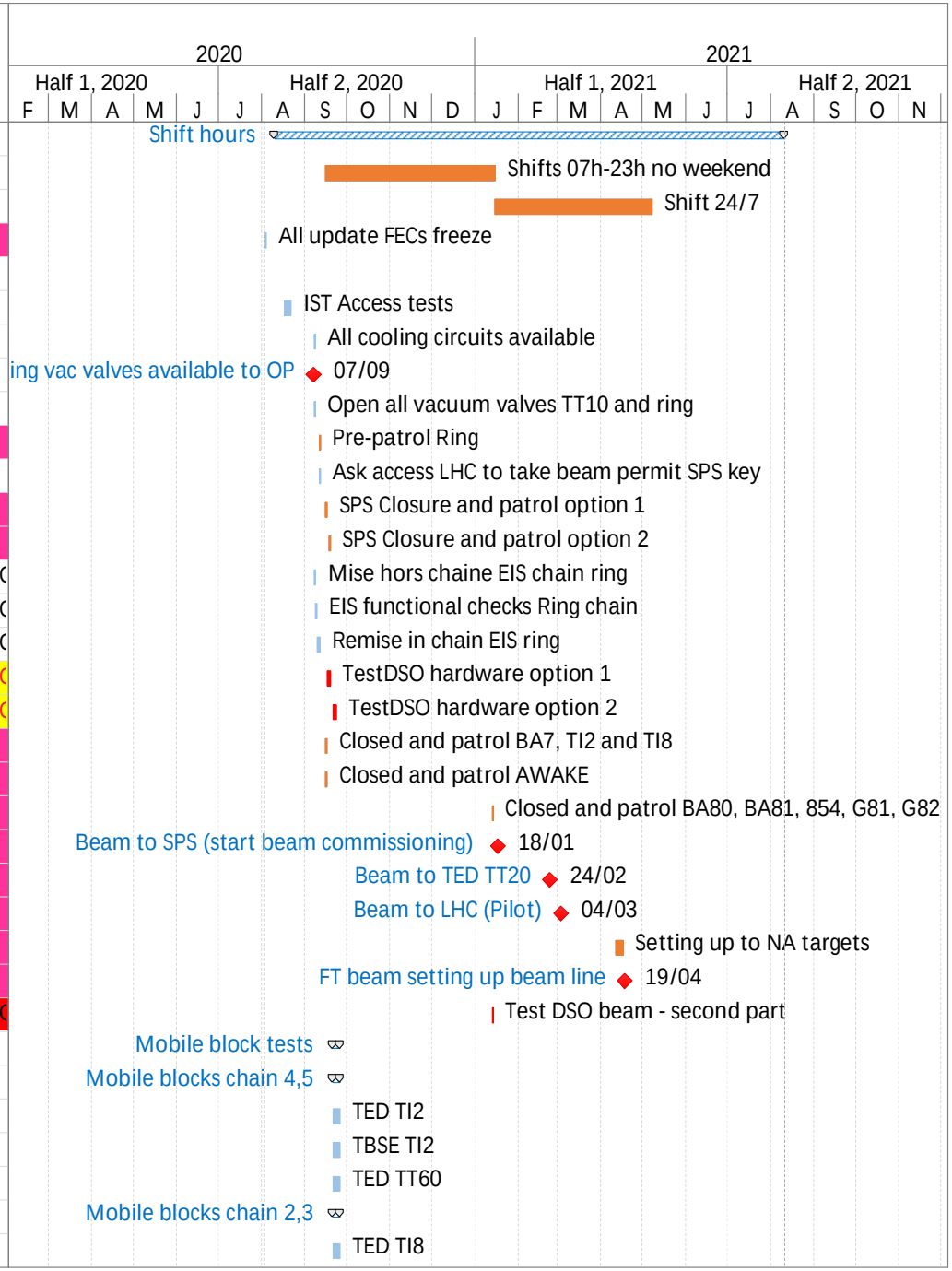
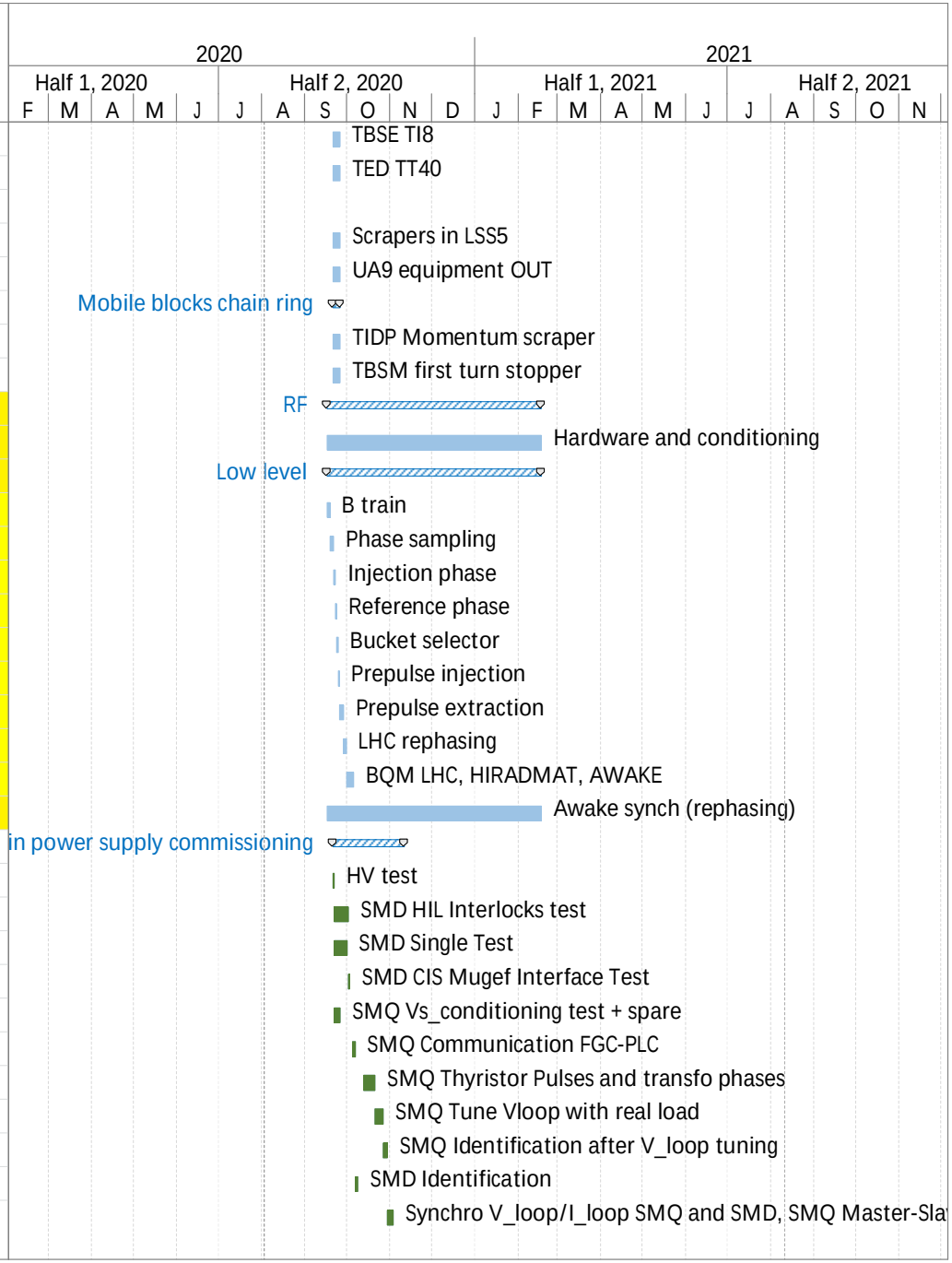
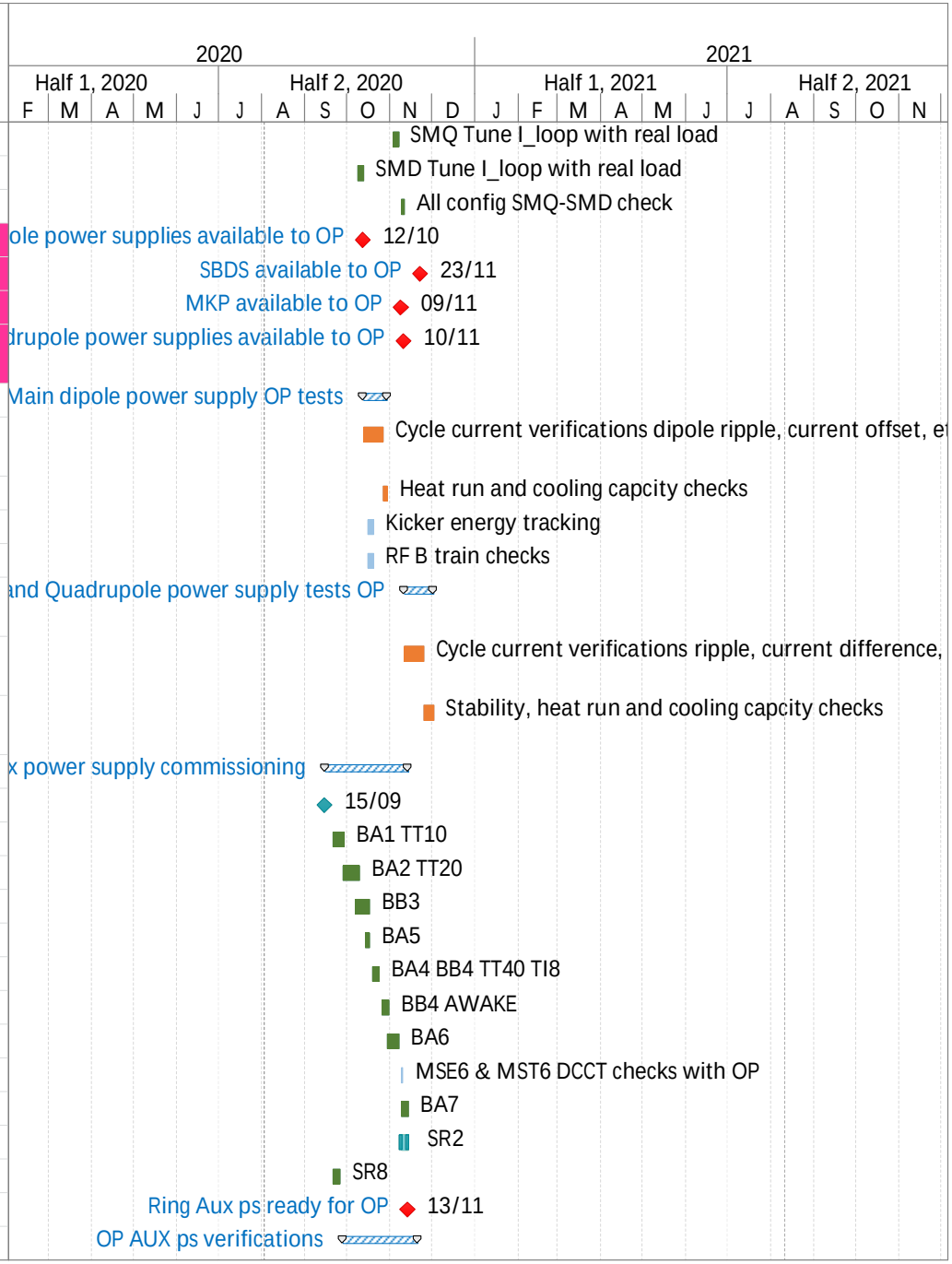
ID	Task Name	Duration	Start	Finish	Groups
1	Shift hours	246 days	10/08/20 08:00	10/08/21 17:00	
2	Shifts 07h-23h no weekend	78 days	15/09/20 13:00	15/01/21 12:00	BE-OP
3	Shift 24/7	79 days	15/01/21 08:00	07/05/21 17:00	BE-OP
4	All update FECs freeze	1 day	03/08/20 08:00	03/08/20 17:00	BE-CO
5	Control system checks	15 days	24/08/20 13:00	15/09/20 12:00	BE-CO,BE-OP
17	IST Access tests	5 days	17/08/20 08:00	21/08/20 17:00	BE-ICS,BE-OP
18	All cooling circuits available	1 day	07/09/20 13:00	08/09/20 12:00	BE-OP,EN-CV
19	TT10 and ring vac valves available to OP	0 days	07/09/20 13:00	07/09/20 13:00	
20	Open all vacuum valves TT10 and ring	1 day	07/09/20 13:00	08/09/20 12:00	BE-OP,TE-VSC
21	Pre-patrol Ring	1 day	11/09/20 08:00	11/09/20 17:00	BE-OP
22	Ask access LHC to take beam permit SPS I	1 day	11/09/20 08:00	11/09/20 17:00	BE-ICS,BE-OP
23	SPS Closure and patrol option 1	1 day	15/09/20 13:00	16/09/20 12:00	BE-OP
24	SPS Closure and patrol option 2	1 day	18/09/20 08:00	18/09/20 17:00	BE-OP
25	Mise hors chaine EIS chain ring	1 day	07/09/20 13:00	08/09/20 12:00	BE-ICS,BE-OP,DSC
26	EIS functional checks Ring chain	1 day	08/09/20 13:00	09/09/20 12:00	BE-ICS,BE-OP,DSC
27	Remise in chain EIS ring	1 day	09/09/20 13:00	11/09/20 12:00	BE-ICS,BE-OP,DSC
28	TestDSO hardware option 1	2.5 days	16/09/20 13:00	18/09/20 17:00	BE-ICS,BE-OP,DSC
29	TestDSO hardware option 2	2.5 days	21/09/20 08:00	23/09/20 12:00	BE-ICS,BE-OP,DSC
30	Closed and patrol BA7, TI2 and TI8	1 day	15/09/20 13:00	16/09/20 12:00	BE-OP
31	Closed and patrol AWAKE	1 day	15/09/20 13:00	16/09/20 12:00	BE-OP
32	Closed and patrol BA80, BA81, 854, G81, (	1 day	13/01/21 08:00	13/01/21 17:00	BE-OP
