

# Progress and Outlook for Interconnections

F. Bertinelli / AT-CRI (10 minutes)

(on behalf of IC Team)

- recent “news” since MARIC 2nd August
- restart sector 4-5
- sector 7-8

# Some recent news...

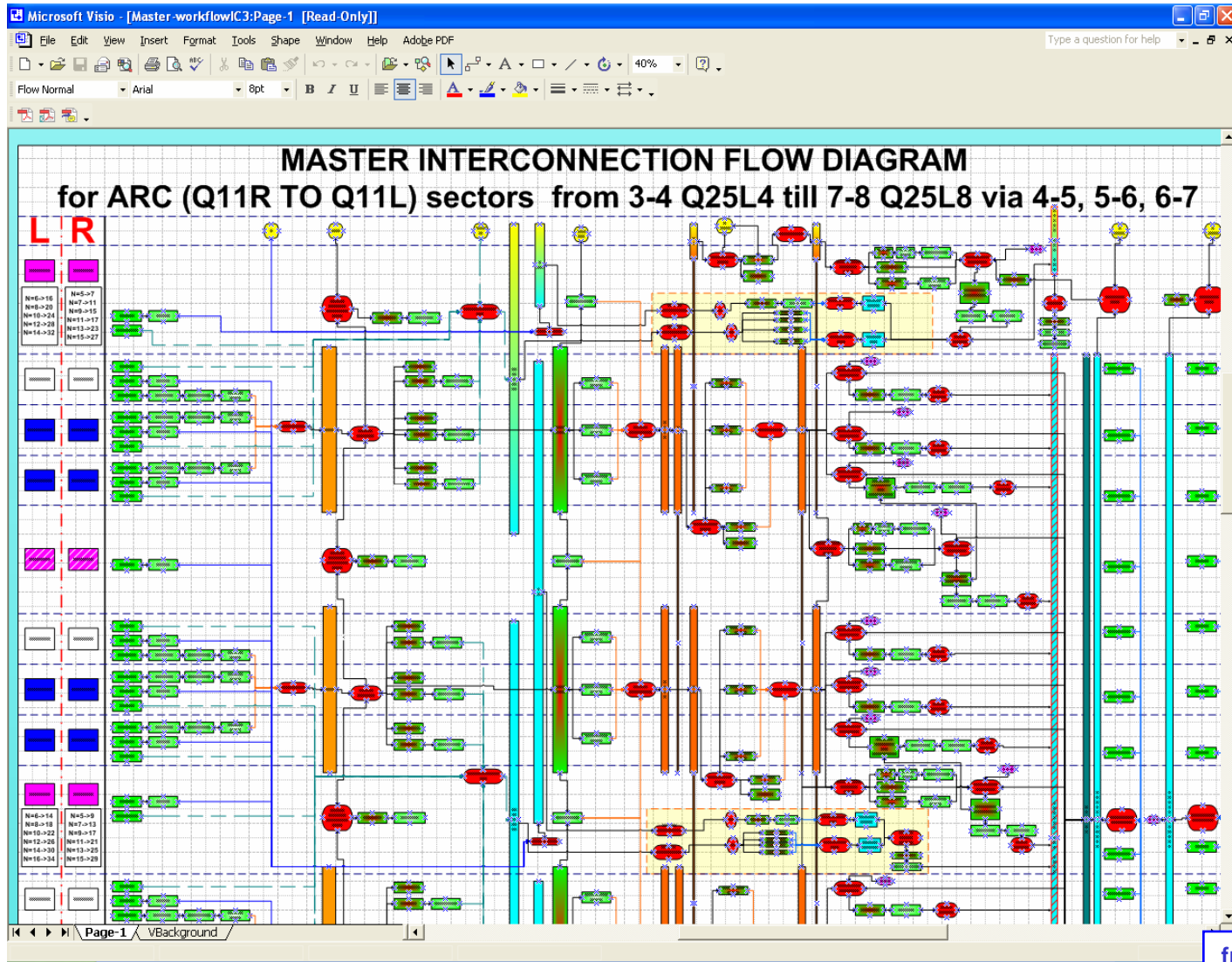
## Organisational:

