

CERN/764
Original : English
7 December, 1967

ORGANISATION EUROPÉENNE POUR LA RECHERCHE NUCLÉAIRE
CERN EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

THIRTY-SIXTH SESSION OF THE COUNCIL

Geneva - 13 and 14 December, 1967

RESOLUTION PASSED BY THE

GERMAN ATOMIC ENERGY ADVISORY COMMITTEE

ON 14 NOVEMBER 1967

Dr. W. Schulte-Meermann, German Delegate to the Council of CERN, has asked that the attached Resolution be circulated to the Council.

RESOLUTION PASSED BY THE
GERMAN ATOMIC ENERGY ADVISORY COMMITTEE

ON 14 NOVEMBER 1967

The German Atomic Energy Advisory Committee appreciates the successful work which is being done by the European Organization for Nuclear Research (CERN) in the field of high-energy physics. Thanks to CERN, Europe holds an eminent position in this field ; the co-operation between high-energy physicists within Europe is exemplary.

The future scientific programme of the Organization therefore deserves special attention. The Federal Republic of Germany has already made a considerable contribution to CERN by investing in the intersecting storage rings and the bubble chamber which are now under construction. The European 300 GeV proton accelerator project has been thoroughly discussed by the German Atomic Energy Advisory Committee. The Committee feels that the decision to build this accelerator should not be taken under pressure of time and should take into account all aspects of the project. To this end, the German Atomic Energy Advisory Committee thinks it advisable for CERN to consider the following problems :

- the energy of the 300 GeV accelerator will be ten times that of the Geneva 28 GeV proton synchrotron. With the importance of the project extending far into the future, it would seem appropriate to use as much new technical know-how as possible in the construction of the accelerator. Thus, investigations should be made on a theoretical and experimental basis to ascertain whether beam-handling can be done by computers so as to reduce the costs of the magnets. Such investigations are recommended because this new technique will be used in the American 200 GeV project ;
- an advanced design and close cost calculation may help to cut construction costs of the accelerator. The significant economies made in the case of the American 200 GeV project should encourage CERN to look for new ways of reducing costs and to adopt modern planning and management methods applied in industry ;
- the possibilities of close long-term scientific co-operation and division of labour between CERN and the United States should be further explored, especially since recent American plans will

probably permit completion of the 200 GeV project by 1972 and subsequent expansion to 400 GeV without much additional cost. Furthermore, the Committee would recommend a study of the experiences gained with the 70 GeV project in the Soviet Union ;

- the different geological characteristics of the proposed sites should be considered with a view to their financial consequences.

The answers to these questions will be of considerable importance for the final assessment of the accelerator plans within CERN.

The German Atomic Energy Advisory Committee appreciates the successful work which is being done by the European Organization for Nuclear Research (CERN) in the field of high-energy physics. It is of course to CERN, Europe holds an eminent position in this field ; the co-operation between high-energy physicists within Europe is exemplary.

The future scientific programme of the Organization therefore deserves special attention. The Federal Republic of Germany has already made a considerable contribution to CERN by investing in the later sections storage rings and the bubble chamber which are now under construction. The European 300 GeV proton accelerator project has been thoroughly discussed by the German Atomic Energy Advisory Committee. The Committee feels that the decision to build this accelerator should not be taken under pressure of time and should take into account all aspects of the project. To this end, the German Atomic Energy Advisory Committee thinks it advisable for CERN to consider the following problems :

- the energy of the 300 GeV accelerator will be far less than that of the Geneva 28 GeV proton synchrotron. With the importance of the project extending far into the future, it would seem appropriate to use as much new technical know-how as possible in the construction of the accelerator. Thus, investigations should be made on a theoretical and experimental basis to ascertain whether beam-handling can be done by computers so as to reduce the costs of the machine. Such investigations are recommended because this new technique will be used in the American 500 GeV project ;

- an advanced design and close cost calculation may help to cut construction costs of the accelerator. The significant economies made in the case of the American 500 GeV project should encourage CERN to look for new ways of reducing costs and to adopt modern planning and management methods applied in industry ;

- the possibilities of close long-term scientific co-operation and division of labour between CERN and the United States should be further explored, especially since recent American plans will