33	Beam to SPS (start beam commissioning)	0 days	18/01/21 08:00	18/01/21 08:00	BE-OP
34	Beam to TED TT20	0 days	24/02/21 08:00	24/02/21 08:00	BE-OP
35	Beam to LHC (Pilot)	0 days	04/03/21 08:00	04/03/21 08:00	BE-OP
36	Setting up to NA targets	5 days	12/04/21 08:00	16/04/21 17:00	BE-OP
37	FT beam setting up beam line	0 days	19/04/21 08:00	19/04/21 08:00	BE-OP
38	Test DSO beam - second part	1 day	13/01/21 08:00	13/01/21 17:00	BE-ICS,BE-OP,DSC
39	Mobile block tests	5 days	21/09/20 08:00	25/09/20 17:00	
40	Mobile blocks chain 4,5	5 days	21/09/20 08:00	25/09/20 17:00	
41	TED TI2	5 days	21/09/20 08:00	25/09/20 17:00	BE-OP,EN-SMM
42	TBSE TI2	5 days	21/09/20 08:00	25/09/20 17:00	BE-OP,EN-SMM
43	TED TT60	5 days	21/09/20 08:00	25/09/20 17:00	BE-OP,EN-SMM
44	Mobile blocks chain 2,3	5 days	21/09/20 08:00	25/09/20 17:00	
45	TED TI8	5 days	21/09/20 08:00	25/09/20 17:00	BE-OP,EN-SMM



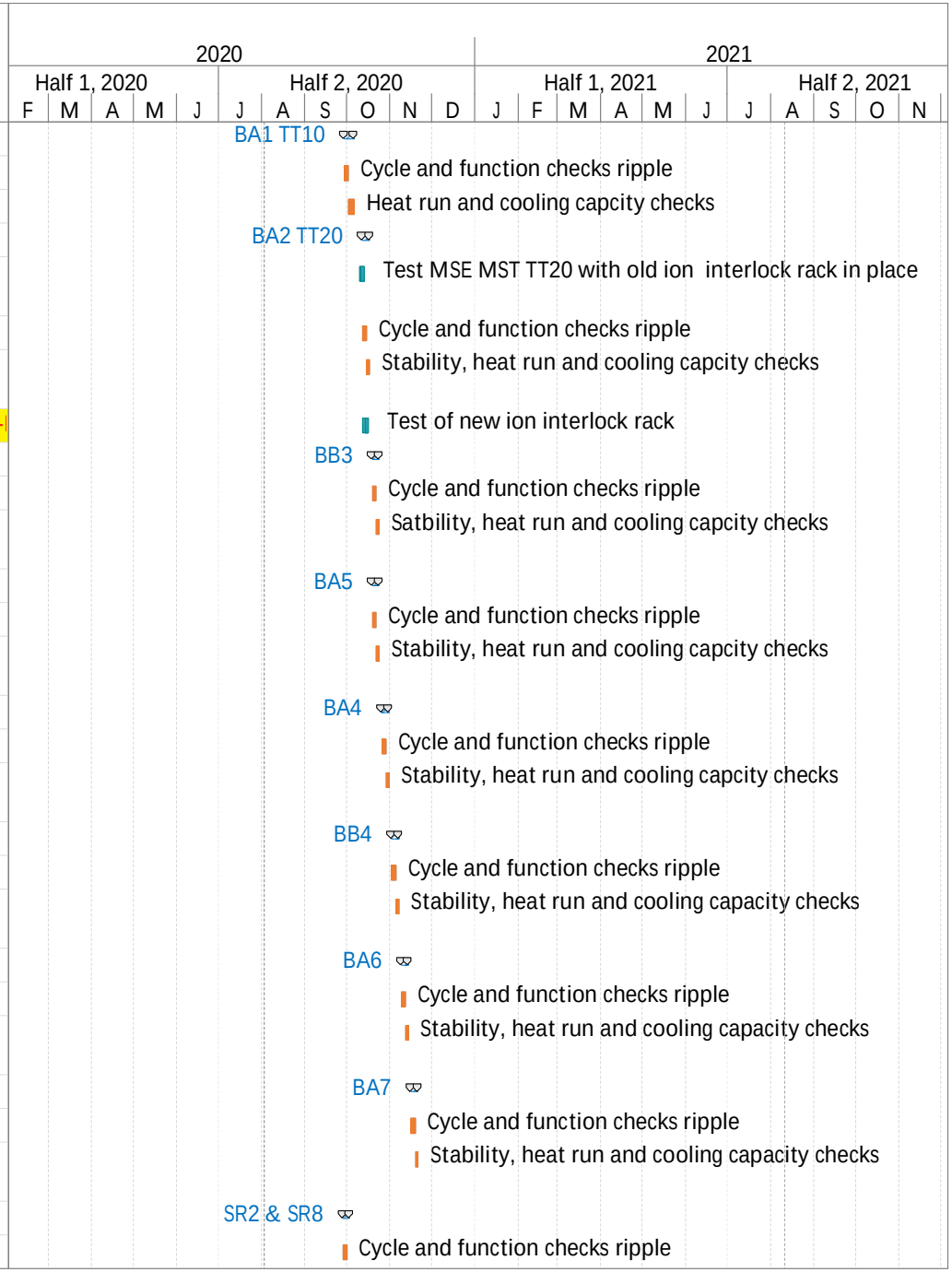
ID	Task Name	Duration	Start	Finish	Groups
46	TBSE TI8	5 days	21/09/20 08:00	25/09/20 17:00	BE-OP,EN-SMM
47	TED TT40	5 days	21/09/20 08:00	25/09/20 17:00	BE-OP,EN-SMM
48	Mobile blocks north	1 day	21/09/20 08:00	21/09/20 17:00	
51	Scrapers in LSS5	5 days	21/09/20 08:00	25/09/20 17:00	BE-OP,EN-SMM
52	UA9 equipment OUT	5 days	21/09/20 08:00	25/09/20 17:00	BE-OP,EN-SMM
53	Mobile blocks chain ring	5 days	21/09/20 08:00	25/09/20 17:00	
54	TIDP Momentum scraper	5 days	21/09/20 08:00	25/09/20 17:00	BE-OP,EN-SMM
55	TBSM first turn stopper	5 days	21/09/20 08:00	25/09/20 17:00	BE-OP,EN-SMM
56	RF	100 days	16/09/20 13:00	17/02/21 12:00	
57	Hardware and conditioning	100 days	16/09/20 13:00	17/02/21 12:00	BE-OP,BE-RF
58	Low level	100 days	16/09/20 13:00	17/02/21 12:00	BE-OP,BE-RF
59	B train	2 days	16/09/20 13:00	18/09/20 12:00	BE-OP,BE-RF