- internal AT reorganisation, IC project consolidation
- already reinforcement of QA (D. Tommasini/MAS, R. Lopez/CRI)
- F523: 4th full team contractually implemented, effective starting week 39/06
- Workflow: developed detailed workflow of activities, including:
  - pre-inspection and reflectometry
  - VAC and MEL tests (with recently introduced extended tests MPAQ and MHVQN)
  - ACR instrumentation
- Planning: developed detailed planning, by activities, slots and weeks, extending to closure of W bellows and sector VAC testing

# Restart sector 4-5

- IC work restarted this week 35/06
- IC work now in 4-5, continuing to 3-4
- detailed planning set up (activities, slots, weeks) for 4-5; 3-4 will follow
- 2 full teams (at the moment BR, US, TIG: V, E, X, C')
- until week 39/06 will work Monday to Thursday, then extend to Saturday
- 3rd large team starting week 39
- “forfait” (“lump sum”) invoicing
- expected average productivity: 8 activities / week-team (but prepare work up to 10 - 12)
  
- first partial results from week 35/06:
  - V1/V2 & E: 19
  - BR: 16
  - US: 11
  - X: 12, C': 21

# Workflow IC





# Sector 7-8 (and 8-1)

- Since this week 35/06 1 full team for 7-8 & 8-1
- until week 39/06 will work Monday to Saturday, then Monday to Thursday
- detailed planning set up (activities, slots, weeks) for 7-8; 8-1 will follow
  - difficulty is coordination to micromanage activities
  - identified driver as MEL tests, and work towards ensuring 15 MEL activities / week – sector
  - focus TIG welding work on “large volume” activities (M and K)

## Technical news and “firsts”:

- Sector VAC test Q15 to Q19 ongoing: without and with thermal screens
- ongoing campaign ACR-CRI to measure, align jumpers QRL and SSS, machine ad-hoc connection pieces, in-situ grinding:
  - first extended MEL test (MPAQ)
  - first insertion of N-line in DS area (ready for next week 36/06)
  - first DFBAO IC work starting
  - cutting campaign (~15) of plugins for reflectometry and “cleanup” of V lines
  - more material leaks appearing (X line flanges)
  - existing material leaks repaired with VACSEAL: resin solution to be tested in tunnel (high probability that as many material leaks remain undetected)

# Sector 7-8: "simplified" planning

AT-CRI

Microsoft Excel - Scenario IC 9 continuous ffb

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AO37

	A	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY
1		Interconnections 7-8																			
2	week	IC/week BR&insulate (M1&M2&M 3@75%) 7- 8 1st wave	IC/week US&insulate (M1&M2&M 3@75%) 7- 8 1st wave	PAQ/week 7-8	IC/week BR(M1&M2& M3@25%) 7- 8 2nd wave	IC/week US(M1&M2& M3@25%) 7- 8 2nd wave	IC/week TO V&E 7-8	IC/week TO X&C 7-8	IC/week TO (M1&M2@75 %) 7-8	IC/week TO (M3@100%) 7-8	IC/week TO K 7-8	Line N/week HV test 7-8	Line N/week AIV1 7-8	Line N/week US 7-8	Line N/week AIV2 7- 8	Line N/week TO (M1&M2@25 %) 7-8	Jumpers/ week TO 7-8	activity/ week TO (M&K post- PAQ) 7- 8	workload indicator TO ("S" needs 1 Team) 7-8	activity/week BR (M1&M2& M3) 7-8	activity/week US (M1&M + II) 7-8
3																					
4																					
5	complete total	156	156	54	54	54	210	193	156	210	187	46	54	54	54	54	27				
6		156	156	54	54	54	210	193	156	210	187	46	54	54	54	54	27				
7																					
22	28 2006																				
23	29 2006																				
24	30 2006																				
25	31 2006																				
26	32 2006																				
27	33 2006	156	155	49	43	40	190	189	136	170	153	28	20	14	10	7	4				
28	34 2006		1		2	2	5	4				4	9	2			2	0	14	2	8
29	35 2006			5								5	5	10			2	0	5	0	26
30	36 2006				5	5	5					5	5	6	5		2	0	10	5	19
31	37 2006								20	16	20	4	5	6	5	5	2	32	48	0	14
32	38 2006						5			24	14		5	5	10	5	3	17	43	0	12
33	39 2006				2	2						5	6	10	10	3	0	28	2	16	
34	40 2006						5						5	5	10	10	3	0	33	0	12
35	41 2006				2	2									4	10	3	0	28	2	2
36	42 2006															7	3	0	22	0	0
37	43 2006																	0	0	0	0
38	44 2006																	0	0	0	0
39	45 2006																	0	0	0	0
40	46 2006																	0	0	0	0
41	47 2006																	0	0	0	0
42	48 2006																	0	0	0	0
43	49 2006																	0	0	0	0
44	50 2006																	0	0	0	0

