CERN told to pay \$70 million to engineering consortium

Money will be out of pocket Current programme to continue

London

CERN, the European particle physics laboratory in Geneva, has suddenly found itself more than \$70 million out of pocket. After six years of legal wrangling, a Swiss court has ruled that CERN should have paid an extra SFr60 million to the consortium of civil engineering companies that built the 27-km tunnel housing the laboratory's Large Electron-Positron (LEP) collider on top of the SFr292 million contract agreed before the EUROLEP consortium began tunnelling. With interest, the total bill runs to a cool SFr100 million (about \$70 million). As the CERN member states are unlikely to provide that much money in addition to their existing CERN subscriptions, the court decision will delay large new projects - including the Large Hadron Collider (LHC), which European physicists hope will be the first machine to detect the elusive Higgs boson.

When drilling the LEP tunnel in the mid-1980s, EUROLEP found the tunnelling conditions more difficult than expected, and had to bring in extra manpower and equipment to complete the tunnel on the tight schedule required by CERN. (At the time, the laboratory was competing with US physicists at the Stanford Linear Accelerator Center to be the first to generate large numbers of Z⁰ particles; the detection of Zºs at CERN and Stanford subsequently showed that there are only three families of elementary particles (see Nature, 341, 555; 1989)). EUROLEP argued that CERN should foot the inflated bill for building the tunnel.

The court's decision is a hard hit to take," says CERN director-general Carlo Rubbia, but he is relieved that EUROLEP's claims were not accepted in full: the consortium had been pressing for more than SFr600 million (about \$420 million), including interest, on top of the original contract. "That would have been the death of our laboratory," says Rubbia. CERN's governing council, which

CERN's governing council, which meets next in March, now has to decide how to find the money. CERN cannot appeal the decision, and the bill must be paid quickly, to avoid further interest charges. Sandy Donnachie, from the University of Manchester, and a British delegate to the CERN council, expects delegates to put pressure on France to provide at least some of the money. CERN is a valuable source of employment and income for the surrounding area, both in Switzerland and over the border in France. Switzerland does pay an extra supplement on top of its CERN subscription in recognition of this, but France has always declined to do so. In any case, says Donnachie, "the bulk of the companies involved [in EUROLEP] are French".

Rubbia accepts that he will probably have to find "a significant fraction" of the SFr100 million from CERN's existing budget, but says he has no intention of



CERN director Carlo Rubbia

closing any of the machines now operating at the laboratory. Instead, new projects a planned upgrade of LEP, and the construction of its successor, the LHC may have to be postponed. But Rubbia is not too concerned, because he says the delays can be measured in months, rather than years. With the United States having failed to secure a Japanese contribution for the LHC's rival, the Superconducting Super Collider, "CERN has so little competition today, that it's a shock that we might be able to absorb," he says.

Nevertheless, the March CERN council meeting will be a lively one, Donnachie predicts. "One could criticise CERN to some extent for not setting up a contingency fund" to pay EUROLEP, he says. But Rubbia says that CERN's priority has been repaying the money it borrowed to build LEP. Debt repayments have been running at around SFr85 million (about \$60 million) a year, and were due to finish in 1993. The new SFr100 million bill may now force the loans to be extended, however. **Peter Aldhous**

DIETARY SUPPLEMENTS -

'IQ pills' land in trouble

London

HEALTHCRAFTS, the company that last year launched a vitamin and mineral dietary supplement on the back of a controversial research claim that the formulation could boost children's intelligence (see Nature 350, 5; 1991), faces charges under British trading law. Trading standards officers in Shropshire, in the English midlands, accuse Healthcrafts of making misleading statements in advertising and packaging their product Vitachieve. The research on which the claims for Vitachieve were based was conducted by Stephen Schoenthaler, from California State University, and his colleagues, who last March reported an increase in nonverbal IQ scores averaging 3.7 points among children given the supplement for 13 weeks. At the time, the research attracted great controversy, not least because of Healthcrafts' decision to begin marketing Vitachieve on the basis of the results, with the endorsement of the Dietary Research Foundation - the charitable trust that funded the work.

The case is likely to focus on the challenges made against the findings by others in the field (see *Nature* 350, 13; 1991), and on the fact that Schoenthaler and his colleagues say that the supplement will, in any case, benefit only a minority of children with poorer nutrition (see *Nature* 351, 263; 1991). Healthcrafts' advertisement said that the average IQ score of children taking the supplement had increased significantly, and was headed: "Extraordinary news for parents."

Charges are also being brought against a second company, Larkhall Natural Health Ltd, over the marketing of a similar supplement, Tandem Ideal Quota. The claims made for Tandem IQ refer to an earlier research project, conducted by David Benton from University College, Swansea, and Marilyn Roberts, a Wrexham schoolteacher. The claims, published in *The Lancet* (*i*,140; 1988), also concluded that dietary supplements can influence IQ.

A spokeswoman for Healthcrafts says that the company cannot comment on the charges for the time being, but Robert Woodward, managing director of Larkhall, disputes the accusation that Tandem IO is marketed using misleading claims. He says that the product's packaging states explicitly that the children who benefited most in Benton and Roberts' experiment were those with the poorest diets. He intends to fight the case. But he adds that last year's controversy surrounding the launch of Healthcrafts' product has made the British public "extremely cynical" about the influence of dietary supplements on IQ. "It really killed the market," he says. Peter Aldhous