60	Phase sampling	1 day	18/09/20 13:00	21/09/20 12:00	BE-OP,BE-RF
61	Injection phase	1 day	21/09/20 13:00	22/09/20 12:00	BE-OP,BE-RF
62	Reference phase	1 day	22/09/20 13:00	23/09/20 12:00	BE-OP,BE-RF
63	Bucket selector	1 day	23/09/20 13:00	24/09/20 12:00	BE-OP,BE-RF
64	Prepulse injection	1 day	24/09/20 13:00	25/09/20 12:00	BE-OP,BE-RF
65	Prepulse extraction	1 day	25/09/20 13:00	28/09/20 12:00	BE-OP,BE-RF
66	LHC rephasing	2 days	28/09/20 13:00	30/09/20 12:00	BE-OP,BE-RF
67	BQM LHC, HIRADMAT, AWAKE	3 days	30/09/20 13:00	05/10/20 12:00	BE-OP,BE-RF
68	Awake synch (rephasing)	100 days	16/09/20 13:00	17/02/21 12:00	BE-OP,BE-RF
69	Main power supply commissioning	37 days	21/09/20 08:00	10/11/20 17:00	
70	HV test	1 day	21/09/20 08:00	21/09/20 17:00	TE-EPC
71	SMD HIL Interlocks test	8 days	22/09/20 08:00	01/10/20 17:00	TE-EPC
72	SMD Single Test	7 days	22/09/20 08:00	30/09/20 17:00	TE-EPC
73	SMD CIS Mugef Interface Test	1 day	02/10/20 08:00	02/10/20 17:00	TE-EPC
74	SMQ Vs_conditioning test + spare	4 days	22/09/20 08:00	25/09/20 17:00	TE-EPC
75	SMQ Communication FGC-PLC	2 days	05/10/20 08:00	06/10/20 17:00	TE-EPC
76	SMQ Thyristor Pulses and transfo phas	6 days	13/10/20 08:00	20/10/20 17:00	TE-EPC
77	SMQ Tune Vloop with real load	4 days	21/10/20 08:00	26/10/20 17:00	TE-EPC
78	SMQ Identification after V_loop tuning	3 days	27/10/20 08:00	29/10/20 17:00	TE-EPC
79	SMD Identification	2 days	07/10/20 08:00	08/10/20 17:00	TE-EPC
80	Synchro V_loop/I_loop SMQ and SMD, SMQ Master-Slave and CIS	2 days	30/10/20 08:00	02/11/20 17:00	TE-EPC



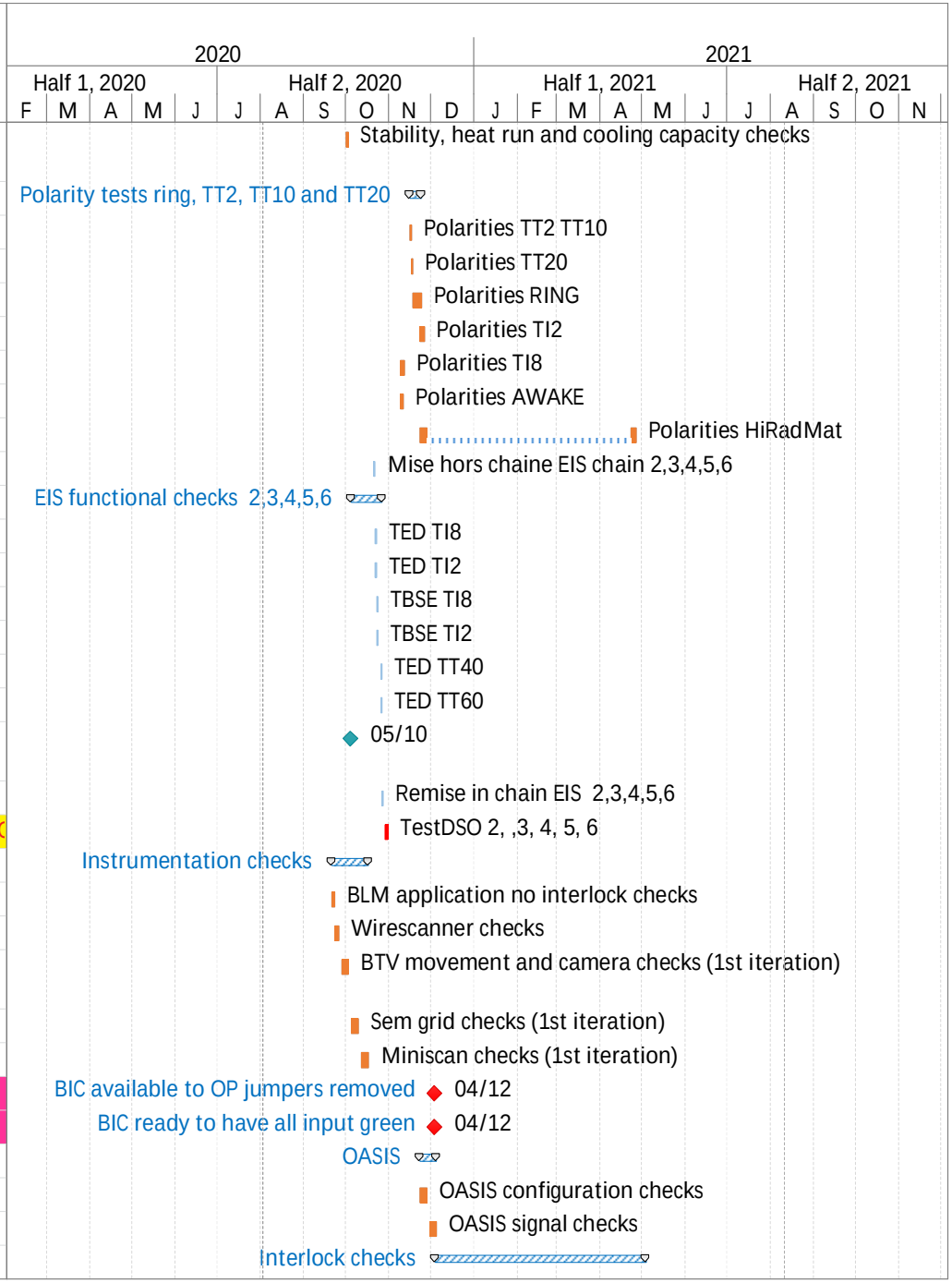
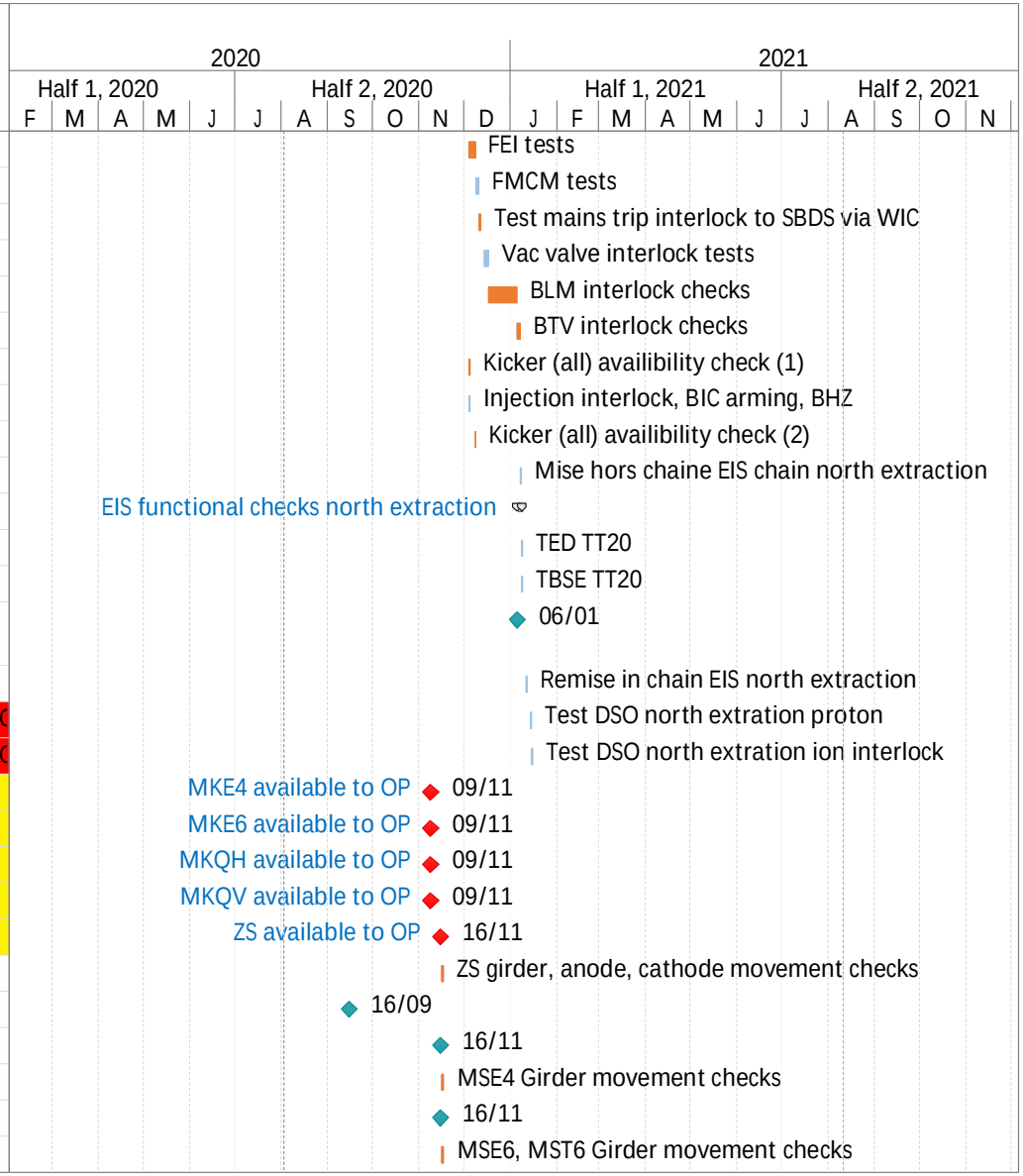
ID	Task Name	Duration	Start	Finish	Groups
81	SMQ Tune I_loop with real load	4 days	03/11/20 08:00	06/11/20 17:00	TE-EPC
