Future ATNF Operations

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6 November 2007

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By 2012, the Australia Telescope National Facility will be operating four world-class observatories ensuring its continued status as a leading global contributor to the understanding of the universe.

Establish integrated operation of all four ATNF telescopes

1. Restructure into Science Operations & Engineering Operations
2. Establish Science Operations Centre (SOC) at central location (initially Marsfield)
3. Streamline supported modes according to scientific priorities

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Development Projects

- Automation
- Telescope safety
- Scheduling
- SOC facility

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Science Operations
Engineering Operations

National Facility Operations

Science Operations

- Telescopes & Systems
- Scientific services
- Computing infrastructure
- Scientific software & Archives
- Visitor services

Engineering Operations

- Receivers, LO, conversion
- Digital, servo
- Cryogenics
- Mechanical, Drives & Electrical

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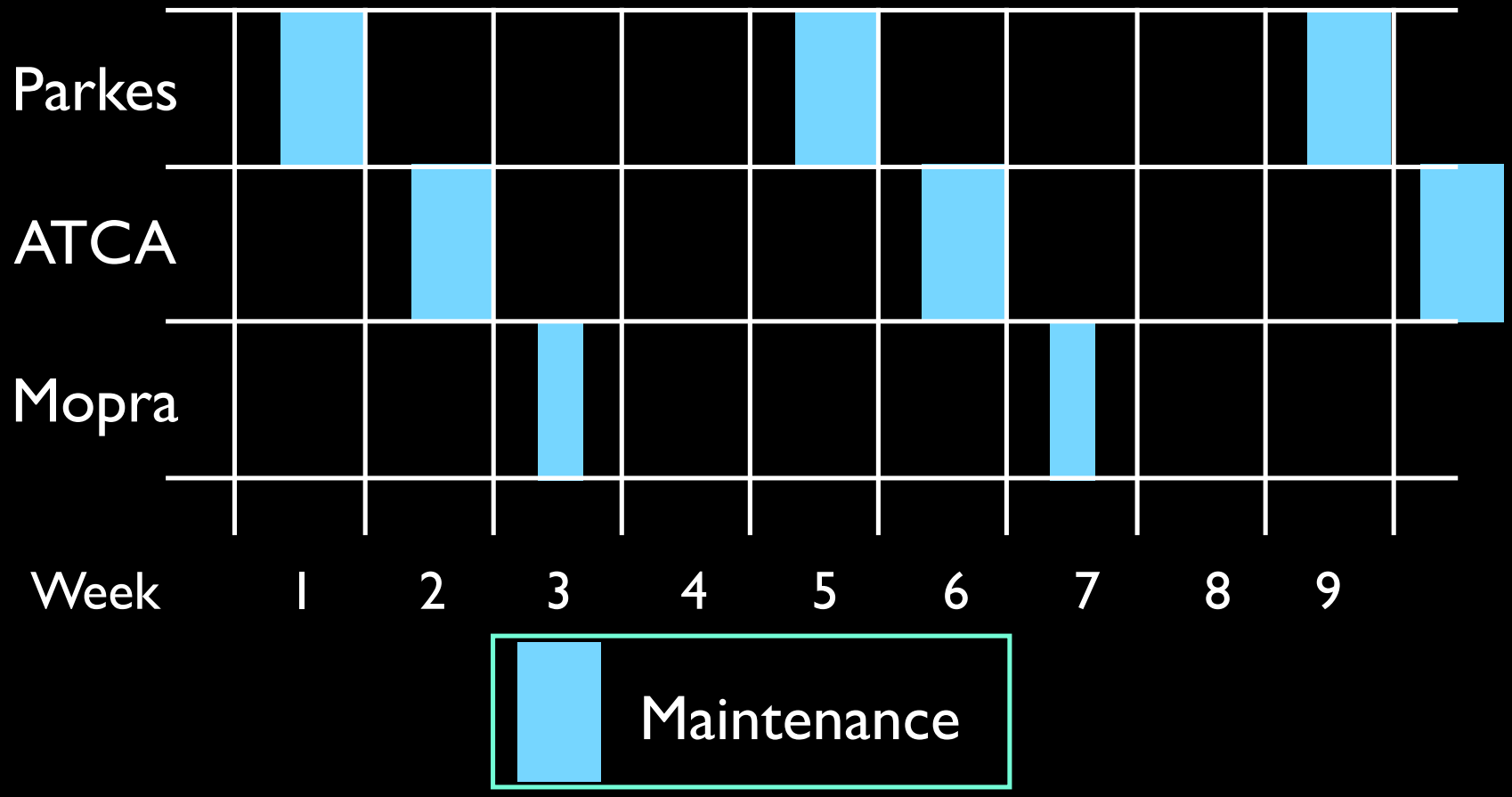
Science Operations Centre

