

## The ESO AES Contract for the VLT Unit Telescope A dramatic start skirting the edge of the precipice

## By Harry Van der Laan

## Director General of ESO 1988-1992

Twenty-three years ago, on 24 September 1991, an impressive Italian delegation of the consortium referred to as AES came to ESO Headquarters in Garching bei München. Sr. L. Giuffrida of SOIMI, Sr F. Bressani of ANSALDO and Sr. G. Marchiori of EIE committed themselves to design, construct and install the main structures of the VLT unit telescopes, to serve ESO's user community in the first half of the 21st century.

This AES contract was the biggest of all in the VLT programme. Our engineers, led by Daniel Enard and Massimo Tarenghi, had spent much of their time between mid 1989 and mid 1990 specifying the Call for Tenders, with Robert Fischer, our procurement officer, looking over their shoulders to assure strict adherence to our tendering rules. In June 1990 the Call for Tenders was issued and in January 1991 five bids were received, massive tomes with piles of drawings. (Regretfully we had spoiled the Christmas season of countless engineers and managers for only a twenty percent chance!)

When all analyses and finance issues were put together I got the big package on my desk and decided that in spite of some flaws the new Italian AES Consortium's bid was the best value for money. A contract proposal was submitted to our Finance Committee. I loved the AES engineering concept, the double concentric rails, the elegant design of its four foci, the precise blind pointing, the marvellous vibration-free tracking; and all this for a price that fit my budget. I was prepared to fight for it.

For the first time I could not persuade an FC majority nor cajole Council to overrule the FC. After much haggling the compromise was to hold a series of one day meetings, one with each willing bidder, before a special expert working group. Four of the five bidders wanted to present and defend their proposal. I cancelled our holiday to Sumatra and Bali (have not been there to this day...).

AES was there on Thursday 27 June. It was the most nervous day, with a host of critical questions and answers which reflected differences of language, culture and national interests. My diary of 1991, on the 27 June page, has a scribble in Dutch: Langs de rand van de afgrond...! Or in English: Skirting the edge of the precipice...!

During the review, there emerged a conclusion, finally adopted unanimously: the AES bid is the best. This time, having seen their demands met, FC on 16 July approved my recommendation without any votes against and Council followed suit. I instructed Jochen Becker, a German space project engineer recently appointed VLT programme manager, to proceed with final negotiations for ESO with AES about the many managerial and administrative loose ends for which AES got the benefit of the doubt.

Back in my HQ office on Monday 26 August I learned that AES-ESO negotiations were in an impasse. I concluded that our programme manager's culture, both personal and from space engineering, was at loggerheads with AES (and ESO) pragmatism. I dismissed him and designated Dr Tarenghi as his successor. I also phoned Sr. Marchiori to reassure him. We agreed to have a one day meeting of the two parties' executives in Milano on Monday 2 September. That turned into a dramatic day with tough discussions between two teams, both determined to succeed. Succeed we did, that day. Three weeks of constructive interaction to articulate a host of details followed and on 24 September we signed the biggest contract of the VLT Programme.

With sixteen years of observing experience behind us now, the extraordinary quality of the VLT unit telescopes' main structure has been overwhelmingly demonstrated on Cerro Paranal and appreciated in all of Europe's astronomy teams. The astronomy community hails the achievements of Italian engineering, demonstrated by the consortium of ANSALDO, SOIMI and European Industrial Engineering --AES—and of their leaders. Congratulations to all, especially to Gianpietro Marchiori!!