United Nations Educational, Scientific and Cultural Organization Executive Board

Hundred and sixty-second Session

162 EX/11 PARIS, 30 July 2001 Original: English

Item 3.3.3 of the provisional agenda

FEASIBILITY STUDY ON A WORLD SCIENCE DAY FOR PEACE AND DEVELOPMENT

SUMMARY

This document contains the report of the feasibility study on the celebration of a world science day for peace and development (WSDPD), carried out in conformity with 160 EX/Decision 3.3.2, adopted by the Executive Board at its 160th session.

Decision required: paragraph 44.

SCOPE, PURPOSE AND OBJECTIVES OF THE FEASIBILITY STUDY

1. At the 160th session of UNESCO's Executive Board (160 EX/Decision 3.3.2), the Director-General was invited to "undertake a feasibility study on the celebration of a world science day for peace and development and report thereon to it at its 161st session".

This report on the feasibility study focuses on the relevance for UNESCO to celebrate a world 2. science day for peace and development (WSDPD), on possible objectives, expected results, modes of implementation, "value added" aspects, as well as management and financial implications. It is based on the results of a broad consultation with stakeholders and an analysis of relevant documents. The consultation, which represented an important part of the feasibility study, consisted of a questionnaire, meetings and interviews.

3. The questionnaire attracted a considerable response. Over 200 replies to the questionnaire were received from 84 countries.¹ UNESCO National Commissions, Member State governments, intergovernmental organizations, national science and research councils, national academies of

¹ Written replies, a list of the respondents and documents related to the study may be consulted at the UNESCO Science Sector/Division of Analysis and Policy.

science, world-renowned scientists, women's scientific associations, young scientists, young people's organizations, journalists, etc., submitted written comments.

4. In presenting the results of the consultation, the concerns expressed and the suggestions made by the partners involved, the report aims to demonstrate the opportunity for UNESCO to celebrate the WSDPD and identify the modalities for the design, implementation and evaluation of such a project.

RATIONALE OF THE PROPOSAL

5. The rationale of celebrating a WSDPD has its roots in the importance of the role of science and scientists for sustainable societies and in the need to inform and involve citizens in science. In this sense, a WSDPD would offer an opportunity to show the general public the relevance of science in their lives and to engage them in discussions. Such a venture would also bring a unique perspective to the global search for peace and development.

6. The organization of a focused event related to the commitment on science and society as one of the positive outcomes of the World Conference on Science was evoked during the Budapest meeting. It was considered an opportunity to reaffirm each year the commitment to attaining the goals proclaimed in the *Declaration on Science and the Use of Scientific Knowledge* and to follow up the recommendations of the *Science Agenda: Framework for Action*.

NATIONAL AND INTERNATIONAL SCIENCE DAYS/WEEKS

7. The future of the scientific endeavour is linked to public attitude and understanding, as well as to scientific literacy, and many initiatives have been taken at national, regional or international level to provide the general public with information on the potential uses and benefits of science.

8. At the global level, the International Week of Science and Peace takes place every year during the week in which 11 November falls. The initiative was created by scientists who warned against the misuse of science and promoted its constructive use. Launched in response to the threats posed by the cold war and the nuclear arms race, this International Week obtained major recognition in 1988 when the United Nations General Assembly adopted a resolution on science and peace, to be followed by a second in 1990 (Resolutions 43/61 and 45/70). These resolutions stress that science and technology are closely linked to international peace and security, economic and social development, respect of human rights and many other aspects of civilization and of culture. They emphasize the need to "promote greater awareness among scientists worldwide of the usefulness of science to increase international peace, security, cooperation, the social and economic development of human rights and the protection of the environment".

9. The United Nations has given moral support to the International Week of Science and Peace, but the work and such resources as are needed come from the voluntary contributions of concerned individuals. The prestige and moral authority of the United Nations were important for the initiative. In the early years, several United Nations Member States gave their official support. They were mostly, perhaps exclusively, socialist countries. With the end of the cold war, the importance of the week has declined, although there are signs of renewed interest.

10. An assessment of the International Week of Science and Peace (in Annex) recognizes that, considering the lack of funding, the initiative has been remarkably successful, although on a modest scale compared with the major issues it addresses.

