

CERN 61-10

10 April 1961

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

An account of the origin and beginnings of CERN

by

L. Kowarski

G E N E V E

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Foreword

Although the early history of CERN may still be fresh in the minds of those who were the pioneers in this venture of European scientific co-operation, it has been thought useful to record the main facts. Enough time has passed for the events to be seen in fairly clear perspective.

In preparing this account, the author has had the valuable assistance of Mme. M. Crémieux-Brilhac and of several other staff members of the Provisional CERN.

I. Early initiatives

The early history of CERN is that of an encounter between two drives which became operative in Europe immediately after the war : the scientists' search for new ways of acquiring large-scale equipment, and the statesmen's search for domains of common interest in which a joint effort could be made to produce tangible manifestations of European unity. It is hardly surprising that the branch of science in which this encounter actually took place, turned out to be nuclear physics: its newly demonstrated importance made the promotion of its claims at the same time imperative and easy.

On the scientists' side it was essential to recognize the need both for new nuclear-physics equipment and for an international effort. The first need became obvious as early as 1947, when the synchro-cyclotron built in California on principles discovered during the war by Oliphant, Veksler and McMillan, began to yield its first crop of discoveries. The second need became gradually apparent as, in the years around 1950, no sign appeared in any single European nation of a willingness to pay the price for staying in the front-line of high-energy nuclear physics.

Among the leading European physicists some had the opportunity to take an international initiative, owing to an accident of history - the U.N. Commission on the control of atomic energy. Scientists, hastily called in as experts, met each other in day-to-day activities and, what was even more important, learned to work with diplomats. They noticed very soon that the new techniques they were learning could be usefully applied to their own problems. Possibilities of an intergovernmental action were explored in private talks, at which H. Kramers, P. Auger and J.R. Oppenheimer were among the earliest leading contributors, and with which F. de Rose (advised by L. Kowarski) was one of the first diplomats to be associated. Other scientists (notably F. Perrin and I. Rabi) immediately became interested and, from these beginnings, a wave of persuasion and action made itself felt at various academic and official levels responsible for scientific development in Europe.

Thus, for instance, between 1948 and 1950, the movement took root in Italy, thanks to the close contact which existed between the Italian scientists (in particular E. Amaldi) and their countrymen established in the United States (in particular G. Bernardini, Rabi's colleague at Columbia University). Kramers exerted some influence in the International Union of Pure and Applied Physics, of which he was then president, in Holland (where new recruits such as C.J. Bakker were involved) and also at the powerful centre of theoretical physics which had grown in Copenhagen around Niels Bohr. In France, Auger and Perrin were able to influence, respectively, the UNESCO headquarters and the Commissariat à l'Energie Atomique - whose Administrator, R. Dautry, was one of the leaders of the European Movement. It was Dautry who, in consultation with de Rose and Kowarski, prepared the first link between the academic circles and the political movement, already powerful at that time, in favour of joint institutions in Western Europe.

The first public manifestation of this new link occurred in December 1949, at the European Cultural Conference held in Lausanne. A message from Louis de Broglie was read by Dautry, in which the proposal was made to create in Europe an international research institution, to be equipped on a financial scale transcending the individual possibilities of the member nations (see Annex I). Curiously enough, nuclear physics was not mentioned at all in this message; it was however mentioned both in Dautry's accompanying

speech and in the Conference's resolution. The latter stressed the peaceful aspects of nuclear science, thus making the first oblique reference to the dilemma which at that time was besetting the scientists' aspirations: atomic energy was attracting public readiness to spend money, but atomic energy invited security-mindedness and separatism.

The way out of the dilemma was clear enough. The domain of common action should be chosen so as not to infringe directly the taboos on uranium fission, but close enough to it, so as to allow any successes gained internationally in the permitted field to exert a beneficial influence on the national pursuits. For this role of close but distinct neighbour, meson (or high-energy) physics was the most obvious and attractive candidate, clearly recognized as such by June 1950, and discussed as such between Amaldi and Rabi on the eve of the latter's official statement at the General Conference of UNESCO held in Florence. Once more, however, mention was made in this statement of regional laboratories without specifying the domain of research to be pursued.

Rabi's declaration gave the first public expression to the sympathy with which the prospects of European scientific co-operation were viewed in America, and which hitherto had been expressed only in conversations between colleagues. Later on, as CERN developed and grew, these friendly contacts continued and Rabi remained among their foremost proponents.

Under the favourable resolution of the Conference (Annex II), Auger, as UNESCO's Director of Natural Science, obtained the authority to act, but there was as yet no money appropriation on a scale which a detailed expert study of such a project would obviously require. A further endorsement came from IUPAP, and it became possible to seek for funds to tide over the initial penury. In December 1950, the European Cultural Centre (founded at the already mentioned Lausanne meeting of 1949) called at Geneva a Commission for Scientific Co-operation, under the chairmanship of D. de Rougemont. Auger and Kramers were present; also two of the future leading members of CERN staff (P. Preiswerk and B. Ferretti) as well as a prominent atomic scientist from Norway (G. Randers). As a result of this meeting, funds totalling some \$ 10,000 were pledged first by the Italian government (at the meeting itself, by Prof. Colonetti) and soon afterwards by the French and Belgian governments;

and the desirability of building a large particle accelerator for high-energy research was explicitly proclaimed.

Auger's action in early 1951 developed in two directions. A special office was created at UNESCO, with J. Mussard as special Secretary, and E. Regenstreif as resident technical expert. At the same time contacts were made in order to ensure the co-operation of a number of European physicists as more or less permanent consultants. The procedure chosen by Auger was deliberately unorthodox: in other attempts to set up a co-operative scientific organization, prospective member states usually were invited, from the start, to appoint their official experts who would act as representatives of their governments in an intergovernmental discussion. In the case of CERN, the consultants were chosen in a personal capacity and had to report to Auger personally. Enough care and prior consultation went into their choice to ensure their ability to present views current in their respective countries; in this important task Auger was greatly helped by Amaldi.

The first meeting of the Board of Consultants was held at UNESCO in May 1951. Eight countries were represented, including the United Kingdom, at that time still undecided but already interested and benevolent.

Two objectives were suggested: a longer-range, very ambitious project of an accelerator second to none in the world and, in addition, the speedy construction of a less powerful and more classical machine in order to start European experimentation in high-energy physics at an early date and so to cement the European unity directed to a more difficult principal undertaking. Another suggestion, adopted immediately, was to proceed stepwise, starting with a provisional organization devoted to planning and the elaboration of a six or seven years' budget. The consultants felt (and subsequent events justified this feeling) that the provisional organization, with its relatively very small budget, would act as an encouragement, bringing the governmental representatives together, ironing out the differences in their outlook and, finally, ushering in an imperceptible transition to greater commitments and steadier relationships.

It was considered that the provisional organization could complete its task in 12 or 18 months, on a budget of \$ 200,000 to \$ 250,000. This

sum was considered sufficient to afford some of the best European experts in physics, electrical engineering, and organization of research, if necessary on a part-time basis. As a further inducement for the European nations to embark on this cautious venture, all plans, estimates, and drawings were to be made freely available to the member states.

The consultants met again in October and November 1951 and, by December, UNESCO was ready to call an intergovernmental Conference provided with a complete and well-reasoned agenda. This again was unorthodox and due to the unprecedented fact that a competent international discussion of aims and means had started several months before the first formal appeal was made to the prospective constituent nations.

The UNESCO-sponsored gathering of formally empowered governmental delegates met in December 1951 in Paris, with F. de Rose in the chair. All European members of UNESCO had been invited, but no response came from the countries of Eastern Europe.

A second similar meeting was held soon afterwards in Geneva; it led to the signature, by the representatives of eleven European governments, of an Agreement (see Annex III) establishing the provisional organization. During the whole life of the provisional CERN, the United Kingdom preferred to remain in the formal position of an observer, although the real difference between this noncommittal role and the full "provisional member" status was never very noticeable and tended to lapse altogether as the Provisional Stage drew to its close.

II. The planning stage

After the signature of the provisional Convention, the rounding-up of the necessary minimum number of ratifications took less than three months: this was possible because of the relative insignificance of the financial effort asked for at that stage.

