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Reports of Governing and Major Subsidiary Bodies



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1. OPENING

1 The Chairman, Mr G. Holland, opened the Twenty-ninth Session of the IOC Executive Council at 10.00 on 24 September 1996.

2 **The Executive Council received with interest and appreciation** the statements given by the Chairman and Director-General of UNESCO (see Annex III - A and B).

2. ADMINISTRATIVE ARRANGEMENTS

2.1 ADOPTION OF THE AGENDA

3 **The Executive Council adopted** the Agenda as given in Annex I.

2.2 DESIGNATION OF THE RAPPORTEUR

4 **The Executive Council accepted** the proposal by the USA to designate Prof. M. Fortes (Philippines) as Rapporteur for the Session.

2.3 CONDUCT OF THE SESSION, TIMETABLE AND DOCUMENTATION

5 The Executive Secretary reviewed the arrangements of the Session and introduced a Provisional Timetable (Document IOC/EC-XXIX/1 Add. prov.) and the Provisional List of Documents (Document IOC/EC-XXIX/4 prov.).

6 Some delegations pointed out that they had only received documents very late or not at all. This was regretted by the Executive Secretary who recalled that statutory despatch time had been followed. He also suggested more use of electronic mail to speed up communications. **The Executive Council suggested** that in future the Executive Secretary also should check that documents were received.

7 The Executive Secretary informed the Executive Council that, unfortunately, the scientist invited to give the Roger Revelle Memorial Lecture at the last minute was unable to attend and the lecture was cancelled.

8 In accordance with the decisions of the Fifteenth Session of the Assembly, **the Executive Council established** a Technical Review Committee for the Resolutions under the Chairmanship of Dr E. Okemwa (Kenya), comprising the Delegates of Argentina, Brazil, China, Cuba, Egypt, France, Russian Federation and USA.

9 The Resolutions adopted by the Executive Council are given in Annex II. The List of Working Documents, the List of Participants and the List of Acronyms are given in Annexes IV, V and VII, respectively.

3. DEVELOPMENTS SINCE THE EIGHTEENTH SESSION OF THE IOC ASSEMBLY

3.1 REPORT ON INTERSESSIONAL ACTIVITIES AND BUDGETARY MATTERS

10 The Executive Secretary IOC presented the Annual Report 1995. He highlighted major policy issues related to IOC flagship programmes, in particular: the development of GOOS; the capacity building programme and TEMA; follow-up to UNCED in science programmes, and UN system-wide co-operation; public awareness creation as regards the role of the ocean and marine science and ocean observations including, in particular, the preparation for the 1998 International Year of the Ocean. He recalled the grave resource situation of the IOC. He stressed the follow-up to DOSS, the report on DOSS-II, the report on UNCLOS and the support received from the UNESCO General Conference for the

resolutions of the Assembly, and reiterated the strong support of the Director-General to IOC. His Statement is given in Annex III-C.

- 11 Most Council Members made statements in response to the presentation of the 1995 Annual Report, expressing their strong support of IOC actions and programmes and informing the Council about relevant national and international actions. They all found the 1995 Annual Report very good. They stressed the importance of the 1998 International Year of the Ocean for IOC and concurred that the IOC should aim for a progressive, quality-ensured development for 1998 and with a quantum jump in resources in this conjunction. A commitment to such a step should be obtained from governments and Member States of IOC in 1998. **The Executive Council reiterated** the commitment of their governments to work through the IOC e.g., in matters related to the development of GOOS, and other important ocean affairs within the evolving mandate of the IOC.
- 12 **The Executive Council stressed** that we are going through challenging times and that we need to take up the challenge, very much in the way the IOC is doing it. The IOC should now exercise proper and adequate leadership and focus its programmes. Member States of the IOC now realize more than before the importance of the oceans and this should naturally imply a willingness also to strengthen the IOC. The breadth of the activities of the IOC demonstrates the interest Member States have in IOC. The imbalance with respect to resources needs to be addressed and the connection to governments and national institutions must be strengthened so as to help solve this question of imbalance. Governments and Member States must be made more aware of the IOC and its potential and the important tool they have in IOC, and hence the need to address the adequacy of the Secretariat for the task.
- 13 **The Executive Council emphasized** the importance of the IOC regional subsidiary bodies. **The Executive Council also stressed** the role of the IOC in the follow-up to UNCED and in conjunction with Member States' efforts to implement UNCLOS. The co-operation with other intergovernmental bodies and in particular the ICSPRO Agencies was strongly endorsed, and the role of the IOC in this connection was stressed.
- 14 The importance of IOC's contribution to coastal zone research and observations was re-emphasized, and the strong involvement with the interdisciplinary project on Coastal Zones and Small Islands was likewise strongly endorsed. In this connection the proper use of resources, including the IMS was again reiterated by several members of the Council. The continuation and increasing association of IOC with IMS was stressed.
- 15 **The Executive Council reiterated** in particular the importance of:
- (i) GOOS and its orderly development, under the leadership of the IOC, and with the support of most other IOC programmes;
 - (ii) contributions from IOC to coastal zone development and management with emphasis on an appropriate scientifically based approach to the overall problem of ICAM;
 - (iii) Training, Education and Mutual Assistance (TEMA), centered on the training activities of all IOC programmes, with a strong linkage between science and education, as well as awareness creation of the importance of the oceans;
 - (iv) the need to find the most appropriate internal structure and organization within UNESCO of the IOC Secretariat and the need to address the perception of IOC in the UN system;
 - (v) the need to obtain real commitments on the part of IOC Member States.
- 16 Several members of the Council referred to the important statement made by the Director-General in his address and stressed the importance of his support and guidance (Annex III-B). **The Executive Council expressed** its appreciation to the Director-General and UNESCO for the support provided to IOC.

17 Several members of the Council specifically informed about support provided from their governments to the IOC, including: Brazil - with the co-operation of Argentina and Uruguay, publication of the atlas entitled "Morphology and Sedimentology of the Southwest Atlantic Coastal Zone and Continental Shelf from Cabo Frio (Brazil) to Peninsula Valdez (Argentina)" and intention to provide, through its Ministry of Science and Technology, financial support to the IOC Trust Fund in 1997; the Russian Federation provided financial support to the IOC Trust Fund in 1996 for the Tsunami Warning System Programme; the Republic of Korea seconded a specialist to the IOC Secretariat through a fund-in-trust contribution from August 1995; it likewise wishes the IOC to be associated with their regional training programme in the WESTPAC area; Greece announced the establishment of an IOC regional project office for the Eastern Mediterranean; the Chilean Delegation informed about its Government's intention to set-up a bill on ocean research which will also lead to increased direct support to the IOC; Portugal's intention to pursue and support IOC's association with EXPO 98, and readiness to respond to the spirit of decentralization within UNESCO through sharing in due course some of their resources with IOC.

18 In conclusion, members of **the Executive Council reiterated** the strong commitment to the IOC of their governments and the need to consolidate this, while evolving and reshaping the IOC in a strategic fashion so that it can respond to the rapidly changing conditions in the world, and the related changes in the oceans.

19 **The Executive Council endorsed** the 1995 Annual Report and **expressed** its great appreciation to the Executive Secretary and the IOC Secretariat for work well done.

3.2 DEVELOPMENTS RELEVANT TO IOC WITHIN UNESCO: 28TH GENERAL CONFERENCE AND EXECUTIVE BOARD

20 The Chairman introduced this item referring to the Annual Report 1995, Document IOC/EC-XXIX/2 and its Annex 1 and noting that most of the relevant developments had already been covered in the Director-General's address, by the Executive Secretary in his report on intersessional activities (Item 3.1), and by the ensuing plenary discussion of that item. The Chairman also noted that the paragraphs for item 3.2 in the Provisional Annotated Agenda provide a clear and concise background of developments since the statutes of the Intergovernmental Oceanographic Commission were amended in 1987.

21 There was, however, an outstanding issue on which the advice of the Executive Council is required. This is on mechanisms to facilitate the provision of dependable resources to the IOC Special Account from those Member States of IOC which are not members of UNESCO. The Chairman drew attention to Document IOC/EC-XXIX/2 Annex 1 which gives the background to this matter; the 150th Session of the UNESCO Executive Board will be considering the matter, and it will be valuable if the views of the Executive Council can be conveyed to the Director-General before the Executive Board meets.

22 The Chairman emphasized that this is a long-standing issue of some sensitivity and suggested that an effective way to proceed would be for him to chair a small *ad hoc* group to discuss this issue, and prepare a draft statement from the Executive Council to be brought back to the Plenary under item 5.1 (DOSS). He suggested membership of the *ad hoc* group be his vice-chairs together with the UK, USA, France and Japan.

23 **The Executive Council accepted** the Chairman's suggestion, noting that there is the broader question of Member States providing support to the Commission. This is part of the task given to DOSS-II, and the context and timing of this comprehensive exercise should be taken into consideration by the drafting group.

4. PROGRAMME MATTERS REQUIRING DECISIONS BY THE EXECUTIVE COUNCIL

4.1 OCEANS AND CLIMATE (JSC; OOPC, FCCC; IPCC-RELATED MATTERS)

24 The Executive Secretary made an overall introduction referring to the Annual Report 1995 and Document IOC/EC-XXIX/2. He recalled Resolution XVIII-6 and the in-depth discussion of the Assembly of this issue on the basis of the review presented to the Assembly in Document IOC-XVIII/2, Annex 5. He stressed the responsibilities given to IOC by UNCED through Agenda 21, Chapter 17, as regards oceans and CO₂, sea-level change and development of GOOS, together with proper capacity building. Some of these matters may also be discussed under Agenda Item 8. He drew the attention of the Executive Council to paragraph 35 in Document IOC/EC-XXIX/2, where the actions decided by the Assembly have been followed-up, and to the proposed actions for the remainder of the 1996-1997 biennium given in paragraph 38 of the same document. Some of these points may also be considered relevant to Agenda Item 9.

25 Mr Arthur Alexiou continued with the introduction of this item covering the activities of the IOC jointly with SCOR/JGOFS, the OOPC, and JSC for the WCRP. He noted the long productive IOC partnership with SCOR/JGOFS in co-operation with WOCE in the quest for quantifying the role of the ocean in mitigating increases in atmospheric greenhouse gas concentrations. He cited the IOC-JGOFS Panel members' contributions to the work of the IPCC and to their part in organizing the first International Symposium on Ocean CO₂, the proceedings of which have been published in a special issue of the Caribbean Journal of Science. He brought the Council's attention to other greenhouse gases which are influenced by ocean processes such as methane and nitrous oxide and informed the delegates that consideration was being given to broadening the Panel's scope and membership to address the ocean processes, sources and sinks of these gases as well. The IPCC is considering a workshop on non-CO₂ greenhouse gases in its work plan for 1997-1999 and an ocean component would be welcomed should this proposed workshop survive the IPCC budget cuts.

26 Mr Alexiou then presented progress by the OOPC of GOOS, which is jointly sponsored by the WCRP and GCOS. At its first meeting in March 1996, the OOPC recognized a need to bring the scientific plan developed by the OOSDP to the users and implementors via a more user friendly strategy. The favored strategy was to select key observation-to-product lines and produce illustrative documents demonstrating the value of these lines. These end-to-end demonstrations would be faithful to the OOSDP design, but would be in a form that would enable "selling" the design by explaining exactly what agencies being asked to make observations can be expected to gain. The aim is to encourage participation and to provide agencies with easy to understand descriptions of where their contributions will lead and the benefits that will ensue. The upper ocean TOGA network in support of operational climate prediction was chosen as the first case. The lines from observations from the Ship of Opportunity Program and the TOGA TAO array, to operational climate prediction, to agricultural crop planning, water resource management, etc., are now real and of some substance. Sea-level monitoring was the second case selected.

27 The OOPC is organizing a workshop in March 1997 on the vexing problem of establishing new and maintaining existing time-series observations. Vital as they are to understanding climate change, long-range funding for time-series programmes has always been problematical. The workshop will examine priorities, needs and new technologies with more attractive cost/benefit ratios with the aim of establishing the basis for formulating a realistically implementable time-series observation program for GOOS.

28 Mr Alexiou then summarized actions by the JSC for the WCRP that had bearing on the work of the IOC. The JSC met in March 1996 in Toulouse. Of particular interest to the Executive Council was the JSC decision to include climate monitoring as a specific agenda item in future JSC sessions in order to review, in conjunction with GCOS and GOOS progress in developing operational monitoring and climate data products. It was believed this would assure a reinforcement of co-ordination with and development of WCRP contributions to GOOS and GCOS. This item will include reports on GOOS, GCOS, GTOS, activities of the OOPC, etc. The JSC also intends to assist with the evolution of WCRP research data projects and observing systems to operational status under GOOS and GCOS. The JSC recognized the need

for more involvement of developing countries through capacity building and reaffirmed its intention to reinforce liaison between the WCRP, IGBP, and IHDP in guiding the development of appropriate START activities. The CLIVAR Implementation Plan was scheduled to be produced by the end of 1996 and made available to the Member States shortly thereafter. The JSC also planned to write a letter to the Member States stressing the need for resources for developing and using global ocean models for both prognostic studies and assimilation, in particular for analysis of the WOCE global data sets, and requesting national commitments to support these efforts. The JSC plans to hold a "mid-term" scientific conference in Geneva in August of 1997. Conference participation will be aimed at senior scientists, policy makers, senior government administrators, etc. This will be done via special invitations. Finally, it was decided that a bi-annual newsletter will be produced for the WCRP. The next JSC meeting will be held in March 1997 in Toronto.

29 Several delegates and the Representative from SCOR made interventions. Japan brought the attention of the Council to the importance of the ocean processes in the WESTPAC region such as the Indonesian through-flow that affect El Niño and the southeast Asian monsoon. He noted the large commitment Japan is making in instrumented moored buoys, satellite observations including ocean colour, and oceanographic ship surveys.

30 Brazil described briefly its participation in a tripartite pilot-project involving also France and the USA as co-partners to the establishment and implementation of a moored-buoy array in the Tropical Atlantic. Those activities will generate an operational programme whose data would represent a substantive contribution to the climate module of GOOS in that region. Kenya expressed interest in making a greater contribution to the studies in the east African region and asked for assistance in interpreting data from WCRP observations in terms of regional impacts.