11. Under successive programmes, the European Union has included support for action aimed at improving the level of public awareness and understanding of science. Various mechanisms have been established to help achieve better public information on science in the framework of the European Science Week, launched in 1993 at the initiative of the European Commission: preparation and distribution of information, seminars and lectures for the general public, activities with schools and science teachers, and exhibitions.

12. In 1987, the Organization of African Unity (OAU) declared 30 June "Africa Science Renaissance Day" for African countries.

13. Science festivals and weeks have been organized in various countries (e.g. Cuba, Mexico, United Kingdom, Republic of Korea and Cameroon). Many associations worldwide hold these events. They include the British Association for the Advancement of Science, the Gesellschaft Deutscher Naturforscher und Ärzte (GDNA), the Indian Science Congress Associations, the China Association for Science and Technology, and the Mali Association of Engineering Women.

14. At the national level, a number of Member States celebrate national science days. Activities include information for schools, preparation of didactic material, exhibitions and workshops. Various media, traditional and non-traditional utilized for these days include articles in newspapers, popular radio/television science programmes, and folk forms such as songs, dances, street theatre and puppetry.

15. The most successful activities involve scientists displaying their work in public places such as shopping centres, and talking with the public about what they are doing. Workshop-based activities for young people, science competitions and interactive Internet projects are developed during these weeks.

RESULTS OF THE CONSULTATION

16. Analysis of the written comments and of the interviews has shown that the initiative is felt to be very appropriate and timely. Although there is widespread recognition of the importance for UNESCO to declare the WSDPD, some people expressed some doubts as to its impact. Certain contributions stressed the need to add "technology" to the title in order to stress that the event must be devoted not only to science as a means of increasing knowledge, but also to its applications.

17. The following issues were considered of high priority:

- (a) bridging the knowledge gap between developed and developing countries;
- (b) the negative impact of science and technological development on the environment;
- (c) the responsibility of scientists;
- (d) the responsibility of society to science;
- (e) a focus on science as a means to improve women's living conditions;
- (f) ethics of scientific development and application.

OBJECTIVES

- 18. The main objectives of the WSDPD were identified as follows:
 - (a) to renew the national as well as the international commitment to science for peace and development and to stress the responsible use of science for the benefit of societies, and more especially for the eradication of poverty and for human security;
 - (b) to discuss new challenges posed by the development of science, with special emphasis on North-South inequalities;
 - (c) to promote the embedding of ethics in science and to provide a forum for discussion on ethical issues related to science;
 - (d) to raise public awareness on the importance of science and bridge the gap between science and society;
 - (e) to recall the importance of science education for future generations.

EXPECTED RESULTS

- 19. The following results are expected:
 - (a) greater visibility of UNESCO's lead role, as well as its mandate and mission in science;
 - (b) new international awareness of the need to help the development of science and research in countries with limited resources;
 - (c) to offer opportunities, each year, to reflect on new challenges for science;
 - (d) mobilization of the scientific community, governments, decision-makers, educational institutions and the media;
 - (e) enhancement of international solidarity on global issues related to science and research;
 - (f) better understanding by the public and local communities of the role of science in everyday life;
 - (g) development of innovative approaches and experiences in science communication.

ENVISAGED DIFFICULTIES

- 20. The envisaged difficulties were listed as follows:
 - (a) lack of commitment by governments;
 - (b) need for coordination;
 - (c) lack of financial resources;
 - (d) lack of sustained international interest;
 - (e) equality, parity and accessibility for the participation of developing countries.

STRATEGY FOR IMPLEMENTATION

21. Two options could be envisaged:

Option I: UNESCO as organizer

22. Here, we present some organizational parameters that could constitute the specification for the celebration of the WSDPD in which UNESCO would be the main organizer, in collaboration with international and national partners:

- (a) the celebration of a day to be held at UNESCO Headquarters in Paris, with simultaneous major events at the country level;
- (b) the creation of a Science for Peace and Development Prize to reward a person or group for an outstanding scientific contribution to improve living conditions or solve specific community problems;
- (c) support to local activities;
- (d) wide media coverage;
- (e) a Secretariat Office whose principal task would be to organize and coordinate all activities.
- 23. Two factors are of crucial importance for the success of the WSDPD based on this option:
 - (a) solid media support in Paris and in the countries where the simultaneous events would be held to ensure substantial impact and visibility of UNESCO's role and action;
 - (b) investment required on the part of UNESCO.