- Initially located at Marsfield
- Retain “User/Operator” model (except ASKAP)
- Fully supported observing available at SOC only
- When necessary, observations will be possible from the observatories.
- Comprehensive computer, visual and auditory monitoring

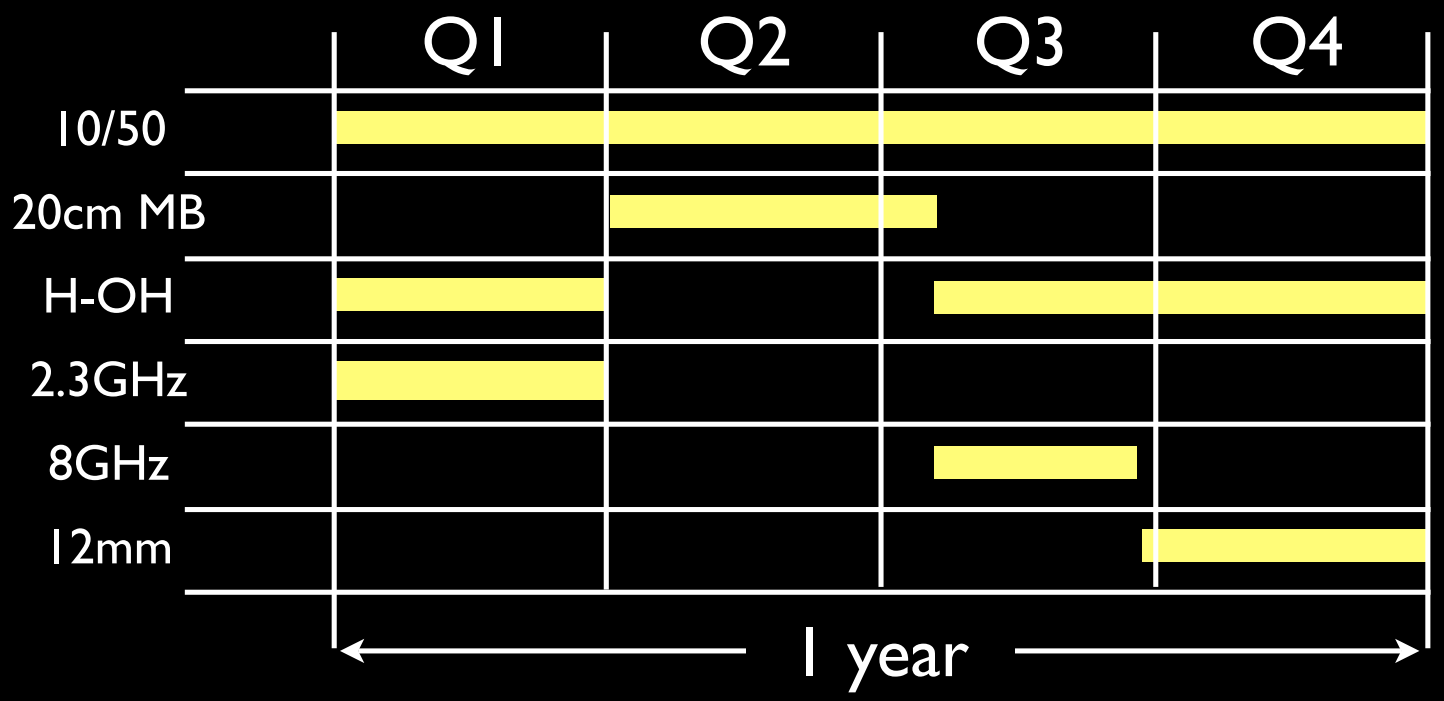
Streamlining operations

- Synchronise schedules
- Reduce the frequency of CA reconfigurations and Parkes receiver changes
- Limit the range of instrumentation
- Limit availability of telescope time

Scheduling scheme



Sample one-year Parkes receiver schedule



Instruments to be decommissioned?

