

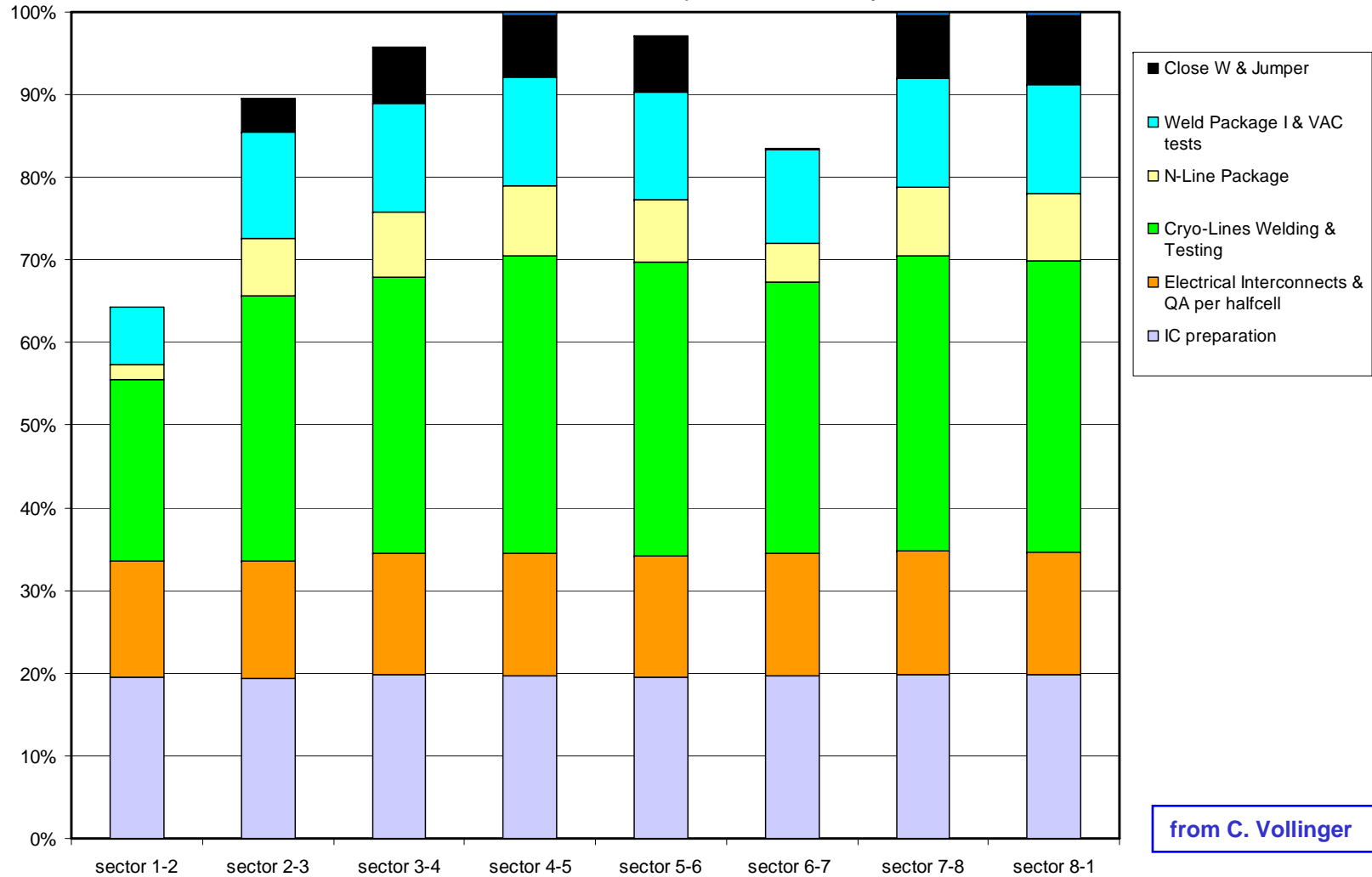
LHC Arc Interconnections: monthly update

F. Bertinelli / AT-MCS

(on behalf of IC Team)

- **Sector 7-8 consolidation: what about other sectors?**
- **IC resources: enough for 2008 and onwards?**
- **Consolidation after pressure test: is 3 weeks enough?**

General Advancement of Interconnects per Sector 4-July-2007



from C. Vollinger

1-2 (L2), 3 July, 2007: last insertion line N DS

L8, 15 September 2006: 1st insertion



L2, 3 July 2007



L2, 3 July 2007: radio contact

L2, 3 July 2007: damaged flexible hose (changes to the team) ...