24. The cost of the operation to the Organization is estimated at US \$300,000. In view of the Organization's budgetary and human resources constraints this option is not recommended.

Option II: UNESCO as a catalyst and sponsor

25. In this scenario, UNESCO would act primarily as a catalyst and sponsor. The basic principles might be as follows:

- (a) UNESCO could create a UNESCO-WSDPD label;
- (b) since there already exist a number of science popularization activities with which UNESCO is associated as part of the regular programme at national or international level, the UNESCO label would be awarded to a range of initiatives provided they meet WSDPD objectives;
- (c) a single person in the Secretariat would be responsible for the promotion and management of activities, working in close collaboration with National Commissions;
- (d) posters could be prepared and widely distributed.

26. Within the framework of option II, UNESCO could also serve as a clearing house for the exchange of information on activities undertaken in the various Member States. An annual operating budget of US \$50,000 should be sufficient to meet the needs of this proposal.

CONCLUSIONS AND RECOMMENDATIONS

27. Option II is recommended, since it has less onerous financial implications and could be more easily managed within the framework of the existing Programme and Budget.

28. The proposed WSDPD is consistent with the purpose and mission of UNESCO and is in line with the commitment expressed in the World Conference on Science documents: *Declaration on Science and the Use of Scientific Knowledge* and the *Science Agenda – Framework for Action*.

29. Since its overall objective is to stress the commitment of science to society, as was postulated by the World Conference on Science, the WSDPD must be considered as a platform of political action for science in relation with society. It should not be reduced to activities that aim solely at public information and the public understanding of science, even though such activities could help emphasize national and international engagement in the new social contract, and the global dimension of such a celebration.

30. The WSDPD has the potential to increase UNESCO's visibility in science by its taking the leadership role in the organization of the event. It is perceived as a challenge for the Organization to reaffirm its mandate and competence in the field. Hence, the WSDPD requires precise formulation accompanied by concrete action to give a convincing image of UNESCO; consequently the WSDPD should not be an event with pious wishes but lacking the necessary means for its implementation. Significant benefits with regard to UNESCO's visibility and "added value" can be expected if the WSDPD is carefully planned and implemented.

31. The feasibility of the celebration of a WSDPD is recognized on the assumption that the following requirements are addressed before the development of the project:

- (a) government support and participation of decision-makers;
- (b) financial support for the activities.

32. It is clear that a one-day event cannot tackle all scientific issues and challenges. For this reason the WSDPD must be designed and implemented as a process with identifiable themes.

33. There is an argument that the public is becoming overwhelmed by too many international days and events. Therefore, if created, WSDPD should not be an abstract wish for commitment, or a social event with no scientific impact. It should generate concrete projects and political actions (funding of science projects related to human welfare, poverty alleviation, the protection of the environment, increase of national R&D budgets, international agreements for more funds for research in developing countries, new mechanisms for funding science, creation of ethics committees, and so on).

34. Activities foreseen in the framework of the WSDPD should be consistent with the results of the World Conference on Science embodied in the *Declaration on Science and the Use of Scientific Knowledge* and the *Science Agenda – Framework for Action*.

35. Non-formal education should be considered an excellent vehicle for the WSDPD, since it can provide opportunities to study issues concerning sustainable development and science, work with local communities that use science and technology in their everyday lives, develop their understanding of the role of science for development, clarify hopes and fears, and build trust.

36. Clearly, UNESCO cannot meet this challenge alone. It would need to cooperate with partners such as National Commissions, United Nations agencies working in the application of science,

scientific institutions, NGOs (especially ICSU), universities, schools and the media in the design of the project, the development of strategy and its implementation.

37. This requires a major effort of coordination and management. An international committee would need to be set up to determine the theme for each year. National committees should be established within, or in cooperation with, UNESCO National Commissions to prepare, undertake and follow up the WSDPD and mobilize public support. Membership of the international as well as national committees would be unpaid. The committees would make full use of new information technologies (electronic mail, forums, etc.). Travel expenses for the members of committees must be avoided.

38. Proposals for the WSDPD should include a programme for action with well-developed objectives and activities to be carried out at the international and national levels. The draft programme should specify organizational arrangements and modalities of financing from both budgetary and extrabudgetary sources, as well as procedures for monitoring its implementation.

39. All countries should be able to participate in the celebration of the WSDPD. Developing countries and LDCs should not be excluded for want of financial resources.

