Software Requirements

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General Approach

- Requirements developed in 2003-2004, re-prioritized in 2005
  - Each is assigned a priority…
    - 1: essential; 2: important; 3: desirable
  - …and timescale
    - Z: test antennas (now)
    - A: Prototype Correlator (2007 Q3)
    - B: Limited Production Correlator (2008 Q2)
    - C: Science commissioning/testing (2009 Q1)
    - D: Shared-risk observing (2010 Q2)
    - E: Full science operations (2012 Q2)
- Transition issues embedded in main documents

General Approach

- Requirements documents set both priorities and timescales
  - timescales are tied to hardware (e.g., prototype correlator, wideband receivers)
  - priorities are tied to available resources – e.g., e2e staffing shortfalls require re-visiting what is required when
- Fundamental requirements are set, but timing, relative priorities, and fine details are intended to be reviewed and revisited regularly
- "Large" changes (cf. McKinnon's talk) go before the Change Control Board for approval

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General Approach

- Much direct interaction between responsible parties and programmers (e.g., Subsystem Scientists)
  - (mostly) single-site project
  - much on-going VLA expertise
  - transition issues
  - react to schedule and staffing changes

Scientific Support Systems

- Requirements documents:
  - Timescales and Deliverables (Dec 05)
  - Science Software Requirements (Dec 05)
  - Engineering Software Requirements (Aug 03)
  - Operations Software Requirements (Jun 03)
  - WIDAR/CBE Requirements (2002-2005)
- Recent efforts
  - re-organize by time
  - compare priorities with resources

Scientific Support Systems

- Status of requirements documents
  - in reasonably good shape – not holding back development
  - broad agreement on highest priority items (given staffing prognosis)
  - developing detailed "priority 0" list, given staffing prognosis
    - timescale: late summer/early fall

Post-Processing (CASA)

- Requirements documents:
  - Science Software Requirements (Jul 03)
- Recent efforts
  - reviewing details of priorities and timescales
    - new WIDAR schedule
    - ramping up EVLA involvement in CASA
    - moving CASA from development to user domain

Post-Processing (CASA)

- Status of requirements documents
  - timescales and priorities being reviewed, now that we have a better idea of EVLA capabilities vs. time
    - connecting now to 2012
  - focus on EVLA-specific requirements (vs. ALMA)
    - tricky since EVLA needs some common functionality before ALMA