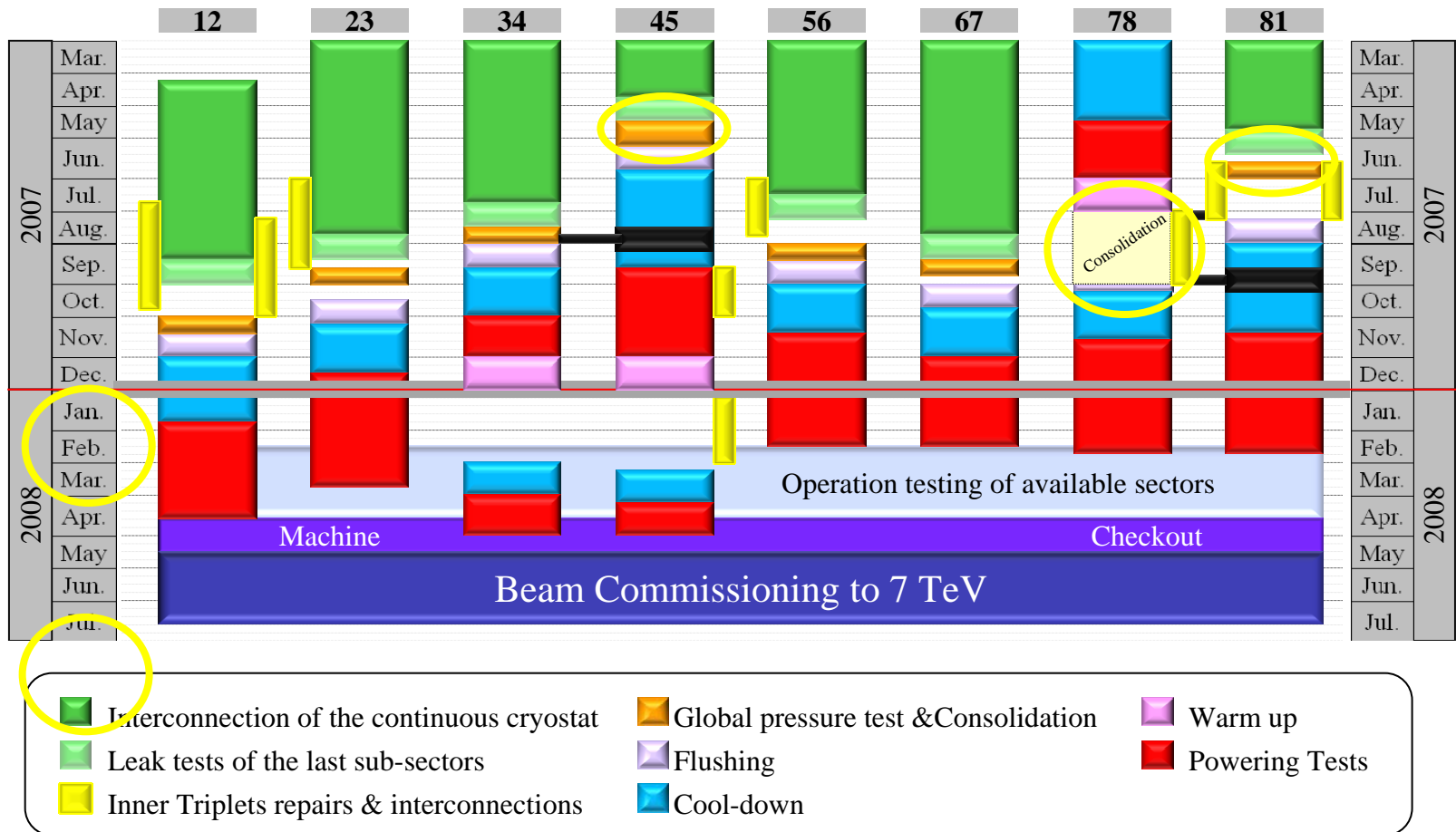


IC issues based on latest LHC schedule

from K. Foraz

LHC Construction and Installation General co-ordination Schedule

LHC project Document N°
LHC-PM-MS-0005.1 rev. 4.0
CERN Dep./Group/Contractor Document N°:
TS/IC
EDMS Document N°:
102590
12 June 2007