82	SMD Tune I_loop with real load	2 days	09/10/20 08:00	12/10/20 17:00	TE-EPC
83	All config SMQ-SMD check	2 days	09/11/20 08:00	10/11/20 17:00	TE-EPC
84	Main Dipole power supplies available to (	0 days	12/10/20 17:00	12/10/20 17:00	TE-EPC
85	SBDS available to OP	0 days	23/11/20 08:00	23/11/20 08:00	
86	MKP available to OP	0 days	09/11/20 08:00	09/11/20 08:00	
87	Main quadrupole power supplies available to OP	0 days	10/11/20 17:00	10/11/20 17:00	
88	Main dipole power supply OP tests	13 days	13/10/20 08:00	29/10/20 17:00	BE-OP
89	Cycle current verifications dipole ripple, current offset, etc	10 days	13/10/20 08:00	26/10/20 17:00	BE-OP
90	Heat run and cooling capcity checks	3 days	27/10/20 08:00	29/10/20 17:00	BE-OP
91	Kicker energy tracking	2 days	16/10/20 08:00	19/10/20 17:00	BE-OP,TE-ABT
92	RF B train checks	2 days	16/10/20 08:00	19/10/20 17:00	BE-OP,BE-RF
93	Main Dipole and Quadrupole power supply tests OP	15 days	11/11/20 08:00	01/12/20 17:00	BE-OP
94	Cycle current verifications ripple, current difference, etc	10 days	11/11/20 08:00	24/11/20 17:00	BE-OP
95	Stability, heat run and cooling capcity checks	5 days	25/11/20 08:00	01/12/20 17:00	BE-OP
96	Aux power supply commissioning	43.5 days?	15/09/20 13:00	13/11/20 17:00	TE-EPC
97	EIS chain1 (Ring) ready for EPC	0 days	15/09/20 13:00	15/09/20 13:00	TE-EPC
98	BA1 TT10	6 days	21/09/20 08:00	28/09/20 17:00	TE-EPC
99	BA2 TT20	10 days	28/09/20 08:00	09/10/20 17:00	TE-EPC
100	BB3	8 days	07/10/20 08:00	16/10/20 17:00	TE-EPC
101	BA5	3 days	14/10/20 08:00	16/10/20 17:00	TE-EPC
102	BA4 BB4 TT40 TI8	5 days	19/10/20 08:00	23/10/20 17:00	TE-EPC
103	BB4 AWAKE	5 days	26/10/20 08:00	30/10/20 17:00	TE-EPC
104	BA6	6 days	30/10/20 08:00	06/11/20 17:00	TE-EPC
105	MSE6 & MST6 DCCT checks with OP	1 day?	09/11/20 08:00	09/11/20 17:00	BE-OP,TE-EPC
