

Status 3-4 Recovery

F. Bertinelli / AT-MCS

(20 min)

- Previous ICC reporting on 10 October (R. Saban, L. Rossi)
- this presentation more an overview than detailed news (8h30 meetings, Task Force, MARIC etc.)
- Tunnel activities
- Surface activities (reminder)

Displacements status in sector 3-4 (From Q17R3 to Q33R3) : P3 side																	
Based on measurements by TS-SU, TS-MME and AT-MCS																	
	Q17	A18	B18	C18	Q18	A19	B19	C19	Q19	A20	B20	C20	Q20	A21	B21	C21	Q21
Cryostat	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
CM Longi	?	?	?	?	?	?	?	?	<5	<5	<5	<5	<5	<5	<5	<5	<5
CM Vert	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
CM Rad	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
	Q21	A22	B22	C22	Q22	A23	B23	C23	Q23	A24	B24	C24	Q24	A25	B25	C25	Q25
Cryostat	<2	<2	<2	<2	-7	<2	<2	<2	-187	<2	<2	<2	<2	<2	<2	<2	<2
CM Longi	<5	<5	<2	<2	-20	-67	-102	-144	<5	-190	-130	-60	<5	<2	<2	<2	<5
CM Vert	?	?	<2	<2	<2	?	?	?	?	?	?	?	?	<2	<2	<2	?
CM Rad	?	?	<2	<2	<2	?	?	?	?	?	?	?	?	<2	<2	<2	?
	Q25	A26	B26	C26	Q26	A27	B27	C27	Q27	A28	B28	C28	Q28	A29	B29	C29	Q29
Cryostat	<2	<2	<2	<2	<2	<2	<2	<2	474	-4	<2	<2	11	<2	<2	<2	<2
CM Longi	<5	<2	<2	<2	<5	57	114	150	-45	230	189	144	85	50	35	<5	<5
CM Vert	?	<2	<2	<2	?	?	?	?	?	?	?	?	?	?	?	?	?
CM Rad	?	<2	<2	<2	?	?	?	?	?	?	?	?	?	?	?	?	?

First work: open W bellows, MLI & thermal shields – consolidate cold mass-to-cryostat where necessary and cryostat-to-ground where necessary

In retrospect: good choice of cryostat-to-ground supports (vertical jacks), including necessity for MB adjacent to displaced SSS

100% D area now opened

~ 55% IC work on disconnecting lines now done

- Start of work: W41 (6 October), first W openings
2 mechanics, CERN staff
- W45: steady conditions reached after 4 weeks
7 AT-MCS staff (mechanics, supervision, inspections),
4 existing FSUs, 4 experienced FSUs returned (from
F525/IEG)
4-5 TS-MME
Very good cooperation
Shift work not introduced, but some extended hours and
optimised logistics (surface bungalows installed)