On the 5th-8th May, the newly empowered Council held its first session at UNESCO in Paris, under the chairmanship of Prof. Scherrer. It approved the first regulations of the provisional organization, prepared by

Auger's special office (see above), and it appointed five senior officers, following the suggestions put forward by Auger's Board of Consultants half a year before. These officers, under these regulations, would be responsible for appointing the remainder of the staff and for making their own rules as they went. Two of them immediately announced the appointment of their deputies. All of these senior staff members (with one exception, N. Bohr) originally belonged to the UNESCO Board of Consultants; they were appointed on part-time (usually 1/3 or 1/2) and resided in seven different countries - a disruptive factor which, on the whole was overcome with a rather remarkable success.

Amaldi was appointed to the top office of Secretary General. His role had to be twofold: in outward relations, to hold the power of signature for such actions as the presentation of the budget, hiring of personnel, collection of funds and justification of their spending, formal relations with other organizations. Internally, the Secretary General had to maintain the cohesion between the four autonomous Groups of which the provisional Organization was composed, to harmonize the timetables of their activities and the employment conditions of their staff, to distribute funds and to keep centralized accounts. Beyond these very material attributes of authority, there was, inherent in the Secretary General's post, a definite opportunity to exercise creative leadership and the subsequent development of CERN showed that this opportunity was by no means missed.

The four "study groups" were treated formally as four sectors of a more or less homogeneous domain, similar to each other as to their nature and structure. In fact, their purposes were so different in their nature, that each had to be run in its own distinctive way. The task of the Synchro-Cyclotron Group, directed by Bakker, was urgent and straightforward: to produce fully workable plans, estimates and indications of possible supplies in time to enable the permanent organization to proceed with the construction of the machine as soon as it would be legally and financially empowered to do so. There was no time and no need to explore basic concepts; but there was every reason to incorporate in the design such extrapolations towards higher energies, and such novel devices as could be indulged in without undue loss of time. This latitude was in fact amply taken advantage of, making the CERN Synchro-cyclotron one of the very best machines of this type available in the world.

The Proton Synchrotron Group, when set up under O. Dahl (with F. Goward as deputy), had as its only directive the proposal to explore the possibilities of building "the biggest machine in the world". Even the possible relevance of the newly-invented (at Brookhaven) strong-focusing principle was not, at that time, explicitly recognized. This relevance became obvious soon enough and the PS Group was able to embark on an ambitious project of a 20-30 GeV machine with the complete certainty of not trailing behind any other team of planners. The very novelty of the principle, however, necessitated the performance of numerous basic experiments and tests in addition to, and sometimes as a pre-condition of, the paper planning.

The Laboratory Group (Director: Kowarski; Deputy: Preiswerk) worked on the assumption that the two accelerators would have to be built in an entirely new autonomous "background landscape" of site, buildings, administrative forms, finance rules, workshops, supporting research and development, etc. It had to be autonomous if only to stress the truly multinational character of the joint effort; and it would have to be new in the sense of being unprecedented, since no other major scientific establishment created by several nations was at that time in existence or in the state of a concrete project.

Many experts were so keenly aware of this problem that proposals were made to develop CERN around an existing national centre (notably Copenhagen). The fully international approach prevailed, although a considerable use was made by the Laboratory Group, in its shaping of CERN's "landscape" of the British and French experience of large-scale atomic research.

The work of the Theoretical Study Group, under Niels Bohr, was the answer to some of the arguments invoked in favour of Copenhagen. Experimental work with big accelerators had to wait until the new equipment was ready, but theoretical work and training of research personnel should and could be started immediately in a European framework, using the existing establishments. For training in theory Copenhagen itself offered the facilities of its experienced and renowned Institute; training fellowships in experimental laboratories such as Liverpool, Uppsala, etc. were organized and administered by the Group. Professor Bohr's world-wide scientific authority and experience

made a deeply appreciated contribution to the activity of the Executive Group (as the periodic meetings of the seven senior officials came to be called).

The second session of the Council was held a month and a half later, at Copenhagen, at the close of the scientific conference called by Bohr to discuss CERN's scientific aims. Proposals made by the Group Directors were discussed and, in the light of the Conference's findings, a committee headed by Prof. Heisenberg presented a report to the Council. Its recommendations incorporated the sketchy proposals made at the founding session of December 1951, and evolved them into a fully reasoned scientific programme. The interest of building a proton synchrotron of 10 GeV or more was reaffirmed. (It is interesting to note in this connection the strong support given to this idea by Prof. Livingston, one of the inventors of the strong-focusing principle. This was the beginning of a very fruitful collaboration).

In the interval between the second and the third (October) session, the Groups had time to hire some initial staff and to do some work. An interim report, setting forth detailed intentions rather than ready results, was submitted by the Secretary General. The Proton Synchrotron Group announced its intention to consider in detail the newly-discovered strong-focusing principle, which promised to produce accelerating energies considerably in excess of the approved minimum of 10 GeV. The Laboratory Group produced a comparative study of the four proposed locations (Copenhagen, Longjumeau near Paris, Arnhem, Geneva), embodying data given by the relevant local authorities in reply to a uniform questionnaire. A first attempt at a seven-year budget was made, totalling $\text{£} 27.3$ million (120 mill. S.Frs.).

At the third session, held in Amsterdam, the Council decided to locate the future Laboratory in Geneva, but to keep all theoretical work in Copenhagen for such time as would be necessary to provide essential buildings and initial experimental equipment (including the heavy construction work on the cyclotron) at the Geneva site. This initial period was expected to last three years.

During the last months of 1952, the Groups went on with their work. After Amaldi's visit to London, in December, the Department of Scientific

and Industrial Research began to take a more active interest in CERN's planning. At the fourth meeting of the Council (January 1953) the head of the D.S.I.R., Sir Ben Lockspeiser, took a leading part in the discussion of the two main items on the agenda: the drafting of the Convention setting up the permanent Organization, and the apportionment of national contributions.

During the first three months of 1953 the Groups continued with their planning activities, with the help of a gradually increasing staff (total of about 70 at the end of March). They drew up a substantial Second Report in which the machines, the structure of the Laboratory, the installation and running costs, etc. were described in considerable detail. The fifth session of the Council (Rome, end of March) was devoted mostly to the discussion of this Report and of the draft Convention.

In the conclusion of the Second Report, the total of the seven-year estimate was raised from 120 to 130 million S.Frs. The Council took note of this new estimate without, however, giving it its formal approval. It was felt that the time was approaching when serious commitments would have to be undertaken, and the preparatory work would have to get down to concrete details. Accordingly, two decisions were taken: (1) to create a temporary centre at Geneva in which the PS could concentrate its design and experimentation teams; (2) to set up a Working Group on administrative and financial questions (at the first meeting of the Group, at the end of April, six nations were represented with Sir Ben Lockspeiser in the chair).

By the end of June 1953 the reactions of the Council to the Second Report were taken into account and a collaboration was established between the Executive Group (international staff) and the administrative Working Group (nationally appointed experts). The task of the provisional CERN was fulfilled; the joint effort was obviously going to continue and some modus vivendi had to be found for the period of many months which would elapse before the permanent Organization would be approved, ratified and empowered to spend money and to undertake commitments.

The sixth meeting of the Council (29th June - 1st July, Paris) marked the transition from the provisional CERN as defined by its original programme adopted in February 1952, to the "Interim CERN". The Convention (Annex IV) was signed, and became available for ratifications by the twelve Member States.

New organs, obviously devised for concrete action rather than for planning, were created: an "Interim Finance Committee" began to evolve out of the Working Group; a Nominations Committee, composed of eminent scientists (Bohr, Cockcroft, Colonetti, Heisenberg, Perrin, Scherrer) was set up to select leading staff for the permanent organization; a Chief Architect (R. Steiger of Zurich) was appointed on a temporary basis with the idea of confirming this appointment for a longer term as soon as this would become legally possible.

Another milestone was passed at about the same date; that of the official acceptance of CERN by the Canton of Geneva. Councillor A. Picot, then in charge of the Canton's educational and cultural department was a supporter of the CERN idea (and of CERN's coming to Geneva) from the earliest beginnings; as soon as the CERN Council's choice had fallen on Geneva, he initiated - together with Councillor R. Casaï, in charge of public works - all those multiple activities which had to be undertaken in good time in order to prepare the future installation of CERN on the territory of the Canton. In view of the somewhat unusual character of CERN's projected activities, detailed explanations had to be given to the population and - when an adverse trend had appeared on the local political scene - a campaign of persuasion had to be carried through. The invitation to CERN was finally ratified by a popular referendum, with a vote of over 70% in favour of CERN's coming to Geneva.