31 The Philippines reported its focus on sea-level rise and has socio-economic studies in process aimed at establishing a long range management plan to adapt to climate change.

32 The Russian Federation underscored the importance of ocean climate research and expects to resume its large scale ocean climate field studies as the economy improves. The establishment of a global ocean CO₂ data bank is under consideration. A strong model development component in Russia is expected to continue.

33 The Indian Delegate expressed the view that the growing profusion in the IOC's work of a large number of working groups, panels, sub-panels, etc., tended to give a perhaps unwarranted impression of lack of focus. He further believed that this complexity made it very difficult for the Executive Council to address and advise on the work of so many science panels with all the issues involved, and encouraged a reexamination of the structure. He noted that the JGOFS process study in the Arabian Sea had just been completed and looked forward to obtaining the complete data set from JGOFS. He further expressed strong support to the programmes of IOC on climate change.

34 The Delegate of the United States expressed that:

(i) The United States encourage the Executive Secretary to prepare a consolidated plan for IOC participation in the IPCC Work and Plenary Session;

(ii) The United States support the continued role of IOC in sponsoring meetings of scientific and technical experts on ocean-related climate issues, and

(iii) IOC should continue to use IODE and IGOSS to produce timely and policy-relevant data products for utilization by scientific bodies and the FCCC.

35 The Delegate of the United States furthermore stressed that the IOC should formally endorse the results of both the 2nd Conference of the Parties to the UNFCCC and the 2nd Assessment Report of the IPCC, since the IOC has been present at and contributed to the work of each body and should get the recognition for having done so.

36 The Delegate of the United States suggested that, with regard to the reports of panels and committees, there is a continued need for the Ocean CO₂ Advisory Panel. Further, the Delegate suggested that the IOC may wish to keep this panel informed of developments in the work being done by GESAMP under IOC sponsorship on the oceanic storage of CO₂.

37 The Delegate of the United States stated that the United States feel that the key issue for the climate programme is the need for an early transition of those ocean-observing systems implemented under WOCE/TOGA into similar continuing systems to be a part of CLIVAR and the Climate Module of GOOS.

38 The Australian Delegate recognized the danger of overstressing the IOC Secretariat in attempting to be represented by IOC staff at all the important ocean fora and encouraged the IOC Secretariat to make greater use of individuals who are members of its subsidiary bodies to represent the IOC at important functions. Australia endorsed the OOPC strategy for developing specific end-to-end illustrations that clearly showed the benefits to result from ocean monitoring.

39 Mexico reported it has groups working on sea-level looking at specific impact possibilities resulting from climate change. Mexico is also installing instrumented buoys off its shores. The Delegate from China voiced strong support for the IOC efforts in climate change. He maintained that current climate models do not adequately represent the ocean and that IPCC documents do not give sufficient consideration to ocean processes.

40 The Delegate from Portugal noted that the very complexity of existing mechanisms for dealing with climate change makes participation by small countries difficult. He recognized the need for a large apparatus for such a multi-dimensional problem but nevertheless made a plea for some streamlining of the machinery. He supported the regional approach to problems through IOC regional bodies whenever possible.

41 The Representative of SCOR noted that the JGOFS programme is moving towards the completion of its field phase in 1998 and to an intensive 3 to 4 year period of data analysis, synthesis and modelling. These activities will ensure that the efforts and funds spent on cruises, time-series stations, etc, will result in a truly global view of the oceanic carbon cycle and its role in climate change.

42 She noted the continuing co-operation between SCOR and IOC in their joint support of the Carbon Dioxide Advisory Panel and requested that discussions between the panel's sponsors precede any expansion of its mandate to consideration of other greenhouse gases.

43 The Representative of SCOR drew attention to two particular JGOFS activities. The recently completed Arabian Sea Process Study involved 6 countries and resulted in numerous publications and the production of data sets on CD-ROMs. More than 2.5 million dollars was spent by participating nations and international organizations to provide training courses, shipboard fellowships and equipment to countries in the Arabian Sea region.

44 A JGOFS continental margins study of fluxes of materials from the land to the open ocean is being developed in co-operation with IGBP-LOICZ (Core Project on Land-Ocean Interactions in the Coastal Zone). A scientific Workshop on this topic will take place in Lagos, Nigeria in October 1996. It will be co-sponsored by IOC.

45 SCOR extended its thanks to Norway for its generous support for the newly-established JGOFS International Core Project Office at the University of Bergen.

46 Turning to OOPC, the Representative of SCOR noted that SCOR is providing funding and staff support for a workshop on time-series stations which will take place at the SCOR Secretariat in March 1997.

47 **The Executive Council strongly endorsed** continued actions of IOC in climate research, observation and change issues.

48 **The Executive Council expressed its endorsement** of IPCC and COP-II results.

4.2 OCEAN SCIENCE IN RELATION TO LIVING RESOURCES (OSLR), IPHAB,
GLOBEC, LME, CONVENTION ON BIOLOGICAL DIVERSITY

(i) **OSLR, IPHAB; GLOBEC; LME**

49 The Executive Secretary made an overall introduction referring to the IOC Annual Report 1995 and Document IOC/EC-XXIX/2. He recalled Resolution XVIII-8 on the Intergovernmental Panel on Harmful Algal Blooms (IPHAB), and stressed the very strong development and implementation of the HAB Programme, with support of major donors, in particular DANIDA, SIDA, Japan and CIDA. He informed about the significance of the agreement with Spain, in the spring of 1996, on the establishment of a science and communication centre on harmful algae at the Instituto Español de Oceanografía in Vigo, Spain, complementary to the Centre already established at the University of Copenhagen, Denmark.

50 He recalled the decision by the Assembly that a special group be established to review the problem of transfer of non-indigenous species through ballast of ships and informed that a joint ICES-IOC-IMO Working Group is proposed with draft Terms of Reference provided in Document IOC/EC-XXIX/2, Appendix 1. These have been considered by the GIPME Programme.

51 He referred to the IOC association with GLOBEC as a co-sponsor and with several regional LME programmes. The possibility of developing an MOU with the LME programmes was brought up. He finally recalled that the IOC is supporting the CPR Programme and the gradual expansion of this Programme to cover other sea areas than the Atlantic Ocean. He draw attention to the serious problem of lack of senior professional staff in the IOC Secretariat to lead the further development and implementation of the OSLR Programme.

52 On behalf of the Chair of the IPHAB, the Secretariat supplemented with highlights of achievements of the HAB Programme in the intersessional period. Emphasis was given to presentation of the 500-page IOC Manual on Harmful Marine Microalgae, an IOC Technical Series (No. 44) on design and implementation of some HAB monitoring systems (prepared jointly with ICES), training and capacity building achievements, developments of the IOC Science and Communication Centre in Copenhagen (see IOC Training Course Report No. 40), and the successful scientific workshop, planned and organized jointly with SCOR, on the physiological ecology of harmful algal blooms, where the proceedings will constitute an important state-of-the-art reference book on research methods.

53 Several Members of the Council provided information on ongoing national activities of relevance to OSLR. The Delegate of Spain informed that the Science and Communication Centre in Vigo will start its activities before the end of the year, and that Spain will host the 8th International Conference on Harmful Algae, June 1997. The Delegate of Chile informed that it will host the next meeting of the IOC Regional Working Group on HAB (COI-FANSA), and reported on positive experience with involvement of the private salmon industry in funding of HAB research, as an example of new ways of identifying resources nationally. The Delegations of the Republic of Korea and China are currently negotiating with GEF for a joint study on marine resources, productivity and ecosystem health of the Yellow Sea.

54 The Representative of SCOR provided additional information on the successful SCOR-IOC Workshop on the Physiological Ecology of Harmful Algal Blooms, Bermuda Biological Station, May 1996. A set of recommendations on future research priorities was made by the Workshop, and the Chair of the now disbanded SCOR-IOC WG 97 has been invited to propose two or three of these as priorities for new SCOR working groups. SCOR expressed the hope that IOC would be interested in continuing its joint activities with SCOR on HAB. In relation to GLOBEC, negotiations towards the establishment of an international Core Project Office for GLOBEC are well advanced and SCOR hopes that IOC and its Member States may contribute resources in support of the GLOBEC planning process, in consultation with the other international sponsors of GLOBEC, namely SCOR and IGBP.

55 **The Executive Council expressed** its great appreciation of the results achieved by the
HAB Programme in the intersessional period, **and emphasized** its continued strong support for the HAB
Programme.

56 **The Executive Council took note of and approved** the draft Terms of Reference for
the proposed ICES-IOC-IMO Working Group on the Transfer of Marine Organisms by Ballast Water.

57 The Secretariat also informed about the most recent developments of the Global
Ecosystems Dynamics Programme (GLOBEC), specifically that the GLOBEC Programme has become an
IGBP Core Project. Dr Roger Harris of the Plymouth Marine Laboratory has been elected as new Chair
of GLOBEC-International. The GLOBEC Scientific Steering Committee will have its first meeting in
November 1996 in Baltimore, USA. The GLOBEC Committee held the International Symposium
"Development of New Techniques and Models for the Study of Marine Ecosystems", in co-operation with
PICES (Hemuro City, 27-28 June 1996). In 1997, six GLOBEC cruises will be undertaken in the North
Pacific Bering Sea using training ships from universities and the Japan Fisheries Agency.

58 It was noted that negotiations leading to the establishment of an International Core Project
Office for GLOBEC are underway. The IOC as one of the international sponsors of GLOBEC should
consider its role in relation to this implementation programme. The Executive Council was in this respect
invited to consider the way that IOC can contribute to the provision of the support for the development of
the SPACC Programme.

59 It was also noted that the connection of GOOS-LMR to the GLOBEC Programme is
suggested to be relatively strong in the Report from the GOOS-LMR Meeting in Dartmouth,
Massachusetts, March 1996. The principle is that the development of GOOS should use the scientific
results of the GLOBEC as being one programme scientifically addressing some of the same parts of the
marine environment as the GOOS-LMR aims to monitor and predict.

60 Several Members of the Council recognized the importance of the Small Pelagic Fish and
Climate Change Programme (SPACC) being a sub-programme of GLOBEC. It was furthermore expressed
that an extended co-operation with the IOC Secretariat and Regional bodies was sought with respect to the
implementation of SPACC in Africa and Latin America, as recommended at implementation and planning
meetings in Namibia and Mexico.

61 **The Executive Council expressed** strong support for the activities of the Small Pelagic
Fish and Climate Change Programme, SPACC, being a sub-programme of GLOBEC important to Member
States who depend on coastal fisheries.

62 **The Executive Council noted** that the activities of the Sir Alister Hardy Foundation of
Ocean Sciences (SAHFOS) on the Continuous Plankton Recorder Survey (CPR) were most important for
the development of the Large Marine Ecosystems (LME). Several Members of the Council informed on
the activities of CPR with respect to new routes and regional co-operation.

63 **The Executive Council welcomed** the developments of new routes of CPR worldwide
and noted the importance of these developments with respect to research on Large Marine Ecosystems
(LME) and furthermore its association and co-operation with other programmes like GLOBEC and GOOS.

64 **The Executive Council expressed** support for developments of the Large Marine
Ecosystem (LME) concept and its association and co-operation with other IOC or IOC-related programmes
and activities including CPR and GLOBEC.

65 The Representative of the Philippines referred to the importance of the IOC International
Directory of Seagrass Bed Institutions currently being prepared. He also referred to the Second
International Seagrass Biology Workshop (Australia, January 1996), co-sponsored by IOC, and invited
IOC to consider to co-sponsor the Third Workshop, to be held in the Philippines in 1998.

66 The United States offered to provide, jointly with United Kingdom, funding for a
Technical Secretary for OSLR. The Representative of the United States underlined that funds at this stage
are only available for one year and thus encouraged other Member States to provide additional funding for
the post.

67 **The Executive Council welcomed** the offer of the United States and the United
Kingdom.

(ii) **Convention on Biological Diversity**

68 The IOC Secretariat introduced the section of Agenda item 4.2 dealing with marine
biodiversity. Reference was made to the Provisional Annotated Agenda (Document IOC/EC-XXIX/2),
Document IOC/EC-XXIX/Inf.2, Resolution XVIII-9 on Marine Biodiversity and the Decision of the
Conference of the Parties (COP) to the Convention on Biological Diversity on Conservation and
Sustainable Use of Marine and Coastal Biodiversity ("The Jakarta Mandate"), as adopted by COP at its
Second Session held in Jakarta, Indonesia, November 1995.

69 The IOC was represented at the Second Session of the Subsidiary Body on Scientific,
Technical and Technological Advice to the Convention (SBSTTA-2), which met in Montreal, Canada (2-6
September 1996); SBSTTA-2 recommended to COP-3 (to be held in Argentina, November 1996) that the
Convention Secretariat convene a Meeting of Experts in early 1997 and IOC will be invited to attend the
Meeting.

70 The Executive Council was furthermore informed that the IOC Secretariat was asked by
the CBD Secretariat for assistance in identifying criteria for the selection of marine and coastal biodiversity
experts, which was delivered. The Executive Council was also informed that the two Secretariats are
considering elements for a possible Memorandum of Understanding on co-operation, with a view towards
the harmonization of programmes and the development of joint activities in the field of coastal and marine
biodiversity.

71 The Delegate of Norway congratulated the efforts of the Secretariat concerning the issue
of marine biodiversity and stressed that the document prepared by the Secretariat had to be seen as a
continuation of the 'IOC Marine Biodiversity Strategy', as developed by the IOC-NOAA *Ad Hoc*
Consultation on Marine Biodiversity (Paris, 3-5 May 1995). It was pointed out that new issues have arisen
as a consequence of the continuous interaction between IOC, CBD and other biodiversity-related bodies,
including the research issues identified by SBSTTA-1, to which IOC is in a position to contribute.
However, in view of the very broad definition of biological diversity within the Convention, IOC must
ensure that its role with respect to marine biodiversity does not stretch beyond the limited funds which are
available for this activity area. The Delegate of Norway stressed the importance to continue linking up
marine biodiversity activities with the relevant existing activities and programmes of IOC, which can
contribute to the biodiversity programme. He strongly encouraged, in particular, the implementation of
training activities within the IOC Marine Biodiversity Strategy and the related Work Plan 1996-97.

72 Several Members of the Council supported Norway in stressing the importance of bearing
in mind the limited resources of IOC, which might lead to the need to limit responsibilities in this field.