40. The WSDPD should be regularly evaluated. The evaluation should assess the activities generated by the WSDPD with a view to integrating some of them in the regular programme, if necessary.

41. It is recommended that the WSDPD be celebrated each year on 10 November and be linked with the United Nations International Week of Science and Peace. This date has been suggested so as to reinforce the commitment to science as requested by the United Nations resolutions and to create synergy between the two events. It is clear that the United Nations resolutions on science and peace should be understood to include "development" if that means the development of a just and prosperous society, in which all, including future, generations may enjoy the benefits of peace, health, education and an enriching environment.

42. The success of a UNESCO WSDPD would depend on the success of its initial implementation, which is the *conditio sine qua non* for a long-term plan to encourage wide participation.

43. For the sustainability of the WSDPD initiatives, some factors, such as financial implications, government support, management arrangements and, most important, sustained interest should be duly considered.

44. In the light of the above, the Executive Board may wish to consider the following decision:

The Executive Board,

- 1. <u>Recalling</u> 160 EX/Decision 3.3.2, in which it invited the Director-General to undertake a feasibility study on the celebration of a world science day for peace and development and to report on it at its 162nd session,
- 2. <u>Having examined</u> document 162 EX/11,
- 3. <u>Considering</u> that science affects peace and development, and must be used for peaceful and sustainable societies,
- 4. <u>Recalling UNESCO's ethical mission to achieve harmonious and peaceful development,</u>

- 5. <u>Recognizing</u> that the need for a new commitment between science and society has been established in the *Declaration on Science and the Use of Scientific Knowledge*, and in the *Science Agenda Framework for Action* (World Conference on Science, Budapest, 1999),
- 6. <u>Considering</u> that such a celebration would be an asset for the Organization's image and visibility, particularly in the context of the follow-up to the World Conference on Science,
- 7. <u>Sharing</u> the conclusions of the study that the celebration of a world science day for peace and development is both feasible and highly desirable,
- 8. <u>Recommends</u> to the General Conference that it:
 - (a) proclaim 10 November each year as World Science Day for Peace and Development;
 - (b) invite the Director-General to:
 - (i) develop the second option examined in the feasibility study;
 - (ii) contribute to the establishment and implementation of the world science day for peace and development;
 - (iii) support recognized national, regional and international activities undertaken as part of this annual celebration;
 - (iv) encourage Member States, intergovernmental and non-governmental organizations, universities, research institutions, learned societies, professional associations and schools to take an active part in the event.

ANNEX

An assessment of the International Week of Science and Peace (IWOSP)

This document is a response by Dr Alan Cottey (United Kingdom's IWOSP Coordinator), School of Chemical Sciences, University of East Anglia, to a request from UNESCO for an assessment of IWOSP, in order to help "to provide UNESCO's Executive Board with sufficient information in order to decide whether or not to celebrate a world science day for peace and development".

History

IWOSP (and its progenitor IPWOS – International Peace Week of Scientists) originated in the actions of numerous individual scientists worldwide, who warned against the misuse of science and promoted the constructive use of science. IWOSP was started in response to the dangers of the cold war and the nuclear arms race, especially the modernization of missile systems which occurred in the 1980s. With the support of Oscar Arias Sanchez, Nobel Peace Laureate and President of Costa Rica, IWOSP achieved a major success in 1988 – the General Assembly adopted a resolution on "Science and peace" (Resolution 43/61). This resolution notes that science and technology have profound links with international peace and security, economic and social development, respect for human rights and many other aspects of civilization and culture. It affirms the need to "promote greater awareness among scientists worldwide of the usefulness of science to increase international peace, security and cooperation, the social and economic development of mankind, the promotion of human rights and protection of the environment".

It notes "with appreciation the joint efforts made by scientists and members of other professional groups" who promoted the first two IWOSPs. The resolution proclaims IWOSP as taking place each year during the week in which 11 November falls; and it "urges Member States and intergovernmental and non-governmental organizations to encourage universities and other institutions of advanced studies, scientific academies and institutes, and professional associations and individuals in the scientific community to hold, during that week, lectures, seminars, special debates and other activities conducive to the study and dissemination of information on the links between progress in science and technology and the maintenance of peace and security".

The United Nations thereby gives IWOSP moral support, but the work and such resources as are needed come from the voluntary contributions of concerned individuals.

