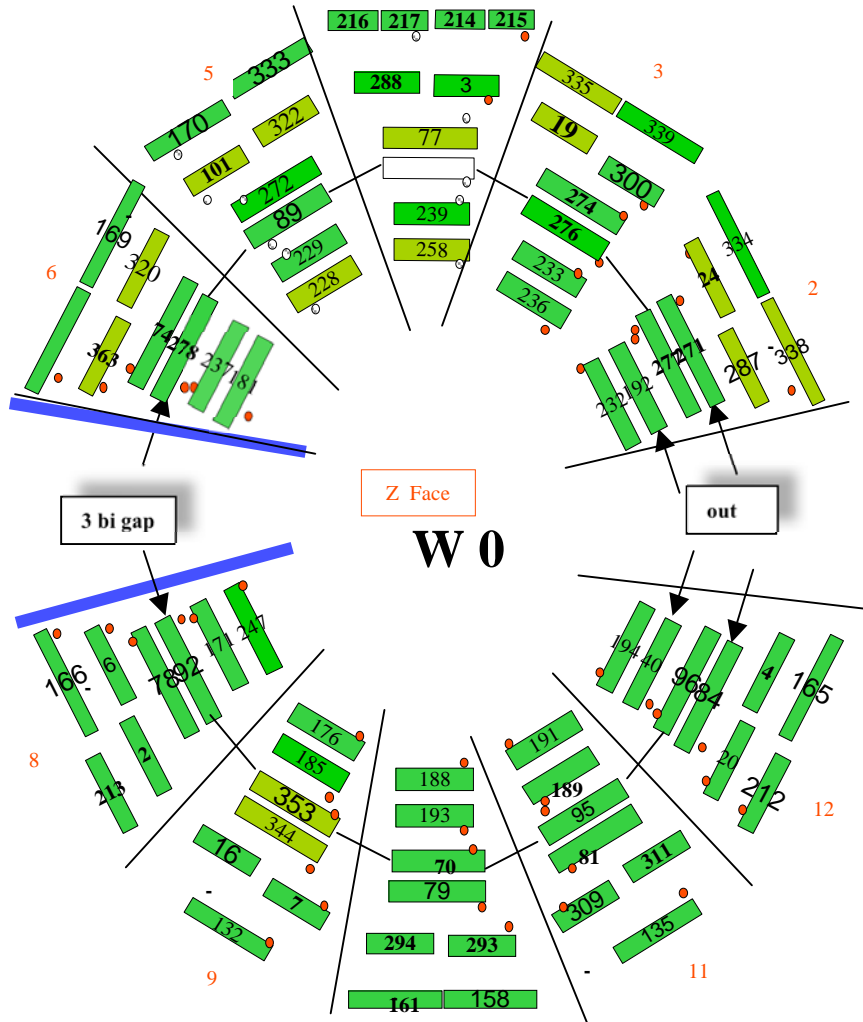


Readiness for installation W0



All chambers but sect.4/5 will be installed
Jan06 – Feb 06

Missing 1 RB2/sect 4. under testing in Bari.
Expected at ISR at the end of January 06