73 The Representative of Italy made reference to the joint statement circulated by the
President of the National Academy of Science of Italy and the President of the National Academy of
Agricultural Sciences of India on the importance to take action towards providing the general public with
information on the biodiversity concept and related issues. He suggested that the same kind of practical
presentation be made in the context of documents prepared by the IOC Secretariat dealing with the issue
of marine biodiversity.

74 The Observer from Pakistan stressed the need for studies aimed at assessing the economic
value of biodiversity.

75 Canada stated that the GESAMP document on biodiversity, which was adopted at the last GESAMP Session in Paris in March 1996, could be considered by IOC in its efforts devoted to marine biodiversity, IOC being a co-sponsor of GESAMP.

76 The Executive Secretary IOC stated that the IOC-NOAA *Ad hoc* Consultation on Marine Biodiversity, which the IOC Assembly at its Eighteenth Session decided to retain, will be used as an advisory mechanism to ensure that the involvement of IOC in the field of marine biodiversity do not overcome present capabilities, both in terms of secretarial manpower and financial resources, and that existing activities and programmes be used for biodiversity study purposes. He said that the Consultation mechanism can work by correspondence, also in accordance with its Terms of Reference. Furthermore, he pointed out that the actions taken covered the instructions contained in Resolution XVIII-9.

4.3 INTERNATIONAL OCEANOGRAPHIC DATA AND INFORMATION EXCHANGE (IODE)

77 Mr B. Searle, Chairman of the Committee on IODE, introduced this agenda item and informed the Executive Council on the achievements of the Committee and briefly presented some views on the future direction. He informed the Executive Council of the great success of the Fifteenth Session of the Committee held in Athens in January 1996. This success was due to the considerable efforts of the Greek Government, Hellenic NODC and the local organizing committee and with the assistance of the European Union MAST programme. The importance of marine data and information exchange was reflected by the attendance of almost 100 participants from 38 Member States and 17 partner organizations. He emphasized that the discussions held at IODE-XV raised a new wave of interest in IODE among the IOC Member States resulting in the subsequent creation of NODCs in Kenya, Ukraine, Croatia and the nomination of contact points in Georgia and Bulgaria.

78 The Chairman IODE focused on some of the achievements of IODE. He mentioned the Global Ocean Data Archeology and Rescue (GODAR) project which had made significant contribution to the global database of ocean profiles with, in excess of 2 million profiles of T, S_{oo}, O₂, nitrates being added. Four regional workshops have been held with two further planned in Colombia (October 1996) and Nigeria (March 1997). An international conference to sum up the progress and identify future directions, is planned for 1997. The Global Temperature and Salinity Pilot Project (GTSP) was highlighted as an example of IODE's success in working with other data collection programmes, such as IGOSS and with the scientific community through WOCE. GTSP demonstrates an ideal model of a fully integrated 'end-to-end' data management system of the type needed to support GOOS. GTSP's success was demonstrated through the recommendation of both IGOSS and IODE committees to make GTSP an operational programme. In support of GOOS, IODE and IGOSS developed a joint data and information management strategy which was approved by the Second Planning meeting of I-GOOS in Washington, May 1996, and will create the framework for the comprehensive GOOS data management plan. The contribution of Canada to GTSP, Australia to the development of the Strategy Plan and the USA to the GODAR project were specially acknowledged.

79 IODE confirmed its continuing commitment to training and capacity building with an emphasis on improving the effectiveness of training through techniques such as "train the trainer" (the OceanPC training course jointly with ICES was especially mentioned) and through the use of electronic training technologies such as computer-aided training. IODE recognized the success of the regional approach to IODE-TEMA activities and has introduced IODE Regional Co-ordinators to support this. The Chairman specifically acknowledged the efforts of Japan in running marine data management training courses for the WESTPAC region over the past 10 years. The continuing success of OceanPC was highlighted with over 300 users worldwide and the increasing importance of marine information management was stressed. The use of technology to support the management and dissemination of data and information was given considerable emphasis, and the value of the IOC's WWW Homepage was demonstrated by more than 40,000 visitors to the site in the past year.

80 Recalling the Director-General's opening remarks concerning the need for the delivery of products and solutions to support the decision-making process, the Chairman IODE informed the Council of the steps taken by IODE to respond to these demands. He stated that the delivery of products

and services is one of IODE's strengths with a range of products developed and made freely and widely available, including the CD-ROMs on GTSP, GEBCO, GLOSS, the World Ocean Atlas '94 and the Global Directory of Marine Scientists.

81 Looking towards the future, it was recognized that IODE needed to expand the types of data managed and exchanged, provide more user-oriented products and address the needs of the wider user community, in addition to supporting the traditional scientific community, including a focus on priority areas such as the coastal zone and the health of the ocean issues. To achieve this, IODE will improve the skills and capabilities of IODE centres through the continuation of training and capacity building, introduction of advanced data and information management technologies and through the strengthening and building of partnership with other programmes in all regions.

82 IODE's continuing emphasis on information was demonstrated by a wide range of activities and projects undertaken by the Group of Experts on Marine Information Management (GEMIM). The production of the MIM publication series, IOC WWW Server, a pilot project for the dissemination of information across developed and developing countries via Internet and a further pilot project to enhance the Marine Environmental Data Inventory (MEDI) is a clear demonstration of IODE's initiative in marine information management.

83 IODE-XV recommended the creation of an IODE strategy sub-committee which was aimed at reducing the duplication of efforts between programmes, seeking additional resources for the programme implementation, and improving the awareness of IODE's capabilities and skills.

84 The Chairman IODE closed his presentation by stressing his concern relating to the amount of resources allocated to IODE which was not keeping pace with the growth of IODE activities. He called upon the Executive Council to continue its strong commitment to IODE and to examine ways to provide the resources necessary to continue the momentum of IODE.

85 **The Executive Council expressed satisfaction** with the efforts of IODE and identified the programme as a flagship of the IOC, because of its considerable successes. Many delegates supported the IODE's four-year programme and stressed the fundamental role of data and information management in many of the IOC's programmes and in support of many other programmes. **The Executive Council approved** the Summary Report of the Fifteenth Session of IODE and endorsed the recommendations.

86 Many delegates commended the progress of IODE and informed the Executive Council of specific activities in their countries. The Delegate of India described the success of the GODAR Meeting held in Goa in 1995 and offered to host a joint IODE-IGOSS Officers Meeting in 1997. The Delegate reiterated India's willingness to making marine data and information available to the international community through the newly established RNODC for the Indian Ocean.

87 The Delegate of Kenya referred to the success of IODE in Africa, particularly with the introduction of new technologies such as the use of E-mail and CD-ROMs, and he requested IOC to continue and reinforce support of IODE activities in developing countries. He recalled that IOCINCWIO-III selected RECOSCIX-WIO network as an appropriate mechanism for TOGA and WOCE data delivery. He identified the need to further increase IOCINCWIO's participation in the IODE programme through the strengthening of national capabilities and by assisting in the development of NODCs in the region. He reported that the use of the RECOSCIX-WIO network for the exchange of data in addition to information has been initiated. The Council joined the Delegate in thanking Belgium for its continued support of RECOSCIX-WIO through the launching of Phase 2 (1996-1999) of the project. The Delegate concluded by welcoming the development of the RECOSCIX-CEA network for the IOCEA region, but called on the IOC to avail more resources to this project.

88 The Delegate from the United Kingdom highlighted national initiatives including the support of a pilot international data and information directory system. He stressed the importance of the national data archaeology and rescue activities following the results of the survey made in the country.

89 **The Executive Council stressed the importance** of using new technology to further the capabilities of IODE. In particular, the use of the IOC Home Page as a method of disseminating information about IODE and IOC activities such as meeting documentation and schedules was identified as a key area for development.

90 **The Executive Council expressed** its appreciation to the many Member States including Japan, Australia, USA, Canada and the UK who have used new technologies to make data and information products more easily available through such mechanisms as on-line access through Internet. This decision supported and strengthened the IODE's policy of free and open exchange of data and information, and should be extended.

91 The Delegate of France acknowledged the importance of IODE's activities and encouraged to continue efforts in establishing end-to-end data management schemes and implementing regional projects such as MEDAR/MEDATLAS.

92 The Delegates of Cuba, Pakistan and Thailand identified the need to develop data management in their countries, requesting support in strengthening existing capabilities, particularly as regards coastal waters through arranging training courses and assisting in the data and information management infrastructure development. **The Executive Council expressed satisfaction** with those members of the Executive Council who stated their countries' readiness to provide facilities for training, in this instance France, Russian Federation and USA.

93 **The Executive Council identified** some specific areas for IODE to focus its efforts including strengthening training and co-operation activities, the use and promotion of new technological tools, increase the range of data types managed within IODE with emphasis on biological and chemical data.

94 **The Executive Council noted** a request from the Islamic Republic of Iran for establishing a RNODC-MARPOLMON for the Persian Gulf area and recommended the Committee on IODE to give consideration to this request in accordance with existing IODE procedures. **The Executive Council noted** the willingness of the Islamic Republic of Iran to host the regional training course on oceanographic data and information management in 1997, and invited the Executive Secretary to implement the course jointly with other international bodies operating in the region.

95 **The Executive Council welcomed the decision** to establish the IODE strategy sub-committee and recommended that links with IODE and other organizations and programmes such as EU/MAST, WMO, ICSU, ICES, should be continued and strengthened. **The Executive Council reiterated** the importance of IODE and called on Member States to continue their excellent efforts and continue with their support of the Secretariat in IODE activities.

96 **The Executive Council adopted** **Resolution EC-XXIX.1.**

4.4 INTERNATIONAL TSUNAMI WARNING SYSTEM IN THE PACIFIC (ITSU) and IDNDR-RELATED MATTERS

97 The Chairman of the ICG/ITSU, Capt. H. Gorziglia, introduced the progress report on the international activities of the Group and called on Members of the Executive Council to approve the Summary Report of ITSU-XV and adopt recommendations contained in the Report. In his presentation he emphasized that the intersessional period marked an increasing interest of the Member States in the tsunami programme, not only in the Pacific but in the IOCARIBE and Mediterranean regions as well. The Tsunami Warning System in the Pacific continues to be a unique operational warning system which comprises hazard assessment, warning and educated response.

98 The Fifteenth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific took place in Papetee, Tahiti from 24-28 July 1995. The Session focused on the further development of the network of seismic and sea-level measurement stations; improvement of

communications links for real-time exchange of telemetry, seismic and tsunami data and dissemination of tsunami notices and warnings; implementation of the Tsunami Inundation Modelling Exchange (TIME) project; development of the expert Tsunami Data Base (ETDB) for the Pacific; on training and education activities, and on actions targeted to increase the awareness of the population about earthquake and tsunami dangers. Special attention was given to the discussion of ways and means of improving the quality of the system components and expanding the knowledge and experience in tsunami mitigation gained in the Pacific to other geographic areas such as IOCARIBE and the Mediterranean.

99 Two comprehensive projects which have been embarked upon bore their first fruit: under the TIME Project, due to generous contributions from Japan and the USA, the Manual of Numerical Simulation of Tsunamis was finalized and is now being published by IOC. A few numerical models have been transferred free of charge to leading institutions involved in the tsunami mitigation and research, and the description of the characteristics of a work station and peripherals necessary for the tsunami simulation and computer graphics animation have been drafted and distributed. Training components constituted an important part of the project, and facilities for training have been provided by Japan, Chile and Mexico through the training course held in Valparaiso, Chile in March-April 1996; under the ETDB project the first set of floppy disks containing software and the full dataset of the tsunami-related data for the Kuril-Kamchatka region have been issued; the work is proceeding to have Pacific-wide coverage with the support of Russia and IOC.

100 The Chairman emphasized that the warning system cannot be successful without efforts and contribution of Member States in improving the effectiveness of their national system components.

101 The Chairman pointed out that the International Tsunami Information Centre (ITIC) continued its activities successfully in providing training, services and increasing awareness to the Pacific population of the tsunami danger. Special acknowledgement was given to Mexico for providing the services of Mr S. Ferreras from April 1995 for a one-year posting in the position of the ITIC Associate Director. This position was partly supported financially by IOC.

102 The Chairman informed the Council of ITSU-XV decision to invite Member States to explore the possibility of proposing candidates for the post of the ITIC Associate Director who will perform his duties in his regular line of work, using the capabilities of electronic communication and assisting the ITIC Director in implementing his duties.

103 Co-operation among Member States and other international agencies in seeking support for the development and maintenance of the system is the key to the ICG/ITSU operation. Science was always considered as the basis for wise decision-making. Jointly with the IUGG Tsunami Commission, the Tsunami Measurements Workshop took place in Estes Park, Colorado, USA, 28-30 June 1995; a second joint workshop took place in Petropavlovsk-Kamchatskiv, Russia, from 19-23 August 1996. The workshop formulated scientifically-proven recommendations targeted to improve the effectiveness of the warning system.

104 At the awareness building level, the ICG/ITSU launched initiatives along two directions: one through facilitating the publication of new materials related to the tsunami danger and placing information on the IOC tsunami programme and ICG/ITSU activities on Internet; and two, through implementing training. The goal is to make all levels of society and different communities aware of the dangers of this natural phenomenon and to bring the programme objectives to schools.

105 An updated version of the ITIC Brochure was published in English, French and Spanish, as well as "Tsunami-the Great Waves", a colour booklet describing tsunami and tsunami safety guidelines. The text of the booklet is also available in digital format. The publication of a set of textbooks and teacher's guides on earthquakes and tsunamis, which was available in Spanish only, is now being published by UNESCO in English. Publication in other languages is under consideration. Indonesia and Russia expressed interest in translating them.

106 The electronic Tsunami Bulletin Board system was developed by the USA NOAA/PMEL as an experimental e-mail notification system for the international tsunami community. A World Wide Web

home page with access to a broad range of tsunami information was developed at the University of Washington (USA) and at the IOC Secretariat.

