



EUROPEAN SOUTHERN OBSERVATORY

Organisation Européenne pour des Recherches Astronomiques dans l'Hémisphère Austral
Europäische Organisation für astronomische Forschung in der südlichen Hemisphäre

La Silla-Paranal Observatory

Extra Good General Spectroscopy Project Plan (Gantt Chart)

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Project Status Resume

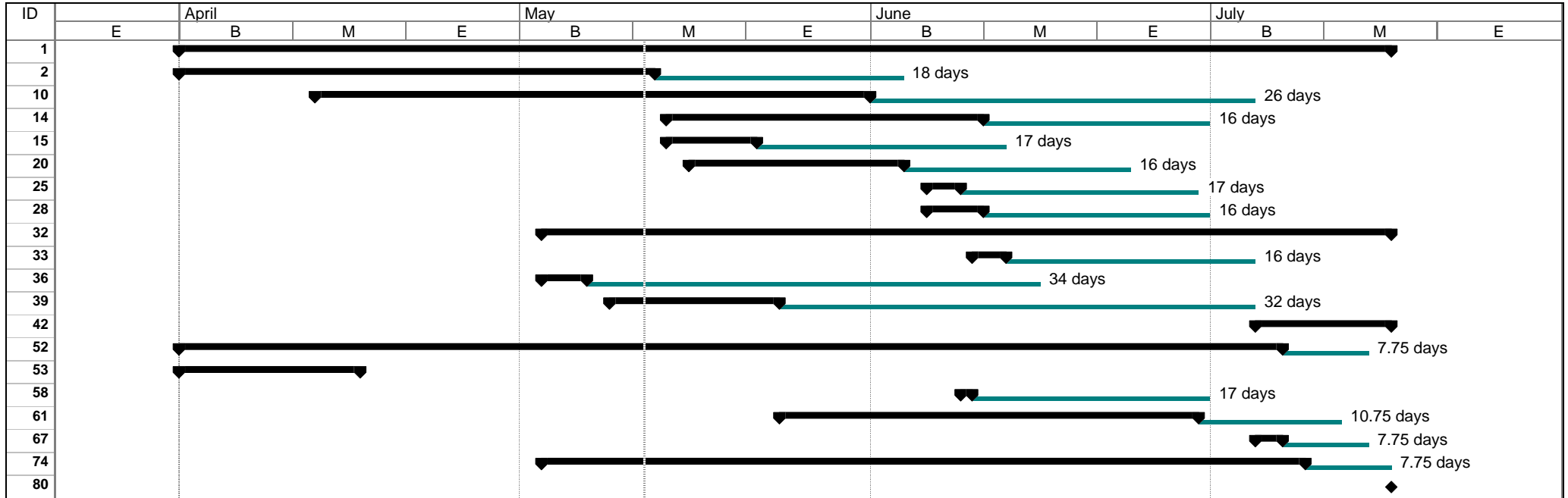
Today (12-May-2005) the project is on schedule and with slack. For details please refer to charts “EGGS project tasks resume and slack” (2 pages).

At the moment we do have one critical path, corresponding to all the tasks after the arrival of Gerardo Avila to La Silla. For details please refer to charts “EGGS project critical path” (2 pages).

For a complete and detailed view of the project please refer to charts “EGGS Project” (4 pages).

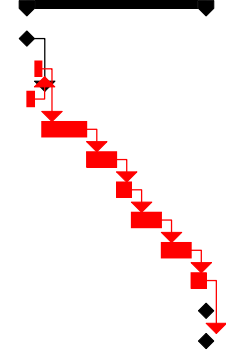
Important to mention that the project schedule is realistic but tight, therefore we will need the full support of the management regarding resources, particularly human resources.