106	BA7	5 days	09/11/20 08:00	13/11/20 17:00	TE-EPC
107	SR2	5 days	09/11/20 08:00	13/11/20 17:00	TE-EPC
108	SR8	5 days	21/09/20 08:00	25/09/20 17:00	TE-EPC
109	Ring Aux ps ready for OP	0 days	13/11/20 17:00	13/11/20 17:00	
110	OP AUX ps verifications	40 days	28/09/20 08:00	20/11/20 17:00	



ID	Task Name	Duration	Start	Finish	Groups
111	BA1 TT10	5 days	29/09/20 08:00	05/10/20 17:00	BE-OP
112	Cycle and function checks ripple	3 days	29/09/20 08:00	01/10/20 17:00	BE-OP
113	Heat run and cooling capcity checks	2 days	02/10/20 08:00	05/10/20 17:00	BE-OP
114	BA2 TT20	5 days	12/10/20 08:00	16/10/20 17:00	BE-OP
115	Test MSE MST TT20 with old ion interlock rack in place	1 day	12/10/20 08:00	12/10/20 17:00	
116	Cycle and function checks ripple	3 days	12/10/20 08:00	14/10/20 17:00	BE-OP
117	Stability, heat run and cooling capcity checks	2 days	15/10/20 08:00	16/10/20 17:00	BE-OP
118	Test of new ion interlock rack	2 days	14/10/20 08:00	15/10/20 17:00	BE-ICS,BE-OP,TE-
119	BB3	5 days	19/10/20 08:00	23/10/20 17:00	BE-OP
120	Cycle and function checks ripple	3 days	19/10/20 08:00	21/10/20 17:00	BE-OP
121	Satbility, heat run and cooling capcity checks	2 days	22/10/20 08:00	23/10/20 17:00	BE-OP
122	BA5	5 days	19/10/20 08:00	23/10/20 17:00	BE-OP
123	Cycle and function checks ripple	3 days	19/10/20 08:00	21/10/20 17:00	BE-OP
124	Stability, heat run and cooling capcity checks	2 days	22/10/20 08:00	23/10/20 17:00	BE-OP
125	BA4	5 days	26/10/20 08:00	30/10/20 17:00	BE-OP
126	Cycle and function checks ripple	3 days	26/10/20 08:00	28/10/20 17:00	BE-OP
127	Stability, heat run and cooling capcity checks	2 days	29/10/20 08:00	30/10/20 17:00	BE-OP
128	BB4	5 days	02/11/20 08:00	06/11/20 17:00	BE-OP