- 107 The International Tsunami Information Centre (ITIC), sponsored by IOC, implemented the visiting experts' programme in October-November 1995 - a regular annual training exercise for 2-3 experts from the Pacific and another one is planned for October-November 1996.
- 108 Finally, the Chairman noted a few shortcomings of the programme. In spite of all the efforts there was no progress in the development of a regional tsunami warning system in the Southwestern Pacific. Tsunami survey teams, though they have been established, could not be used effectively due to the lack of special funds and established procedures for sending the teams to the disaster area. He invited the Council to provide guidance to the Group in solving these problems and requested Member States to increase support in funds and through active participation in the Tsunami Programme.
- 109 **The Executive Council complimented** the progress achieved by ITIC under the Directorship of Mr D. Sigrist and acknowledged with thanks his, and the Associate Director's accomplishments during the intersessional period. **The Executive Council noted** with interest an option proposed by ITSU-XV on the condition of the Associate Director's nomination and working conditions and **urged** Member States to take the necessary measures for supporting ITIC activities, in general, particularly filling the post of the Associate Director.
- 110 **The Executive Council expressed** full support to the ITSU-XV decision to formulate a project proposal for ITSU-XVI based on a concept of the wide utilization of tsunami inundation and detection technologies and requested the ICG/ITSU Chairman and the Executive Secretary IOC to take all necessary action for the development of the project proposal.
- 111 **The Executive Council was pleased** to note the progress made by Chile, France, Mexico and the USA in the wide utilization of modern reliable TREMOR and NGWLM systems, by Australia in developing a project for improving and upgrading the national and tsunami warning system, by Russia in rebuilding national systems destroyed by the 1994 earthquake and tsunamis. Progress in Canada, Costa Rica, Ecuador, Nicaragua, Singapore and the Republic of Korea were also especially noted.
- 112 **The Executive Council requested** to increase efforts in providing technical advice and training to developing countries in the usage of new technologies. The requests of Peru and Indonesia have been specially noted.
- 113 The experience gained by Japan and Indonesia in the transfer of know-how and technology on a bilateral basis was noted with interest and **the Executive Council recommended** to explore the continuation and widening of this type of arrangement. It also comments the effort of Japan to establish the headquarters for promoting the activities of IDNDR headed by the Prime Ministry himself.
- 114 **The Executive Council expressed satisfaction** with the progress achieved by the ICG/ITSU during the intersessional period and **thanked** the Chairman of the Group for his devotion, energy and guidance in the programme implementation. **The Executive Council approved** the ITSU-XV Summary Report and all Recommendations contained therein. **The Executive Council adopted Resolution EC-XXIX.2.**
- 115 The Delegate of Peru confirmed his Government's invitation to host ITSU-XVI in 1997 in Lima. **The Executive Council noted** this with appreciation.
- 116 **The Executive Council noted** the proposal for expansion of the International Tsunami Warning System in the Pacific into other regions, such as the Caribbean and considered that the necessary resources to support this expansion should be identified prior to accepting these additional responsibilities.
- 117 **The Executive Council expressed satisfaction** with the action taken by the Executive Secretary IOC, Russia and USA in rebuilding the tsunami warning system in the Kuril-Kamchatka region

and **expressed hope** that the installation of new equipment will be completed, necessary training provided during 1997, in order to bring the system into full operation.

118 Dr Oliounine, IOC Senior Assistant Secretary, informed the Council of the progress achieved in the implementation of the decision of the Assembly taken at its Eighteenth Session by which it was recommended to start the development of a storm surges project, particularly for the Bay of Bengal and the northern part of the Indian Ocean. In response to this decision a regional storm surge workshop will be organized in India from 5-7 December 1996 in conjunction with the IOCINDIO Meeting and the International Conference on Natural and Technological Coastal Hazards. This will provide an opportunity for consultations with other international organizations which may have potential interest to co-operate in the development of the project. The representative of India expressed wholehearted support to the IOC initiatives and conveyed to the Council the readiness of his country to provide all necessary facilities for these meetings.

119 **The Executive Council noted** with pleasure the December 1996 workshop being planned in India for intercomparison of storm surge models in the Bay of Bengal. It is recommended that the validation of the storm surge prediction models should constitute an important item for the workshop discussions.

4.5 GLOBAL OCEAN OBSERVING SYSTEM DEVELOPMENT AND RELATED MATTERS

(i) **Global Ocean Observing System (GOOS)**

120 This item was introduced by Dr A. McEwan on behalf of the Chairman of I-GOOS, Prof. M. Glass. Dr McEwan conveyed Prof. Glass' apologies for being unable to present the report personally. He reported on the progress in GOOS design and planning since the Eighteenth Session of the IOC Assembly. Particular attention was brought to the outcome and recommendations of the Second Planning Session of I-GOOS which was preceded by a Workshop on Socio-economic Aspects of GOOS (Washington, USA, May 1996), the Second Session of the Strategy Sub-Committee of I-GOOS (Paris, March 1996) and the Third Session of J-GOOS (April 1996). In his presentation, Dr McEwan highlighted the following points:

(a) The regional approach to GOOS planning and implementation has been strongly encouraged. Examples of successful developments are EuroGOOS and NEARGOOS. However, regional GOOS development requires harmonization between regional, national and global activities so a set of guidelines for inclusion as parts of GOOS was needed;

(b) among the five GOOS modules, the greatest progress has been achieved in planning the Climate and Health of the Ocean Modules. Although the GOOS Coastal module has received high priority among countries, it still requires a good definition and special efforts to initiate its planning;

(c) the LMR and operational marine meteorological and oceanographic modules are under consideration for closer definition by J-GOOS and I-GOOS;

(d) the document "Approach to GOOS" has been revised and entitled "Towards Operational Oceanography". The SSC has prepared a draft GOOS Strategic Plan and actions have been taken by J-GOOS to prepare a GOOS Scientific Plan. A recent meeting of GOOS sponsors has decided to ensure co-ordination of the activities in order to have a unique GOOS Plan by 1998;

(e) a GOOS Data Management Strategy has been developed jointly with IODE and IGOSS. The concept of a common GOOS-GCOS-GTOS Data Management Panel has been agreed upon; and

(f) capacity building activities will be developed through regional workshops.

121 Dr McEwan stated that although some progress has been achieved in GOOS planning, special attention should be given to obtaining the resources needed to implement the identified activities.

Therefore, the proposed Priority Agreement meeting in 1997 should receive particular attention by IOC and other sponsoring agencies. He noted that support had been given at I-GOOS-PS-II for the concept of a "two tier" agreement meetings, the first tier being a high-level meeting to gain agreement on the principles of GOOS involvement and the second tier focusing upon "pragmatic" commitment to elements of GOOS that could be implemented immediately from existing systems and observations.

122 Dr T. Spence, Director of the Joint Planning Office for GCOS, noted the role of GCOS in integrating the climate elements including atmosphere, ocean and land surface. He stressed the close co-operation among these elements via GOOS, GTOS, and existing programmes of their sponsoring organizations. He indicated the key role of the joint GCOS-GOOS-WCRP OOPC in advancing the climate module of GOOS, and the significance of newly-reconstituted GCOS-GOOS-GTOS panels in co-ordinating activities of the three observing systems.

123 Regarding implementation, he complimented the responsiveness of programmes-bodies such as IODE, IGOSS, DBCP, and the TOGA TAO Implementation Panel, especially in so far as they are striving to improve and enhance their services.

124 He noted the need for national participation in the development of the GCOS and GOOS, and informed the Executive Council that the JSTC for GCOS will give consideration to an appropriate strategy to support national involvement in establishing principles, priorities, and enhanced participation.

125 Many delegates reported on national activities related to GOOS and reaffirmed their strong, continued support for GOOS development.

126 The Delegate of Peru stressed the need, so as to permit the South Pacific region to participate effectively in GOOS, for the installation of oceanic-meteorological floating platforms in that region. He called for IOC assistance to that effect.

127 The Delegation of Brazil expressed some concern with respect to the Marine Living Resources Module of GOOS, that seems to lack a precise definition of its profile and end-users. It has also been mentioned that Capacity Building, as a major building block of GOOS, has still to fulfil its most important role, that relates to the generation of a community of operational oceanographers within member countries interested in GOOS. Finally, the representative of Brazil reaffirmed the intention of his government in seconding an expert to the GOOS Support Office in 1997, now pending approval by the highest decision-making level of the Brazilian Government.

128 The Delegation of France stressed the importance of GOOS and its country's interest in the GOOS Programme, and recalled that France has put at the disposal of the GOOS Support Office the services of an expert who has been its Acting Director since 1995.

129 The Republic of Korea informed that KORDI organized a regional Workshop of Operational Oil Spill Modelling jointly with IMO and IOC/WESTPAC, in Pusan, Korea, April 1996.

130 The Delegate of Japan informed that Japan has sent an associate expert to the GOOS Support Office of IOC.

131 **The Executive Council acknowledged** these statements with great appreciation.

132 The Representative of WMO reaffirmed WMO's strong support for GOOS development, especially its climate and services modules. He invited IOC to continue to support the implementation of the CMM SEACAMP (South-East Asian Center for Atmospheric and Marine Prediction) Project as a possible contribution to GOOS in the ASEAN region.

133 **The Executive Council noted** with satisfaction the progress of NEARGOOS, and, in particular, the implementation of a real-time exchange system for physical oceanographic data. **The Executive Council also noted** with satisfaction progress in the development of EuroGOOS, as well as initiatives to develop GOOS activities in the Black Sea and the Mediterranean. **The Executive Council**

also noted the initiative to set up a Mediterranean Forecasting System (MFS) for the prediction of ocean weather in the basin, and **further noted with interest** the potential of MFS in enhancing the regional scientific co-operation in the Mediterranean.

134 **The Executive Council strongly endorsed** the concept of regional development of GOOS and related regional co-operation.

135 **The Executive Council encouraged** the integration of GOOS activities with GCOS and GTOS in relation to data management and space observations.

136 Some participants expressed their views on the use of existing systems. This could be seen to include the continuing involvement of IGOSS and IODE in the data management strategy development.

137 The need to accelerate progress on the coastal module was emphasized and concern was expressed about the slow progress in its development.

138 Some support was given to the themes proposed by the US Coastal GOOS as an approach to defining an international coastal GOOS.

139 A common theme of many interventions was the need to minimize the number of subsidiary panels and bodies involved in GOOS planning to streamline the GOOS structure. Concerns were expressed about possible divergence of the SSC Strategic Plan and the proposed J-GOOS Scientific Plan for GOOS. **The Executive Council requested** I-GOOS and J-GOOS to work together on this matter as recommended by the recent meeting of GOOS sponsors and incorporate a "phased approach" into the SSC Strategic Plan to allow the implementation of GOOS elements as they become feasible.

140 **The Executive Council supported** the holding of a "two-tier Priority Agreement" meeting in 1997, the second tier being to accelerate the immediate implementation of GOOS elements that are ready.

141 The involvement of private agencies at an Agreement Meeting in was discussed. It was clarified that GOOS, though it can become permanent only if the governments are involved, should not exclude private agencies who may be able to contribute to GOOS observations. **The Executive Council felt** that the "Priority Agreement" meeting should assist in defining the principles of GOOS and in integrating the needs for implementation.

142 **The Executive Council endorsed** the recommendations of the Second Planning Session of I-GOOS. **The Executive Council agreed** that a two-day meeting of I-GOOS should be organized in conjunction with the Nineteenth Session of the IOC Assembly in July 1997, in accordance with the decision of the Assembly in 1995. The question of whether the Priorities Agreement meeting could be held in conjunction with the I-GOOS meeting would be addressed intersessionally.

(ii) **Integrated Global Ocean Services System (IGOSS)**

143 The Chairman of the Joint IOC-WMO Committee for IGOSS, Prof. Dr D. Kohnke, introduced the topic in highlighting that IGOSS, though considered under this agenda item, was not a subsidiary GOOS group, but rather a building block of GOOS. He recalled the IGOSS objectives and the variables presently taken into account within the system, among which the salinity data were still quite inadequate, as was in general the geographic coverage of the data. He then summarized the main issues dealt with by the Seventh Session of the Joint Committee (Paris, 20-28 November 1995) and focused primarily on measures taken to ensure the continuation of a viable ship-of-opportunity programme (SOOP), after the completion of TOGA and with the field programme of WOCE due to be completed by the end of 1997. These included the establishment of a new organizational structure, made up of the IGOSS SOOP Implementation Panel (SOOPIP) which would monitor and co-ordinate the observations to maintain an adequate sampling strategy (as defined by the Ocean Observation Systems Development Panel and refined by the Ocean Observations Panel for Climate, *inter alia*), under the overall guidance of the newly formed

SOOP Management Committee (SMC). The latter body had held its First Session from 21-23 May 1996 in Toulouse, France, whereas the former should probably meet in 1997 in South Africa.

144 Prof. Kohnke further underlined that one of the IGOSS strengths resided in its Plans and Implementation Programmes (PIPs) and that IGOSS-VII had adopted a new PIP to cover at least the period 1996-2003. As far as co-operation with IODE was concerned, he referred to agenda item 4.3 (IODE) where this topic had been fully taken into account. Finally, he referred to the relationship between IGOSS on the one hand and GCOS, GOOS and WCRP on the other. He expressed the view that, for the foreseeable future, the IGOSS support to those programmes would most likely concentrate on climate and services issues, but that there were in principle no objections to IGOSS embarking on exchanging other real- or near real-time kinds of data, if requested to do so.

145 **The Executive Council recalled:** (a) it had to consider only aspects of IGOSS relevant to the period 1996-1997, since the forthcoming session of the Assembly would review the overall programme proposed by the system; and (b) the relevant decisions taken by the WMO Executive Council at its Forty-eighth Session, through *inter alia* Resolution 2 (EC-XLVIII). **It therefore recorded** its decisions regarding IGOSS-VII conclusions in **Resolution EC-XXIX.3**. In so doing, **the Executive Council recalled** that, however critical the ship-of-opportunity programme is to IGOSS and other major programmes of IOC and WMO, other means of obtaining relevant data did exist, in the form of *inter alia* declassified naval XBT measurements, and CTD measurements from scientific or fishing vessels, as well as from profiling ALACE floats. **It finally noted** with regret the termination of operations of one of the last existing weather ship, commissioned in the United Kingdom, which had, as other weather ships in the past, provided for invaluable time series of ocean measurements for decades.