Base data / Status / Graph total transport / Graph total IC / Graph team 7-8 / Sheet1 /

Ready

# Sector 7-8: detailed planning

AT-CRI

Microsoft Excel - Sector78 Status end week 33-2006 Planning ffb

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AC1 AIV1

	A	B	C	E	F	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP
	SUB SEC.	dcum ring start	mag. Left	IC number	mag. Right	VAC test circuit K1K2C	weld M1_M2	insert N	Tack Weld N (not qbg)	cable N	Test HVQN	AIV 1	MPAQ	US weld N (cables)	AIV 2	MHVQN	Weld N (Ø71 sleeve)	Insulate and weld N (Ø139 sleeve)	Install th. shield + MLI	Close W	Open W	Cryo Instrum	Close W	VAC final test	Vacuum sector
1																									
6		20279	3050	QBBL3R7	1044			Week 36																Week 45	
7		20294	1044	QBBL3R7																				Week 45	
8		20302		QBBL3R7	1052			Week 36																Week 45	
9		20318	1052	QBBL10R7	1032			Week 36																Week 45	
10		20333	1032	QBBL10R7																				Week 45	
11		20343		QBBL10R7	3022			Week 36																Week 45	
12		20358	3022	QBBL11R7	1034			Week 36																Week 45	
13		20374	1034	QBBL11R7	0001			Week 36																Week 45	
14		20382	0001	QBBL11R7																				Week 45	
15		20397		QBBL11R7	2018		7/27/2006	7/27/2006	Week 35		Week 35	Week 35												Week 45	
16		20413	2018	QBBLA12R7	1010		7/27/2006	7/27/2006	Week 35		Week 35	Week 35												Week 45	
17		20427	1010	QBBLB12R7	2039		7/28/2006	7/27/2006	Week 35		Week 35	Week 35												Week 45	
18		20434	2039	QBBLI2R7	0245			Week 37		7/25/2006				Week 36										Week 45	
19		20450	0245	QBBLI2R7	3041		7/27/2006	7/20/2006	9/8/2006		Week 36	Week 34			Week 37		Week 36							Week 45	
20	H	20466	3041	QBBLA13R7	1054		9/10/2006	7/20/2006	9/8/2006		Week 36	Week 34			Week 37		Week 36							Week 45	
21		20481	1054	QBBLB13R7	3019		9/9/2006	7/20/2006	9/8/2006		Week 36	Week 34			Week 37		Week 36							Week 45	
22		20488	3019	QBBLI3R7	0019		Week 37			9/8/2006				Week 35										Week 45	
23		20504	0019	QBBLI3R7	3030		9/2/2006	7/27/2006	9/9/2006		Week 36	Week 36			Week 37		Week 36							Week 45	
24		20519	3030	QBBLA14R7	1004		9/3/2006	7/27/2006	9/9/2006		Week 36	Week 36			Week 37		Week 36							Week 45	
25		20535	1004	QBBLB14R7	2015		9/3/2006	7/27/2006	9/9/2006		Week 36	Week 36			Week 37		Week 36							Week 45	
26		20541	2015	QBBLI4R7	0037		Week 37			7/25/2006				Week 35			Week 38							Week 45	
27		20557	0037	QBBLI4R7	3020		9/3/2006	7/20/2006	9/7/2006		Week 36	Week 34			Week 37		Week 36							Week 45	
28		20573	3020	QBBLA15R7	3010		9/3/2006	7/20/2006	9/7/2006		Week 36	Week 34	Week 36		Week 37	Week 38	Week 36							Week 45	
29		20588	3010	QBBLB15R7	1022		9/4/2006	7/20/2006	9/7/2006		Week 36	Week 34			Week 37		Week 36							Week 45	
30		20595	1022	QBBLI5R7	019		Week 37			9/4/2006				Week 35			Week 39							Week 45	
31		20610	019	QBBLI5R7	3279		9/4/2006	7/24/2006	9/7/2006		Week 34	Week 34			Week 36		Week 35		Week 40			Week 40	Week 40		
32		20626	3279	QBBLA16R7	1008		9/5/2006	7/24/2006	9/7/2006		Week 34	Week 34			Week 36		Week 35		Week 40			Week 40	Week 40		
33		20642	1008	QBBLB16R7	3028		9/5/2006	7/24/2006	9/7/2006		Week 34	Week 34			Week 36		Week 35		Week 40			Week 40	Week 40		