129	Cycle and function checks ripple	3 days	02/11/20 08:00	04/11/20 17:00	BE-OP
130	Stability, heat run and cooling capacity checks	2 days	05/11/20 08:00	06/11/20 17:00	BE-OP
131	BA6	5 days	09/11/20 08:00	13/11/20 17:00	BE-OP
132	Cycle and function checks ripple	3 days	09/11/20 08:00	11/11/20 17:00	BE-OP
133	Stability, heat run and cooling capacity checks	2 days	12/11/20 08:00	13/11/20 17:00	BE-OP
134	BA7	5 days	16/11/20 08:00	20/11/20 17:00	BE-OP
135	Cycle and function checks ripple	3 days	16/11/20 08:00	18/11/20 17:00	BE-OP
136	Stability, heat run and cooling capacity checks	2 days	19/11/20 08:00	20/11/20 17:00	BE-OP
137	SR2 & SR8	5 days	28/09/20 08:00	02/10/20 17:00	BE-OP
138	Cycle and function checks ripple	3 days	28/09/20 08:00	30/09/20 17:00	BE-OP



ID	Task Name	Duration	Start	Finish	Groups
139	Stability, heat run and cooling capacity checks	2 days	01/10/20 08:00	02/10/20 17:00	BE-OP
140	Polarity tests ring, TT2, TT10 and TT20	6 days	16/11/20 08:00	23/11/20 17:00	
141	Polarities TT2 TT10	1 day	16/11/20 08:00	16/11/20 17:00	BE-OP
142	Polarities TT20	1 day	17/11/20 08:00	17/11/20 17:00	BE-OP
143	Polarities RING	4 days	18/11/20 08:00	23/11/20 17:00	BE-OP
144	Polarities TI2	3 days	23/11/20 08:00	25/11/20 17:00	BE-OP
145	Polarities TI8	3 days	09/11/20 08:00	11/11/20 17:00	BE-OP
146	Polarities AWAKE	2 days	09/11/20 08:00	10/11/20 17:00	BE-OP
147	Polarities HiRadMat	99 days	23/11/20 08:00	26/04/21 17:00	BE-OP
148	Mise hors chaine EIS chain 2,3,4,5,6	1 day	21/10/20 08:00	21/10/20 17:00	BE-ICS,BE-OP
149	EIS functional checks 2,3,4,5,6	16 days	05/10/20 08:00	26/10/20 17:00	BE-OP
150	TED TI8	1 day	22/10/20 08:00	22/10/20 17:00	BE-OP,EN-SMM
151	TED TI2	1 day	22/10/20 08:00	22/10/20 17:00	BE-OP,EN-SMM
152	TBSE TI8	1 day	23/10/20 08:00	23/10/20 17:00	BE-OP,EN-SMM
