ID	Task Name	Duration	Start	Finish	Predecessors	Constraint	WB$	Resource Names	Names
1	Online System	126 w	Fri 9/19/97	Tue 4/11/00		As Soon As Possible		PhysF150	Fuess
2	arbitrary placeholder to set critical path max	64 w	Fri 1/1/99	Tue 4/11/00		Start No Earlier Than			
3									
4	1.5.1 Online Equipment	124 w	Fri 9/19/97	Tue 3/28/00		As Soon As Possible		CProfF150	SysMgr
5	Purchases	120 w	Fri 9/19/97	Wed 3/1/00		As Soon As Possible			
6	FY97 Purchases	0 w	Fri 9/19/97	Fri 9/19/97		As Soon As Possible			
16	FY98 Purchases	0 w	Wed 7/29/98	Wed 7/29/98		As Soon As Possible			
26	FY99 Purchases	32.6 w	Fri 1/15/99	Wed 9/1/99		As Soon As Possible			
36	Future Purchases	0 w	Wed 3/1/00	Wed 3/1/00		As Soon As Possible			
46	Installations	62 w	Fri 1/1/99	Tue 3/28/00		As Soon As Possible			
53	Operations	60 w	Fri 1/1/99	Tue 3/14/00		As Soon As Possible			
58									
59	1.5.2 Level 1 and 2 Trigger Interface	0 w	Wed 4/1/98	Wed 4/1/98		As Soon As Possible			
60	M3 - Online Level 1 Readout Available	0 w	Wed 4/1/98	Wed 4/1/98		Start No Earlier Than			
61									
62	1.5.3 Level 3 Trigger Interface	0 w	Wed 1/13/99	Wed 1/13/99		As Soon As Possible			
63	M3 - Online Level 3 Readout Available	0 w	Wed 1/13/99	Wed 1/13/99		Start No Earlier Than			
64									
65	1.5.4 Configuration and Run Control	98.8 w	Tue 3/31/98	Tue 3/28/00		As Soon As Possible			
66	Client / Server Prototype Development	2 w	Fri 1/1/99	Thu 1/14/99		Start No Earlier Than		CProfF150[75%]	Genser[75%]
67	COOR / TAKER Prototype Development	4 w	Fri 1/15/99	Wed 2/10/99	66	As Soon As Possible		PhysU150[50%]	Snyder[50%]
68	Online Run Control System Operational	0 w	Wed 2/10/99	Wed 2/10/99	67	As Soon As Possible			
69	Download Manager Prototype Development	4 w	Wed 4/7/99	Tue 5/4/99	109	As Soon As Possible		PhysF150[25%]	Jonckheere[25%]
70	COOR / TAKER - Trigger Integration	6 w	Thu 2/11/99	Tue 3/23/99		As Soon As Possible		PhysU150[50%]	Snyder[50%]
71	Trigger Control Computer (TCC) Communication	2 w	Thu 2/11/99	Wed 2/24/99	67	As Soon As Possible			
72	COOR setup of Trigger Framework	4 w	Thu 2/25/99	Tue 3/23/99	60,71	As Soon As Possible			
73	Level 3 Communication	4 w	Thu 2/11/99	Tue 3/9/99	67	As Soon As Possible			
74	COOR setup of Level 3	2 w	Wed 3/10/99	Tue 3/23/99	63,73	As Soon As Possible			
75	Configuration and Run Control Commissioned	0 w	Tue 5/4/99	Tue 5/4/99	69,70	As Soon As Possible			
76	Continued Development and Maintenance	60 w	Fri 1/15/99	Tue 3/28/00		As Soon As Possible			
77	Client / Server Package Maintenance	60 w	Fri 1/15/99	Tue 3/28/00	66	As Soon As Possible		CProfF150[25%]	Genser[25%]
78	COOR / TAKER Maintenance	44 w	Wed 5/5/99	Tue 3/28/00	75	As Soon As Possible		PhysU150[25%]	Snyder[25%]
79	Download Manager Maintenance	44 w	Wed 5/5/99	Tue 3/28/00	69	As Soon As Possible		PhysF150[10%]	Jonckheere[10%]
