

Spain and CERN: **personal impressions**

- **CERN user since 1985 (ALEPH)**
- **Manager of the PNFAE (92-95)**
- **Member of the (first) LHCC (93-94)**
- **Chairman of ECFA (96-99) → ex-officio member of:**
 - Scientific Policy Committee (SPC)**
 - Finance Committee (FC)**
 - Committee of Council (CC)**
 - Council (C)**
- **Member of the ERC (External Review Committee) (2002)**

I started as a user of CERN in 1985, and thus had an “outsider” perspective.

The “CERN-style”.

Strong nationalistic sentiments...I have the feeling that this is still true today, at least much more than desirable (to me).

In 1985 the Barcelona group joined ALEPH:

Perception of a new Spanish group by (some) European colleagues somewhat distorted, but this soon changed.

In perspective: ALEPH computing ‘organization’ poor. We had a strong influence.

CERN technical support superb.

CERN and the PNFAE (92-95)

Main interaction is through the “finance committees” of the experiments (now called RRB’s).

ALEPH, DELPHI, SMC

Big crisis in Spain-CERN relations in 93-94

Spain had some grievances and decided to stop paying its contribution (already in 91).

Furthermore, the budget line with the CERN contribution was dropped from the 94 budget!

The problem was finally solved in May of 94. Spain got a reduction in the CERN contribution equivalent to a 1.14 yearly contribution, spread over 5 years.

Perception at CERN of Spanish reality was incorrect.

LHCC (92-94)

The committee started in late 92 or early 93.

First big decisions: 3 proposals, ATLAS (ASCOT+EAGLE), CMS and L3P, and only 2 interaction regions.

Second big decision: B-physics detector. Again 3 proposals, COBEX, GAJET, LHB, and only 1 interaction region.

The decision was for a colliding-beam detector, but different from COBEX. → LHCB

CERN came out of all these difficult decisions quite well.

ECFA (1996 -1998)

ECFA and CERN.

Insight into the relations between CERN and its governing bodies (CC, C, SPC), and on the CERN allocation of contracts (FC).

FC: this is where the external contracts are allocated. 96-98 was a very good period for Spain.

The CC and C: new, and “very visible”, chief of Spanish delegation to Council. This was also a good period for Spain, the delegation was very generous.

Special LEP contribution, LNGS extra contribution...
Even to the “asymmetry problem”!

SPC (Scientific Policy Committee): advises the Council. It used to propose the DG.

The 1996 CERN Crisis

Germany asked for a unilateral reduction of its CERN contribution, but other countries did not accept it.

Hard negotiations and fights. At the end the overall budget of CERN was reduced (8.7% in 1997, 9.3% after that).

The LHC schedule was changed. Instead of a two-stage machine (1/2 energy in 2004, full energy in 2008), it was decided to go for full energy in a single stage, starting in 2005.

These were very tough decisions...but life went on as usual.

ERC Committee: the 2001 CERN crisis.

- In June 2001 the LHC was on-time, on budget. But in September 2001 there was a money problem: the LHC needed ~ 470 MCHF.
- An external committee was appointed by the Council, with a complicated mandate. 6 months to produce report.
- First report in March of 2002: the report was very critical of some common practices.

CERN External Review Committee

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I. Mannelli, M. Pannier, J. Peoples, D. Saxon

Interim Report - March 2002

The report addressed many points:

IV-A.1 Level of confidence in the November 2001 cost to completion estimates

IV-A.2 Analysis of the main reasons for overcosts

IV-A.3 Organisation and procedures to build the LHC machine

IV- B CERN's share of detectors construction

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and was very critical about some of them. It made an impact and there was a reaction...

Conclusions

CERN is an excellent laboratory, the number one laboratory in the world today.

Re-joining CERN in 1983 has been for Spain a success story. However the presence at CERN of Spanish experimental physicists is anomalously low.

The LHC is the next frontier and it will remain so for many years.

However:

We should not forget the cost (in Spain and at CERN) of doing our science.

And we should not be arrogant. There is many interesting science elsewhere, with similar priority.