



# SKA Signal Processing: Requirements



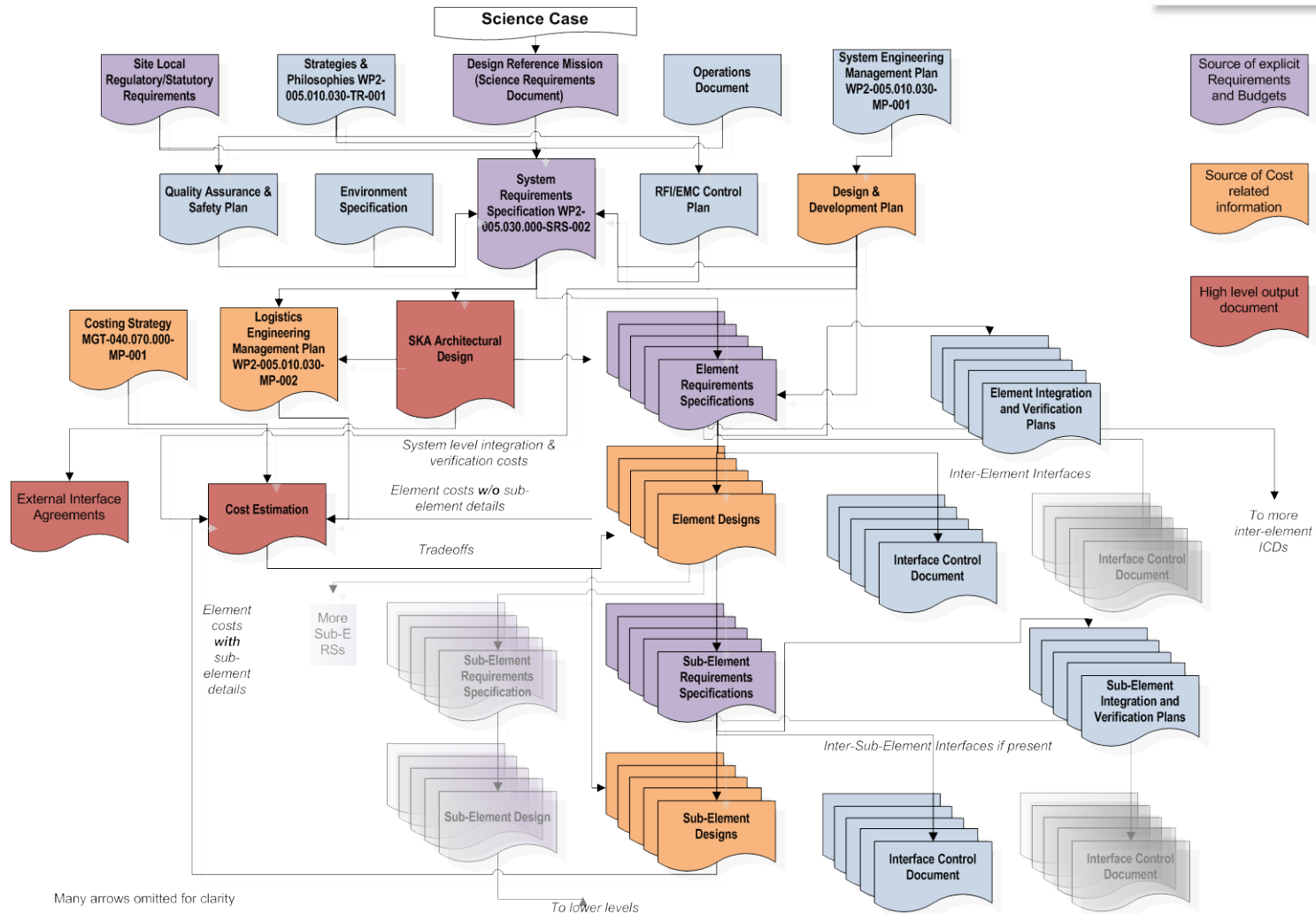
- Requirements Engineering in SKA
- Source Documents
- Signal Processing Requirements status at CoDR
- Next steps

# Requirements Eng. In SKA



- Principal drivers are scientific
  - Phase 1 is defined in terms of science objectives (as a subset of the full Case)
  - Extensibility (i.e. Not ruling out full case capabilities by design) requirements still in work
- Some requirements will require formal Allocation
  - i.e. Budgets allocated to several child requirements
    - Example: timing precision
- The architecture is being conceptually defined and constituent technologies identified and reviewed
  - The results of which lead to integration and interface requirements
- Design and Development requirements help control the cost
  - Examples are use of Standards and Good Practice guidelines
- Environmental and Regulatory/Statutory requirements are site specific

# Source Documents



# SigProc Requirements at CoDR



- Total number of requirements - 347
- Number of Requirements without Parents - 33
- Number of Requirements verified by Analysis – 13/58
- Number of Requirements verified by Test – 43/58
- Number of Comments (open issues) - 18
- Standards Invoked - 1

# Next Steps



- Science Requirements under intensive revision
  - Moderate impact on Signal Processing
- Operations Requirements being captured
  - By various means
- Routemap to SRR
  - Other sources of requirements will be mined
    - Statutory/regulatory requirements
    - Environmental requirements
    - Design and Development requirements
  - Architectural baseline established
  - Interfaces identified and documented
  - Verification Plan drafted