80	M3 - Online Run Control System Operational	0 w	Tue 3/31/98	Tue 3/31/98		Start No Earlier Than			
81									
82	1.5.5 Data Logging	79.8 w	Thu 7/23/98	Tue 3/7/00		As Soon As Possible			
83	Collector / Router Prototype Development	4 w	Fri 1/15/99	Wed 2/10/99	66	As Soon As Possible		CProfF150[25%]	unknown[25%]
84	Data Logger Prototype Development	4 w	Fri 1/15/99	Wed 2/10/99	66	As Soon As Possible		CProfF150[25%]	Genser[25%]
85	Online Data Logger Operational	0 w	Wed 2/10/99	Wed 2/10/99	84	As Soon As Possible			
86	RIP Prototype Development	13 w	Thu 2/11/99	Tue 5/11/99	66,85	As Soon As Possible		CProfF150[50%]	Litmaath[50%]
87	Online Data Logger Commissioned	0 w	Tue 5/11/99	Tue 5/11/99	83,84,86	As Soon As Possible			
88	Continued Development and Maintenance	53 w	Thu 2/11/99	Tue 3/7/00		As Soon As Possible			
89	Collector / Router continued development	0.2 w	Thu 2/11/99	Thu 2/11/99	83	As Soon As Possible		CProfF150[25%]	unknown[25%]
90	Data Logger continued development	52 w	Thu 2/11/99	Tue 2/29/00	84	As Soon As Possible		CProfF150[25%]	Litmaath[25%]
91	RIP Connection continued development	40 w	Wed 5/12/99	Tue 3/7/00	86	As Soon As Possible		CProfF150[25%]	Litmaath[25%]
92	M3 - Online Data Logger Operational	0 w	Thu 7/23/98	Thu 7/23/98		Start No Earlier Than			
93									
94	1.5.6 Control and Monitoring	75.2 w	Wed 9/23/98	Tue 4/4/00		As Soon As Possible		PhysF150,CProfI	Bartlett,Savage[25%],Gilmartin[25%
95	Hardware Database	12 w	Fri 1/1/99	Tue 3/23/99		As Soon As Possible		CProfF150[125%	Krzywdzinski[50%],Simmons[75%]
96	Prototype EPICS DB populated	0 w	Fri 1/1/99	Fri 1/1/99		Start No Earlier Than			
97	EPICS DB populated with ICD info	2 w	Fri 1/1/99	Thu 1/14/99	96	As Soon As Possible			
98	ORACLE Installation	6 w	Fri 1/1/99	Wed 2/10/99		Start No Earlier Than			
99	HDB populated with ICD info	1 w	Thu 2/11/99	Wed 2/17/99	97,98	As Soon As Possible			
100	EPICS DB derived from HDB	1 w	Thu 2/18/99	Wed 2/24/99	99	As Soon As Possible			
101	HDB populated with Muon PDT info	2 w	Thu 2/25/99	Tue 3/9/99	100	As Soon As Possible			
102	HDB populated with Calorimeter info	2 w	Wed 3/10/99	Tue 3/23/99	101	As Soon As Possible			
103	HDB Commissioned	0 w	Tue 3/23/99	Tue 3/23/99	95	As Soon As Possible			
104	VME Downloading	14 w	Fri 1/1/99	Tue 4/6/99		As Soon As Possible			
105	Prototype of VME memory control	0 w	Fri 1/1/99	Fri 1/1/99		Start No Earlier Than			
106	ICD ADC download	2 w	Fri 1/15/99	Thu 1/28/99	97,105	As Soon As Possible			
107	Muon PDT download	2 w	Wed 3/10/99	Tue 3/23/99	101,106	As Soon As Possible			
108	Calorimeter ADC download	2 w	Wed 3/24/99	Tue 4/6/99	102,107	As Soon As Possible			
109	Download Commissioned	0 w	Tue 4/6/99	Tue 4/6/99	103,104	As Soon As Possible			

ID	Task Name	Duration	Start	Finish	Predecessors	Constraint	WB$	Resource Names	Names