153	TBSE TI2	1 day	23/10/20 08:00	23/10/20 17:00	BE-OP,EN-SMM
154	TED TT40	1 day	26/10/20 08:00	26/10/20 17:00	BE-OP,EN-SMM
155	TED TT60	1 day	26/10/20 08:00	26/10/20 17:00	BE-OP,EN-SMM
156	EIS chain 2,3,4,5,6 (EAST WEST TI8 TI2 AWAKE) validated by EPC	0 days	05/10/20 08:00	05/10/20 08:00	TE-EPC
157	Remise in chain EIS 2,3,4,5,6	1 day	27/10/20 08:00	27/10/20 17:00	BE-ICS,BE-OP
158	TestDSO 2, ,3, 4, 5, 6	2 days	29/10/20 08:00	30/10/20 17:00	BE-ICS,BE-OP,DSC
159	Instrumentation checks	20 days	21/09/20 08:00	16/10/20 17:00	
160	BLM application no interlock checks	2 days	21/09/20 08:00	22/09/20 17:00	BE-OP
161	Wirescanner checks	3 days	23/09/20 08:00	25/09/20 17:00	BE-OP
162	BTV movement and camera checks (1st iteration)	5 days	28/09/20 08:00	02/10/20 17:00	BE-OP
163	Sem grid checks (1st iteration)	5 days	05/10/20 08:00	09/10/20 17:00	BE-OP
164	Miniscan checks (1st iteration)	5 days	12/10/20 08:00	16/10/20 17:00	BE-OP
165	BIC available to OP jumpers removed	0 days	04/12/20 08:00	04/12/20 08:00	TE-MPE
166	BIC ready to have all input green	0 days	04/12/20 08:00	04/12/20 08:00	BE-OP
167	OASIS	10 days	23/11/20 08:00	04/12/20 17:00	BE-OP
168	OASIS configuration checks	5 days	23/11/20 08:00	27/11/20 17:00	BE-OP
169	OASIS signal checks	5 days	30/11/20 08:00	04/12/20 17:00	BE-OP
170	Interlock checks	95 days	04/12/20 08:00	03/05/21 17:00	



ID	Task Name	Duration	Start	Finish	Groups
171	FEI tests	3 days	04/12/20 08:00	08/12/20 17:00	BE-OP
172	FMCM tests	2 days	09/12/20 08:00	10/12/20 17:00	BE-OP,TE-MPE
173	Test mains trip interlock to SBDS via W	1 day	11/12/20 08:00	11/12/20 17:00	BE-OP
174	Vac valve interlock tests	3 days	14/12/20 08:00	16/12/20 17:00	BE-OP,TE-VSC
175	BLM interlock checks	3 days	17/12/20 08:00	04/01/21 17:00	BE-OP