Follow-up and Planning for IC work

AT-MCS

DCU#	ma	Se	Inter. numb	Se	ma	IC Open	Pics	X-Ray	PIM V1c	PIM V2c	M's cut	E cut	N cut	X cut	M1-M2 D	M3 Del	US	C' cut	K1-K2 c	N-line ex
7708.6	1236	A23	QBBI.A23R3	B23	2193	8-0ct-08	*		31-0ct-08	31-0ct-08	22-0ct-08	3-Nov-08	16-0ct-08	16-0ct-08	28-0ct-08	28-0ct-08	22-0ct-08	23-0ct-08	23-0ct-08	28-0ct-08
7724.3	2193	B23	QBBI.B23R3	C23	3150	8-0ct-08	*		15-0ct-08	15-0ct-08	23-0ct-08	30-0ct-08	16-0ct-08	16-0ct-08	22-0ct-08	22-0ct-08	23-0ct-08	23-0ct-08	23-0ct-08	28-0ct-08
7739.9	1109	C23	QBQI.23R3		4107	8-0ct-08	*		31-0ct-08	31-0ct-08	24-0ct-08	17-0ct-08	16-0ct-08		21-0ct-08	21-0ct-08	24-0ct-08	23-0ct-08		28-0ct-08
7746.4	0233		QBQI.23R3	A24	5064	8-0ct-08	*		15-0ct-08	15-0ct-08	25-0ct-08	20-0ct-08	16-0ct-08	16-0ct-08	20-0ct-08	20-0ct-08	25-0ct-08	23-0ct-08	23-0ct-08	28-0ct-08
7762.1	1241	A24	QBBI.A24R3	B24	2055	9-0ct-08	*	X	6-Nov-08	6-Nov-08	3-Nov-08	6-Nov-08	20-0ct-08	20-0ct-08	3-Nov-08	3-Nov-08	3-Nov-08	22-0ct-08	22-0ct-08	23-0ct-08
7777.7	2055	B24	QBBI.B24R3	C24	3110	9-0ct-08	*	X	6-Nov-08	6-Nov-08	3-Nov-08	6-Nov-08	20-0ct-08	20-0ct-08	4-Nov-08	4-Nov-08	3-Nov-08	22-0ct-08	22-0ct-08	23-0ct-08
7793.4	3110	C24	QBQI.24R3		0199	7-0ct-08	*		6-Nov-08	6-Nov-08	3-Nov-08	6-Nov-08	21-0ct-08	21-0ct-08	4-Nov-08	4-Nov-08	3-Nov-08			18-Nov-08
7799.9	0199		QBBI.24R3		1132	6-0ct-08	*	X	6-Nov-08	6-Nov-08	3-Nov-08	6-Nov-08	20-0ct-08	20-0ct-08	4-Nov-08	4-Nov-08	3-Nov-08	22-0ct-08	22-0ct-08	18-Nov-08
7815.5	1132		QBBI.A25R3		1084	6-0ct-08	*		7-Nov-08	7-Nov-08	3-Nov-08	12-Nov-08	21-0ct-08	22-0ct-08	4-Nov-08	4-Nov-08	3-Nov-08	22-0ct-08	22-0ct-08	18-Nov-08
7831.2	1084		QBBI.B25R3		3096	8-0ct-08	*		7-Nov-08	7-Nov-08	4-Nov-08	12-Nov-08	22-0ct-08	22-0ct-08	5-Nov-08	5-Nov-08	4-Nov-08	3-Nov-08	3-Nov-08	18-Nov-08
7846.8	3096		QBQI.25R3		0219	8-0ct-08	*		7-Nov-08	7-Nov-08	4-Nov-08	12-Nov-08	3-Nov-08		5-Nov-08	5-Nov-08		3-Nov-08		18-Nov-08
7853.3	0219		QBQI.25R3		1242	8-0ct-08	*		10-Nov-08	10-Nov-08	4-Nov-08	12-Nov-08	5-Nov-08	6-Nov-08	5-Nov-08	5-Nov-08		3-Nov-08	3-Nov-08	18-Nov-08
7869.0	1242		QBBI.A26R3		2111	13-0ct-08	*		10-Nov-08	10-Nov-08	5-Nov-08	12-Nov-08	5-Nov-08	6-Nov-08	6-Nov-08	6-Nov-08		3-Nov-08	3-Nov-08	18-Nov-08
7884.6	2111		QBBI.B26R3		2100	13-0ct-08	*		10-Nov-08	10-Nov-08	5-Nov-08	12-Nov-08	6-Nov-08	6-Nov-08	6-Nov-08	6-Nov-08		3-Nov-08	3-Nov-08	18-Nov-08