(iii) **Remote Sensing and Relation to CEOS**

146 This item was introduced by Mr J. Withrow who noted that IOC remote sensing activities were focused in two areas. The first was the traditional relationship with World Meteorological Organization (WMO) and the second the relationship with the Committee on Earth Observation Satellites (CEOS). He described the effort by the IOC/GOOS in co-operation with the other affiliates of CEOS to generate a data base of user requirements. This effort was realized through the implementation of the CEOS affiliates database which is accessible through the IOC home page.

147 The IOC strategy to work with CEOS in the international development of ocean colour was described along with the need for, and timeliness of, the ocean colour activity. The current international mechanisms for realizing the value and benefit of ocean colour data were set forth. The origin of the International Ocean Colour Co-ordination Group was described along with its objectives in the context of the promotion of ocean colour.

148 Other activities related to the development of a coastal high resolution AVHRR product for coastal studies, training, including the CSI distance learning modules, and the development of a remote sensing project in North-western Africa were also described.

149 The Director of the GCOS Joint Planning Office provided a brief report on the recent "*In situ* Observations for the Global Observing System" meeting hosted by GCOS, 10-13 September in Geneva. He reviewed several recommendations from the meeting which encouraged close partnerships among the three global observing systems. Results from the meeting will be communicated to the CEOS plenary, and may lead to further consideration of an Integrated Global Observation Strategy.

150 **The Executive Council welcomed** the report on the remote sensing and CEOS **and strongly supported** the increased development of remote sensing activities in IOC programmes and maintenance of close ties with CEOS. **It endorsed** the formation of the International Ocean Colour Co-ordination Group **and**, noting the extra-budgetary support, **directed** the Secretariat to provide staff support as necessary to continue its work. **The Executive Council also noted** with appreciation the information provided by Dr Spence, Director of the GCOS Joint Planning Office, regarding the CEOS efforts in pursuing an Integrated Global Observing Strategy and instructed the Director of the GOOS Support Office to continue to monitor these activities. **The Executive Council expressed its appreciation** to India for

its offer to host training activities either in ocean colour or in other areas of ocean remote sensing. **The Executive Council noted** with interest the publication of the first status report on ocean remote sensing by the Joint CMM-IGOSS-IODE Sub-group on Ocean Satellites and Remote Sensing (OSRS) and **endorsed** further support for the activities of the sub-group in the context of IGOSS.

4.6 TEMA AND CAPACITY BUILDING

151 Lic. G. Garcia-Montero, First Vice-Chairman, introduced this agenda item referring to the Summary Report of the First Meeting of the TEMA Group of Experts for Capacity Building (Document IOC/TEMA-CB-I/3), which he chaired. He elaborated in particular on the recommendations and interpretations of the Group as regards the mandate provided through Resolution XVIII-15. The terms of reference and the tasks provided through this resolution, basically derived from the Draft TEMA Strategy in Response to UNCLOS and UNCED (Document IOC-XVIII/2 Annex 6) and the TEMA Strategy *ad hoc* Meeting 1995 (Document IOC/INF-999). The work of the Group is an evolving process with a number of issues to be further considered during the intersessional period.

152 The introduction was supplemented by Dr F. Robles, Senior Assistant Secretary, up-dating recent developments on regional capacity building networking, with particular reference to the Workshop on Management of Oceanographic Systems of the Eastern Pacific, held at Concepcion, Chile, April this year (Document IOC/INF-1042). A similar effort is organized for the Atlantic South American countries, in Porto Alegre, Brazil, May 1997, and for the IOCARIBE region. The latter will focus on integrated coastal area management. Some preliminary steps have also been taken for the Mediterranean, in conjunction with the insular coastal dynamics (ICOD) programme of the Council of Europe, based in Malta; and, relevant activities may evolve for IOCEA, from a recent agreement established between the Commission and the University of Las Palmas, Canary Islands, Spain.

153 Most Members of the Executive Council participated in the following discussion. All Member States expressed their strong support for the TEMA-Capacity Building programme and agreed it should remain as a continuing high priority for the Commission. The Brazilian Delegation stressed the necessity of Member States to support and facilitate access to information related to the work of the group.

154 There was general support for the findings of the Group of Experts although some specific suggestions were made as to the direction and the tasks assigned by the Assembly.

155 Various delegations pointed out that the small resources allocated to IOC should be focussed on TEMA activities related to major programmes and services of the Commission, and the overall strategy, co-ordination and evaluation should be reviewed and established to this end. Several delegations indicated willingness to provide further support to TEMA.

The Delegate of France expressed the wish that the TEMA Committee be replaced by a "Steering Committee", comprising officers responsible for the programme as well the regional representatives concerned, in charge of aligning training activities within the IOC programmes.

156 **The Executive Council concurred** with the suggestion for an extended debate on the TEMA strategy to be organized in conjunction with the next Session of the Assembly, based upon additional elements developed by the Group of Experts during the intersessional period and its second meeting, in May 1997.

157 **The Executive Council recognized** that many opportunities exist at the national, regional and global levels, for extrabudgetary funding of TEMA-Capacity Building efforts and these could and should be supported through concerted actions of Member States. The IOC regional programmes, in particular, can provide a focus for relevant Member States to co-ordinate their requirements for development and funding to multilateral and bilateral agencies. **The Executive Council emphasized** that it is mainly at the regional level that large programmes are most capable of providing infrastructure facilities and educational support, necessary to underpin marine programmes and services of IOC.

158 **The Executive Council supported** the idea that a survey conducted by Member States to identify their own national contributions to and requirements for TEMA activities related to the IOC programmes and services be prepared, possibly for the discussion during the next Assembly. This may also be a very useful activity to be considered in conjunction with the 1998 International Year of the Ocean.

159 **The Executive Council endorsed** the Summary Report of the First Meeting of the TEMA Group of Experts for Capacity Building.

5. **OTHER MATTERS ARISING FROM THE EIGHTEENTH SESSION OF THE ASSEMBLY**

5.1 PROGRESS REPORT OF THE *AD HOC* STUDY GROUP ON IOC DEVELOPMENT, OPERATIONS, STRUCTURE AND STATUTES (DOSS-II)

160 The Chairman of DOSS-II, Dr Manuel Murillo, introduced the item, noting that DOSS-II was working to the schedule and terms of reference given in Resolution XVIII-1 of the Eighteenth Session of the Assembly and the Annex to that Resolution. He referred to Document IOC/EC-XXIX/6 and to paras 102 to 108 in the Annotated Provisional Agenda (Document IOC/EC-XXIX/2). He also drew attention to IOC/EC-XXIX/2 Annex 1 and the related IOC/EC-XXIX/Inf.5 which had just been circulated; it was the draft text prepared by the Chairman's *ad hoc* advisory group considering mechanisms to facilitate the provision of dependable resources to the IOC Special Account from Member States of the IOC, non-members of UNESCO, for consideration by the Executive Council.

161 Dr Murillo informed the Executive Council on working arrangements for the Group, noting that the Interim Report to the Nineteenth Session of the Assembly is expected to be ready by April 1997. Using Document IOC/EC-XXIX/6 as the reference, he reported on progress, drawing attention to a number of specific issues on which the advice of the Executive Council would guide the Group's future work.

162 In particular, he reported on the work of the sub-group on Statutes, Rules of Procedures and Pledging System which had met in Lisbon on 26-29 August 1996. It had considered various options for mobilization of support for the IOC: a voluntary pledging system based on a binding legal instrument, as described in "*Quo Vadis IOC*" (Document IOC/DOSS-III/3); establishing an annual or biannual membership fee structure; and a voluntary pledging system using a soft law measure adopted by the IOC Assembly in the form of a recommendation to be addressed to the governments of Member States. The sub-group had also considered the merits of focussing pledging arrangements to support regional activities or specific programmes, on the basis that such a focussing might be more attractive to Member States. The report of the sub-group will be discussed at the next DOSS-II meeting.

163 Finally, Dr Murillo drew attention to Document IOC/EC-XXIX/6 Add., which asked the Executive Council to consider a change in Article I para 2 of the Statutes, and to provide advice and instructions to the Executive Secretary with respect to its possible transmission to the Nineteenth Session of the Assembly.

164 The Chairman IOC thanked Dr Murillo for his lucid and comprehensive presentation and noted that the Executive Council should provide advice generally on the work of the Group, and also provide its view on two specific actions: advice to the Director-General on mechanisms to facilitate the provision of dependable resources from Member States of IOC non-members of UNESCO, for discussion of this matter at the 150th Session of the Executive Board; and on the proposed Amendment to Article I of the Statutes. In response to comments and questions from delegations, he asked all delegations to ensure that advice on these three matters was clearly differentiated.

165 In regard to the proposed Amendment to Article I of the Statutes, **the Executive Council determined** that it should not transmit it to the next Assembly. The Chair accordingly withdrew Document IOC/EC-XXIX/6 Add. Decisions resulting from the work of DOSS-II will almost certainly result in other changes to the Statutes and it is preferable if these be handled in totality. A careful and orderly approach

would help to ensure that the revised Statutes fully reflect the expanded role and responsibilities of the IOC. Furthermore, this process provides an opportunity also to raise the profile of the IOC with governments and other organizations.

166 **The Executive Council agreed** that, when next the Statutes and Rules of Procedure are addressed, consideration should be given to two additional clauses to Rule 55:

(i) Voluntary contributions made by Member States of the Commission that are not Member States of UNESCO can be calculated on a basis of a known incompressible appropriation to IOC by the General Conference of UNESCO, using the current assessment scales for Member States contributions to the United Nations.

(ii) Additional voluntary contributions may be obtained from Member States of the Commission, from other Organizations of the United Nations system, as well as other sources.

167 **The Executive Council recognized** that two Member States of IOC, non-members of UNESCO, contribute to and participate in activities of the Commission at a level currently which comfortably satisfies the first of the above clauses. This is not always immediately obvious, however, as the contributions are often received in a variety of ways from a variety of sources, which makes it difficult to identify the totality. This is true generally, but is a particular problem for in-kind contributions.

168 **The Executive Council welcomed** the efforts of the USA to identify the support they provide to the Commission through contributions to the IOC Trust Fund and in-kind support for IOC programmes and secretariat. It also welcomes the announcement by the UK that it will undertake a similar exercise. Indeed, the Executive Council considers that this would be a useful exercise for all IOC Member States, and would provide a more realistic picture of IOC's activities and influence than is presently available.

169 The contributions made to the IOC Trust Fund can be readily identified, and a listing of those contributions is already prepared on a regular basis. In-kind contributions can in general only be identified and evaluated by the Member States making the contribution. **The Executive Council invites** all Member States to undertake this exercise on an annual basis, guided by the Modalities of Support document approved by the Sixteenth Session of the Assembly in 1991 (Document SC/MD/97 Annex VIII).

170 **The Executive Council recommended** that the Officers of the Commission meet annually, in the course of the Governing Bodies meetings, to consider this listing of contributions; to ensure that all contributions are consistent with the Commission's programmes and priorities as determined by the Assembly; and to evaluate the in-kind contributions. The Officers could ask for assistance and clarifications from Member States as necessary. The Chairman would report to the Governing Bodies in Plenary Session on the Officers deliberations and conclusions.

171 Such a process would make clear both the level and relevance of Member States' contributions, and would also help to identify those programme areas in which more support is needed, either in cash or in kind, to achieve the agreed programme objectives.

172 As this matter is to be discussed at the 150th Session of the Executive Board, **the Executive Council requests** the Chairman to ensure these views are brought to the attention of the Director-General prior to the Session.

173 **The Executive Council endorsed** the general thrust of DOSS-II's work. Many delegations provided advice to the *ad hoc* Study Group on content and direction, summarized as follows:

(i) prioritizing and focussing IOC activities needed to be examined thoroughly, recognizing that there is likely to be a need to reduce the number of programmes in order to meet budget constraints; the regular process of evaluation should be used as an instrument for this purpose;

- (ii) the content and length of governing body meetings should be considered; the Executive Council still resembles a mini-assembly despite decisions taken on the first DOSS' recommendations, and further and stronger steps may be necessary;
- (iii) while supporting an increase in the number of vice-chairpersons, more detailed consideration of the role and responsibilities was needed;
- (iv) in seeking to increase financial resources there was a need to examine ways to raise IOC's profile and image, both with Member States and with other institutions; this was particularly pertinent given the opportunities presented by the 1998 International Year of the Ocean and the turn of the Century;
- (v) linkages to Member States through National Commissions and other arrangements needed to be strengthened; delegates to the IOC should be expected to carry a large part of the responsibility for this;
- (vi) the open session, which DOSS-II introduced to inform Permanent Delegates and Observer Missions of its deliberations and to benefit from their comments and advice, was welcomed; it would be more effective if earlier notification of such sessions could be given;
- (vii) the IOC needs to ensure that processes do not take precedence over purpose; DOSS is an effective way to do this, and it must continue to focus on main issues;
- (viii) all the work of the DOSS-II group should bear in mind that IOC is a body with functional autonomy within the UNESCO, and that the options for mobilization of support for the IOC or the adequacy of financial contributions shall consider this aspect.

174 Several delegations spoke on the options for mobilization of support for the IOC, but no clear conclusion emerged. Other delegations noted that they would provide comments when a document describing the options was available to them.

175 The Chairman of DOSS-II thanked the Executive Council for its valuable advice and guidance, and assured the Executive Council that careful note would be taken. He assured the Executive Council that DOSS-II was addressing the need to focus and cut back on activities, an important requirement in the dynamic field in which the IOC operates.

5.2 FINANCIAL RULES APPLICABLE TO THE SPECIAL ACCOUNT OF THE IOC

176 The Executive Secretary IOC introduced this item, referring to Document IOC/EC-XXIX/2 Annex 2, responding to IOC Resolution XVIII-2 requiring detailed financial rules applicable to the IOC Special Account to be prepared for initial consideration by the Twenty-ninth Session of the IOC Executive Council. The draft Financial Rules, included as the appendix to the above document, were based on the current Financial Rules for UNESCO. The intention was that, after discussion and possible amendment by the Executive Council, the draft Financial Rules would be referred to the UNESCO Comptroller's Office, then brought for consideration to the next Assembly after necessary revisions and modifications.

177 Several delegations indicated that they had a number of concerns regarding the draft Financial Rules as currently formulated. **The Executive Council agreed** with the Chairman's suggestion to form a small *Ad hoc* sessional group to consider these concerns and report back to Plenary.