110	Rack Monitors	13 w	Fri 1/1/99	Tue 3/30/99		As Soon As Possible		PhysU150[50%]	Gilmartin[50%]
111	Prototype GUI Control of Rack Monitor	0 w	Fri 1/1/99	Fri 1/1/99		Start No Earlier Than			
112	GUI Control of ICD related Rack Monitors	4 w	Fri 1/15/99	Wed 2/10/99	97,111	As Soon As Possible			
113	GUI Control of Muon PDT related Rack Monitors	1 w	Wed 3/10/99	Tue 3/16/99	101,112	As Soon As Possible			
114	GUI Control of Calorimeter related Rack Monitors	1 w	Wed 3/24/99	Tue 3/30/99	102,113	As Soon As Possible			
115	Rack Monitor Commissioned	0 w	Tue 3/30/99	Tue 3/30/99	103,114	As Soon As Possible			
116	Low Voltage Power Supply Control	13 w	Fri 1/1/99	Tue 3/30/99		As Soon As Possible		PhysU150[50%],(	Gilmartin[50%],Krzywdzinski[50%]
117	Prototype LV PS GUI Control	0 w	Fri 1/1/99	Fri 1/1/99		Start No Earlier Than			
118	GUI Control of ICD BLS and ADC LV PS	4 w	Fri 1/15/99	Wed 2/10/99	97,117	As Soon As Possible			
119	GUI Control of Muon PDT LV PS	1 w	Wed 3/10/99	Tue 3/16/99	101,118	As Soon As Possible			
120	GUI Control of Calorimeter LV PS	1 w	Wed 3/24/99	Tue 3/30/99	102,119	As Soon As Possible			
121	LV PS Control Commissioned	0 w	Tue 3/30/99	Tue 3/30/99	103,116	As Soon As Possible			
122	High Voltage Power Supply Control	13 w	Fri 1/1/99	Tue 3/30/99		As Soon As Possible			
123	Prototype HV PS Control development	4 w	Fri 1/1/99	Thu 1/28/99		Start No Earlier Than			
124	Prototype HV PS GUI Control	0 w	Thu 1/28/99	Thu 1/28/99	123	As Soon As Possible			
125	GUI Control of ICD HV PS	1 w	Fri 1/29/99	Wed 2/3/99	97,124	As Soon As Possible			
126	GUI Control of Muon PDT HV PS	2 w	Wed 3/10/99	Tue 3/23/99	101,125	As Soon As Possible			
127	GUI Control of Calorimeter HV PS	1 w	Wed 3/24/99	Tue 3/30/99	102,126	As Soon As Possible			
128	HV PS Control Commissioned	0 w	Tue 3/30/99	Tue 3/30/99	103,122	As Soon As Possible			
129	Clock Control	14 w	Fri 1/1/99	Tue 4/6/99		As Soon As Possible		CProfF150	Paterno
130	Protype Clock Control development	2 w	Fri 1/1/99	Thu 1/14/99		Start No Earlier Than			
131	Prototype Clock Control	0 w	Thu 1/14/99	Thu 1/14/99	130	As Soon As Possible			
132	ICD Specific Clock Control	1 w	Fri 1/15/99	Thu 1/21/99	97,131	As Soon As Possible			
133	Muon PDT Specific Clock Control	2 w	Wed 3/10/99	Tue 3/23/99	101,132	As Soon As Possible			
134	Calorimeter Specific Clock Control	2 w	Wed 3/24/99	Tue 4/6/99	102,133	As Soon As Possible			
135	Clock Control Commissioned	0 w	Tue 4/6/99	Tue 4/6/99	103,129	As Soon As Possible			
136	Alarm System	26 w	Fri 1/1/99	Wed 6/30/99		As Soon As Possible		CProfF150[75%]	Savage[75%]
137	Alarm Server	14 w	Fri 1/1/99	Tue 4/6/99		As Soon As Possible			
138	Prototype Server development	10 w	Fri 1/1/99	Tue 3/9/99		Start No Earlier Than			
139	Prototype Control GUI	2 w	Wed 3/10/99	Tue 3/23/99	138	As Soon As Possible			
140	Software Alarms	4 w	Wed 3/10/99	Tue 4/6/99	138	As Soon As Possible			