ID	Task Name	Duration	Start	Finish
1	HARPS EGGS Phase II	86 days	Fri Apr 1, '05	Sat Jul 16, '05
2	Design	33 days	Fri Apr 1, '05	Fri May 13, '05
10	Purchasing and External Manufacturing	40 days	Wed Apr 13, '05	Tue May 31, '05
14	Mechanics	22 days	Sat May 14, '05	Fri Jun 10, '05
15	Detailed Drawings	7 days	Sat May 14, '05	Sat May 21, '05
20	Fibre Head Machining	16 days	Mon May 16, '05	Fri Jun 3, '05
25	Tools Machining	3 days	Mon Jun 6, '05	Wed Jun 8, '05
28	Assembling	5 days	Mon Jun 6, '05	Fri Jun 10, '05
32	Optics	63 days	Tue May 3, '05	Sat Jul 16, '05
33	Receive and Accept	3 days	Fri Jun 10, '05	Sun Jun 12, '05
36	Working Places Preparation	4 days	Tue May 3, '05	Fri May 6, '05
39	Tools and Materials from Garching	13 days	Mon May 9, '05	Mon May 23, '05
42	Telescope Intervention	12 days	Tue Jul 5, '05	Sat Jul 16, '05
52	Electronics	76.25 days	Fri Apr 1, '05	Thu Jul 7, '05
53	Prototyping	12 days	Fri Apr 1, '05	Sat Apr 16, '05
58	Fibre head	1 day	Thu Jun 9, '05	Thu Jun 9, '05
61	Production	29 days	Tue May 24, '05	Wed Jun 29, '05
67	Installation	2.25 days	Tue Jul 5, '05	Thu Jul 7, '05
74	Software	55.25 days	Tue May 3, '05	Sat Jul 9, '05
80	HARPS EGGS Phase III	0 days	Sun Jul 17, '05	Sun Jul 17, '05



ID		Task Name	Duration	Start	Finish	Predecessors	Resources
1		HARPS EGGS Phase II	86 days	Fri Apr 1, '05	Sat Jul 16, '05		
32		Optics	63 days	Tue May 3, '05	Sat Jul 16, '05		
42		Telescope Intervention	12 days	Tue Jul 5, '05	Sat Jul 16, '05		
43		G. Avila arrives at La Silla	0 days	Tue Jul 5, '05	Tue Jul 5, '05	34,35,41,13	
44		Mount fibre protection jacket	0.5 days	Tue Jul 5, '05	Tue Jul 5, '05	41,45	GAV,AGI,EAR,JAL,EGA
45		Pass the fibre at the telescope	0.5 days	Tue Jul 5, '05	Tue Jul 5, '05	43	GAV,AGI,EAR,JAL,EGA
46		Fibre splicing	3 days	Wed Jul 6, '05	Fri Jul 8, '05	44	GAV,AGI,EAR
47		Glue the fibres into the ferules	2 days	Sat Jul 9, '05	Sun Jul 10, '05	46	GAV,AGI,EAR
48		Ferule's front face polishing	1 day	Mon Jul 11, '05	Mon Jul 11, '05	47	GAV,AGI,EAR
49		Glue/Adjust rod lenses using Tool #1	2 days	Tue Jul 12, '05	Wed Jul 13, '05	48	GAV,AGI,EAR,JAL
50		Glue/Adjust ferules into the head using Tool #2	2 days	Thu Jul 14, '05	Fri Jul 15, '05	49	GAV,AGI,EAR,JAL
51		Mount/Align the HEF head over the adapter	1 day	Sat Jul 16, '05	Sat Jul 16, '05	50	GAV,AGI,EAR,WEC
80		HARPS EGGS Phase III	0 days	Sun Jul 17, '05	Sun Jul 17, '05		
81		Technical Commissioning	0 days	Sun Jul 17, '05	Sun Jul 17, '05	51,73,79	GAV,AGI,WEC,GLO,JAL,EAR

