations with Phase 2
- 2020 Full science operations with Phase 1
- 2018-23 Phase 2 construction
- 2016-19 Phase 1 construction
- 2012-16 Detailed design and pre-construction phase
- 2012 Site selection
- 2011 Establish SKA organisation as a legal entity
- 2008-12 Telescope system design and cost
- 2006 Short listing of suitable sites
- 1991 Concept

End