- Ready at ISR
- id Tested in Italy or under test
- To be built

Installation Sect 4/5 end of August
MB4 sect 9-11 October 8th



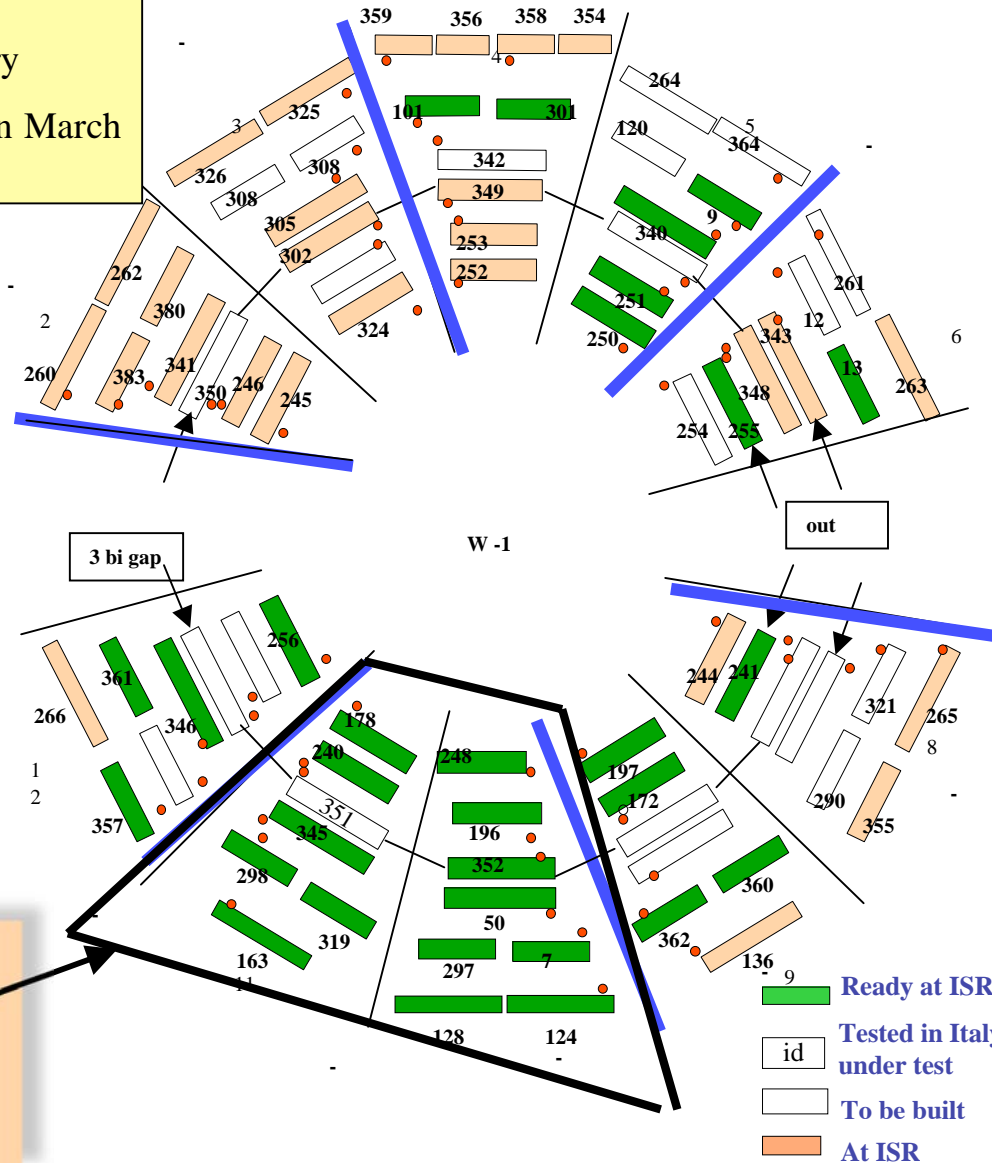
Readiness for installation W-1

CMS RPC
group

1RB1 in construction in Bari. Expected at ISR at the end of January 06

2 RB2 under test in Bari. At ISR at the end of January

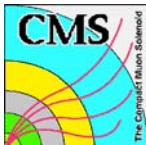
6 RB2 under construction in GT. Expected at ISR in March 06.



Installation remaining 8 sectors:
Beginning Sept.06

All chambers ready in May

Readiness for next installation sect
10/11 End Feb 06:
1 RB2 under test in Bari
at ISR end Jan06 –ready endFeb06