ID	April				May			June			July		
	E	B	M	E	B	M	E	B	M	E	B	M	E
1	[Horizontal bar spanning from April 1 to July 13]												
32	[Horizontal bar spanning from May 1 to July 13]												
42	[Horizontal bar spanning from July 13 to July 20]												
43	[Horizontal bar spanning from July 13 to July 20]												
44	[Horizontal bar spanning from July 13 to July 20]												
45	[Horizontal bar spanning from July 13 to July 20]												
46	[Horizontal bar spanning from July 13 to July 20]												
47	[Horizontal bar spanning from July 13 to July 20]												
48	[Horizontal bar spanning from July 13 to July 20]												
49	[Horizontal bar spanning from July 13 to July 20]												
50	[Horizontal bar spanning from July 13 to July 20]												
51	[Horizontal bar spanning from July 13 to July 20]												
80	[Horizontal bar spanning from July 13 to July 20]												
81	[Horizontal bar spanning from July 13 to July 20]												



ID		WBS	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1		1	HARPS EGGS Phase II	86 days	Fri Apr 1, '05	Sat Jul 16, '05		
2		1.1	Design	33 days	Fri Apr 1, '05	Fri May 13, '05		
3	✓	1.1.1	Head block prototype design & construction	3 days	Fri Apr 1, '05	Tue Apr 5, '05		JAL,GIH,WEC,JFI
4	📅	1.1.2	Opto-Mechanical design document delivery	0 days	Mon May 2, '05	Mon May 2, '05	3	
5	✓	1.1.3	Software design document delivery	0 days	Fri Apr 1, '05	Fri Apr 1, '05		
6	✓	1.1.4	Electronics design document delivery	0 days	Fri Apr 1, '05	Fri Apr 1, '05		
7	📅	1.1.5	Call for FDR	0 days	Tue May 3, '05	Tue May 3, '05	5,6,4	
8	📅	1.1.6	Receive and answer comment/questions (RIX)	6 days	Fri May 6, '05	Wed May 11, '05	7	GAV,AGI,WEC,JAL,GLO
9	📅	1.1.7	FDR	0 days	Fri May 13, '05	Fri May 13, '05	8	
10		1.2	Purchasing and External Manufacturing	40 days	Wed Apr 13, '05	Tue May 31, '05		
11	📅	1.2.1	Nickel plates	28 days	Wed Apr 13, '05	Mon May 16, '05	3	WEC
12	📅	1.2.2	Shutter blades	28 days	Wed Apr 13, '05	Mon May 16, '05	3	WEC
13	📅	1.2.3	Order four spare rod lenses	40 days	Wed Apr 13, '05	Tue May 31, '05	3	GAV
14		1.3	Mechanics	22 days	Sat May 14, '05	Fri Jun 10, '05		
15		1.3.1	Detailed Drawings	7 days	Sat May 14, '05	Sat May 21, '05		