7900.3	2100		QBQI.26R3		0208	13-0ct-08	*		11-Nov-08	11-Nov-08	22-0ct-08	14-Nov-08	3-Nov-08	6-Nov-08	29-0ct-08	29-0ct-08				18-Nov-08
7906.8	0208		QBQI.26R3	A27	2043	13-0ct-08	*		11-Nov-08	11-Nov-08	22-0ct-08	14-Nov-08	21-0ct-08	21-0ct-08	29-0ct-08	29-0ct-08		22-0ct-08	22-0ct-08	18-Nov-08
7922.4	2043	A27	QBBI.A27R3	B27	1089	14-0ct-08	*		11-Nov-08	11-Nov-08	5-Nov-08	14-Nov-08	21-0ct-08	21-0ct-08	6-Nov-08	6-Nov-08		22-0ct-08	22-0ct-08	18-Nov-08
7938.1	1089	B27	QBBI.B27R3	C27	1235	15-0ct-08	*		20-0ct-08	20-0ct-08	20-0ct-08	20-0ct-08	21-0ct-08	21-0ct-08	29-0ct-08	29-0ct-08	20-0ct-08	22-0ct-08	22-0ct-08	18-Nov-08
7953.7	1235	C27	QBQI.27R3		0230	16-0ct-08	*		12-Nov-08	12-Nov-08	29-0ct-08	31-0ct-08	22-0ct-08		30-0ct-08	30-0ct-08		22-0ct-08	22-0ct-08	4-Nov-08
7960.2	0230		QBQI.27R3	A28	1088	17-0ct-08	*		12-Nov-08	12-Nov-08	6-Nov-08	12-Nov-08	3-Nov-08	6-Nov-08	6-Nov-08	6-Nov-08				4-Nov-08
7975.9	1088	A28	QBBI.A28R3	B28	3128	17-0ct-08	*		12-Nov-08	12-Nov-08	6-Nov-08	12-Nov-08	21-0ct-08	21-0ct-08	7-Nov-08	7-Nov-08		22-0ct-08	22-0ct-08	4-Nov-08
7991.5	3128	B28	QBBI.B28R3	C28	3103	17-0ct-08	*		12-Nov-08	12-Nov-08	6-Nov-08	12-Nov-08	22-0ct-08	22-0ct-08	10-Nov-08	10-Nov-08		22-0ct-08	22-0ct-08	4-Nov-08
8007.2	3103	C28	QBQI.28R3		0198	16-0ct-08	*		12-Nov-08	12-Nov-08	7-Nov-08	12-Nov-08	22-0ct-08	22-0ct-08	10-Nov-08	10-Nov-08				
8013.7	0198		QBQI.28R3	A29	1112	16-0ct-08	*		12-Nov-08	12-Nov-08	7-Nov-08	12-Nov-08	7-Nov-08	6-Nov-08	12-Nov-08	12-Nov-08		29-0ct-08	29-0ct-08	
8029.3	1112	A29	QBBI.A29R3	B29	1061	15-0ct-08	*		12-Nov-08	12-Nov-08	10-Nov-08	12-Nov-08	7-Nov-08	6-Nov-08	12-Nov-08	12-Nov-08		29-0ct-08	29-0ct-08	
8045.0	1061	B29	QBBI.B29R3		2040	8-0ct-08	*		12-Nov-08	12-Nov-08	10-Nov-08	12-Nov-08	7-Nov-08	7-Nov-08	12-Nov-08	12-Nov-08		29-0ct-08	29-0ct-08	
8060.6	2040		QBQI.29R3		0221	8-0ct-08	*		14-Nov-08	14-Nov-08	6-Nov-08	12-Nov-08	3-Nov-08		12-Nov-08	12-Nov-08		29-0ct-08		
8067.1	0221		QBQI.29R3		1154	9-0ct-08	*		14-Nov-08	14-Nov-08	5-Nov-08	12-Nov-08	7-Nov-08	7-Nov-08	12-Nov-08	12-Nov-08		29-0ct-08	29-0ct-08	
8082.8	1154		QBBI.A30R3		3409	9-0ct-08	*		14-Nov-08	14-Nov-08	5-Nov-08	12-Nov-08	12-Nov-08	12-Nov-08	7-Nov-08	7-Nov-08		29-0ct-08	29-0ct-08	