Readiness for installation W-2

CMS RPC
group

2RB1 in construction in GT in January. Expected at ISR in March 06

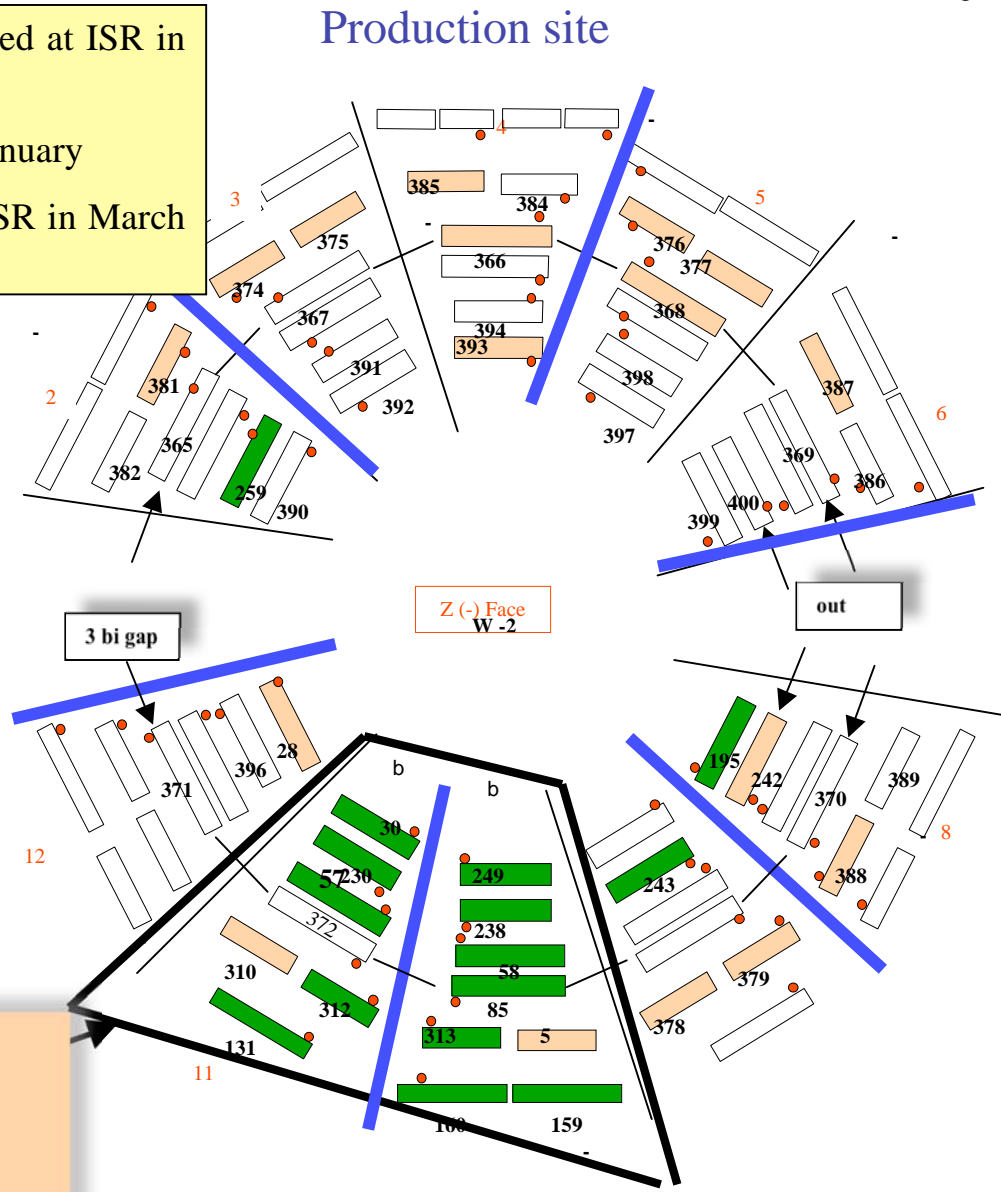
5 RB2 under test in Bari. At ISR at the end of January

9 RB2 under construction in GT. Expected at ISR in March 06.

Installation remaining 8 sectors:
Middle Oct.06

All chambers ready in June

- Ready at ISR
- Tested in Italy or under test
- To be built
- At ISR



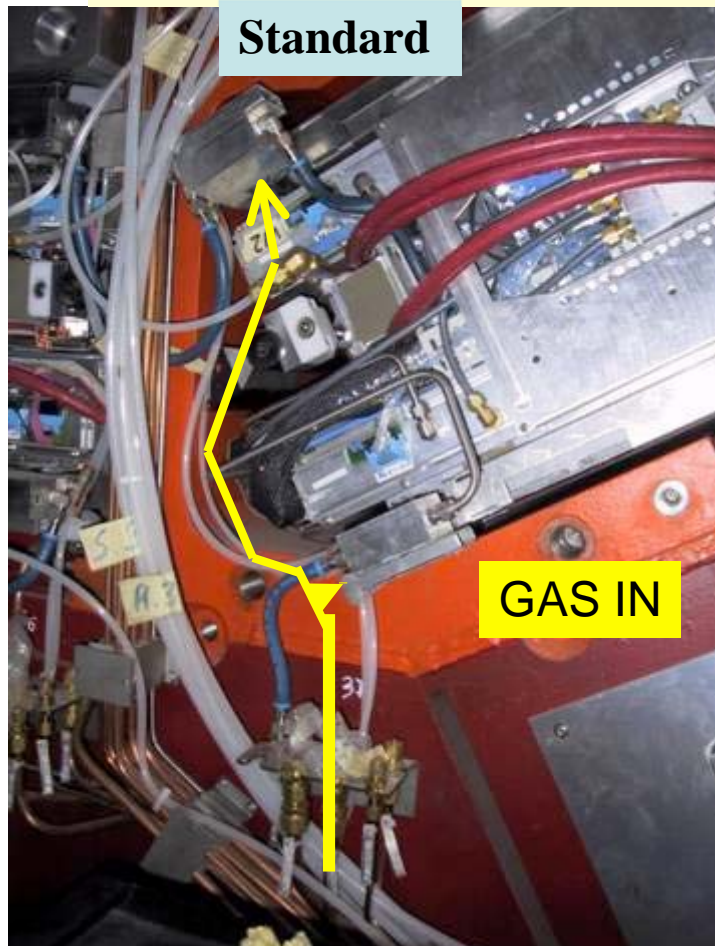
Readiness for next installation sect
10/11 End Feb 06:
1 RB2 to be tested in Bari
at ISR end Jan06 –ready end Feb06