178 The *Ad hoc* sessional group identified a number of questions in the current draft which will need to be referred to the appropriate experts in UNESCO for resolution. **The Executive Council instructed** the Executive Secretary IOC to undertake the necessary consultations and prepare a revised set of draft Financial Rules for consideration at the Nineteenth Session of the IOC Assembly.

179 The Chairman IOC also informed the Executive Council that the Financial Regulations provided in Document IOC/EC-XXIX/2 Annex 2 Add. were not those finally approved by the UNESCO

Executive Board. The approved Financial Regulations would be circulated to all Member States of the IOC as soon as they are available in all working languages.

5.3 1998 INTERNATIONAL YEAR OF THE OCEAN: PROPOSALS AND PROGRESS REPORT

180 In introducing this agenda item, the Chair recalled that the UN General Assembly had declared 1998 as the UN International Year of the Ocean following a proposal of the UNESCO General Conference that had been based upon Resolution XVII-17 as adopted by the Seventeenth Session of the IOC Assembly. As referred to in the Expanded Annotated Agenda (Document IOC/EC-XXIX/2, para 113-118), the Eighteenth Session of the Assembly had requested the Executive Secretary to report to both the Executive Council and the Assembly on progress being made in formulating proposals for celebration of the international year by the IOC. These are found in Document IOC/EC-XXIX/2 Annex 3 and its Addendum.

181 The Chair also recalled that, throughout the process leading up to declaration of the international year, there had been wide support from Member States at the governing bodies of the IOC, UNESCO and the UN. In his view, the initiative is considered as a unique opportunity to increase awareness of the importance of the ocean and coastal environment and to raise greater political visibility for ocean-related issues, including their socio-economic dimensions. To reach this goal, however, concrete steps need to be taken in the near future towards developing an overall management plan for the event.

182 As guidance to the Executive Council, the Chair suggested that the deliberations focus on: (i) a review of the proposals with a view to approving the type of activities that IOC should assist in mobilizing; and (ii) instructions to the Executive Secretary regarding further steps to be taken in developing a plan for implementation, including staff and resource implications.

183 The Executive Secretary provided complementary information regarding action that had been taken to foster inter-agency collaboration through the ACC Sub-Committee on Oceans and Coastal Areas as well as through the Inter-secretariat Committee on Scientific Programmes Relating to Oceanography (ICSPRO). Likewise, within UNESCO, the Director-General had requested him to lead an intersectoral task team so that UNESCO activities for the year could benefit from the whole spectrum of the Organization's competence.

184 During the ensuing discussion, a large number of Member States reiterated their commitment to this endeavour and referred to planning that had already begun at the national level, both in regard to the international year as well as to participation at EXPO-98 in Lisbon. Examples include dedicated research cruises, special scientific publications, travelling exhibits, educational materials for schools and the general public, national scientific conferences, etc. In many member states, events such as that of the proposed launching of ocean satellite by India, are being planned to take place in 1998, to fittingly commemorate the celebration of the International Year of the Ocean. Japan will host the Fourth WESTPAC Scientific Symposium in early 1998 in connection with the celebration.

185 In agreeing with the views of the Chair regarding the need for development of a management plan, numerous Member States expressed interest in providing support and facilities. The Delegates of Argentina and France reminded the Executive Council that, in accordance with UN rules, no costs should be borne through the regular programme budget for celebration of the international year.

186 The Delegate of France recalled that, due to budgetary constraints, the transfer of IOC activities - especially its Executive Council and the TEMA Group of experts - should not be done on the occasion of EXPO 98.

187 Recalling the invitation of the Director-General of UNESCO in his opening address that the IOC programme should include activities that will sensitize governments, the general public and society as a whole to the significance of the ocean to our common future, the Canadian Delegation authorized the Executive Secretary to expend the \$Cdn 15,000 IOC Trust Fund contribution, together with any other

remaining voluntary contributions made by Canada during the last two years, on such activities that he deems a priority to support the Year of the Ocean initiatives by IOC.

188 He hoped that this action, and similar actions and donations from other IOC Member States would provide the Executive Secretary with the necessary flexibility to undertake activities on this important topic.

189 Noting the value of sharing information in stimulating further action at the national level by all IOC Member States, **the Executive Council instructed** the Executive Secretary to solicit reports from national contacts for compilation and dissemination to all interested parties. Such information should also be included within the progress report that will be presented to the Nineteenth Session of the Assembly.

190 In endorsing the scope of the proposals presented in Document IOC/EC-XXIX/2 Annex 3 and its Addendum, **the Executive Council emphasized** that activities should be based upon the on-going programmes of the Commission, as had been suggested by the Officers. **The Executive Council noted** the plans to develop a logo and basic theme for the international year and **encouraged** that this be done as soon as possible.

5.4 IOC AND UNCLOS: PROGRESS REPORT OF INTERSESSIONAL WORKING GROUP

191 Mr Haiqing Li, Assistant Secretary IOC, introduced the agenda item, referring to the Annotated Provisional Agenda (IOC/EC-XXIX/2) and the Progress Report on the Intersessional Working Group on IOC's Possible Role in Relation to the United Nations Convention on the Law of the Sea (Document IOC/EC-XXIX/2 Annex 4).

192 Mr Li first referred to some important events that took place over the past year in the field of the Law of the Sea. He informed the meeting that the Agreement Relating to the Implementation of Part XI of the Convention entered into force on 28 July 1996, and with the election of the 36 members of the Council of the International Seabed Authority and of the Secretary-General, Mr Satya Nandan, the Authority's Secretariat has been established and the International Sea-Bed Authority has come into full operation. In the programmes identified by the Authority, the study and assessment of the impact of the activities in the international sea-bed area on the marine environment, the reduction and control of pollution of the marine environment from the activities in the area, as well as the related marine scientific research and monitoring are encouraged. These programmes promise broad aspects for co-operation between IOC and the Authority.

193 Mr Li also informed the meeting of the latest results on the election of the 21 members of the International Tribunal for the Law of the Sea and congratulated Profs. Yankov, Kolodkin and Treves, well-known to IOC, on their being elected as the members of the Tribunal.

194 He recalled the preparatory activities for the establishment of the Commission on the Limits of the Continental Shelf (CLCS) initiated by the United Nations Division for Ocean Affairs and the Law of the Sea (UN-DOALOS) serving as the Secretariat of CLCS, including the invitation to the IOC and the International Hydrographic Organization (IHO), to prepare a review on science and technology associated with the continental shelf definition under UNCLOS.

195 He also informed about other actions related to the Law of the Sea, taken by the international community, including as regards the issue of straddling fish stocks and highly migratory species, the large-scale pelagic drift-net fishing and its impact on marine living resources, as well as the activities of the non-governmental organizations, notably the Independent World Commission on the Oceans. He drew attention to the various resolutions on the Law of the Sea adopted by the United Nations General Assembly at its Fifteenth Session, December 1995, calling upon the competent international organizations, including IOC, to adopt a consistent and co-ordinated approach to the implementation of provisions of the Law of the Sea Convention, and particularly to assist and support developing countries in their efforts aimed at co-operation in the effective implementation of the Convention.

- 196 Turning to IOC activities in relation to the provision of support toward efforts to Member States in the implementation of the Law of the Sea Convention, he drew the attention of the meeting, particularly to the activities that took place in 1996. He urged the Member States who are parties to the Convention, but have not nominated their experts to do so, so that the list of experts in the field of marine scientific research for use by the Special Arbitral Tribunal would be further updated.
- 197 He informed the Executive Council of the establishment of the joint IOC-IHO Editorial Board on the preparation of a synthesis on science and technology associated with the definition of the continental shelf upon the invitation of UN-DOALOS as the Secretariat of CLCS. He informed the Executive Council about the invitation from IHO to IOC to possibly co-sponsor the Advisory Board on the Law of the Sea (ABLOS) presently co-sponsored by IHO and the International Association on Geodesy (IAG).
- 198 He finally stressed the work of the Intersessional Working Group on IOC's Possible Role in Relation to UNCLOS, established through Resolution XVIII-4 adopted by the Eighteenth Session of the IOC Assembly. He presented the Progress Report (Document IOC/EC-XXIX/2 Annex 4) summarizing the results of the first meeting of the Working Group, Paris, May 1996. He invited the Executive Council to provide guidance on the report and related IOC actions, particularly the actions to be taken during 1996-1997.
- 199 **The Executive Council expressed** its satisfaction with the work of the Intersessional Working Group on IOC's Possible Role in Relation to UNCLOS, and **endorsed** the Progress Report of the Intersessional Working Group, together with the table identifying IOC's role in relation to UNCLOS, as well as relevant recommendations therein, for submission to the Nineteenth Session of the IOC Assembly for approval.
- 200 Recalling that the IOC is not the main body for the application of the Convention, the Delegate of France requested that the IOC remain within the two explicit references of the Convention with which it is concerned. He has also asked for extreme prudence concerning the political depositions arising from the sovereignty of States or of the last resort of the United Nations authorities. Lastly, he added that the IOC, through its programmes, already played a role in the UNCLOS implementation.
- 201 **The Executive Council considered** it necessary to plan the short-term and medium-term priority actions to be taken by the IOC, based on the recommendations of the Intersessional Working Group on IOC's Possible Role in Relation to UNCLOS. **The Executive Council recognized** particularly, the IOC's role within the framework of Part XIV of the Convention on Development and Transfer of Technology, and considered it useful that guidelines be formulated with regard to the transfer of marine technology within the IOC fields of competence, and emphasized that TEMA work should be further strengthened in the context of UNCLOS.
- 202 Other matters discussed by the Executive Council include, as proposed by the delegations of China, Russia and the USA, the establishment of an open-ended intersessional working Group to analyze the procedures mentioned in Article 247, taking into account Document IOC/EC-XXIX/2 Annex 4; further consideration of existing guidelines on the identification, markings and warning signals of oceanographic equipment and facilities, and the system of publicizing the development of oceanographic equipment and facilities in EEZ, on the Continental Shelf and in the High Seas, which might hamper international navigation, including an update of present ODAS draft proposals in co-operation with the International Maritime Organization; updating of the list of experts in marine scientific research for use in Special Arbitration.
- 203 **The Executive Council expressed** its general support for IOC to co-ordinate and co-operate with other international bodies, particularly UN-DOALOS, IHO and CLCS in the implementation of the provisions of the UN Convention on the Law of the Sea, particularly with due regard to avoiding duplication.

- 204 The IHO invitation for IOC to join the Advisory Board on the Law of the Sea (ABLOS), presently co-sponsored by the International Hydrographic Organization and the International Association on Geodesy, was provided to the Council.
- 205 Many delegations informed the Executive Council of their actions taken in terms of the ratification of the Law of the Sea Convention, as well as their national legislation within the context of the Law of the Sea, and encouraged IOC to play a positive and leading role as a competent international organization in marine scientific research, especially by providing scientific and technical assistance to the Member States, particularly the developing countries, in their efforts to implement the Law of the Sea Convention.
- 206 The Delegation of Greece expressed its support for the UN Convention on the Law of the Sea of 1982 and invited IOC to apply guidelines regarding the conduct of marine research, the relevant provisions of this Convention which constitute rules of international customary law binding all states, without any exception. Concerning the draft agreement on ODAS the delegation of Greece has requested its finalization in order to avoid implications from the use of these oceanographic instruments in marine areas.
- 207 With regard to the actions taken by the IOC in relation to the preparation of a review and synthesis on science and technology associated with the definition of the continental shelf, at the recommendation of the UN Group of Experts on Preparation for CLCS and at the invitation of the UN-DOALOS, the Delegate of Brazil made a statement recorded in Annex VI.
- 208 The Delegate for the UK, Chairman of OSNLR, explained the background to the make up of the Editorial Board and advised that it did now include a member from Brazil. It was also re-emphasized that the volume was concerned with science and technology, not with law, and as such it would make a particularly useful contribution to TEMA.
- 209 **The Executive Council acknowledged** that the review proposed by the Joint IOC-IHO Editorial Board addresses the scientific and technical issues within the purview of the IOC, but considered that actions in this connection should be handled with special care, and that the policy should be considered by the IOC Assembly at its Nineteenth Session in 1997.

6. GUIDELINES FOR CONSULTATIONS WITH THE DIRECTOR-GENERAL ON THE APPOINTMENT OF THE SECRETARY IOC

- 210 The Chairman IOC introduced this item, referring to Document IOC/EC-XXIX/2 Annex 5 which provided the background and suggested a procedure to be followed by the Executive Council when it is consulted by the Director-General. The suggested procedure reflected what had transpired on previous occasions, but which had never been documented.
- 211 Some delegations considered the proposed procedure did not comply with UNESCO Rules; other delegations considered that it did. Noting that there was no intention to contravene UNESCO Rules, the Chairman proposed that the UNESCO Legal Adviser should be consulted to ensure that any process adopted by the Executive Council was in accord with UNESCO Rules; **the Executive Council accepted** the proposal of the Chair.
- 212 Recognizing that the advice of the UNESCO Legal Adviser can influence the final outcome, the Executive Council already had asked for a number of changes to the current text now and henceforth. These related mainly to the view that the current incumbent should have no direct role in the appointment of his successor. These will be taken into account in the revision which will be sent to the Legal Adviser.
- 213 Some delegations considered it would be useful if the Executive Council was consulted on the job description and on the advertisement for the position. Some delegations also stressed that they

do not wish the IOC office to take charge of drawing up "the short list". Some other delegations considered that the names of all applicants should be provided to Member States on the Executive Council.

214 The Executive Council will only make a definitive statement on the text after having received the conclusions of the Legal Adviser.

7. REGIONAL SUBSIDIARY BODIES

7.1 IOCARIBE-V

215 The IOC Acting Secretary for IOCARIBE, Mr Rafael Steer-Ruiz, introduced this agenda item referring to the Annotated Agenda (Document IOC/EC-XXIX/2, pages 20 and 21) where the Executive Council is requested to review the report of the Fifth Session of the Sub-Commission with a view to endorsing the decisions and recommendations of policy-oriented and financial nature, relevant for the present biennium.

216 In addition, document IOC/INF-1043 "Report on IOCARIBE Evaluation" and document IOC/INF-1027 "IOCARIBE Medium Term Strategy, 1996-2000 (revised version)" were presented. The Executive Council was invited to endorse these documents as well, as far as the present biennium is concerned.