141	Prototype Alarm Server	0 w	Tue 4/6/99	Tue 4/6/99	137	As Soon As Possible			
142	Hardware (Front End) Alarms	18 w	Fri 1/1/99	Tue 5/4/99		As Soon As Possible			
143	Generate EPICS Alarms	4 w	Fri 1/1/99	Thu 1/28/99		Start No Earlier Than			
144	Generate D0 Alarms	4 w	Wed 4/7/99	Tue 5/4/99	143,141	As Soon As Possible			
145	Alarm Display	8 w	Wed 4/7/99	Wed 6/2/99	141	As Soon As Possible			
146	Alarm Logger	8 w	Wed 4/7/99	Wed 6/2/99	141	As Soon As Possible			
147	Alarm Log Reader	4 w	Thu 6/3/99	Wed 6/30/99	146	As Soon As Possible			
148	Alarm - DAQ Interface	4 w	Wed 4/7/99	Tue 5/4/99	141	As Soon As Possible			
149	Alarm System Commissioned	0 w	Wed 6/30/99	Wed 6/30/99	136	As Soon As Possible			
150	Control Path DAQ	16 w	Fri 1/1/99	Tue 4/20/99		As Soon As Possible		CProfF150[50%]	Guglielmo[25%],Moore[25%]
151	Front End DAQ	0 w	Fri 1/1/99	Fri 1/1/99		Start No Earlier Than			
152	Event Builder	8 w	Fri 1/1/99	Wed 2/24/99	151	As Soon As Possible			
153	Interface to DAQ	4 w	Thu 2/25/99	Tue 3/23/99	152	As Soon As Possible			
154	Control Path DAQ Integration	4 w	Tue 3/23/99	Tue 4/20/99	151,152,153	As Soon As Possible			
155	Control and Monitoring Generic Applications	30.4 w	Fri 1/1/99	Mon 8/2/99		As Soon As Possible			
156	Parameter Page	30.4 w	Fri 1/1/99	Mon 8/2/99		As Soon As Possible			
157	EPICS Parameter Page	8 w	Fri 1/1/99	Wed 2/24/99		Start No Earlier Than			
158	D0 Parameter Page	16 w	Fri 4/9/99	Mon 8/2/99	157	Start No Earlier Than			
159	Control Path Logger	12 w	Fri 1/1/99	Tue 3/23/99		Start No Earlier Than			
160	Control & Monitoring Detector Specific Applications	52 w	Fri 1/1/99	Tue 1/18/00		As Soon As Possible		PhysU150[150%]	detector[150%]
161	Front End Monitoring	52 w	Fri 1/1/99	Tue 1/18/00		Start No Earlier Than			
162	Host Monitoring	52 w	Fri 1/1/99	Tue 1/18/00		Start No Earlier Than			
163	Detector Downloading	52 w	Fri 1/1/99	Tue 1/18/00		Start No Earlier Than			
164	Continued Development and Maintenance	51 w	Wed 3/24/99	Tue 4/4/00		As Soon As Possible			
165	HDB continued population	48 w	Wed 3/24/99	Tue 3/14/00	103	As Soon As Possible		CProfF150[25%],I	Krzywdzinski[25%],detector[50%]
166	Download continued development	48 w	Wed 4/7/99	Tue 3/28/00	109	As Soon As Possible			
167	LV PS Control continued development	50 w	Wed 3/31/99	Tue 4/4/00	121	As Soon As Possible		PhysU150[25%]	Gilmartin[25%]
168	HV PS Control continued development	50 w	Wed 3/31/99	Tue 4/4/00	128	As Soon As Possible			
169	Clock Control continued development	48 w	Wed 4/7/99	Tue 3/28/00	135	As Soon As Possible		CProfF150[25%]	Paterno[25%]
170	Alarm System continued development	36 w	Thu 7/1/99	Tue 3/28/00	136	As Soon As Possible		CProfF150[75%]	Savage[75%]
171	M3 - Online Database Populated	0 w	Tue 4/20/99	Tue 4/20/99		Start No Earlier Than			