Gas system test:

- Commissioning the final gas distributor **DONE ON W+1 and W+2** but not easy operation
- Gas line equalization :

Each CMS gas line supplies in parallel 2 chambers in same station.

Very important to equalize the gas flow between the chambers. Needed in W+2 due to different input impedance between some chambers. **DONE**



Equalization example:

case chamber 2 lower impedance than chamber 1



Status

Gas System

- Final gas mixture
- Gas mixture monitor done
- Interlock system done
- Final distributor under commissioning

Chamber test

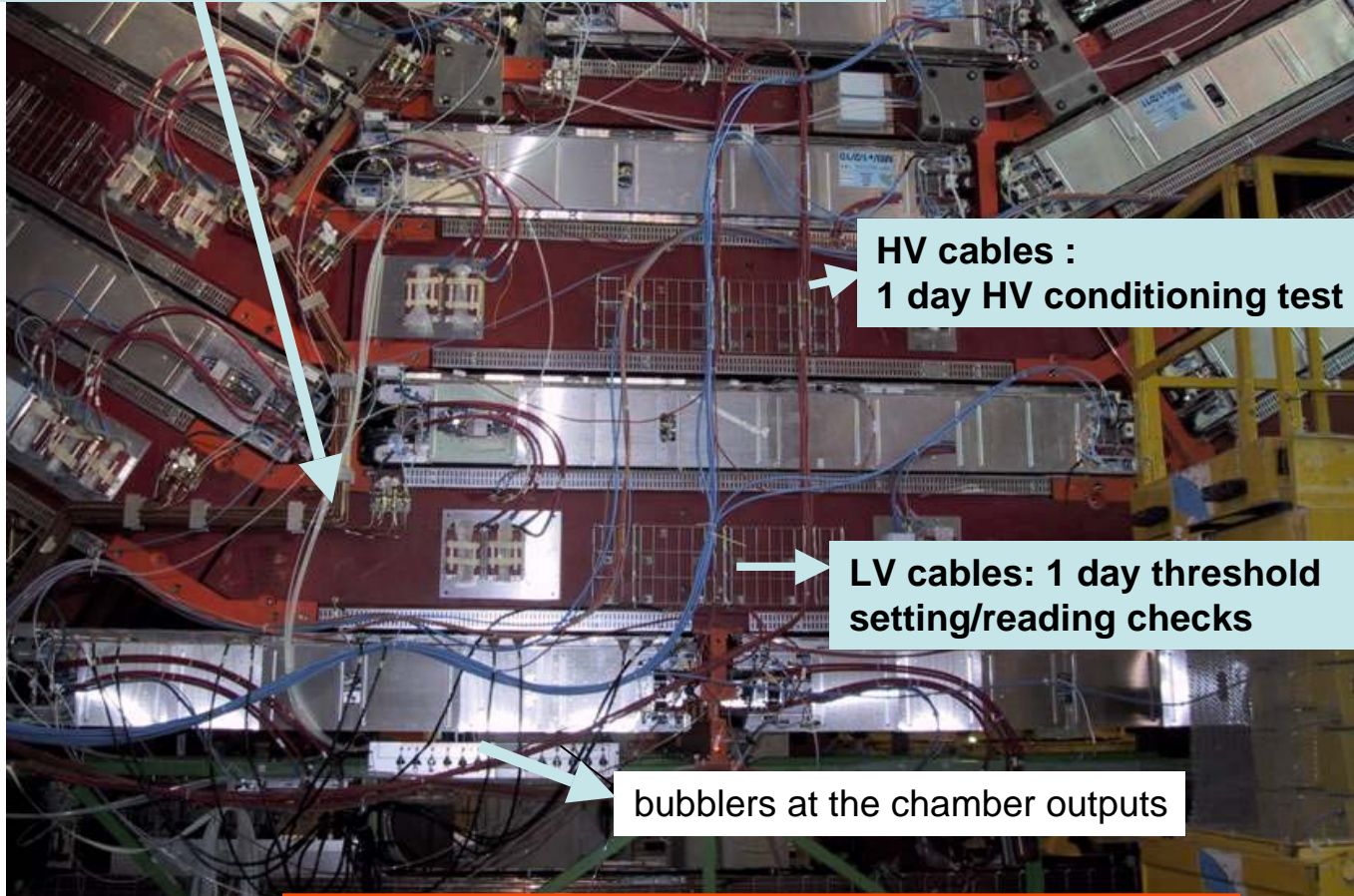
6 sector/10 sectors tested

- Conditioning under HV
- Connectivity check
- Noise test

Planning

1 sector/week will be improved next week using the final gas distributor

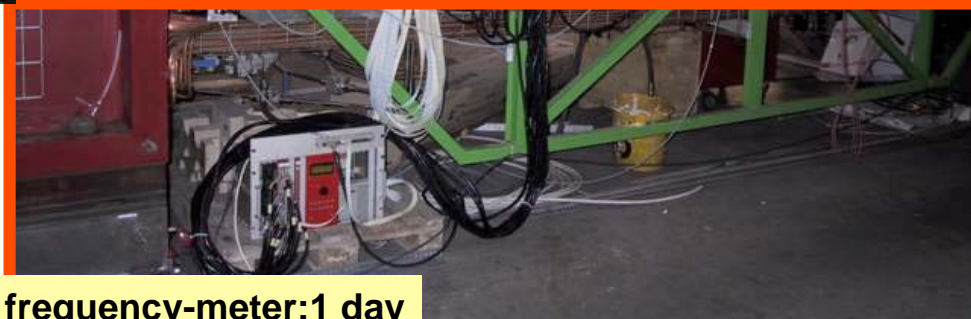
On flight gas pipes on the sector: 2 days flushing



HV cables :
1 day HV conditioning test

LV cables: 1 day threshold
setting/reading checks

bubblers at the chamber outputs



Noise test with frequency-meter:1 day



Chamber commissioning on wheel W+1

RPC group

Problems Found:

- 1) 1 disconnected connector (8 strips) from front-end board
- 2) 1 Distribution Board was accidentally broken during operation
- 3) High voltage problem inside in RB2 sect 5 \Rightarrow need to replace the chamber. But the chamber have be put under test now. Ready middle of Jan 06.

First 2 chambers repaired last week with help of DT group –about 3 hours of work each chamber:

Both muon stations pushed out about 30 cm on Z- side