III. The interim stage

During the fifteen months which elapsed between the signature of the permanent Convention (1st July 1953) and the completion of the empowering ratification procedure (end of September 1954), CERN lived in a state of curious contradiction between its legal status and the character of its actual activities. De jure, under the provisional Convention of 1952, the Council had to supervise a fairly loose confederation of designing and planning groups, scattered all over Europe. De facto, from July 1953 onwards, the Council embarked on a series of activities - establishment of a provisional laboratory in Geneva, preparation of a site, the making of detailed architectural drawings, the training of a scientific and technical staff, etc. -

which, according to the failure or success of the ratification procedure would add up either to waste of money and effort, or to an unprecedented gain of time.

The high-minded scientific leaders, diplomats and administrators responsible for these far-reaching decisions would hardly have accepted the view that they were taking a gamble. In their judgment, CERN was going to succeed - and they felt that it was their duty to remove all possible obstacles and delays from its path. R. Valeur, who served as Chairman of the Council during the whole of the interim period, and Sir Ben Lockspeiser, Chairman of the Interim Finance Committee, used the full extent of their authority to stir up early initiatives and to create an atmosphere of confidence in the fortunes of the new venture. In response to this encouragement, young scientists and engineers from various European countries were willing, on the strength of a mere "moral commitment" to leave their secure positions at home and to embark on a pioneer's existence in Geneva.

During the interim period the Council held three sessions, all in Geneva (October 1953, January and April 1954), not counting its formal winding-up in October 1954. Its business was mainly financial: the original endowment of roughly 1 million S.Frs. (including the "observers' gift" from the United Kingdom) would run out sometime in late 1953 and a first additional contribution had to be called at the July session in preparation for the increasing scale of activity. This gesture was renewed on a growing scale at every subsequent session; in this way the needs of the interim stage could be fully covered (bringing the total of expenditure for the period May 1952 - September 1954 inclusive to some 3.7 millions of S.Frs) and an initial sum of 4.4 million S.Frs. was made available to the permanent Organization as soon as it came into being.

Recommendations worked out by various permanent and ad hoc committees were considered by the Council and kept in readiness for application in the permanent CERN. Questions of structure and persons were examined, of which the most important was to invite the Swiss-American physicist F. Bloch, a Nobel prizewinner, to be the Director-General. Nominations for the posts of Division Directors were considered, chosen mostly among the leading staff of the provisional CERN.

The Executive Group began to meet regularly in Geneva at intervals of one or two months. From October 1953 on, a gradually increasing fraction of the staff took residence in Geneva (see below) and in November Amaldi, as Secretary General, began to visit Geneva on a twice-monthly schedule.

For the Proton-Synchrotron Group, the transition from mainly theoretical work to experimentation and technical designing was marked by the transfer of the staff to Geneva and by an international conference on proton synchrotrons; both of these events took place in October 1953. At the conference, the theoretical design submitted by CERN was approved by the assembled experts both as to its technical soundness and its scientific interest (summed up in a report by Heisenberg). The Brookhaven Laboratory (United States), where the strong-focusing principle was invented in 1952, took an important part in this conference, and its own project of a similar machine was approved soon afterwards; this was the beginning of a friendly race between the two projects (in which CERN was able to maintain its initial advance until the completion of its synchrotron in November 1959).

The PS staff assembled in Geneva was housed partly at the Institute of Physics of the University and partly in temporary huts built in its vicinity. Its initial resident leader, the Deputy-Director of the Group (F. Goward), died after a short and tragic illness in March 1954; he was succeeded by J.B. Adams who later on became the Director of the PS Division.

The Synchro-Cyclotron Group remained centered in Amsterdam until the end of the Interim Period. It fulfilled its aim of preparing a complete technical specification of the machine and of bringing the competitive tenders, the architectural plans, etc. to a point of readiness at which contracts could be signed and sent out with no loss of time. The design was both ample (an output energy only slightly lower than that of the most powerful existing synchro-cyclotron - that of Dubna near Moscow) and original in some essential features such as the use of a "tuning fork" for the regulation of frequency.

The Laboratory Group, as a source of all those preparatory activities which were not directly connected with either machine, brought into existence several nuclei which later on developed into full-fledged Divisions. From July 1953 on, design contracts were concluded with the chosen architect. With

the full co-operation of the local Geneva authorities, and without waiting for the formal confirmation of CERN's legal powers, major excavation work was started on the Meyrin site on the 17th May 1954; at about the same time Preiswerk, as the future Director of the Site and Buildings Division, began to assume an increasingly autonomous role. An administrative nucleus began to function in October in a temporary Geneva office and, from January 1954 on, in the Villa Cointrin at the Geneva airport. First instrumentation workshops - mechanics and electronics -, a library and an offset printing shop were set up, also at the airport, in the summer of 1954.

As already explained (see above, "The planning stage"), the activities of the Theoretical Study Group were least dependent on the progress in Geneva and on the organizational developments; they continued on the lines explained above - theoretical research, training of young theoreticians recruited as CERN Fellows, training of experimentalists at Uppsala and Liverpool - as they were to continue for the first few years of the permanent CERN. The original results of these lines of work supplied the material for a first series of CERN publications which was started as soon as the organization acquired its full status.

At the end of the Interim Period the total staff of CERN, not counting the holders of fellowships and the consultants on a small time-fraction, numbered 120, of which nearly a half belonged to the Proton Synchrotron Group. A total floor area of some 2500 square meters was occupied, and a comfortable financial endowment was on hand (see above). All these assets became suddenly masterless when a prescribed point in the ratification procedure was reached on the 29th September 1954; for eight days the Secretary General held the redoubtable honour of sole responsibility of ownership on behalf of a newborn permanent Organization. Then the first meeting of the permanent Council assembled and CERN's formative years were over.

Why was it possible, for the new Organization, to embark on its legal existence with a head start of several years' concrete work? No other example of this feat can be found in the history of CERN's forerunners in the field of international scientific co-operation, nor in that of the weighty initiatives which were started in Europe a few years later. If one looks for distinguishing features which might be held responsible for CERN's unusual

success, a certain number of psychological factors appear to have played a decisive role:

1. Ambitious and sharply-defined objectives were aimed at from the very beginning. For a certain type of active mind, to think in terms of a huge machine is more stimulating than to plan for the benefit of some worthy but less defined entity such as the future of physical research in abstracto, or international togetherness. By insisting - against a background of caution - on the maximum size and novelty for the machine to be built in common, Prof. Auger endowed the project with an almost irresistible attraction.

2. Scientific and technical experts participated at all stages of organizational planning, and not merely were called in "to perform" in a framework not of their making. A competent administrator knows "how" to set up a suitable organization, but only a scientific mind will know "what" the task of this organization should be; the nature of the task has to be taken into account from the start and this means that the two kinds of mind have to be blended.

3. It was recognized that the inevitably modest initial pace of even a very big project could be financed on a modest scale and in an unassuming legal framework; thus an initial stage could be run concurrently with the full-scale legal building-up, instead of waiting for its completion. The hopeful assumption that it was safe to extrapolate, was an act of faith, for which concrete ambition and blending of competences may well have been the necessary preconditions.

M O U V E M E N T E U R O P E E N
CONFERENCE EUROPEENNE DE LA CULTURE, LAUSANNE

9 décembre 1949

Message de Monsieur de BROGLIE

(lu par M. Dautry)

Monsieur le Président,
Monsieur le Conseiller fédéral,
Mesdames, Messieurs,

Votre Comité a demandé à M. de Broglie de venir ici aujourd'hui parler de l'organisation du travail scientifique en Europe. Il a été empêché de le faire et m'a fait le très grand honneur de me charger de lire le message qu'il vous adresse. Ce message, le voici :

Les sciences progressent. Leurs domaines s'étendent et se ramifient. Les connaissances qu'elles nous apportent, les applications qui en découlent, augmentent sans cesse.