16	📅	1.3.1.1	Fibre head drawings #1 to #5	1 day	Sat May 14, '05	Sat May 14, '05	9	WEC,JPI
17		1.3.1.2	Fibre head drawings #6 to #25	4 days	Mon May 16, '05	Thu May 19, '05	16	WEC,JPI
18		1.3.1.3	Tool #1 drawings #1 to #5	1 day	Fri May 20, '05	Fri May 20, '05	17	WEC,JPI
19	📅	1.3.1.4	Tool #2 drawings #1 to #4	1 day	Sat May 21, '05	Sat May 21, '05	18	WEC,JPI
20		1.3.2	Fibre Head Machining	16 days	Mon May 16, '05	Fri Jun 3, '05		
21		1.3.2.1	Main block machining Part 1	2 days	Mon May 16, '05	Tue May 17, '05	16	JFI
22		1.3.2.2	Mount Nickel plate and close for machining	1 day	Wed May 18, '05	Wed May 18, '05	21,11	JAL
23		1.3.2.3	Main block machining Part 2	2 days	Thu May 19, '05	Fri May 20, '05	22	JFI
24	📅	1.3.2.4	Head machining	10 days	Mon May 23, '05	Fri Jun 3, '05	23,17	JFI
25		1.3.3	Tools Machining	3 days	Mon Jun 6, '05	Wed Jun 8, '05		
26		1.3.3.1	Tool #1 machining	2 days	Mon Jun 6, '05	Tue Jun 7, '05	24,18	JFI
27		1.3.3.2	Tool #2 machining	1 day	Wed Jun 8, '05	Wed Jun 8, '05	26,19	JFI
28		1.3.4	Assembling	5 days	Mon Jun 6, '05	Fri Jun 10, '05		
29		1.3.4.1	Fibre head assembling	3 days	Mon Jun 6, '05	Wed Jun 8, '05	24,12	WEC,AGI,JAL
30		1.3.4.2	Tool #1 assembling	1 day	Thu Jun 9, '05	Thu Jun 9, '05	29,26	WEC,AGI,JAL
31		1.3.4.3	Tool #2 assembling	1 day	Fri Jun 10, '05	Fri Jun 10, '05	30,27	WEC,AGI,JAL
32		1.4	Optics	63 days	Tue May 3, '05	Sat Jul 16, '05		
33		1.4.1	Receive and Accept	3 days	Fri Jun 10, '05	Sun Jun 12, '05		
34	📅	1.4.1.1	Fibre head unit	2 days	Fri Jun 10, '05	Sat Jun 11, '05	60	AGI,EAR,JAL,GLO
35	📅	1.4.1.2	Tool #1 and Tool #2	2 days	Sat Jun 11, '05	Sun Jun 12, '05	31	AGI,EAR,GLO,JAL
36		1.4.2	Working Places Preparation	4 days	Tue May 3, '05	Fri May 6, '05		
37		1.4.2.1	HARPS Room (work bench, instruments, tools)	2 days	Tue May 3, '05	Wed May 4, '05	7	EAR,AGI
38		1.4.2.2	Observing Floor(work bench, instruments, tools)	2 days	Thu May 5, '05	Fri May 6, '05	37	EAR,AGI
39		1.4.3	Tools and Materials from Garching	13 days	Mon May 9, '05	Mon May 23, '05		
40	📅	1.4.3.1	Talk/coordinate with G.Avila	1 day	Mon May 9, '05	Mon May 9, '05	38	AGI,EAR,WEC,JAL
41		1.4.3.2	Send them to La Silla	12 days	Tue May 10, '05	Mon May 23, '05	40	AGI,EAR,WEC,JAL
42		1.4.4	Telescope Intervention	12 days	Tue Jul 5, '05	Sat Jul 16, '05		