During operation cooling from patch panel and DT cables/ground cables were disconnected

The commissioning must be finished by 9 Jan. 06 due to cabling activity on W+1 but we plan to finish the test one week later.



Commissioning on wheel W+2

CMS RPC
group

The commissioning was postponed due to the cabling activity

In order to save time a fast check of all front-end board started with a portable frequency-meter

Up to now Sect 8/9/12 checked. Aim to finish middle December.

Problem found :

1 Broken FB in sect 9

Repaired last week : muon station was pulled out of about 70 cm with cradle on **Z- side**

The commissioning can start during the cabling operation breaking on W+2

Commissioning plan: 9 Jan- 10 Feb 8 sectors

5-15 Feb. Sect 10/11

From Middle of Feb. test sect 10/11 with final cables and LBB+RBC

Installation After the Magnet Test

RPC readiness

Preferred Installation Sequence:

- | | | |
|--|-----------------------------|-------------------------|
| 1) YB-0 S04, S05: 9 +2 chambers | Inst. End Aug06 | Ready in Jan06 |
| 2) YB-1 ~8 Sectors: 29 +2 chambers | Inst. Beg Sept 06 | Ready in May06 |
| 3) YB+2, YB+1 S01, S07: 16 chambers | Inst. End Sept 06 | Ready in July 06 |
| 4) YB-2 ~8 Sectors: 30 +2 chambers | Inst. Middle Oct. 06 | Ready in June 06 |
| 5) YB0, YB-1, YB-2 S01,S07: 24 chamber | Inst end 06- beg 07 | Ready in Aug 06 |

The chambers for the first 3 points (58) must be ready by the end of the Magnet Test.

Access time to YB0 can be minimized by commissioning (and cabling) YB+0 and YB-0 in parallel with two dedicated teams.