What	Where	When
70 cm receiver	Parkes	2007
Methanol receiver (6/12GHz)	Parkes	2007
1.3cm receiver	Parkes (replaced by new 12mm rx)	2007
WideBand Correlator	Parkes	2007
S2 VLBI recorders	Parkes, ATCA, Mopra	2007
Mark3A VLBI recorder	Parkes	2007
AT Correlator	Parkes, ATCA, Mopra	2008
Analogue Filter Bank	Parkes	2008
Methanol Multibeam	Parkes (send to JB)	2010

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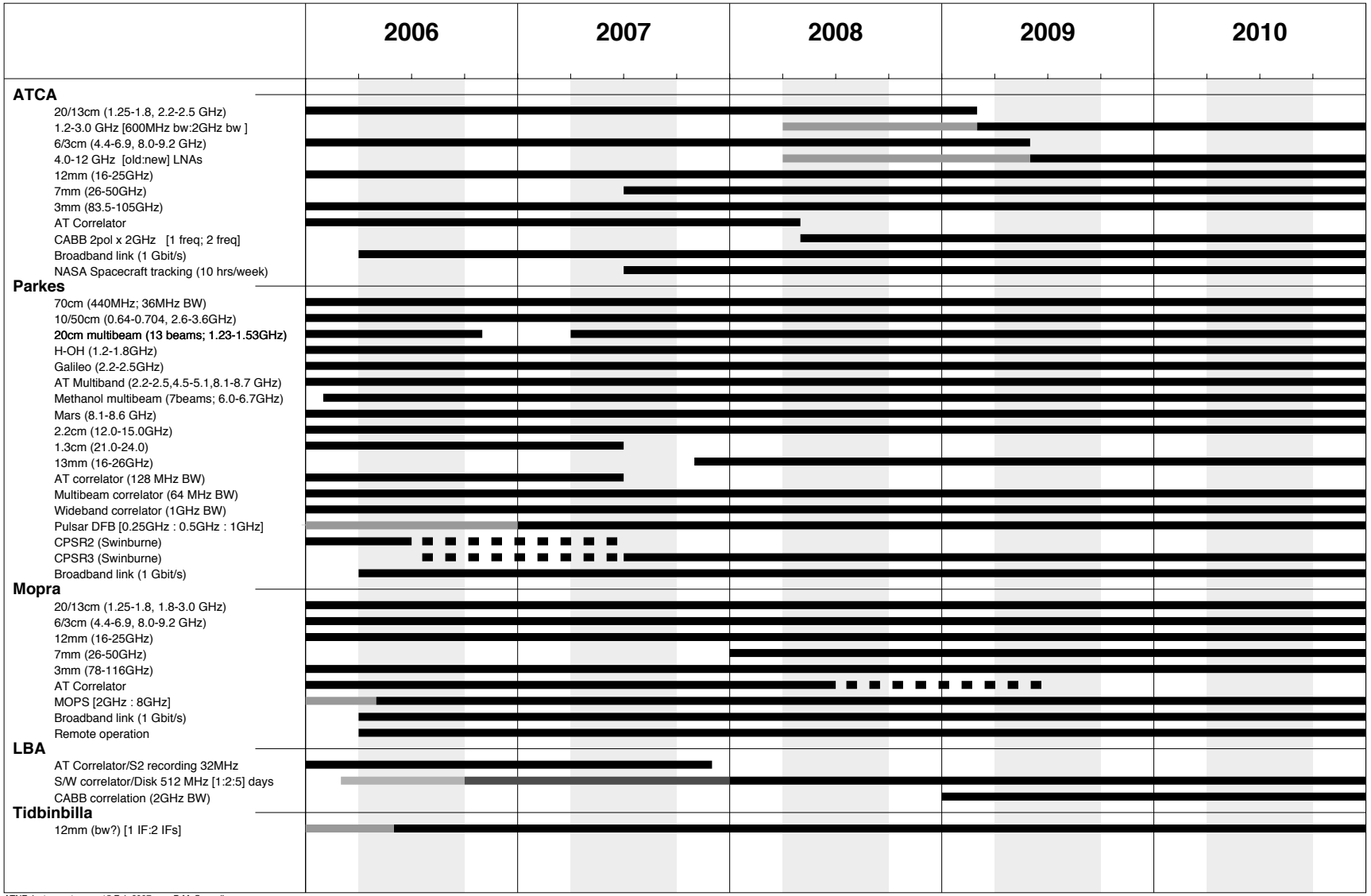
ATNF instrumentation

