



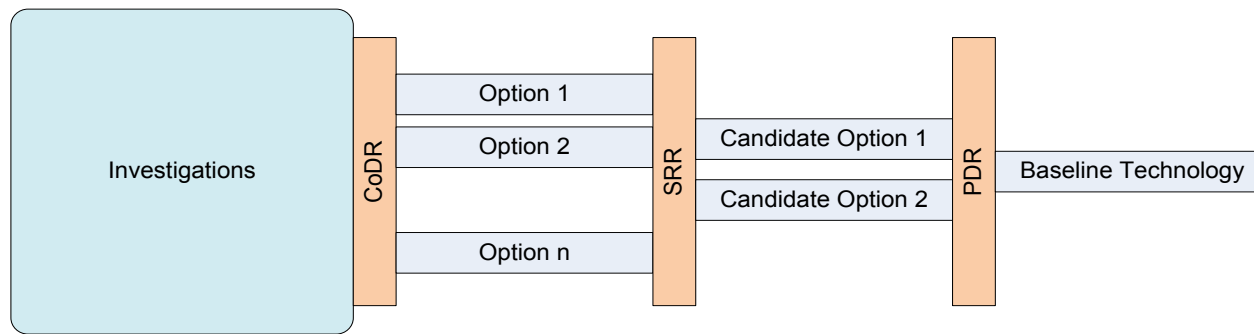
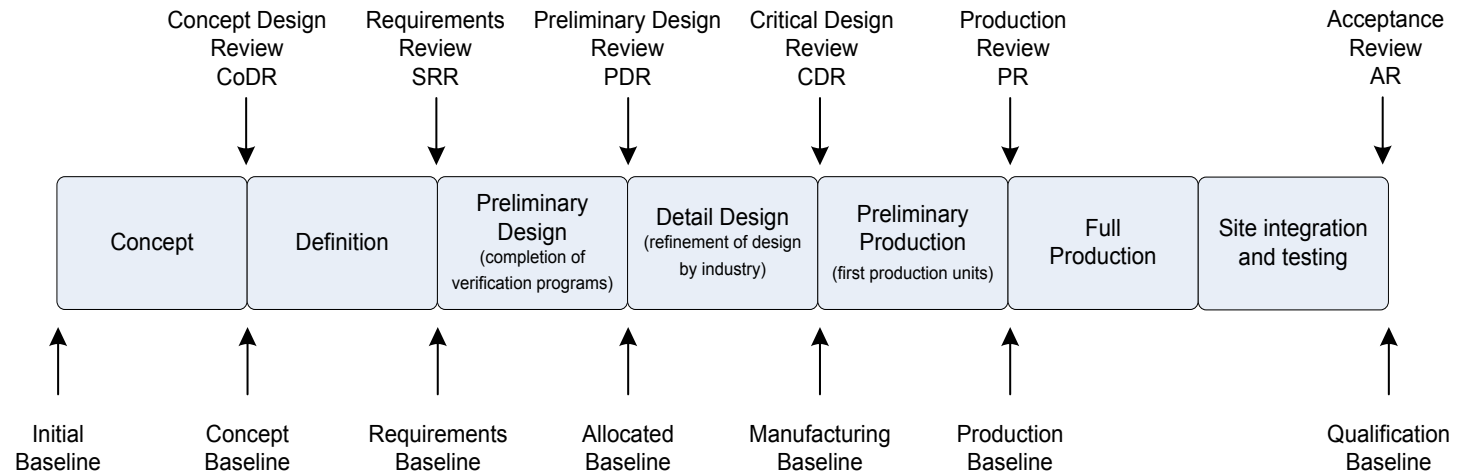
# SKA Software & Computing CoDR

## Scope & Objectives

# Scope & Objectives



- The review will consider whether the first order solutions that have been identified are indeed appropriate and will ensure that agreement is reached on the option(s) to be carried forward
- The aim of the Software & Computing CoDR is to confirm that the ‘problem’ has been thoroughly explored and is well understood
- The desired outcome is a (perhaps conditional) release of the next phase of activity





The Review Panel is requested to consider the following questions:

1. Are the requirements complete, and **sufficiently defined for this stage of the project**?
2. **At the concept level**, is the element/subsystem presented **capable** of meeting the requirements?
3. Has interfaces to other aspects of the system have **adequately identified and defined at this stage of the program**?
4. Are the options proposed to be carried forward **credible** and are the presented data and information in support of each option **credible**?
5. Have all the **necessary** aspects of the specific element/subsystem been considered and addressed during the review or are there gaps and/or shortcomings?
6. Does the risk profile appear **reasonably** detailed and assessed **for this stage of the program**?
7. Do the stated risk controls and proposed mitigations appear **reasonable** and executable?
8. 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**?

# Roles & Responsibilities



- Panel:
  - Review the documentation
  - Raise questions, comments and queries before and during the review related to any part or aspect of the project
  - Support the Chairman in the preparation of the External Review Panel Report
- Panel Chair (additionally):
  - Organise and lead the External Review Panel
  - Prepare and issue the External Review Panel Report, together with a list of the agreed Actions
- Observers:
  - Provide written feedback with regards to any of the aspect (including the documentation) of the review after the review

# SKA Concept Reviews



- System CoDR
  - February 2010
- System deltaCoDR
  - February 2011
- Signal Processing
  - 14<sup>th</sup>-15<sup>th</sup> April 2011, Univ. of Manchester, UK
- Aperture Arrays
  - 19<sup>th</sup>-20<sup>th</sup> April 2011, Schiphol NL
- Signal Transport & Networks
  - 28<sup>th</sup> – 30<sup>th</sup> June 2011, Jodrell Bank, UK
- Dish Array
  - 13<sup>th</sup> – 15<sup>th</sup> July 2011, Penticton, CA
- Monitoring & Control
  - 8<sup>th</sup> – 9<sup>th</sup> November 2011, Pune, IN
- AA Mid deltaCoDR
  - 23<sup>rd</sup> – 24<sup>th</sup> November 2011, Astron, NL
- Software & Computing
  - 15<sup>th</sup> – 16<sup>th</sup> February 2012, Univ. of Manchester UK

# Domain CoDRs Synthesis



- Panels all had positive things to say
- Panels variously issued cautions regarding
  - Requirements definition
  - Comparability of concepts (scope, maturity)
  - System level responsibilities
- > 50 concepts covered
  - Dishes, Aperture Array Elements, Cryo-coolers, Feeds, Receivers, Digitisers, Beamformers, Signal & Data transport, Sync & Timing, non-imaging computing, Correlators, etc
  - Large range of TRLs
- Cost information patchy