Sector 7-8 consolidation

	<u>Sector 7-8 repairs</u>	Expected non-recurring	Potentially recurring
MCS Coordinator : A Poncet			
	<u>Identification</u>		
1	QQB-Plugin-Modules (x9 IC)	x	
2	Improve electrical insulation DFBAO-6kA	x	
3	Q4-D2: motion after pressure test?	x	
4	Exchange cryodipole 1055	x	
5	SSS-500 (x6 SSS)	x	
6	Triplet Repair (HX and fixed points)	x	
7	Leak in 32L8 - CM circuit		x
8	Check of line N US welds	x	
9	Q5/DFBMC Elec NC L8	x	
10	Leak in 11R7 K-C' circuit		x
11	UnConnected Line Y (Q9-11L8)		x
12	Short circuit on MQD - QQBI.22L8		x
13	Replace O Rings in DFBA/Q7R7	x	
14	Repair short circuit on cryodipole 3006		x
15	Repair cryothermometers		x
16	Others		

Sector 7-8 consolidation

- Start of intervention: Monday, 6th August
 - start of warm-up Monday 9th July
 - work for 35 persons organised (IEG, CERN, FSUs)
 - please avoid further delays (e.g. tests AUG on Monday 9th July): please avoid argument « cryogenics to pay for further delays »
 - may start triplet intervention 1 week earlier
- Will this be the only consolidation?
 - potentially recurring problems, e.g. short circuit 4-5 in diode following flushing (He flow: 100 gs⁻¹)
 - no (not likely): so safer/realistic to organise for others
 - many of these problems would become visible at the same time and late (December 2007 – March 2008)

4-5: short circuit in MB 3186



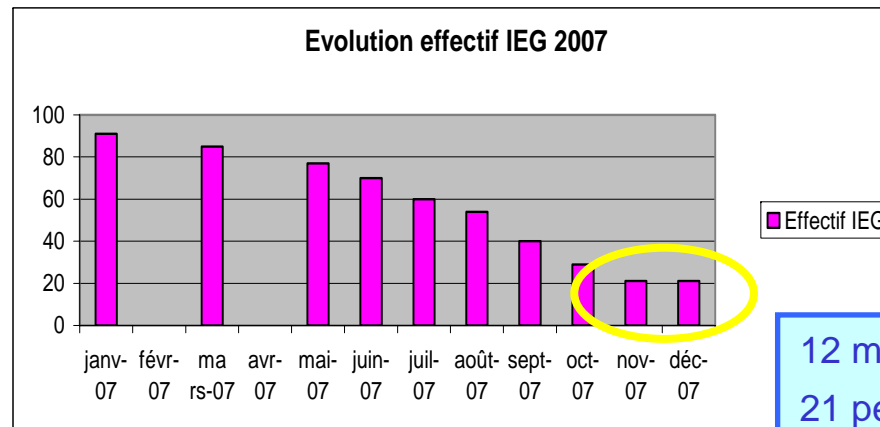
from D. Bozzini, F. Savary

- F523-IEG:
 - Last CODIR: 29 June (next: 25 July)
 - F523 contract extended to 31 December, 2007
 - planned reduction in IEG resources (some quality problems...)
 - still to be decided: how to cover the first months 2008 with existing trained persons (F523-IEG or FSU, ...).
- CERN technical intervention team:
 - today 27 persons:
 - 13 CERN staff (6 from IC, 7 from other MCS sections)
 - 14 FSUs: reduction of 5 persons already decided, then to 6 FSUs by January 2008
 - in June 2008 6 persons:
 - 6 CERN staff (**2 from IC**, 4 from other MCS sections)
 - ongoing AT discussion for some mechanics contract extensions based on new schedule and longer term IC (and non-IC) work, end 2008 onwards.
- CERN QC team: reinforced for July – Sept. 2007 (P. dos Santos de Campos).

Planned reduction of IEG resources

Evolution effectif IEG 2007

	01/01/2007	01/03/2007	01/05/2007	01/06/2007	01/07/2007	01/08/2007	01/09/2007	01/10/2007	01/11/2007	01/12/2007
Effectif IEG	91	85	77	70	60	54	40	29	21	21
ACTIVITES			WP1ab	WP1ab	Finition WP1ab	Finition WP1ab	Finition WP1ab	Finition arc	Finition arc	Finition arc
			WP1c	WP1c	WP1c	Finition WP1c	Finition WP1c	DFB	LSS/DFB	LSS/DFB
			WP2	WP2	WP2	Finition WP2	Finition WP2	LSS	Transfert	Transfert
			WP3	WP3	WP3	WP3	WP3	Transfert		
			WP5	WP5	WP5	WP5	Finition WP5			
			DFB	DFB	DFB	DFB	DFB			
			LSS	LSS	LSS	LSS	LSS			
							Secteur 7-8	Secteur 7-8		



12 mechanics in the tunnel.
21 persons overall.