2006 - 2010



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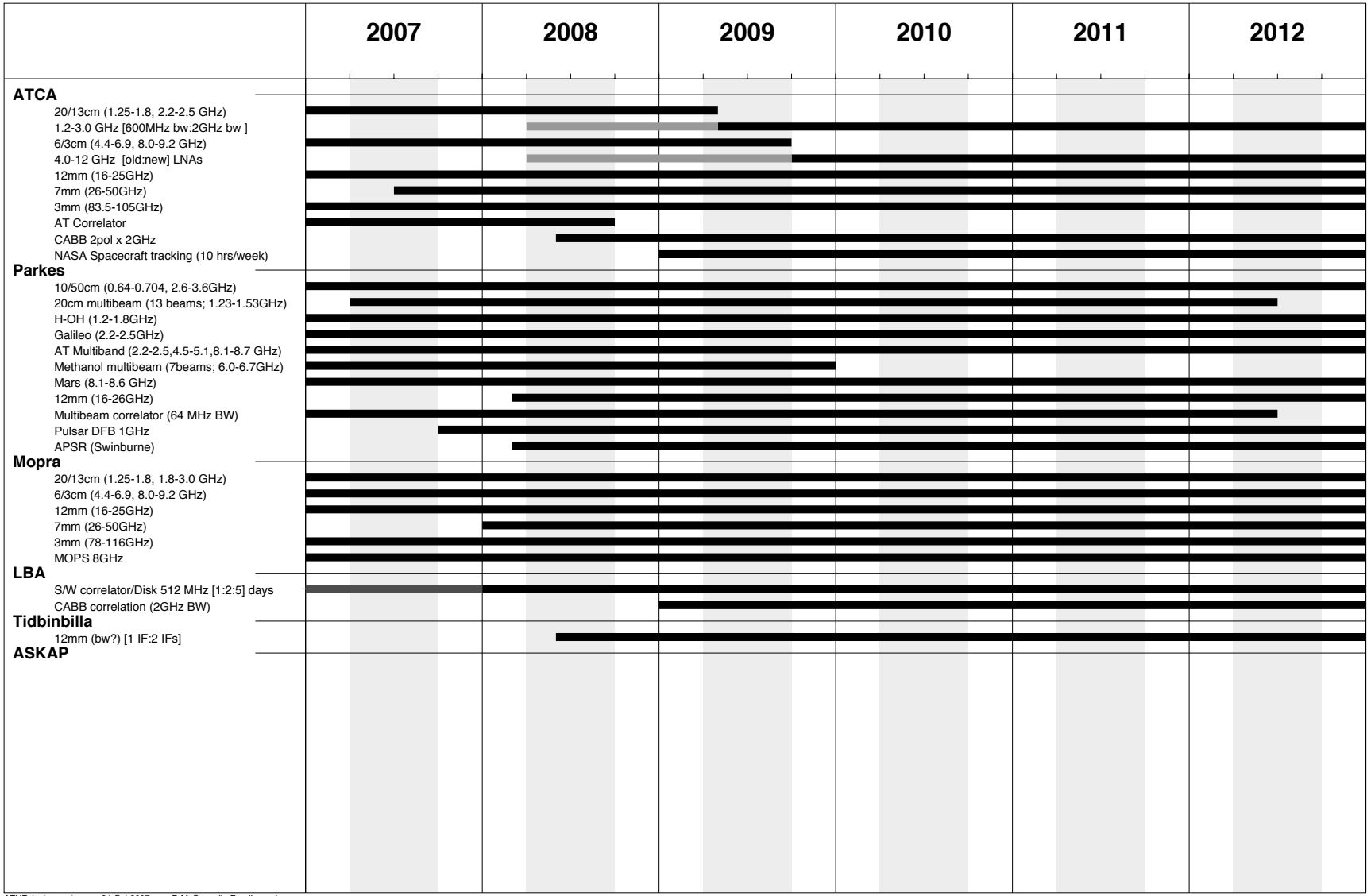
ATNF instrumentation