Pour empêcher la dispersion des efforts, pour assurer une certaine cohérence entre les points de vue divers, pour éviter que le progrès ne soit entravé par l'excès des spécialisations, il apparaît chaque jour plus indispensable que puisse s'établir une certaine coordination et de nombreux contacts entre les savants. Chaque pays s'efforce de son mieux à organiser son travail scientifique par l'extension et la coordination des enseignements, par le développement des laboratoires et des centres de recherches. Mais à l'heure actuelle, une telle organisation dans les cadres nationaux ne peut plus suffire. L'évolution, au cours de l'histoire, a poussé de petites nations à s'unir pour former de grandes nations. Un mouvement général créé par des raisons de convulsions internationales porte aujourd'hui certaines nations à se grouper et à mettre au moins en partie en commun,

à l'intérieur de chaque territoire, leurs intérêts et leurs efforts.

Ce n'est pas seulement sur le plan économique ou politique que ces mouvements paraissent souhaitables ou même nécessaires; c'est aussi sur le plan intellectuel, et particulièrement sur le plan scientifique.

A l'heure où, justement, on parle de l'union des peuples de l'Europe, la question se pose donc de développer cette nouvelle unité internationale, un laboratoire ou institution où il serait possible de travailler scientifiquement, en quelque sorte en dehors et au-dessus du cadre des différentes nations participantes. Résultat de la coopération d'un grand nombre d'Etats européens, cet organisme pourrait être doté de ressources plus importantes que celles dont disposent les laboratoires nationaux et pourrait, par la suite entreprendre des tâches qui, par leur ampleur et leur goût, restent interdites à ceux-ci. Il servirait à coordonner les recherches et les résultats obtenus, à comparer les méthodes, à adopter et à réaliser des programmes de travail, avec la collaboration des savants des diverses nations.

Il existe déjà depuis près de 90 ans un organisme qui présentait des caractéristiques analogues et qui a rendu et rend chaque jour de grands services: Le Bureau international des poids et mesures, dont le siège est à Sèvres, au Pavillon de Breteuil. Ce Bureau ne s'occupe que d'un domaine, très important, étroitement limité à la métrologie. Son organisation et son fonctionnement permettent cependant de se rendre compte des services que pourraient rendre de grandes institutions de laboratoires internationaux consacrés à l'étude des diverses branches de la science. L'état actuel du monde ne permet pas encore de réaliser à l'échelle terrestre de tels centres de recherches, mais il serait certainement très utile de chercher à en établir dans le cadre plus restreint d'une fédération européenne.

Il ne m'appartient pas de chercher à établir le plan de ces futurs institutions ou laboratoires internationaux, ni le programme de leur activité. De tels travaux demanderaient de longues réflexions et la collaboration d'un grand nombre de savants et même encore d'ingénieurs

appartenant à des disciplines diverses. Les besoins ne sont pas les mêmes dans les diverses branches de la science: physique, médecine, radio-électricité, etc. Divers pays ne s'intéressent pas au même degré aux mêmes questions. Suivant les produits ou les ressources de leur sol, ils orientent différemment leur production et leurs recherches. L'organisme à créer devra dépendre de toutes ces circonstances. Ces questions demanderaient donc des études approfondies et il faudra beaucoup de travail pour arriver à mener à bien une entreprise d'aussi grande envergure.

Il est certain que les résultats de cette entreprise couvriraient largement les efforts dépensés. Resserrant les liens entre les hommes de science des différents pays, centralisant les ressources, assurant la coopération des moyens matériels et des ressources intellectuelles, devant absolument réaliser une circulation plus aisée des études, publications, informations, la création de ce centre de recherche symbolisera la mise en commun dans le domaine intellectuel d'une partie des énergies de l'Europe contemporaine. Cette convergence des efforts est plus facile à réaliser sur ce plan que sur d'autres, parce que les intérêts matériels et nationaux y jouent un moindre rôle, et offre un exemple de ce qu'il faudrait, peu à peu, réaliser dans d'autres domaines. Le caractère universel et très souvent désintéressé de la recherche scientifique semble l'avoir prédestinée à travailler dans une mutuelle et fructueuse collaboration.

Aussi, cette forme de coopération doit-elle être un des objectifs les plus immédiats de ceux qui endossent la tâche de rapprocher les peuples européens et de faire collaborer les valeurs diverses au progrès de la civilisation.

RECORDS OF THE GENERAL CONFERENCE OF UNESCO

5th SESSION : FLORENCE 1950

Resolution No. 2.21.

The Director-General is authorized:

To assist and encourage the formation and organization of regional research centres and laboratories in order to increase and make more fruitful the international collaboration of scientists in the search for new knowledge in fields where the effort of any one country in the region is insufficient for the task; and to this end, to undertake to find out the needs and possibilities for such regional research centres, to make initial surveys of cost estimates and location; and to help in the formulation of programmes, contributing to the cost of construction or of maintenance out of of UNESCO's regular budget.

AGREEMENT

**constituting a Council of Representatives of European States
for planning an International Laboratory and
organizing other forms of co-operation
in Nuclear Research**

The European signatory States, Members of the United Nations Educational Scientific and Cultural Organization, having taken part in the "Regional Conference for the organization of studies concerning the establishment of the European Nuclear Research Laboratory" which met in December 1951 at the seat of the United Nations Educational Scientific and Cultural Organization,

CONSIDERING that at its fifth session, the General Conference of the United Nations Educational Scientific and Cultural Organization decided to promote and encourage the establishment and organization of regional research laboratories and centres in order to increase and make more fruitful collaboration of scientists in different countries in search of new knowledge in fields where the effort of any one country would be insufficient for the task:

IN VIEW of the preliminary studies undertaken by the United Nations Educational Scientific and Cultural Organization relating to the organization of nuclear research on a European regional basis

CONVINCED that the advance of this scientific research requires close collaboration on both a material and an intellectual plane,

DESIRING for this purpose to establish an international research laboratory to study phenomena involving high energy particles in order to increase the knowledge of such phenomena and thereby to contribute to progress and to the improvement of the living conditions of mankind:

CONSIDERING that the establishment of such a laboratory requires theoretical and technical investigation and the study of administrative financial and legal problems involved,

DESIRING to proceed with these studies immediately and also on a provisional basis to make use jointly of the scientific equipment and facilities offered by certain of the signatory states,

HAVE AGREED AS FOLLOWS.

Article I

Establishment of a Council of Representatives

A Council of Representatives of European States (hereinafter called "the Council") is hereby constituted for planning an International Laboratory and organizing other forms of co-operation in Nuclear Research. The seat of the Council shall be at Geneva.

Article II

Composition

1. The States which took part in the "Regional Conference for the organization of studies concerning the establishment of the European Nuclear Research Laboratory" which undertake to contribute in money or in kind to the Council and become parties to the present Agreement, shall be Members of the Council

The Governments of States which took part in the above-mentioned Conference which have undertaken to contribute to the Council in money or in kind and which have signed the present Agreement subject to ratification, shall pending the deposit of their instruments of ratification, be fully entitled to be represented on the Council and take part in all its work.

2 Any European State which has not taken part in the above-mentioned Conference which undertakes.

1) to co-operate in the work of the Council on a footing of the free reciprocal exchange of persons and scientific and technical information of Members in accordance with its programme of work, and

2) to make an adequate contribution to the Council in money or in kind,

is eligible for membership of the Council. Applications are subject to the approval of the Council. States referred to in this section must moreover become parties to the present Agreement.

3 The obligations of States to contribute to the Council in money or in kind are set out in the Annex to this Agreement.

4 Each Member may appoint not more than two representatives to the Council It shall have one vote.

5. The Director-General of the United Nations Educational, Scientific and Cultural Organization. or his representative may attend meetings of the Council and take part in its discussions without the right to vote

Article III

Functions of the Council

1 The function of the Council is to organize on a regional European basis collaboration in the study of phenomena involving high energy particles and thus to contribute to the progress of fundamental science. For the purpose of such collaboration it shall

1) make plans for the establishment of an international nuclear research laboratory and to this effect carry out

(a) technical investigations relating to experimental equipment which should be furnished:

(b) a study of the administrative financial legal and technical problems involved in establishing such an institution;

2) take measures appropriate for utilizing the equipment and facilities put at its disposal in accordance with the provisions of agreements determining its right to use such equipment and facilities, provided that the financial obligations arising out of such agreements shall not prejudice the achievement of the purposes of the Council set out in paragraph 1) of this section.

3) undertake theoretical research in connection with the work described in paragraphs 1) and 2) of this section.