217 Mr Steer explained the evolution and sequence of these documents by referring to the decision taken by the 27th General Conference of UNESCO, as well as the request from the Seventeenth Session of the IOC Assembly, (Paris, 25 February - 11 March 1993) to carry out an Evaluation of the IOC Sub-Commission for the Caribbean and Adjacent Regions.

218 Based on the evaluation document, the Medium Term Strategy as well as the IOCARIBE Action Plan 1996-1998 were amended and approved by the Fifth Session of IOCARIBE.

219 The positive trend of an increased participation of Member States in the last Session of the Sub-Commission was highlighted.

220 Mr Steer also informed the Council of the Seminar on Integrated Coastal Zone Management in Small Island Developing States, which took place just before the IOCARIBE Session. Its report is included as Annex VI to the SC-IOCARIBE-V Report.

221 The Executive Secretary of IOC informed the Executive Council on the actions taken following Resolutions of the Seventeenth and Eighteenth Sessions of the IOC Assembly, with regard to obtaining a permanent professional post in the IOCARIBE Secretariat. It has not so far been possible to obtain neither a new post, nor the return of the previous professional position to the region. He stressed the need for Member States to provide funds and advice on this matter in order to solve what has become a problematic situation for the Sub-Commission.

222 Mr Stefan Andersson informed the Executive Council about the decision taken by the Swedish International Development Co-operation Agency (SIDA) to provide financial support for programme implementation for a period of three years. The support is based on the Recommendations of SC-IOCARIBE-V.

223 Several delegations expressed their strong support to the three documents submitted to the Executive Council for endorsement and approval.

224 The Delegate of Colombia informed that, besides the current in-kind contribution of US\$25,000 for the Regional Secretariat, his Government is prepared to increase the current office space in Cartagena as required by the expanding activities of IOCARIBE, and to appoint one young professional as seconded expert, once UNESCO/IOC provide the post for the regional Secretary for IOCARIBE.

225 The Delegate of Costa Rica also expressed the concern of her country because of the difficulties in contracting the regional Secretary. She informed the Executive Council that her Government is willing to provide one expert, located in Costa Rica, to collaborate with the IOCARIBE Secretariat.

226 The Delegate of the USA reaffirmed the concerns expressed regarding the absence of a post for the IOCARIBE Secretary, particularly in consideration that the Director-General of UNESCO expressed his desire to increase the regional staff. He also urged Member States to provide experts, not necessarily based in Cartagena, as is the case for Mr Fred Berry, provided by USA and working out of SEFC-NOAA in Miami.

227 The Delegate of Cuba pointed out the total support of his Government to the IOCARIBE Symposium planned for 1998 as a contribution to the International Year of the Ocean. He also informed that his government will have a Seminar on the Sea for Children in 1998, and invited UNESCO/IOC to participate. The Delegate of Cuba also informed the disposition of Cuban institutions to identify experts, as mentioned by other delegations.

228 The Delegate of Brazil informed the Executive Council that her Government will conduct a workshop on OSNLR in Recife, December 1996, in which experts from the IOCARIBE region are invited to participate. The IOC is supporting the participation of these experts. She expressed her concern for GOOS not having been mentioned in the Medium Term Strategy, and also encouraged the offers made by other delegations to strengthen the Regional Secretariat.

229 The Delegate of Mexico also underlined the importance of the post of regional Secretary and the need for an "incompressible" budget for the Sub-Commission. He particularly drew attention on the redefinition of the region as recommended in the report of the Fifth Session of the Sub-Commission.

230 **The Executive Council adopted Resolution EC-XXIX.4.**

7.2 WESTPAC-III

231 The Chairman of WESTPAC, Prof. Keisuke Taira, introduced this agenda item. He informed the Executive Council that the most important event since the last IOC Assembly for the WESTPAC Sub-Commission was the Third Session of the IOC Sub-Commission for WESTPAC, which was held in Tokyo, Japan, 26 February - 1 March 1996. Thirteen countries and six international and regional co-operating agencies were represented at the meeting. Emphasis was given to the need for science in providing pertinent advice as an input towards solving both global and regional problems. In this context, the Session adopted a new project called the "Co-operative Study on the Gulf of Thailand".

232 The regional component of GOOS was discussed in the meeting and the Co-ordinating Committee for NEAR-GOOS was established to further develop the NEAR-GOOS Implementation Plan and to prepare the Operational Manual for NEAR-GOOS.

233 There were six recommendations submitted to the Executive Council, including as regards the International WESTPAC Symposium, Work Programme and Budget for the Sub-Commission, Asian-Australia Monsoon Oceanography, NEAR-GOOS Co-ordinating Committee, International Coral Reef Initiative and the dates and place of next Session.

234 Prof. Taira informed the Executive Council that as a follow-up of the decision made by the Session, the NEAR-GOOS Co-ordinating Committee had its First Meeting in the IOC Regional Secretariat in Bangkok, Thailand, 4-6 September 1996. Thanks to the efforts made by all participating countries, the Implementation Plan and the Operational Manual were finalized during the meeting. To operate the NEAR-GOOS system, the Real-Time and Delayed Mode databases have been established, as well as the Associate Databases in the participating countries. The draft meeting report, together with the Implementation Plan and the Operational Manual, has been prepared by the WESTPAC Secretariat and will be published soon. The experimental operation of the NEAR-GOOS has started. He encouraged those who are interested in accessing oceanographic data in the NEAR-GOOS region or those who want to know the detailed information about NEAR-GOOS to access the Home Pages of the NEAR-GOOS databases.

Relevant technical information is available in the WESTPAC Secretariat. He emphasized that the data available in the system is free of charge and open to everyone.

235 The project on the Co-operative Study in the Gulf of Thailand is being initiated. A questionnaire has been sent to all coastal countries and others who are interested in the project and more than 20 responses have been received, with identification of available oceanographic observations and existing data. A draft scientific plan for the project is being prepared based on contributions from participating institutions.

236 Thanks to the continued support from the National Research Council of Thailand and the Government of the United States, the IOC Regional Secretariat is fully operational in Bangkok, with increasing tasks and responsibilities. The staff situation needs to be improved with additional support and contribution from Member States.

237 Co-operation with other regional and international organizations such as CCOP, ESCAP, APEC, SOPAC, WMO and UNEP, has been or is being undertaken by the WESTPAC Secretariat, to ensure wide co-operation at the regional level.

238 Information was provided to the Executive Council on the Fourth IOC/WESTPAC International Scientific Symposium, which will be held in Okinawa, Japan, 2-7 February 1998, as a contribution to the 1998 Year of Ocean. The Chair WESTPAC encouraged, on behalf of the organizing committee, the Executive Council and Member States to take all possible actions ensuring widest possible participation of scientists in the Symposium, especially young scientists from developing countries.

239 **The Executive Council expressed** appreciation to the Government of Japan for hosting the Third Session of the IOC Sub-Commission for WESTPAC in Tokyo, Japan, 26 February - 1 March 1996. Appreciation was also extended to the Government of Thailand for the continued support provided to the WESTPAC Secretariat.

240 The Delegate of the Republic of Korea confirmed his Government's offer to host the Fourth Session of WESTPAC in Seoul in March 1999, the exact dates to be confirmed. **The Executive Council noted** this with great appreciation.

241 With regard to the implementation of the North-East Asian Regional-Global Ocean Observing System (NEAR-GOOS), **the Executive Council noted** with great interest and satisfaction the progress achieved. For the implementation and further improvement of the system, it was suggested that:

(i) due consideration should be given to extend its activities from data exchange to other aspects, such as the provision of necessary services to various user communities;

(ii) while implementing the initial phase of NEAR-GOOS, focusing on the physical parameters, additional measurements need to be added; this concerns, in particular, the chemical parameters, so as to develop a GOOS-HOTO Pilot Project in the region in the near future;

(iii) training activities should be an important aspect of NEAR-GOOS, not only for the participating countries, but also for scientists from other WESTPAC countries so as to further the possible extension of NEAR-GOOS to the entire WESTPAC region;

(iv) co-ordination and co-operation with other regional and national components of GOOS should be ensured, e.g., SEACAMP, SEAWATCH.

242 To further implement the WESTPAC Programme and to ensure the effective operation of the Secretariat, it will be necessary to increase the number of staff in the WESTPAC Secretariat. **The Executive Council instructed** the Executive Secretary IOC to make the best possible efforts to complete the P-4 post in the WESTPAC Secretariat rapidly, with a person with experience and knowledge about the IOC and the region.

- 243 The Executive Council was informed and acknowledged that the Government of Sweden through SIDA (SAREC) will provide an Associate Expert to the IOC Regional Secretariat for WESTPAC in Bangkok, and financial support for the implementation of the WESTPAC projects. The support of Canadian CIDA to the WESTPAC programme implementation and the Third Session of WESTPAC was also noted and acknowledged.
- 244 The Delegation of China informed the Executive Council that their Government will provide financial support to the amount of US\$ 20,000 for the implementation of the WESTPAC programmes, including in particular training activities.
- 245 The Delegations of Germany and the Republic of Korea informed the Executive Council about training activities provided from their countries for supporting the WESTPAC activities.
- 246 **The Executive Council expressed** its appreciation to these Governments for their generous support to the WESTPAC activities.
- 247 **The Executive Council adopted** Resolution EC-XXIX.5.
- 7.3 SOUTHERN OCEAN FORUM AND REGIONAL COMMITTEE FOR THE SOUTHERN OCEAN
- 248 The German Delegate, Dr Giermann, speaking on behalf of the newly elected Chairman of IOCSOC, Prof Dr Max Tilzer, introduced this item referring to Document IOC/SOC-VI/3S "Executive Summary of the Sixth Session of the IOC Regional Committee for SOC and the First Southern Ocean Forum".
- 249 He reminded the Executive Council that the Sixth Session of the Regional Committee held in Bremerhaven, 12-13 September 1996, was preceded by a three-day Southern Ocean Forum in which 26 scientists, science administrators and representatives of international organizations and programmes discussed items of great concern such as Climate and Climate Change, Southern Ocean Ecosystems and their Living Resources, Marine Pollution and Monitoring, GOOS and Data Management, laying particular emphasis on the implementation of the regional components of global programmes such as WCRP, GOOS, IGBP/GLOBEC/JGOFS. They stressed that co-operation with other international organizations and the Antarctic Treaty System has to be pursued and if possible increased.
- 250 The Forum formulated several recommendations, which were taken up and discussed by the Regional Committee and condensed into five recommendations herewith submitted to the Executive Council for approval.
- 251 In the Regional Committee, 10 Member States were present, including Argentina, Australia, Brazil, Chile, France, Germany, Russia, South Africa, UK and the USA, as well as representatives of WMO, WCRP, IWC, COMNAP and ICSU/SCOR. It was regretted that SCAR, despite repeated invitations, did not attend. In support of the new Chairman, an advisory group was set up to work by correspondence, with members from Argentina, Australia, Russia, UK and the USA. The Regional Committee also adopted new Terms of Reference available as Annex to Recommendation IOCSOC-VI.1, and reproduced here in the Annex to Resolution EC-XXIX.6.
- 252 The German Delegate recommended to the Executive Council to give high priority to the Southern Ocean and to adopt the proposed resolution.
- 253 Many delegates expressed their support for the activities proposed by the IOC Regional Committee and **the Executive Council endorsed** the Executive Summary and Recommendations of the Sixth Session of the Regional Committee for the Southern Ocean.
- 254 The Delegate of Argentina emphasized that existing rights of coastal states in the region, as the rights and obligations emanating from the Antarctic Treaty and related instruments, shall be taken into account, as laid down in the proposed resolution.

255 The Delegate of Brazil, referring to the Recommendation IOCSOC-VI.5 on GOOS, expressed concern regarding the use of the CCAMLR Ecosystem monitoring as a specific model for further planning and possible implementation of the LMR module of GOOS, as the LMR module still requires more precise definition.

256 **The Executive Council invited** the Chairman of IOCSOC and the Advisory Group to prepare a more specific plan of activities and present it to the next Session of the Assembly.

257 The Representative of SCOR expressed the willingness of SCOR to co-operate with the Regional Committee and referred particularly, to the activities of Working Group 86 - Sea-Ice Ecology and the recently established programme (iAnZone) - International Antarctic Zone Programme, and invited the IOC to be associated with these activities and to continue its collaboration with SCOR and IGBP in the Southern Ocean Components of JGOFS and GLOBEC.

258 **The Executive Council adopted Resolution EC-XXIX.6.**

7.4 BLACK SEA REGIONAL COMMITTEE

259 The Executive Secretary IOC introduced the item referring to Document IOC/EC-XXIX/2, the Annual Report 1995, and the Summary Report of the First Session of the Black Sea Regional Committee and Related Draft Resolution (Document IOC/BS-RC-I/3), as well as the relevant parts of the report of the Eighteenth Session of the Assembly.

260 The First Session of the Committee was held in Varna, Bulgaria, 10-13 September 1996. The Executive Secretary IOC expressed appreciation to the host country, Bulgaria, its UNESCO National Commission and the Bulgarian National Committee for Oceanography for hosting the session and for the excellent arrangements for the meeting.

261 He recalled Resolution XVIII-17 and its Annexes establishing the Regional Committee, giving its Terms of Reference and initial tasks. He stressed that the First Session had addressed the structure and working method of the Committee.

262 The Committee had reviewed and further developed its two pilot projects and had agreed on a work programme for 1996-1998. The Committee had also reviewed and initiated several of the initial tasks, in addition to the pilot projects, specified in Resolution XVIII-17, Annex 2.

263 The Executive Secretary IOC who is also Chairman of the Black Sea Regional Committee, presented in particular some aspects of the report of the First Session drawing attention to the recommendations of the Session, particularly regarding the initiation of two regional pilot projects "The Black Sea-GOOS" and "the Assessment of the Sediment Flux in the Black Sea". He pointed out that the implementation of these projects would require active participation and support from all Black Sea countries and also some financial support from other international organizations and programmes active in the region.

264 The working plan for the next two years of the Black Sea Regional Committee and scientific programmes for two pilot projects are attached in the annex of the report of the First Session.