The bipolar cold war has ended, yet it is clear that the post-cold war world is still extremely dangerous. The dangers now are different, and more complex, but the United Nations resolution remains valid. This is not by chance. The original formulators (among whom Hendrik Bramhoff took the leading part) devoted much thought and discussion to the draft presented for the General Assembly's consideration. The approved resolution addresses fundamental problems and not just symptoms.

IWOSP to February 2001

November 2000 saw the 15th IWOSP. Like its predecessors, it was organized and implemented by voluntary efforts at the "science for peace grass roots". The prestige and moral authority of the United Nations has been important for IWOSP. In the early years, a few United Nations Member States gave official support to IWOSP. They were mostly, perhaps exclusively, socialist countries. In view of the tense state of international relations in the 1980s, one may say that

162 EX/11 Annex – page 2

IWOSP performed a useful function in standing above the cold war hostilities and drawing attention to fundamental issues of common interest.

Considering the lack of funding, IWOSP has been, in this author's judgement, remarkably successful, although on a small scale compared with the enormous problems it addresses. It has helped to keep alive a flame of hope that science may be used wisely, and may contribute to humanity's overcoming the current problems of strife and waste which are all too apparent around us. In 1999, the latest year for which a full report is available, there were (known to the International Chair) 42 events in 13 countries. I am sending the report separately.

An especially positive aspect of the 15 IWOSPs to date is that they have tested, in the field, the validity of the General Assembly resolution. As far as I know, no potential participant ever had a problem with the wording or the spirit of the resolution; and members of the International Coordinating Committee had few problems deciding if events should be invited or accepted as IWOSP events. Although UNESCO will, naturally, be considering a fresh document as the basis of the proposed WSDPD, I am pleased to report that the basic ideas of the General Assembly science and peace resolution have been found durable.

UNESCO's proposed world science day for peace and development

I am in agreement with Professor Becker's² warm support for this initiative. The central place of peace in the UNESCO Constitution makes such a Day, promoted by UNESCO, a logical proposition. Since the proposed Day would have a budget and the active support and direction of UNESCO, the WSDPD has the potential to be observed much more widely than IWOSP has been. The existence of UNESCO National Commissions is also a positive feature. I hope that the National Commissions would encourage individuals and NGOs concerned for "science, peace and development" to support WSDPD.

Concerning the question whether IWOSP's "P" and WSDPD's "PD" represents a difference, I would answer "no". It is clear that the General Assembly resolution includes development, if that is understood to mean the development of a just and prosperous social order, in which all (including future generations) may enjoy the benefits of peace, health, education and a nurturing environment.

I also support Professor Becker's proposal that the WSDPD be 11 November. The rule which defines the IWOSP week is "the Monday to Sunday within which 11 November falls". IWOSP and WSDPD could be considered to be compatible, and would be so in every year.

Since IWOSP has been operating on a small scale, there is, I believe, no problem with instituting a WSDPD. There is plenty of scope for more to be done in the field of science for peace and development!

The immediate future

At the time of writing, IWOSP does not have a Chair for 2001. Dr Faessler, who has been Chair for the last several years, is ill and unable take on the role for 2001. IWOSP appears to have no one wishing to take on this role at the present time. Dr Faessler and Professor Becker would like me at least to be a "caretaker" for the time being. This I am willing to do, principally for the purpose of liaison between IWOSP and the UNESCO WSDPD proposal during the coming months.

² Professor Yechiel Becker, Director, The UNESCO-Hebrew University of Jerusalem, International School for Molecular Biology, Microbiology and Science for Peace.

I suppose that the urgency implied by certain deadlines means that the first WSDPD, if it is approved, could be in November this year.

The longer term future

With regard to the question "Do you think that it would be possible to create synergy between the World Science Day declared by UNESCO and IWOSP?", in my view, that would be a possibility in the longer term. For 2001, I feel that a successful first WSDPD would be an excellent initial step in a long-term plan to encourage wide participation in events promoting world science for peace and development.

Summary

IWOSP volunteers have, to date, made many valuable contributions to the aims set out in the General Assembly resolution on science and peace. A UNESCO world science day for peace and development would not interfere in any adverse way with IWOSP. There might possibly be synergy in the future. All of the persons most active in the organization of IWOSP support the new UNESCO initiative.