2. The Council shall make a report on the results of its work and studies, and submit it to the Governments of its Members. This report shall contain the draft of a convention for the establishment of an international laboratory and for the organization of other forms of co-operation for nuclear research.

3. The Council shall seek to collaborate with the United Nations Educational Scientific and Cultural Organization and shall enter into negotiations with it for a special agreement determining the particulars of such collaboration.

Article IV

Method of Work

1. The first meeting of the Council shall be summoned by the Chairman of the "Conference for the organization of studies concerning the establishment of a Regional Nuclear Research Laboratory"

2. The Council shall make its own Rules of Procedure which shall in particular determine the method of appointing the Chairman, the frequency of its ordinary sessions and the method of convoking extraordinary sessions

3. The Council may appoint a Committee consisting of not more than five persons chosen from among the representatives of the Members of the Council The Committee shall between meetings of the Council exercise all powers specifically delegated to it by the Council

4 The Council may in exceptional cases admit to its sessions upon terms to be defined by its representatives of scientific organizations which it desires to have associated with its work.

Article V

Secretary and Study Groups

1. The Council shall appoint a Secretary from candidates put forward by Members of the Council and shall commit to him the task of carrying out its decisions under the authority of the Chairman. The Secretary shall represent the Council for legal and civil purposes. The Secretary of the Council shall keep in close contact with the Study Groups as provided for in section 2.

2. The Council shall appoint the Study Groups necessary to carry out the functions described in Article III. Members of the Study Groups shall be chosen from candidates presented or approved by the Member States of which they are nationals. This shall not, however prevent the Council from appointing persons who are nationals of States not Members of the Council.

Article VI

Revenue and Budget

1. The revenue of the Council is made up as follows

- 1) contributions subscribed by Members,
- 2) any donations which may be made to it

2. The Council shall prepare its budget upon the basis and within the limits of the revenue received by it. It may if its revenue is increased make consequential amendments to the budget

3. If at the conclusion of its work, its revenue has not been completely disposed of or committed, the Council shall decide upon the disposal of the balance.

Article VII

Legal Personality and Facilities

The Council shall on the territory of its Members, have legal personality. The Governments of its Members shall in accordance with the provisions of existing legislation, grant it whatever facilities may be necessary for the exercise of its functions.

Article VIII

Duration

1. This Agreement is made for a period of eighteen months from the date of its coming into force provided that it shall in any event terminate upon the date of the entry into force of the convention referred to in Article III section 2.

2. If such a convention does not come into force within the period mentioned in the preceding section, Member States of the Council may decide to prolong the present Agreement for a period to be determined by them in accordance with a supplementary agreement which shall contain necessary provisions relating to additional revenue to be provided for the Council. The extension of this Agreement shall not in any case affect any State not party to the supplementary agreement.

Article IX

Final Provisions

1. States entitled to become Members of the Council shall become parties to this Agreement by signature without reserve as to ratification or by signature subject to ratification, followed by ratification. The Agreement shall be open for signature at Geneva on 15 February 1952 and, after that date at the seat of the United Nations Educational, Scientific and Cultural Organization.

2. It shall come into force when signed without reserve as to ratification, or signed subject to ratification and subsequently ratified by five of the States mentioned in Article II section 1 paragraph 1 and when the financial contributions to the Council undertaken by such States reach a total equivalent to one hundred thousand United States dollars.

3 States which sign the present Agreement subject to ratification shall become parties thereto upon depositing their instruments of ratification with the Director-General of the United Nations Educational Scientific and Cultural Organization.

4. The Director-General of the United Nations Educational, Scientific and Cultural Organization shall notify the entry into force of the present Agreement to all States which have taken part in the "Regional Conference for the organization of studies concerning the establishment of a European Nuclear Research Laboratory"

5. The Director-General of the United Nations Educational, Scientific and Cultural Organization shall upon the entry into force of this Agreement, present it for registration to the Secretariat of the United Nations in accordance with Article 102 of the Charter of the United Nations.

IN WITNESS WHEREOF the under-signed representatives duly authorized to that effect have signed the present Agreement.

Done in the City of Geneva this fifteenth day of February One Thousand Nine Hundred and Fifty-two, in one copy in the French and English languages both texts being equally authentic.

The original shall be deposited in the Archives of the United Nations Educational, Scientific and Cultural Organization. The Director-General of that Organization shall transmit a certified copy to the States which took part in the "Regional Conference for the organization of studies concerning the establishment of a European Nuclear Research Laboratory" and to all other States which subsequently become Members of the Council

Pour la République fédérale d'Allemagne For the Federal Republic of Germany

Dr W HEISENBERG

Pour le Royaume du Danemark For the Kingdom of Denmark

Jakob NIELSEN
(sous réserve de ratification)

Pour la République française For the French Republic

F PERRIN G. DUPOUY F de ROSE
(sous réserve de ratification)

Pour le Royaume de Grece For the Kingdom of Greece

D HONDROS
(sous réserve de ratification)

Pour la République d'Italie For the Republic of Italy

A. CASATI
(sous réserve de ratification)

Pour le Royaume des Pays-Bas For the Kingdom of the Netherlands

J H. BANNIER

Pour le Royaume de Suede For the Kingdom of Sweden

Malte JACOBSSON
(subject to ratification)

Pour la Confédération Suisse For the Confederation of Switzerland

P SCHERRER
(sous réserve de ratification)

Pour la République populaire
fédérative de Yougoslavie

For the Peoples Republic of
Yugoslavia

Pavle SAVIĆ Stevan DEDIJER

Pour le Royaume de Belgique

For the Kingdom of Belgium

GUILLAUME 2 avril 1952
(sous réserve de ratification)

Pour le Royaume de Norvege

For the Kingdom of Norway

Rolf ANDVORD 5th May 1952
(subject to ratification)

ANNEX

General Provisions

1. The States signing this Annex undertake respectively to make the contributions, in money or in kind, listed in this Annex to the Council of Representatives of European States constituted by the principal Agreement

2. A contribution in kind made by a State which participated in the "Regional Conference for the organization of studies concerning the establishment of the European Nuclear Research Laboratory" may be made the subject of a special agreement to be concluded between the Council and the contributory State

3. The conditions upon which contributions in money or in kind may be accepted from States which did not participate in the above-mentioned Conference and which apply for membership of the Council may be determined by the Council

4. Special provisions relating to the contributions of States signing after the 15th February 1952 may be added later to this Annex

5 This Annex shall come into force at the same time as the principal Agreement.

CONTRIBUTIONS

The German Federal Republic will contribute the sum of \$ 35 000 (thirty-five thousand dollars) in United States currency payable to the Council as soon as it is legally constituted.

Signature Dr W HEISENBERG

The Kingdom of Denmark undertakes to place the Institute of Theoretical Physics of the University of Copenhagen at the disposal of the Council to the extent necessary for assisting in the work of the European Study Group.

Signature: Jakob NIELSEN

The French Republic will contribute the sum of 25,000,000 French francs (twenty-five million French francs) payable to the Council as soon as it is legally constituted.

Signature F PERRIN - G. DUPOUY - F de ROSE

The Republic of Italy will contribute the sum of \$ 25,000 (twenty-five thousand dollars) payable in Swiss francs, to the Council as soon as it is legally constituted.

Signature. A. CASATI

The Kingdom of the Netherlands will contribute the sum of \$ 10,000 (ten thousand dollars) payable to the Council as soon as it is legally constituted, in any European currency desired by the Council.

Signature. J.H. BANNIER

The Kingdom of Sweden will contribute the sum of 57 000 Swedish crowns (fifty-seven thousand Swedish crowns), payable to the Council as soon as it is legally constituted.

Signature. Malte JACOBSSON

The Peoples' Federal Republic of Yugoslavia will contribute the sum of \$ 10,000 (ten thousand dollars) in United States currency payable to the Council as soon as it is legally constituted.

Signature. Pavle SAVIČ - Stevan DEDIJER

The Kingdom of Norway will contribute the sum of \$ 5,000 (five thousand dollars) to the Council as a maximum contribution.

Signature. Rolf ANDVORD, 5th of May 1952

The Confederation of Switzerland has paid the sum of thirty thousand Swiss francs to the United Nations Educational, Scientific and Cultural Organization for the account of the Council.