ID		WBS	Task Name	Duration	Start	Finish	Predecessors	Resource Names
43		1.4.4.1	G. Avila arrives at La Silla	0 days	Tue Jul 5, '05	Tue Jul 5, '05	34,35,41,13	
44		1.4.4.2	Mount fibre protection jacket	0.5 days	Tue Jul 5, '05	Tue Jul 5, '05	41,45	GAV,AGI,EAR,JAL,EGA
45		1.4.4.3	Pass the fibre at the telescope	0.5 days	Tue Jul 5, '05	Tue Jul 5, '05	43	GAV,AGI,EAR,JAL,EGA
46		1.4.4.4	Fibre splicing	3 days	Wed Jul 6, '05	Fri Jul 8, '05	44	GAV,AGI,EAR
47		1.4.4.5	Glue the fibres into the ferules	2 days	Sat Jul 9, '05	Sun Jul 10, '05	46	GAV,AGI,EAR
48		1.4.4.6	Ferule's front face polishing	1 day	Mon Jul 11, '05	Mon Jul 11, '05	47	GAV,AGI,EAR
49		1.4.4.7	Glue/Adjust rod lenses using Tool #1	2 days	Tue Jul 12, '05	Wed Jul 13, '05	48	GAV,AGI,EAR,JAL
50		1.4.4.8	Glue/Adjust ferules into the head using Tool #2	2 days	Thu Jul 14, '05	Fri Jul 15, '05	49	GAV,AGI,EAR,JAL
51		1.4.4.9	Mount/Align the HEF head over the adapter	1 day	Sat Jul 16, '05	Sat Jul 16, '05	50	GAV,AGI,EAR,WEC
52		1.5	Electronics	76.25 days	Fri Apr 1, '05	Thu Jul 7, '05		
53		1.5.1	Prototyping	12 days	Fri Apr 1, '05	Sat Apr 16, '05		
54		1.5.1.1	Assemble prototype	5 days	Fri Apr 1, '05	Thu Apr 7, '05	6	EGA
55		1.5.1.2	Manufacture cables	3 days	Fri Apr 8, '05	Tue Apr 12, '05	54	EGA
56		1.5.1.3	Test & Debbug prototype	2 days	Wed Apr 13, '05	Thu Apr 14, '05	55	JAL
57		1.5.1.4	Full testing with VME & PULPO	2 days	Fri Apr 15, '05	Sat Apr 16, '05	56	JAL
58		1.5.2	Fibre head	1 day	Thu Jun 9, '05	Thu Jun 9, '05		
59		1.5.2.1	Wiring	0.5 days	Thu Jun 9, '05	Thu Jun 9, '05	29	EGA,JAL
60		1.5.2.2	Testing	0.5 days	Thu Jun 9, '05	Thu Jun 9, '05	59	JAL
61		1.5.3	Production	29 days	Tue May 24, '05	Wed Jun 29, '05		
62		1.5.3.1	Design PCB's	5 days	Tue May 24, '05	Mon May 30, '05	7,57	JAL
63		1.5.3.2	Prepare boxes (4 units)	8 days	Tue May 24, '05	Thu Jun 2, '05	7	EGA,JAL
64		1.5.3.3	Send for PCB manufacturing	12 days	Tue May 31, '05	Mon Jun 13, '05	62	JAL
65		1.5.3.4	Assemble two systems (1 spare)	5 days	Tue Jun 21, '05	Mon Jun 27, '05	64,63	EGA,JAL
66		1.5.3.5	Test the final systems	2 days	Tue Jun 28, '05	Wed Jun 29, '05	65	JAL
67		1.5.4	Installation	2.25 days	Tue Jul 5, '05	Thu Jul 7, '05		
68		1.5.4.1	Pass "cable5" (Control to Driver) telescope	0.5 days	Tue Jul 5, '05	Tue Jul 5, '05	43,66	EGA,JAL
69		1.5.4.2	Pass "cable4" (Control to VME) HARPS room	0.25 days	Tue Jul 5, '05	Tue Jul 5, '05	68	EGA,JAL
70		1.5.4.3	Install HEFS Control Box at vaccum besel rack	0.25 days	Tue Jul 5, '05	Tue Jul 5, '05	69	EGA,JAL
71		1.5.4.4	Install Driver Box over adapter's external wall	0.5 days	Wed Jul 6, '05	Wed Jul 6, '05	70	EGA,JAL
72		1.5.4.5	Connect Cables 3, 4, 5 and 6.	0.25 days	Wed Jul 6, '05	Wed Jul 6, '05	71	EGA,JAL
73		1.5.4.6	Test the installed system	0.5 days	Wed Jul 6, '05	Thu Jul 7, '05	72	JAL
74		1.6	Software	55.25 days	Tue May 3, '05	Sat Jul 9, '05		
75		1.6.1	LCU software	8 days	Tue May 3, '05	Tue May 10, '05	7,5	TSH
76		1.6.2	WS software	8 days	Wed May 11, '05	Thu May 19, '05	75	TSH
77		1.6.3	Design verification test	8 days	Fri May 20, '05	Mon May 30, '05	76,57	TSH
78		1.6.4	Full laboratory verification/testing	2 days	Tue May 31, '05	Wed Jun 1, '05	77	TSH
79		1.6.5	Full telescope verification/testing	2 days	Thu Jul 7, '05	Sat Jul 9, '05	78,73	TSH
80		2	HARPS EGGS Phase III	111 days	Sun Jul 17, '05	Wed Dec 14, '05		
81		2.1	Technical Commissioning	4 days	Sun Jul 17, '05	Wed Jul 20, '05	51,73,79	GAV,AGI,WEC,GLO,JAL,EAR
82		2.2	Pipeline, Trigger, STS development	103 days	Thu Jul 21, '05	Sat Dec 10, '05	81	GENEVA
83		2.3	Science Commissioning	4 days	Sun Dec 11, '05	Wed Dec 14, '05	82	GLO,GENEVA