176	BTV interlock checks	2 days	05/01/21 08:00	06/01/21 17:00	BE-OP
177	Kicker (all) availibility check (1)	1 day	04/12/20 08:00	04/12/20 17:00	BE-OP
178	Injection interlock, BIC arming, BHZ	1 day	04/12/20 08:00	04/12/20 17:00	BE-OP,TE-ABT
179	Kicker (all) availibility check (2)	1 day	08/12/20 08:00	08/12/20 17:00	BE-OP
180	Mise hors chaine EIS chain north extracti	1 day	07/01/21 08:00	07/01/21 17:00	BE-ICS,BE-OP
181	EIS functional checks north extraction	3 days	06/01/21 08:00	08/01/21 17:00	BE-OP
182	TED TT20	1 day	08/01/21 08:00	08/01/21 17:00	BE-OP,EN-SMM
183	TBSE TT20	1 day	08/01/21 08:00	08/01/21 17:00	BE-OP,EN-SMM
184	EIS TT20 EXTR, North transfer, ION interlock validated by EPC	0 days	06/01/21 08:00	06/01/21 08:00	TE-EPC
185	Remise in chain EIS north extraction	1 day	11/01/21 08:00	11/01/21 17:00	BE-ICS,BE-OP
186	Test DSO north extration proton	1 day	14/01/21 08:00	14/01/21 17:00	BE-ICS,BE-OP,DSC
187	Test DSO north extration ion interlock	1 day	15/01/21 08:00	15/01/21 17:00	BE-ICS,BE-OP,DSC
188	MKE4 available to OP	0 days	09/11/20 08:00	09/11/20 08:00	TE-ABT
189	MKE6 available to OP	0 days	09/11/20 08:00	09/11/20 08:00	TE-ABT
190	MKQH available to OP	0 days	09/11/20 08:00	09/11/20 08:00	TE-ABT
191	MKQV available to OP	0 days	09/11/20 08:00	09/11/20 08:00	TE-ABT
192	ZS available to OP	0 days	16/11/20 08:00	16/11/20 08:00	TE-ABT
193	ZS girder, anode, cathode movement che	1 day	16/11/20 08:00	16/11/20 17:00	BE-OP
194	MSE2 & MST2 available to OP	0 days	16/09/20 08:00	16/09/20 08:00	
195	MSE4 & available to OP	0 days	16/11/20 08:00	16/11/20 08:00	
196	MSE4 Girder movement checks	1 day	16/11/20 08:00	16/11/20 17:00	BE-OP
197	MSE6 & MST6 available to OP	0 days	16/11/20 08:00	16/11/20 08:00	
198	MSE6, MST6 Girder movement checks	1 day	16/11/20 08:00	16/11/20 17:00	BE-OP