Signature. P SCHERRER, 5th of May 1952

The Kingdom of Belgium has paid the sum of one million Belgian francs in Swiss currency to the United Nations Educational, Scientific and Cultural Organization for the account of the Council.

Signature. Jean WILLEMS, 5th of May 1952

The Confederation of Switzerland undertakes to contribute the sum of 100,000 Swiss francs (one hundred thousand Swiss francs) to the Council of which 30 000 Swiss francs (thirty thousand Swiss francs) have already been paid to Unesco, as set out herein, and the balance of 70 000 Swiss francs (seventy thousand Swiss francs) will be paid directly to the Council.

For the Federal Council of Switzerland
Bernard BARBEY 30th of July 1952

DEPOSIT OF INSTRUMENTS OF RATIFICATION

The instruments of ratification of the following countries have been deposited in the Unesco Archives:

<i>Countries</i>	<i>Date of deposit</i>
France	11 April 1952
Sweden	2 May 1952
Denmark	3 June 1952
Switzerland	30 July 1952
Belgium	20 August 1953
Norway	10 December 1953
Greece	13 January 1954

Note

The Netherlands, the German Federal Republic and Yugoslavia signed, on the 15th of February, 1952, *without reserve* for ratification.

CONVENTION

for the establishment of a European Organization for Nuclear Research

THE STATES parties to this Convention.

CONSIDERING the Agreement opened for signature at Geneva on the fifteenth of February 1952 constituting a Council of Representatives of European States for planning an international laboratory and organizing other forms of co-operation in nuclear research:

CONSIDERING the Supplementary Agreement signed at Paris on the thirtieth of June 1953 prolonging the said Agreement, and

DESIRING pursuant to section 2 of Article III of the said Agreement of the fifteenth of February 1952 to conclude a Convention for the establishment of a European Organization for Nuclear Research, including the establishment of an International Laboratory for the purpose of carrying out an agreed programme of research of a pure scientific and fundamental character relating to high energy particles,

HAVE AGREED as follows:

Article I

Establishment of the Organization

1. A European Organization for Nuclear Research (hereinafter referred to as "the Organization") is hereby established.
2. The seat of the Organization shall be at Geneva.

Article II

Purposes

1. The Organization shall provide for collaboration among European States in nuclear research of a pure scientific and fundamental character and in research essentially related thereto. The Organization shall have no concern with work for military requirements and the results of its experimental and theoretical work shall be published or otherwise made generally available

2. The Organization shall in the collaboration referred to in paragraph 1 above confine its activities to those set out in paragraphs 3 4 and 5 of this Article

3. The basic programme of the Organization shall comprise:

(a) The construction of an International Laboratory (hereinafter referred to as "the Laboratory") for research on high energy particles, including work in the field of cosmic rays. The Laboratory shall consist of:

(i) a proton synchrotron for energies above ten gigaelectronvolts (10^{10} eV)

(ii) a synchro-cyclotron capable of accelerating protons up to approximately 600 million electron-volts (6×10^8 eV)

(iii) the necessary ancillary apparatus for use in the research programmes carried out by means of the machines referred to in (i) and (ii) above

(iv) the necessary buildings to contain the equipment referred to in (i) (ii) and (iii) above and for the administration of the Organization and the fulfilment of its other functions.

(b) The operation of the Laboratory specified above.

(c) The organization and sponsoring of international co-operation in nuclear research, including co-operation outside the Laboratory. This co-operation may include in particular:

(i) work in the field of theoretical nuclear physics

(ii) the promotion of contacts between and the interchange of scientists the dissemination of information and the provision of advanced training for research workers

(iii) collaboration with and advising of national research institutions

(iv) work in the field of cosmic rays

4. Any supplementary programme shall be submitted to the Council referred to in Article IV and shall require approval by a two thirds majority of all the Member States of the Organization

5. The Laboratory shall co-operate to the fullest possible extent with laboratories and institutes in the territories of Member States within the scope of its basic and any supplementary programmes of activities. So far as is consistent with the aims of the Organization, the Laboratory shall seek to avoid duplicating research work which is being carried out in the said laboratories or institutes.

Article III

Conditions of Membership

1. States which are parties to the Agreement of the fifteenth of February 1952, referred to in the Preamble hereto, or which have contributed in money or in kind to the Council thereby established and actually participated in its work, shall have the right to become members of the Organization by becoming parties to this Convention in accordance with the provisions of Articles XV XVI and XVII.

2. (a) Other States may be admitted to the Organization by the Council referred to in Article IV by a unanimous decision of Member States.

(b) If a State wishes to join the Organization in accordance with the provisions of the preceding sub-paragraph, it may notify the Director. The Director shall inform all Member States of this request at least three months before it is discussed by the Council. States accepted by the Council may become members of the Organization by acceding to this Convention in accordance with the provisions of Article XVII.

3. Member States shall co-operate in the work of the Organization except that a Member State shall have no obligation to contribute financially to any activity additional to those specified in paragraph 3 of Article II. A Member State shall not have the right to participate in any activity to which it has not made a financial contribution.

4. Member States shall facilitate for the purpose of the basic and any supplementary programmes of activities of the Organization the exchange of persons and of relevant scientific and technical information, provided that nothing in this paragraph shall

- (a) affect the application to any person of the laws and regulations of Member States relating to entry into residence in or departure from their territories or
- (b) require any Member State to communicate or to permit the communication of any information in its possession insofar as it considers that such communication would be contrary to the interests of its security

Article IV

Organs

The Organization shall consist of a Council and a Director assisted by a staff

Article V

The Council

1. The Council shall be composed of not more than two delegates from each Member State who may be accompanied at meetings of the Council by advisers.

2. The Council shall subject to the provisions of this Convention:

- (a) determine the Organization's policy in scientific, technical and administrative matters;
- (b) approve detailed schemes of research and decide on any supplementary programmes of activities of the Organization;
- (c) adopt the budget and determine the financial arrangements of the Organization in accordance with the Financial Protocol annexed to this Convention;
- (d) review expenditures and approve and publish audited annual accounts of the Organization;
- (e) decide on the staff establishment required;

(f) publish an annual report.

(g) have such other powers and perform such other functions as may be necessary for the purposes of this Convention.

3. The Council shall meet at least once a year at such places as it shall decide.

4. Each Member State shall have one vote in the Council except that a Member State shall not be entitled to vote in regard to activities specified in any supplementary programme unless it has agreed to make a financial contribution to that supplementary programme or unless the matter voted upon relates to facilities to the cost of which it has contributed.

5. A Member State shall have no vote in the Council if the amount of its unpaid contributions to the Organization exceeds the amount of the contributions due from it for the current financial year and the immediately preceding financial year. The Council nevertheless may by a two-thirds majority of all the Member States permit such Member State to vote if it is satisfied that the failure to pay is due to conditions beyond the control of the State concerned.

6. Decisions of the Council shall be taken by a simple majority of the Member States represented and voting, except where otherwise provided in this Convention.

7. Subject to the provisions of this Convention, the Council shall adopt its own rules of procedure.

8. The presence of delegates from a majority of Member States shall be necessary to constitute a quorum at any meeting of the Council.

9. The Council shall elect a president and two vice-presidents who shall hold office for one year and may be re-elected on not more than two consecutive occasions.

10. The Council may establish such subordinate bodies as may be necessary for the purposes of the Organization. The creation and the terms of reference of such bodies shall be determined by the Council by a two-thirds majority of all the Member States.

11. Pending the deposit of their instruments of ratification or accession the States mentioned in paragraph 1 of Article III may be represented at meetings of the Council and take part in its work until the thirty-first of December 1954. This right shall not include the right to vote unless the State concerned has contributed to the Organization in accordance with the provisions of paragraph (1) of Article 4 of the Financial Protocol annexed to this Convention.

Article VI

Director and Staff

1. (a) The Council shall by a two-thirds majority of all the Member States appoint a Director for a defined period and may by the same majority dismiss him. The Director shall be the chief executive officer of the Organization and its legal representative. He shall in regard to the financial administration of the Organization act in accordance with the provisions of the Financial Protocol annexed to this Convention. He shall also submit an annual report to the Council and shall attend, without the right to vote all its meetings.
- (b) The Council may postpone the appointment of the Director for such period as it considers necessary either on the entry into force of this Convention or on the occurrence of a subsequent vacancy. In this event it shall appoint a person to act in his stead the person so appointed to have such powers and responsibilities as the Council may direct.