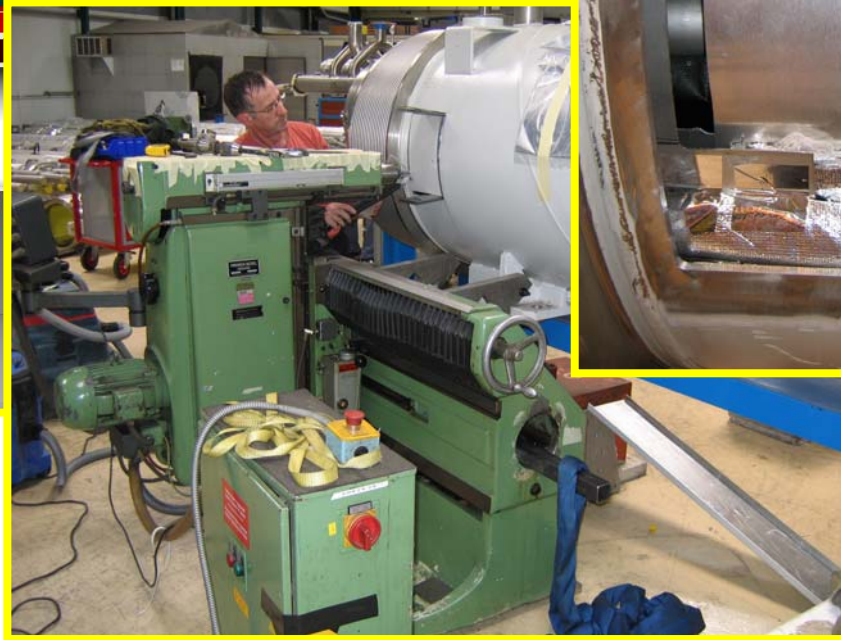
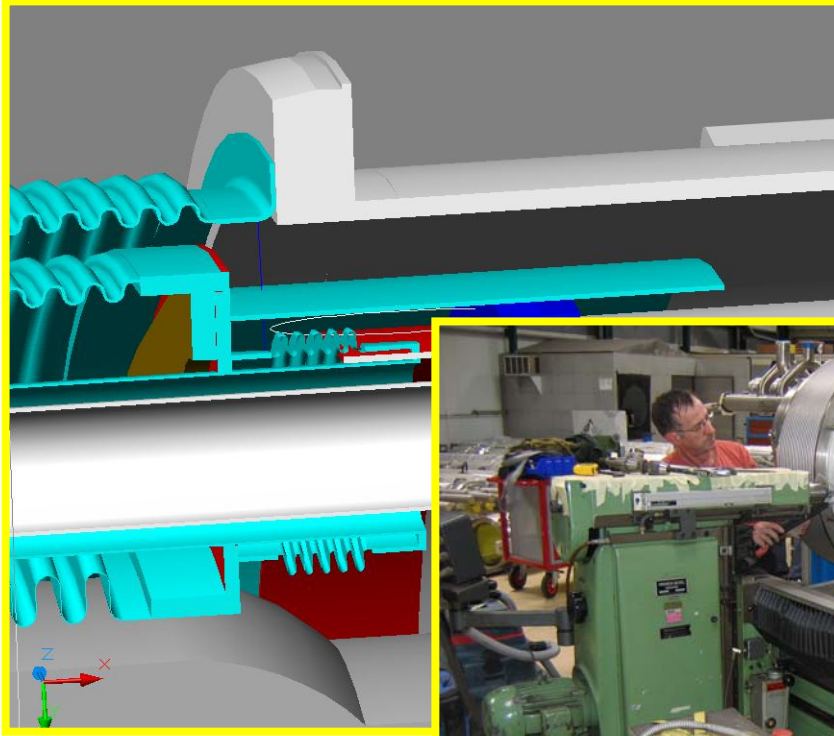
from L. Vaudaux, JP. Tock

3 weeks' consolidation after pressure test

- Sector 4-5:
 - pressure test on 12 May 2007
 - flushing
 - short circuit localised in MB 3186
 - cryogenic lines crossing in DFBAH HCM-LCM
- Sector 8-1:
 - pressure test on 16 June 2007
 - 4 leaks identified:
 - 2: localisation successful, repair pending
 - 2: localisation still ongoing
 - few (~4) VAC experts for localisation: concern for 7-8 (tight time schedule, He-polluted environment) and future sectors

Intended as constructive comment !!! localisation is not leak detection

SSS533 repair: Q11R2 critical (mid August)



Please follow cold testing closely in the next weeks.

from V. Parma, N. Bourcey