Bertinelli: to stay open until the 2 adjacent MHVQN are passed

VACSEC (requ)

VACSEC

Ready

CRI \ general \ Production weights \ CH jumper \ JUMPER \ CH pre int rate



# Sector 7-8: new activities

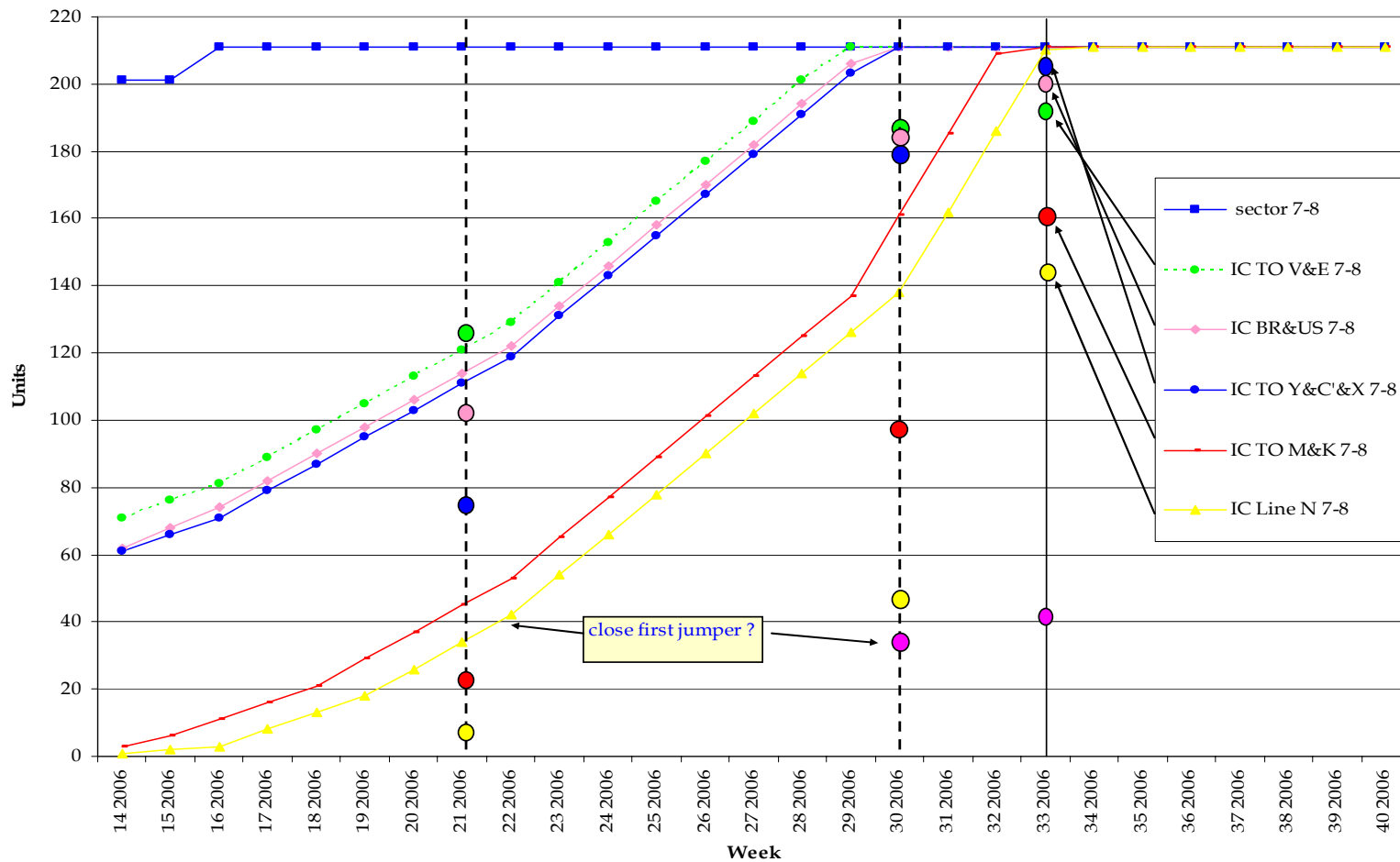