2007 - 2012



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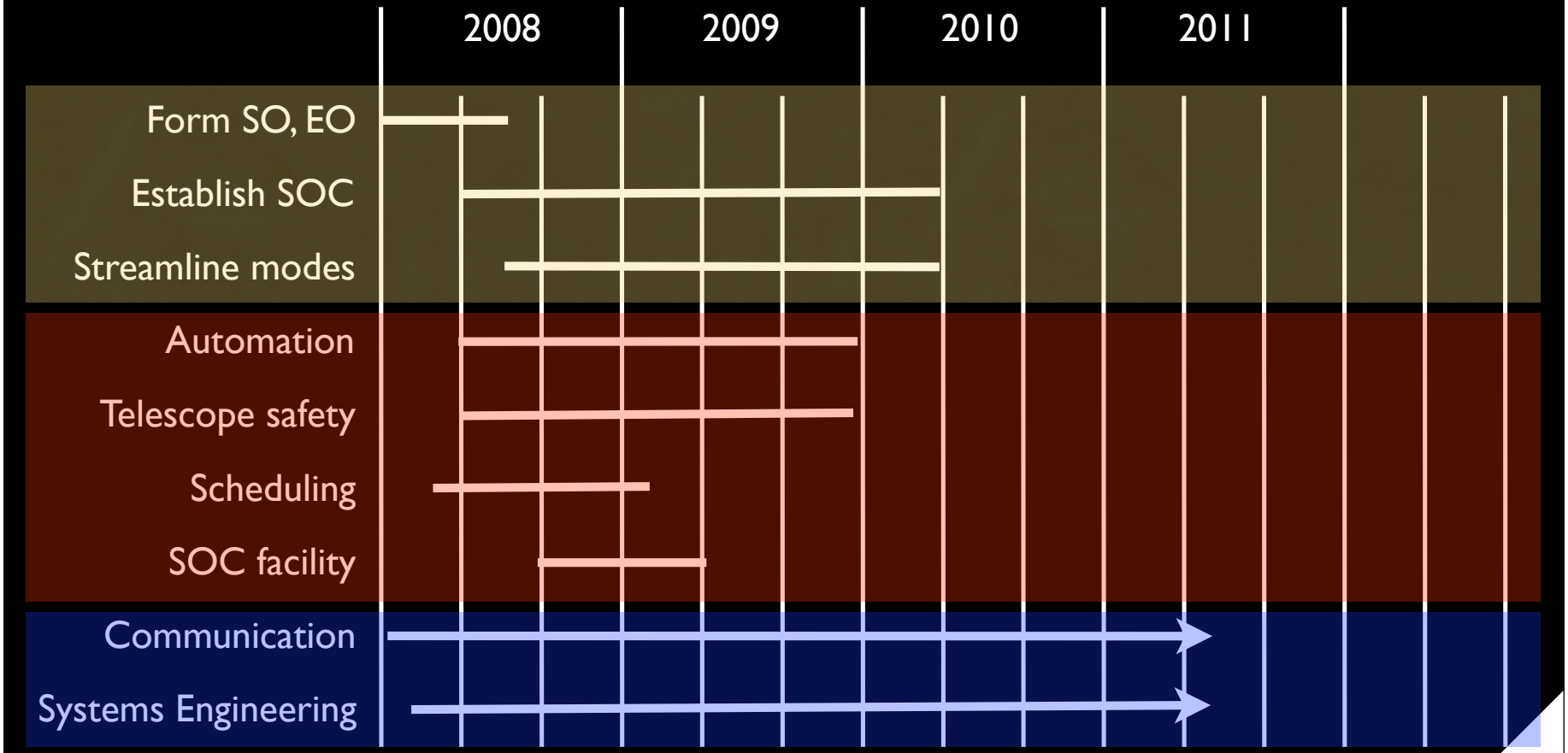
Schedule



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Significant milestones

- 7 Dec 07 Written report to ATSC
- Dec 07 ATSC consultation
- Dec 07 Written report to ATUC
- 31 Mar 08 Projects approved
- 1 Jul 08 New formal structures in place
- Mid 2010 SOC operational
- 2011 ASKAP operational