2. The Director shall be assisted by such scientific technical administrative and clerical staff as may be considered necessary and authorized by the Council

3 All staff shall be appointed and may be dismissed by the Council on the recommendation of the Director Appointments and dismissals made by the Council shall require a two-thirds majority of all the Member States. The Council may by the same majority delegate powers of appointment and dismissal to the Director Any such appointment and its termination shall be in accordance with staff regulations to be adopted by the Council by the same majority Any scientists not members of the staff who are invited by the Council to carry out research in the Laboratory shall be subject to the authority of the Director and to such general conditions as may be approved by the Council.

4. The responsibilities of the Director and the staff in regard to the Organization shall be exclusively international in character In the discharge of their duties they shall not seek or receive instructions from any government or from any authority external to the Organization. Each Member State shall respect the international character of the responsibilities of the Director and the staff and not seek to influence them in the discharge of their duties.

Article VII

Financial Contributions

1. Each Member State shall contribute both to the capital expenditure and to the current operating expenses of the Organization

- (a) for the period ending on the thirty-first of December 1956. as set out in the Financial Protocol annexed to this Convention. and, thereafter

(b) in accordance with a scale which shall be decided every three years by the Council by a two-thirds majority of all the Member States, and shall be based on the average net national income at factor cost of each Member State for the three latest preceding years for which statistics are available except that

(i) no Member State shall, in respect of the basic programme be required to pay contributions in excess of twenty-five per cent of the total amount of contributions assessed by the Council to meet the cost of that programme

(ii) the Council may decide, by a two-thirds majority of all the Member States, to take into account any special circumstances of a Member State and adjust its contribution accordingly

2. The contributions to be paid by a Member State under paragraph 1 of this Article shall be calculated in respect of and applied only to, the specific activities to which it has agreed to contribute. In the event of some Member States not participating in a supplementary programme, the Council shall assess the scale of contributions to that programme among the participating Member States on the basis stated in sub-paragraph (b) of paragraph 1 above but, for this purpose proviso (i) shall be disregarded.

3. (a) The Council shall require States which become parties to this Convention after the thirty-first of December 1954. to make a special contribution towards the capital expenditure of the Organization already incurred, in addition to contributing to future capital expenditure and current operating expenses. The amount of this special contribution shall be fixed by the Council by a two-thirds majority of all the Member States.

(b) All contributions made in accordance with the provisions of sub-paragraph (a) above shall be applied in reducing the contributions of the other Member States.

4. Contributions due under the provisions of this Article shall be paid in accordance with the Financial Protocol annexed to this Convention.

5. The Director may subject to any directions given by the Council accept gifts and legacies to the Organization provided that such gifts or legacies are not subject to any conditions inconsistent with the purposes of the Organization.

Article VIII

Co-operation with UNESCO and with other organizations

The Organization shall co-operate with the United Nations Educational Scientific and Cultural Organization. It may also by a decision of the Council taken by a two-thirds majority of all the Member States co-operate with other organizations and institutions.

Article IX

Legal Status

The Organization shall have legal personality in the metropolitan territories of all Member States. The Organization and the representatives of Member States on the Council the members of any subordinate bodies established under paragraph 10 of Article V the Director and the members of the staff of the Organization shall be accorded in the metropolitan territories of Member States by virtue of agreements to be concluded between the Organization and each Member State concerned such privileges and immunities if any as they agree to be necessary for the exercise of the functions of the Organization. The agreement to be concluded between the Organization and the Member State on the territory of which the Organization shall be established shall contain in addition to provisions concerning privileges and immunities, provisions regulating the special relations between the Organization and that Member State.

Article X

Amendments

1. The Council may recommend amendments of this Convention and of the annexed Financial Protocol to Member States. Any Member State which wishes to propose an amendment shall notify the Director thereof. The Director shall inform all Member States of any amendment so notified at least three months before it is discussed by the Council.

2. Any amendment, other than an amendment of the Financial Protocol annexed to this Convention, recommended by the Council shall require acceptance in writing by all Member States. It shall come into force thirty days after the Director has received notifications of acceptance from all Member States. The Director shall inform all Member States of the date on which the amendment shall thus come into force.

3. The Council may amend the Financial Protocol annexed to this Convention by a two-thirds majority of all the Member States provided that such amendment does not conflict with the Convention. Any such amendment shall come into force on a date to be decided by the Council by the same majority. The Director shall inform all Member States of each such amendment and of the date on which it shall come into force.

Article XI

Disputes

Any dispute between two or more Member States concerning the interpretation or application of this Convention, which is not settled by the good offices of the Council shall be submitted to the International Court of Justice unless the Member States concerned agree on some other mode of settlement.

Article XII

Withdrawal

After this Convention has been in force for seven years a Member State may give notice in writing to the Director of withdrawal from the Organization. Such withdrawal shall take effect

at the end of the financial year in which it is notified if the notice is given during the first nine months of that financial year. If the notice is given in the last three months of the financial year it shall come into effect at the end of the next financial year.

Article XIII

Non-fulfilment of Obligations

If a Member State fails to fulfil its obligations under this Convention, it shall cease to be a member of the Organization on a decision of the Council taken by a two-thirds majority of all the Member States.

Article XIV

Dissolution

The Organization shall be dissolved if at any time there are less than five Member States. It may be dissolved at any time by agreement between the Member States. Subject to any agreement which may be made between Member States at the time of dissolution, the State on the territory of which the seat of the Organization is at that time established shall be responsible for the liquidation, and the surplus shall be distributed among those States which are members of the Organization at the time of the dissolution, in proportion to the contributions actually made by them from the dates of their becoming parties to this Convention. In the event of a deficit this shall be met by the existing Member States in the same proportions as those in which their contributions have been assessed for the financial year then current.

Article XV

Signature

This Convention and the annexed Financial Protocol which is an integral part thereof shall be open for signature until the thirty-first of December 1953 by any State which satisfies the conditions laid down in paragraph 1 of Article III.

Article XVI

Ratification

1. This Convention and the annexed Financial Protocol shall be subject to ratification.

2. Instruments of ratification shall be deposited with the Director General of the United Nations Educational, Scientific and Cultural Organization.

Article XVII

Accession

1. Any State, not a signatory of this Convention, which satisfies the conditions laid down in paragraphs 1 or 2 of Article III may accede to the Convention and the Financial Protocol as from the first of January 1954.

2. Instruments of accession shall be deposited with the Director General of the United Nations Educational, Scientific and Cultural Organization.

Article XVIII

Entry into force

1. This Convention and the annexed Financial Protocol shall enter into force when seven States have ratified or acceded to, these instruments provided that

- (a) the total of their percentage contributions on the scale set out in the Annex to the Financial Protocol amounts to not less than seventy-five per cent, and
- (b) Switzerland, being the country in which the seat of the Organization is to be established, shall be among such seven States.

2. This Convention and the annexed Financial Protocol shall enter into force for any other signatory or acceding State on the deposit of its instrument of ratification or accession, as the case may be.

Article XIX
Notifications

1. The Director General of the United Nations Educational Scientific and Cultural Organization shall notify all signatory and acceding States and all other States which took part in the Conference for the organization of studies concerning the establishment of a European Nuclear Research Laboratory held at Paris in December 1951, and at Geneva in February 1952, of the deposit of each instrument of ratification or accession, and of the entry into force of this Convention.

2. The Director of the Organization shall notify all Member States and the Director General of the United Nations Educational, Scientific and Cultural Organization of every withdrawal from, or termination of membership.

Article XX
Registration

The Director General of the United Nations Educational, Scientific and Cultural Organization shall, upon the entry into force of this Convention, register it with the Secretary General of the United Nations in accordance with Article 102 of the Charter of the United Nations.

IN WITNESS WHEREOF the undersigned representatives having been duly authorized thereto by their respective Governments have signed this Convention.