**Closed W bellows for VAC sector test**



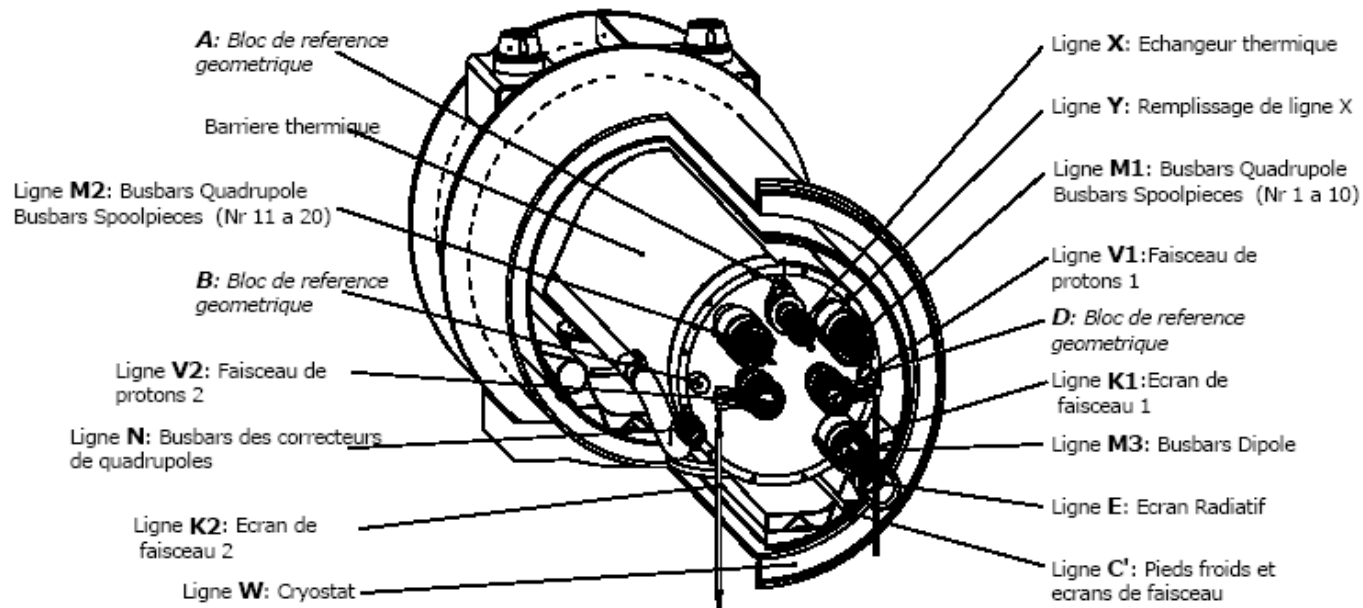
**Jumper connections**

Activity interconnection 7-8



# Definition of lines

## EXTREMITE DOWNSTREAM D'AIMANT DIPOLE LIGNES D'INTERCONNEXION



From A. Jacquemod