

7th October, 1957

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GOVERNING BOARD

Minutes of the Fourth meeting of the Governing Board held in the Board Room, Treasury Buildings, Whitehall, S.W.1. on 30th September 1957 at 3 p.m.

PRESENT:

Lord Bridges (In the Chair)
Professor P.M.S. Blackett
Sir John Cockcroft
Dr. H.W. Melville
Sir Philip Morris
Professor N.F. Mott
Professor R.E. Peierls
Sir Donald Perrott
Dr. B.F.J. Schonland
Sir George Thomson
Professor D.H. Wilkinson
Mr. P.J. Searby (Acting Secretary)

1. APOLOGIES FOR ABSENCE

Apologies for absence were received from Sir David Brunt, Sir James Mountford, Professor J. Diamond, Professor H.S.W. Massey and Mr. John Gridley.

2. MINUTES OF LAST MEETING

The Board approved the Minutes of their third meeting.

3. NEXT STEPS FOR THE NATIONAL INSTITUTE

Sir John Cockcroft reported on the conclusions that the Physics Committee had reached following the two meetings that they held on September 3rd and the morning of September 30th. These meetings had taken place at the request of the Governing Board who had asked the Physics Committee to reconsider the recommendations made at their meeting on July 10th in the light of the discussions of the Governing Board at the Board's third meeting on July 19th. Sir John Cockcroft said the Committee had considered the following points:-

- (a) They had taken note of the original proposals for the setting up of the National Institute circulated as the Annex to N.I.(57)16 and in particular the paragraph on page 2 of the Annex setting out the terms of reference of the Institute. They considered that those terms of reference gave a good general definition of the scope of the activities of the National Institute and accepted that an exact interpretation of the particular words used could only be made when particular projects were being considered.
- (b) The Committee took note of the paper circulated by the Chairman and Sir Donald Perrott on construction of University facilities within the scope of a single university (N.I.(57)17). In the light of that document they agreed to recommend that the proton

linear accelerator should be transferred to the National Institute at the date originally suggested, i.e. mid 1958. Attention had been drawn at the meeting to the administrative and technical advantages of operating the proton linear accelerator by the same organisation as that responsible for the 7 Gev proton synchrotron which was being built immediately alongside the P.L.A.

- (c) The Committee considered a suggestion that the National Institute might take over the responsibilities of D.S.I.R. for financing the operation and construction of large machines in individual universities. They considered that this was certainly a possibility at some future date, but thought it would be premature to transfer these responsibilities at this early stage in the life of the National Institute.
- (d) The Committee noted that there had been proposals that the National Institute should construct and operate reactors for the use of universities. They accepted in principle the possibility of such a development but would welcome an opportunity to comment on the merits of individual cases when the Institute's Research Reactor Committee had examined any proposals.
- (e) The Committee had appointed a Sub Committee to examine the case for taking over the shower experiment at Culham airfield. It was possible that this Sub-Committee would recommend that the experiment should be enlarged and transferred to a new site. The Physics Committee might wish to suggest that the National Institute should take responsibility for this experiment, but this could only be settled when they had received and considered the Sub-Committee's report.
- (f) The Committee had noted that the A.E.A. and the National Research Development Corporation were discussing the development and construction of a high speed computer to be in operation in the early 1960's. This computer would be built primarily for the use of the Authority but might be available part-time for use by universities. The Committee considered that it would be appropriate to examine at a later date the possibility that the National Institute should operate this on behalf of the Universities and Authority.

The Chairman expressed the Committee's gratitude to Sir John Cockcroft and the Physics Committee for the care with which the Committee had examined the problems put before them.

The Board discussed Sir John Cockcroft's report and:-

- (a) took note with approval that the Physics Committee endorsed the general conclusions of the Governing Board regarding the scope of the National Institute;
- (b) agreed in principle with the recommendation that the proton linear accelerator should be transferred to the National Institute and invited the Atomic Energy Authority representatives to present a paper setting out details on the cost of the machine, the arrangements for transfer and any other matters which should be drawn to the attention of the Board;

- (c) took note of the Committee's views on the possibility of transferring responsibility for financing the construction and operation of large machines to the National Institute and agreed it was premature to contemplate an immediate transfer;
- (d) took note of the Committee's view that there was no objection in principle to the construction and operation of a research reactor by the National Institute;
- (e) took note of the study that was in hand regarding the possibility of enlarging the large shower experiment;
- (f) took note of the possibility that at some future date the Board might have to consider the question of transferring the high speed computer that was to be built by the N.R.D.C. to the National Institute.

The Board then discussed arrangements for the senior staff structure of the first laboratory of the National Institute at Harwell in the immediate future. A report of their discussions is given in the confidential Annex.

4. GENERAL PURPOSES COMMITTEE

The Chairman said that the Minutes of the General Purposes Committee had been circulated for the information of all members of the Board. From these they would see that the General Purposes Committee had approved the signing of a contract for the magnet yoke (this had since been signed) and had worked out a flexible form of procedure for the future.

The Board took note of the position.

5. DATE OF THE NEXT MEETING

The Board agreed that if there was sufficient business to justify a meeting at that date they would meet on Tuesday November 12th at 3 p.m.