

29th November, 1962.

Leinfenanti
NI/GP/62/39

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GENERAL PURPOSES COMMITTEE

Experimental Cables for Nimrod

Covering Note by the Secretary

This paper asks for an increase in the sum approved for experimental cables for Nimrod. Provision for this expenditure is included in the estimates now being submitted to the Treasury.

As is briefly described in the paper, a very large amount of time and effort has gone into reducing the cost, and this has been completed just in time to avoid delaying the programme. Approval by correspondence is sought and a form for use in reply if desired is appended.

NI/GP/62/39

To: The Secretary, N.I.R.N.S.,
Rutherford High Energy Laboratory,
Harwell, Didcot, Berks.

From:

I approve/do not approve the proposal in paper NI/GP/62/39
for the purchase and installation of cables for nuclear physics
on Nimrod at a total cost not exceeding £90,000.

Signed:

Date:

29th November, 1962

NI/GP/62/39

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Experimental Cables for Nimrod

1. In February 1960 the Committee approved paper NI/GP/60/7 which set out the case for the purchase and installation of experimental cables for nuclear physics at a total cost of £50,000. These cables constitute the electronics links between the nuclear physics apparatus in the experimental areas and the counting rooms in the control room block, and they range from ordinary multicores to special low-loss coaxial signal-cables, the latter representing more than a half of the cable cost.
2. At that time the nature of the scheme was known but details, particularly as to its scope, had not been worked out. The estimate was therefore a token one.
3. During the next two years detailed requirements were worked out in conjunction with the potential users of the machine and in February 1962 tenders were invited. Only one quotation of £160,000 was obtained and this was not a fixed price. Although the major part of this increase was due to amplification of the scheme there had been considerable inflation in the cost of cable and of installation, and a monopoly had come into existence in the supply of low-loss signal cable. The quotation was from the supplier of the low-loss cable.
4. Again in conjunction with the potential users of the machine, the scheme was cut to the minimum acceptable for useful experimental coverage. The reduction in the amount of cable was almost by a factor of two but not so much reduction could be achieved in cable trays, support structures and other factors in installation. Again only one price was obtained of £96,000, on a scheduled rate basis. This price was not regarded as fair and reasonable.
5. Strenuous efforts were made to increase the competition from firms who had to buy the low-loss signal cable. Three prices were obtained, and that from the supplier of the low-loss signal cable was reduced to £87,600; again on a scheduled rate basis. There seem to be no further ways in which the scheme can be reduced or the competition increased. There is no other supplier of the low-loss cable in Europe although one is thought to exist in the United States. A fixed price cannot be obtained. The work has to be started in January or February 1963 for completion in time for the start up of nuclear physics on Nimrod.
6. There may be some doubt as to whether this cabling should be treated as a capital scheme but since it was submitted as one, it is thought that the increase should be sought on the same basis.
7. Approval is now sought for the purchase and installation of cables for nuclear physics on Nimrod at a total cost not exceeding £90,000.

L. B. Mullett
Chairman, Nuclear Equipment
Project Committee