Done at Paris, this first day of July 1953 in the English and French languages both texts being equally authoritative in a single original which shall be deposited in the archives of the United Nations Educational Scientific and Cultural Organization, the Director General of which shall transmit a certified copy to all signatory and acceding States and to all other States which took part in the Conference for the organization of studies concerning the establishment of a European Nuclear Research Laboratory

FINANCIAL PROTOCOL

**annexed to the Convention for the establishment
of a European Organization for Nuclear Research**

THE STATES parties to the Convention for the establishment of a European Organization for Nuclear Research (hereinafter referred to as "the Convention")

DESIRING to make provision for the financial administration of the said Organization

HAVE AGREED as follows

Article 1
Budget

(1) The financial year of the Organization shall run from the first of January to the thirty-first of December

(2) The Director shall not later than the first of September in each year submit to the Council for consideration and approval detailed estimates of income and expenditure for the following financial year

(3) Estimates of income and expenditure shall be divided under general headings. Transfers within the budget shall not be permitted except by authority of the Finance Committee referred to in Article 3. The exact form of the estimates shall be determined by the Finance Committee on the advice of the Director

Article 2
Supplementary Budget

The Council may require the Director to present a supplementary or revised budget if circumstances make it necessary. No resolution involving additional expenditure shall be deemed to be approved by the Council until it has approved an estimate submitted by the Director of the additional expenditure involved.

Article 3

Finance Committee

A Finance Committee composed of representatives of all* Member States shall be set up by the Council with such functions as shall be laid down in Financial Rules to be approved by the Council. The Director shall submit the budget estimates to this Committee for examination, after which they shall be transmitted to the Council with the Committee's report thereon.

Article 4

Contributions

(1) For the period ending on the thirty-first of December 1954, the Council shall make provisional budgetary arrangements, which shall be met by contributions as provided for in paragraph (1) of the Annex to this Protocol.

(2) For the financial years 1955 and 1956 approved budget expenditure shall be met by contributions from Member States, which shall be assessed in the same proportions as the percentage figures set out in paragraph (2) of the Annex to this Protocol, it being understood that the provisions mentioned in (i) and (ii) of sub-paragraph (b) of paragraph 1 of Article VII of the Convention shall apply.

(3) From the first of January 1957 approved budget expenditure shall be met by contributions from Member States as provided for in paragraph 1 of Article VII of the Convention.

(4) When any State becomes a member of the Organization after the thirty-first of December 1954 the contributions of all Member States shall be re-assessed and the new scale shall take effect as from the beginning of the current financial year. Reimbursements shall be made,

* Article 3 was amended at the First Session of Council of the permanent Organization, where it was agreed to replace "five" by "all" Member States.

if necessary to ensure that the contributions paid by all the Member States for that year are in conformity with the new scale.

- (5) (a) The Finance Committee shall in consultation with the Director determine the terms on which payments in respect of contributions shall be made consistently with the proper financing of the Organization.
- (b) The Director shall thereafter notify Member States of the amount of their contributions and of the dates on which payments shall be made.

Article 5

Currency of Contributions

(1) The budget of the Organization shall be expressed in the currency of the country in which the seat of the Organization is established. The contributions of Member States shall be made in that currency in accordance with the payments arrangements currently in force.

(2) The Council may however require Member States to pay part of their contributions in any currency which may be needed for the work of the Organization.

Article 6

Working Capital Fund

The Council may establish a Working Capital Fund.

Article 7

Accounts and Auditing

(1) The Director shall keep an accurate account of all receipts and disbursements.

(2) The Council shall appoint auditors who will serve for three years in the first instance and may be re-appointed. The auditors

shall examine the accounts of the Organization, particularly in order to certify that the expenditure has conformed within the limits specified in the Financial Rules referred to in Article 3 to the provisions made in the budget and shall discharge such other functions as are set out in the said Financial Rules.

(3) The Director shall furnish the auditors with such information and help as they may require to carry out their duties.

IN WITNESS WHEREOF the undersigned representatives, having been duly authorized thereto by their respective Governments have signed this Protocol

Done at Paris, this first day of July 1953 in the English and French languages both texts being equally authoritative in a single original which shall be deposited in the archives of the United Nations Educational Scientific and Cultural Organization, the Director General of which shall transmit a certified copy to all signatory and acceding States and to all other States which took part in the Conference for the organization of studies concerning the establishment of a European Nuclear Research Laboratory

A N N E X

- (1) *Contributions for the period ending on the 31st of December 1954.*
 - (a) The States which are parties to the Convention on the date of its entry into force, together with any other States which may become members of the Organization during the period ending on the 31st of December 1954, shall between them contribute the whole of the sums required by such provisional budgetary arrangements as the Council may make under paragraph (1) of Article 4.
 - (b) The contributions of the States, which are members of the Organization when the Council first makes such provisional budgetary arrangements, shall be provisionally assessed on the basis set out in paragraph (2) of Article 4, subject to the provisos mentioned in (i) and (ii) of sub-paragraph (b) of paragraph 1 of Article VII of the Convention, except that in proviso (i) thirty per cent shall be deemed to be substituted for twenty-five per cent.
 - (c) The contributions of the States which become members of the Organization during the period between the first occasion on which provisional budgetary arrangements have been made and the 31st of December 1954, shall be provisionally assessed in such a manner that the relative proportions between the provisional contributions of all Member States are the same as between the percentage figures set out in paragraph (2) of this Annex. Such contributions will serve either as provided for in sub-paragraph (d) below to reimburse subsequently part of the provisional contributions previously paid by the other Member States, or to meet additional budgetary appropriations approved by the Council during that period.

(d) The final contributions due for the period ending on the 31st of December 1954, from all the States which are members of the Organization on that date shall be retroactively assessed after that date on the basis of the total budget for the said period, so that they shall be those which they would have been if all these States had become parties to the Convention on the date of its entry into force. Any sum paid by a Member State in excess of its contribution thus retroactively assessed shall be placed to the credit of the Member State.

(e) If all the States specified in the scale set out in paragraph (2) of this Annex have become members of the Organization before the 31st of December, 1954, their percentage contributions to the total budget for that period shall be those set out in that scale.

(2) *Scale to serve as a basis for the assessment of contributions during the period ending on the 31st of December 1956.*

	Percentage
Belgium	4.88
Denmark	2.48
France	23.84
German Federal Republic	17.70
Greece	0.97
Italy	10.20
Netherlands	3.68
Norway	1.79
Sweden	4.98
Switzerland	3.71
United Kingdom of Great Britain and Northern Ireland	23.84
Yugoslavia	1.93
Total	100.00

For the German Federal Republic

Pour la République Fédérale
d'Allemagne

W HEISENBERG

subject to ratification

For the Kingdom of Belgium

Pour le Royaume de Belgique

J. WILLEMS

sous réserve de ratification

For the Kingdom of Denmark

Pour le Royaume de Danemark

ELVAERUM 23.12.53

sous réserve de ratification

For the French Republic

Pour la République Française

Alexandre PARODI - Robert VALEUR - F. PERRIN

sous réserve de ratification

For the Kingdom of Greece

Pour le Royaume de Grèce

N. EMBIRICOS

sous réserve de ratification

For Italy

Pour l'Italie

Gustavo COLONNETTI - Antonio PENNETTA

sous réserve de ratification

For the Kingdom of Norway

Pour le Royaume de Norvège

Rolf ANDVORD 31.12.1953

subject to ratification

For the Kingdom of the Netherlands

Pour le Royaume des Pays-Bas

J.H. BANNIER

subject to ratification

For the United Kingdom of
Great Britain and Northern Ireland

Pour le Royaume-Uni de la
Grande-Bretagne et de
l'Irlande du Nord

B. LOCKSPEISER

subject to ratification

For the Kingdom of Sweden

Pour le Royaume de Suède

Ivar WALLER - Torsten GUSTAFSON

subject to ratification

For the Confederation of
Switzerland

Pour la Confédération Suisse

v SALIS 17.7.53

sous réserve de ratification

For the Federal People's
Republic of Yugoslavia

Pour la République Fédérative
Populaire de Yougoslavie

Pavle SAVIĆ

sous réserve de ratification

DEPOSIT OF INSTRUMENTS OF RATIFICATION

The instruments of ratification of the following countries have been deposited in the Unesco Archives.

<i>Countries</i>	<i>Date of deposit</i>
United Kingdom	30 December 1953
Switzerland	12 February 1954
Denmark	5 April 1954
Netherlands	15 June 1954
Greece	7 July 1954
Sweden	15 July 1954
Belgium	19 July 1954
France	29 September 1954
German Federal Rep.	29 September 1954
Norway	4 October 1954
Yugoslavia	9 February 1955
Italy	24 February 1955