100% work in D area expected end November, but:

Follow coactivity with transport carefully

Work outside D area (replacement of buckled PIMs, cleaning in-situ vs remove more magnets etc.)



SAFETY:

Proceed carefully, constant work together with SC

Need for restraints, often ad-hoc cases

Magnets with large cold mass/cryostat displacements: need extra time and attention

Inspection work



PIMs outside D area (V2 buckled towards 12 R3)

Endoscopy:

Soot & MLI residues (V. Baglin for beam lines)

Busbars, soot & electrical damage (M. Modena, P. Fessia, A. Siemko et.al.)

Cryostats, cold supports, MLI, thermal screens (V. Parma, M. Felip)

US inspection of BB splices before debrazing (A. Jacquemod, L. Williams)

Magnet transport



Presentation S. Prodon

First SSS removed yesterday 6 November, then 1 per day, then 2 per day (starting W47/48): objective 100% W51

SAFETY:

Transport restraints, may need to be reused in the first weeks

Measurements of magnet displacements (especially radially and vertically)

Inspection of cold supports

MBs transport towards Point 3, SSS towards Point 4

- **3-4 tunnel: coordination F. Bertinelli, with JP Tock.**
 - Constant tunnel presence for the first weeks (FB, JPT, A. Musso)
 - Coordination mainly associated to IC work (TS/MME, transport, VAC, BLMs etc.)
 - But also shutdown starting (5-6, 1-2 ...)
- **3-4 surface activities for AT-MCS: coordination L. Rossi**
 - Specifically coordination with TS-MME (Tuesday and Thursday morning meetings)

- **Cryostating activities SMI2 (V. Parma):**

- Resources increased (experienced FSUs)

- Planning well advanced

- Cryostating of new SSS ongoing

- Shift work possible

- **Logistics (M. Modena)**

- Reuse Gematec storage area

- **Component orders**

- bottom trays, MLI, cold supports, bellows, W bellows, flexible hoses

- **Bdg. 181**

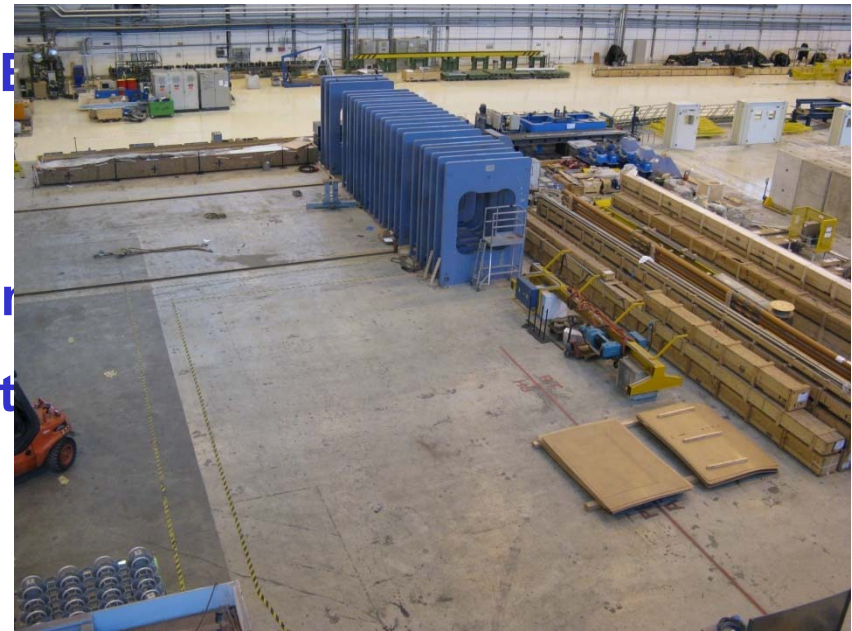
Installation of SSS vertical assembly bench
("ACCEL") launched (H. Prin, K. Schirm)

- **Bdg. 180**

Installation of second MME
("CNRS") ongoing, area
thanks)

TS/MME responsibility, in

Dedicated to MBs non-st



- **Analysis and samples**

- Analysis of BB production data (P. Fessia, P. Hagen)

- New BB samples made for additional testing, electrical and mechanical (Cryolab, TRESCA, EIG)

- And of course Task Force and MOPS analyses ...