172	M3 - EPICS Control System Operational	0 w	Wed 9/23/98	Wed 9/23/98		Start No Earlier Than			

ID	Task Name	Duration	Start	Finish	Predecessors	Constraint	WB$	Resource Names	Names
173	***M3 - Online Alarm System Operational***	***0 w***	***Wed 11/11/98***	***Wed 11/11/98***		***Start No Earlier Than***			
174	***M3 - Online Parameter Page Available***	***0 w***	***Fri 4/9/99***	***Fri 4/9/99***		***Start No Earlier Than***			
175									
176	**1.5.7 DAQ Monitoring**	**54 w**	**Thu 2/25/99**	**Tue 3/28/00**		**As Soon As Possible**		**PhysF150**	**Yasuda**
177	**Independent Monitor development**	**14 w**	**Thu 2/25/99**	**Wed 6/2/99**		**As Soon As Possible**			
178	Level 1 & 2 Monitor	4 w	Thu 2/25/99	Tue 3/23/99	71	As Soon As Possible			
179	Level 3 Monitor	4 w	Wed 3/10/99	Tue 4/6/99	73	As Soon As Possible			
180	Host DAQ Monitor	4 w	Wed 5/5/99	Wed 6/2/99	75	As Soon As Possible			
181	***DAQ Monitoring Commissioned***	***0 w***	***Wed 6/2/99***	***Wed 6/2/99***	***177***	***As Soon As Possible***			
182	Integrated Monitor development	16 w	Thu 6/3/99	Fri 9/24/99	181	As Soon As Possible			
183	***Integrated DAQ Monitoring Commissioned***	***0 w***	***Fri 9/24/99***	***Fri 9/24/99***	***182***	***As Soon As Possible***			
184	Continued Development and Maintenance	24 w	Mon 9/27/99	Tue 3/28/00	183	As Soon As Possible			
185									
186	**1.5.8 Event Monitoring**	**63 w**	**Fri 1/1/99**	**Tue 4/4/00**		**As Soon As Possible**		**PhysF150**	**Yu**
187	**Data Distributor**	**19 w**	**Fri 1/1/99**	**Tue 5/11/99**		**As Soon As Possible**		**CProfF150[75%]**	**Guglielmo[75%]**
188	Data Distributor Prototype development	4 w	Fri 1/1/99	Thu 1/28/99		Start No Earlier Than			
189	***Data Distributor Prototype***	***0 w***	***Thu 1/28/99***	***Thu 1/28/99***	***188***	***As Soon As Possible***			
190	Data Distributor Integration	12 w	Fri 1/29/99	Tue 4/20/99	189	As Soon As Possible			
191	***Integrated Data Distributor***	***0 w***	***Tue 5/11/99***	***Tue 5/11/99***	***75,87,190***	***As Soon As Possible***			
192	***Data Distributor Commissioned***	***0 w***	***Tue 5/11/99***	***Tue 5/11/99***	***187***	***As Soon As Possible***			
193	**EXAMINE**	**16 w**	**Fri 1/1/99**	**Tue 4/20/99**		**As Soon As Possible**			
194	**Event Processor**	**16 w**	**Fri 1/1/99**	**Tue 4/20/99**		**As Soon As Possible**			
195	Event Processor prototype development	4 w	Fri 1/1/99	Thu 1/28/99		Start No Earlier Than			
196	***Event Processor Prototype***	***0 w***	***Thu 1/28/99***	***Thu 1/28/99***	***195***	***As Soon As Possible***			
197	Event Processor Integration	12 w	Fri 1/29/99	Tue 4/20/99	196	As Soon As Possible			
198	Graphical Browser	4 w	Fri 1/29/99	Wed 2/24/99	196	As Soon As Possible			
199	***EXAMINE Commissioned***	***0 w***	***Tue 4/20/99***	***Tue 4/20/99***	***193***	***As Soon As Possible***			
