

ELECTRA and NAOMI Project Milestones.

wht-naomi-66

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Milestone		Due Date 11/07/96	Due Date 15/01/97	Due date 20/06/97	Due date 15/10/97	Achieved Date	Reason for delay
Single actuator DM test	D	25/03/96	25/03/96	08/03/96	08/03/96	08/03/96	
E0 DM 10 segment soak test	D	30/07/96	11/10/96	11/10/96	11/10/96	11/10/96	Effort not available
ELECTRA WFS cam. delivery	D	09/08/96	17/01/97	20/01/97	20/01/97	20/01/97	Contractor late del
EEV chip delivered	D	15/08/96	22/08/96	22/08/96	22/08/96	22/08/96	
tip-tilt mirror tested*	D	14/09/96	31/01/97	14/02/97	14/02/97	14/02/97	
E0 first light	D	15/10/96	20/04/97	18/06/97	18/06/97	18/06/97	Revised definition Late delivery of W
E0 performance assessment	D	28/10/96	01/06/97	24/07/97	24/07/97		“ “
Supervisory software Architecture Des. complete	C	28/10/96	28/04/97	28/04/97	28/04/97	28/04/97	Still preliminary a architecture not fix
o-m-c PDR	E	01/11/96	13/03/97	23/04/97	23/04/97	23/04/97	Staff changes; add on calibration unit definition
WFS PDR	C	13/12/96	19/02/97	19/02/97	19/02/97	19/02/97	Revised WFS desi
system review (1)	A	06/01/96	23/05/97	29/08/97	22/09/97	22/09/97	Delay to E0; chang infrastructure assu Modified to detail report
Sup.S/ware prototype N-A built	C	24/01/97	03/06/97	01/08/97	31/01/98		Waiting for WHT Architecture devel
OMC CDR	E	14/03/97	21/08/97	09/09/97	07/11/97		Delayed PDR; lac electronics effort
NAOMI WFS CCD delivery	C	-	-	13/10/97	12/12/97		
NAOMI WFS CDR	C	11/04/97	11/09/97	14/11/97	17/12/97		Re-design to meet latency with existi
E1 closed loop DM accept	D	23/05/97	01/08/97	??	20/05/98		E0 delay: Durham New timescale aw feedback from E0
E1 lab acceptance	D	13/06/97	22/08/97	??	03/06/98		See above
system review (2)	A	30/06/97	06/11/97	16/02/98 ?	02/04/98		
E1 can be at telescope	D	04/07/97	12/09/97	05/12/97 ?	17/06/98		E0 delay etc. New awaiting feedback
E1 performance evaluation	A	08/08/97	17/10/97	12/01/97 ?	22/07/98		See above
OAPs delivered	E	01/09/97	21/02/98	23/02/98	06/08/98		Latest quote gives delivery, instead o
Stubbed system software tests prototype N-B	C	24/12/97	05/01/98	15/03/98 ??	31/08/98		Provisional pendin architecture defini
NAOMI WFS build complete	C	06/03/98	29/04/98	15/09/98	13/10/98		Funding profile ch
OMC stand-alone accept	E	13/03/98	01/09/98	21/06/99	05/03/99		Reduction in stanc period, as expectec
NAOMI timing prototype N-C complete	C	10/06/98	26/06/98	??	26/03/99		Very provisional, j further architectur
WFS acceptance	C	15/06/98	31/08/98	24/02/99	11/01/99		
NAOMI Full Lab. Integration starts	A	03/07/98	10/09/98	05/04/99	06/04/99		
Full Lab. Integration complete	A	25/09/98	18/01/99	30/07/99	12/08/99		
NAOMI First Light	L	14/11/98	05/03/99	22/08/99	14/09/99		

Notes on 16/10/97 version

The design reviews held so far have proved the ideas for NAOMI are sound.

The following list itemises the main reasons for delays. Some items have significant delays from the last plan, but only those relevant to ELECTRA and software prototyping are crucial, as the ELECTRA development and the top-level software are now the critical path items. There is about one month slack in other areas relative to this.

Overall delays have been caused by the following.

1. Neither of the two cameras most likely to be available for the NAOMI WFS met the full latency specifications for NAOMI. A new option, to use two CCDs and bin pixels orthogonally in each CCD, has been evaluated and adopted to overcome this problem. The new option enables NAOMI to employ the new standard cameras to be adopted by ING while meeting NAOMI specifications.
2. System reviews are further delayed because of (a) the delay to E0; (b) uncertainties in the infrastructure requirements at GHRIL; (c) lack of electronics effort
3. Software planning has been hampered by continued uncertainties in the architecture to which NAOMI must interface. To recover (partially) from this the NAOMI internal architecture is now more tied to that of ELECTRA; the differential work in going from ELECTRA to NAOMI has been minimised, which should allow some flexibility in handling NAOMI development while the WHT architecture is determined and problems with DRAMA are evaluated and solved or by-passed.
4. Delays to E0 have occurred because it took longer to solve some real-time control problems than was anticipated.
5. Delays to E1 are because of a combination of delay in delivery of the final version of the WFS camera, the delay in awarding the Durham NAOMI grant and the delay to E0.
6. Some additional delay is being caused by modifications to the funding profiles (June 1996). The current plan has a funding profile which is slightly delayed from that agreed in June, mostly because of the phasing of payments in the Durham grant but also because of a longer than expected delivery time on the OAPs.