200	**Continued Development and Maintenance**	**47 w**	**Wed 4/21/99**	**Tue 4/4/00**		**As Soon As Possible**			
201	Data Distributor continued development	44 w	Wed 5/12/99	Tue 4/4/00	187	As Soon As Possible		Guglielmo[25%]	Guglielmo[25%]
202	EXAMINE continued development	46 w	Wed 4/21/99	Tue 3/28/00	199	As Soon As Possible		PhysU[150%]	detector[150%]
203	Express Line	44 w	Wed 4/21/99	Tue 3/14/00	199	As Soon As Possible			
204									
205	**1.5.9 Calibration**	**56 w**	**Thu 2/11/99**	**Tue 3/28/00**		**As Soon As Possible**		**PhysU150**	**Bertram**
206	**Calibration Infrastructure**	**20 w**	**Thu 2/11/99**	**Wed 6/30/99**		**As Soon As Possible**			
207	Calibration Database	8 w	Thu 2/11/99	Tue 4/6/99	98	As Soon As Possible		CProfF150[25%]	Simmons[25%]
208	Calibration Server	4 w	Wed 4/7/99	Tue 5/4/99	207	As Soon As Possible			
209	Front End CALIB Framework	8 w	Wed 5/5/99	Wed 6/30/99	208	As Soon As Possible			
210	Level 3 CALIB Framework	8 w	Wed 5/5/99	Wed 6/30/99	208	As Soon As Possible			
211	Host CALIB Framework	4 w	Wed 5/5/99	Wed 6/2/99	208	As Soon As Possible			
212	***Calibration Commissioned***	***0 w***	***Wed 6/30/99***	***Wed 6/30/99***	***206***	***As Soon As Possible***			
213	**Calibration Applications**	**40 w**	**Wed 5/5/99**	**Tue 2/29/00**		**As Soon As Possible**			
214	Detector Specific CALIB	40 w	Wed 5/5/99	Tue 2/29/00	208	As Soon As Possible		PhysU[150%]	detector[150%]
215	Continued Development and Maintenance	4 w	Wed 3/1/00	Tue 3/28/00	206,213	As Soon As Possible			
216									
217	**1.5.10 Accelerator Interface**	**52 w**	**Fri 1/1/99**	**Tue 1/18/00**		**As Soon As Possible**		**PhysU150[25%]**	**unknown[25%]**
218	Control Room Console	2 w	Fri 10/1/99	Thu 10/14/99		Start No Earlier Than			
219	D0 Interface to Accelerator	52 w	Fri 1/1/99	Tue 1/18/00		Start No Earlier Than			
220	Accelerator Interface to D0	52 w	Fri 1/1/99	Tue 1/18/00		Start No Earlier Than			
221									
222	**Integration and Commissioning**	**10 w**	**Wed 2/10/99**	**Tue 4/20/99**		**As Soon As Possible**			
223	**Online System Commissioning**	**10 w**	**Wed 2/10/99**	**Tue 4/20/99**		**As Soon As Possible**			
224	***ICD Commissioning***	***0 w***	***Wed 2/10/99***	***Wed 2/10/99***	***47,63,68,85,97,1***	***As Soon As Possible***			
225	***Muon PDT Commissioning***	***0 w***	***Tue 4/20/99***	***Tue 4/20/99***	***224,101,107,113***	***As Soon As Possible***			
226	***Calorimeter Commissioning***	***0 w***	***Tue 4/6/99***	***Tue 4/6/99***	***224,60,103,109,.***	***As Soon As Possible***			
227	***Online System Commissioned***	***0 w***	***Tue 4/20/99***	***Tue 4/20/99***	***223***	***As Soon As Possible***			
228									
229	**Documentation**	**0 w**	**Wed 4/1/98**	**Wed 4/1/98**		**As Soon As Possible**			
230	***M3 - TDR Review***	***0 w***	***Wed 4/1/98***	***Wed 4/1/98***		***Start No Earlier Than***			