265 The Delegates of Germany, Ukraine, Turkey, Russian Federation and Bulgaria expressed full support for the programme and stressed the following points:

(i) all Member States, not only from the region, interested in the Black Sea studies should be invited to participate in the next meeting and activities of the regional committee;

(ii) the need for close co-operation and co-ordination with other on-going Black Sea programmes such as GEF, NATO, ComsBLACK, EROS;

(iii) close interaction with other relevant IOC programmes, as well as international oceanographic programmes, particularly GOOS, GCOS, JGOFS, IODE, TEMA and GIPME;

(iv) the importance of the initiation of some specific joint activities in conjunction with the Year of the Ocean 1998.

266 **The Executive Council endorsed** the report of the First Session of the Black Sea Regional Committee (Document IOC/BS-RC-I/3) and **urged** all countries interested in the Black Sea to participate in the work towards the implementation of the adopted pilot projects and seek extra-budgetary funds from different sources, as well as the Regional Committee and the Executive Secretary IOC to do the same.

267 **The Executive Council requested** the Executive Secretary IOC to inform Member States of the region and their National Commissions for UNESCO, as well as regional Black Sea programmes GEF, NATO, EROS, etc., on the establishment of the regional committee and the outcome of its first session, as well as the decisions of the Executive Council, and **urged** The Executive Secretary IOC to take actions to implement them and support the projects proposed by the first session of the Regional Committee.

268 **The Executive Council invited** the Regional Committee to report to the Nineteenth Session of the IOC Assembly on the progress and further actions to be taken to strengthen co-operation in the region.

269 **The Executive Council adopted** [Resolution EC-XXIX.7](#).

7.5 OTHER REGIONAL SUBSIDIARY BODIES

270 The Delegate of India informed the Executive Council of the forthcoming Session of IOCINDIO, to take place in Goa, India, from 20 to 22 November 1996. In conjunction with this event, a regional workshop on capacity building related to GOOS will be held from 18 to 19 November 1996.

271 Several delegations stressed the enormous importance of the Indian Ocean, e.g. vis-à-vis its role in climate regulation and the related need for further co-operation at the intergovernmental level. In this respect, it was stated that representatives of WESTPAC and IOCINCWIO could also be requested to attend the meeting of IOCINDIO. The Delegate of the Islamic Republic of Iran reiterated the importance of holding the IOCINDIO meeting as planned, and to reinforce actions in the region from the IOC.

272 The Delegate of Argentina referred to on-going co-operation between Argentina, Brazil and Uruguay in the framework of the "Sub-regional Programme for the Upper Southwest Atlantic Ocean" (ASOS in Spanish), started in 1993. The Fourth Session of ASOS will take place in Brasilia, Brazil, October 1996, where further developments of IOC-UNEP co-operation in the region will also be dealt with. He informed the Executive Council of two TEMA-related activities within this co-operation framework: (i) training on-board a research vessel provided by Argentina for experts coming from the three countries to start in October 1996 and (ii) the organization of a GLOSS Training Course, to be held in Argentina at the end of November this year, with participation of around twenty specialists from Latin American countries.

273 The Delegate of Greece pointed out the importance of research activities such as POEM and recalled the debate at IOC-XVIII as regards the need to involve Member States from the Southern Mediterranean in such activities. He also stated that this was consistent with the establishment of an IOC Project Office for the Eastern Mediterranean in Greece.

274 The Delegate of Guinea informed about actions in the IOCEA region and the need to provide more support for these.

275 The Executive Secretary referred to IOC actions in other regional subsidiary bodies (such as IOCEA) where, despite the number of activities developed recently, intergovernmental communication

and co-operation still needs to be strengthened. He invited all Member States to join the different efforts that are going on regionally.

276 **The Executive Council stressed** the enormous potential of regional bodies as essential tools and instruments to link Member States as well as for the implementation of major programmes and services of the Commission. Careful selection of issue-oriented activities of importance to the specific regions should be taken into account.

277 **The Executive Council concurred** with the suggestion made by the Delegate of Portugal that a dedicated debate be held on a strategic approach on how to strengthen the capacities of and interaction between the IOC Regional Subsidiary Bodies, including relevant TEMA capacity building, and technical assistance activities in general in this respect. This will be first addressed within the special session on TEMA planned for the Nineteenth Session of the IOC Assembly.

8. **FOLLOW-UP TO UNCED**

(i) **Agenda 21 and the ACC Sub-Committee on Oceans and Coastal Areas**

278 The Senior Assistant Secretary IOC for Information and Co-ordination, also in her capacity as Secretary of the ACC Sub-Committee for Oceans and Coastal Areas, introduced this agenda item, referring to the Annotated Provisional Agenda (Document IOC/EC-XXIX/2: paras 156-160).

279 Recalling relevant statements made under previous agenda items in regard to the need for close inter-agency co-operation within Agenda 21, and especially Chapter 17, Ms Philippon-Tulloch emphasized the importance of linkages between the work of IOC and that being undertaken by other bodies of the UN system. Given that Agenda 21 is the established framework for collaborative efforts at the national, regional and international levels, she reiterated the key role to be assumed by IOC national contacts in ensuring that decisions taken by the IOC Governing Bodies are properly reflected in national positions.

280 **The Executive Council agreed** that the post-UNCED process in regard to implementation of Chapter 17 at the national level would be facilitated by the establishment and strengthening of national co-ordination mechanisms for ocean and coastal areas together with an appropriate interface amongst and between the various UN structures, in particular the Commission for Sustainable Development.

281 In regard to the recognized need for better communication between all levels of action that lead towards better implementation of Agenda 21, she stressed the need for rapid exchange of information with established points of contact.

282 Within this perspective, **the Executive Council recalled** that the work of FURES had led to agreement by the Sixteenth Assembly (Paris, 1991) of the IOC that an essential modality of support which Member States could provide to the IOC (Document SC/MD/97: Annex VIII) is:

"Improving and establishing, when required, proper liaison mechanisms and adequate national co-ordinating structures and counterpart arrangements for marine science activities, in general, and for the purposes of IOC co-ordination, in particular. In this context, the importance of rapid communication is underlined."

283 In concluding the information statement on this agenda item, Ms Philippon-Tulloch reminded the Executive Council that the Fifth Session of the Commission on Sustainable Development would provide guidance to the Special Session of the UN General Assembly in 1997. The Chair, referring to his own experiences in representing IOC at UN bodies, encouraged Members of the Executive Council to ensure adequate briefings to their focal points within the UN system.

284 **The Executive Council took note** of the information and **strongly endorsed** the role of the IOC in the ACC Sub-Committee and the related follow-up to UNCED, particularly the Global Programme of Action for Protection of the Marine Environment from Land-Based Activities.

(ii) **ICSPRO, GESAMP and Co-operation not otherwise covered**

285 The Executive Secretary IOC introduced this sub-item by referring to Document IOC/EC-XXIX/2, the Annual Report 1995 and the report of the Eighteenth Session of the IOC Assembly (Document SC/MD/106). He recalled the significance of ICSPRO and several joint programmes associated with ICSPRO Agencies in which IOC is a partner, e.g., GIPME, WCRP, GOOS. He referred to the close co-operation with UNEP and brought attention to the UNEP statement which had been circulated. He recalled that ICSPRO consultations had agreed to use ICSPRO as the inter-agency co-ordination mechanism for the 1998 International Year of the Ocean. He informed about the involvement of UNESCO-IOC in GESAMP as a co-sponsor, and in several associated GESAMP Working Groups; in particular the Review of the State of the Marine Environment, and the possible implications of potential deep ocean storage of CO₂.

286 He referred to the decision of CSD-IV and the related United Nations General Assembly Resolution on the institutional arrangements for the implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities and the reference to the IOC of UNESCO therein, as one of the relevant competent international bodies. He informed the Executive Council that a recent meeting called by UNEP on the associated clearing house mechanism has expressed strong interest on the part of UNEP for IOC involvement in this. He concurred that the IOC stands ready to provide scientific and technical advice through its relevant subject area and regional programmes.

287 He referred to the decision of CSD-IV on the Protection of the Oceans, all kinds of seas, including enclosed and semi-enclosed seas, and coastal areas and the protection, rational use and development of their living resources, within which the CSD expresses its support for GOOS, established by UNESCO/IOC.

288 Finally, the Executive Secretary IOC recalled the growing co-operation in-house UNESCO, the interdisciplinary project referred to as CSI and the joint statement by the chairpersons of the IOC, MAB, IHP, IGCP and MOST Programme resulting from their meeting on 3 November 1995 in conjunction with the 28th General Conference. This joint statement is printed in Volume 2 of the Records of the General Conference, Reports, Programme Commissions, Administrative Commission, and Legal Committee.

289 The Chair then invited Dr G. Glaser, Co-ordinator of Environmental Programmes, to present a report on the subsequent developments.

290 The Executive Council heard with interest presentations made by the UNESCO Environment Co-ordinator and the Representative for the UNESCO CSI project. It was pointed out that UNESCO was in a unique position to ensure useful cross-disciplinary work in bringing together IOC, MAB, IHP, IGCP and MOST within the context of their specified areas of responsibility. The CSI programme, in particular, represented a specific action towards focusing input from the above-mentioned UNESCO programmes on problems relating to coastal zone management.

291 Many delegates welcomed the exercise and some pointed out that programme planning with IHP in particular, had already taken place during the period in which the current Executive Council has been in session. It was also noted that an intricate web of programmes and activities relating to the marine environment existed and the Executive Council welcomed UNESCO's work in co-ordinating such actions. It was proposed that the IOC Secretariat produce a tabulation summarizing IOC interactions with agencies and joint programmes with which it shares activities or commitments. This tabulation was envisaged as being in a regularly and easily updated form using modern word-processing software suitable for electronic distribution or access and which would form part of the basic documentation of future IOC Assembly and Council sessions.

292 Member States generally expressed support for the UNESCO-CSI initiative with some indicating that caution should, nonetheless, be exercised in maintaining an appropriate focus for activities and urged that every opportunity should be grasped to make sure that existing regional IOC machinery is fully utilized in carrying the project forward.

293 It was noted that particular attention should be focused by highlighting the oceans as a medium through which peace might be promoted and that both IOC and CSI should strive towards this end.

294 Some Member States also emphasized the valuable co-operation with GESAMP, IMO, HOTO, GOOS, IODE and GIPME. Many reported favourably on particular efforts by CSI that had been undertaken in their regions and others noted specific problems that might yet be addressed (e.g. Persian Gulf). In connection with the IOC co-operation with IMO it was emphasized that problems that might arise during the shipment of hazardous wastes, in particular of radio-active materials, should be given particular attention in the appropriate context by IOC.

295 The Islamic Republic of Iran stated that the Persian Gulf, because of its enormous hydrocarbon reserve and related interventions from industrialized countries, is a highly disturbed area in different ways. Economic development in the region is very difficult, and the marine environment is in danger. The Islamic Republic of Iran emphasized the need for IOC, UNESCO, and UN to take the necessary measures and find specific and acceptable solutions to the problems of the Persian Gulf.

296 The Delegate of Canada drew attention to the Rimouski Declaration from the International Conference Coastal Zone Canada'96 calling for the sustainable and wise use of coastal and ocean resources world-wide.

297 The Executive Secretary IOC responded that an IOC homepage covering interactions with UN bodies would be set-up and maintained by the Secretariat. He agreed that work with the Interagency Committee on Sustainable Development deserved continued attention, particularly with regard to interagency co-ordination regarding the upcoming "Year of the Ocean". He noted the problems of ballast water discharges and transport of dangerous goods as areas of particular concern. He also mentioned that co-operation would be maintained in relation to GESAMP, the operational elements of GIPME and he identified specific instances of CSI co-operation through IOCARIBE and IOCINCWIO. The Executive Secretary IOC noted that IOC would continue to co-sponsor coastal zone meetings and would take a closer look at economic and social linkages in relation to the marine environment.

298 The proposal by WMO to investigate concrete co-operative relationships in the form of IOC-WMO co-sponsorship of the CMM was viewed by the Executive Council in a cautious but positive light and it was decided to field a joint IOC-WMO effort to assess the implications. This would involve two consultants, respectively appointed by IOC and WMO, to jointly prepare an assessment which could be properly reviewed by experts associated with the various relevant programmes. The resulting information and preliminary analysis should be presented to the Governing Bodies; in the case of IOC the Assembly, for further consideration.

299 The Chairman of IODE brought to the attention of the Executive Council information on a new legal regime proposed in the World Intellectual Property Organization (WIPO). One of the basic proposals under consideration in WIPO is a Treaty on Intellectual Property in Respect to Databases which may have potential implications for the data exchange programmes of the IOC and the World Data Centers system, and for ocean sciences and services programmes in general. He pointed out that unfortunately the information available on this issue is very limited and that the issue has some urgency given the timeframe for proposed action on the treaty. It will be considered for adoption at a Diplomatic Conference to be held in Geneva, 2-20 December 1996. He emphasized that certain provisions of the proposed treaty might be contrary to the IOC policy on Data Management for Global Ocean Programmes adopted by the IOC Assembly at its Seventeenth Session (Paris, 25 February - 11 March 1993). The main principle of this policy is a full and open access to quality ocean data.

300 **The Executive Council was fully aware** that without adequate information and special consultations it would be premature and inappropriate to take direct actions. At the same time **the**

Executive Council was in agreement that all necessary measures should be taken in order to discourage any decisions being taken by WIPO that might be detrimental to ocean science and operational programmes in general and in particular to the IOC programmes and IOC policy on full and open data exchange.

301 **The Executive Council instructed** the Executive Secretary IOC to undertake urgently the following actions:

- (a) contact WIPO as soon as possible and obtain documents and other information regarding the proposed database treaty;
- (b) distribute this information without delay to the Member States;
- (c) seek advice within UNESCO on the interpretation of the treaty and its implications for IOC and UNESCO and inform Member States of this interpretation;
- (d) employ as far as possible expertise within UNESCO in dealing with this issue;
- (e) consult with the WIPO Secretariat on possible implications the treaty may have on the IOC's data exchange policy and on the exchange of marine environmental data generally between and within national agencies and data centers worldwide, convey the results of consultations to the Member States;
- (f) consult with ICSPRO agencies and relevant non-governmental scientific and academic organizations in order to provide a consistent view on the WIPO proposal.

302 **The Executive Council stressed** that, since the new legal regime proposed by the World Intellectual Property Organization (WIPO) could have repercussion on the activities of other scientific programmes, as well as other sectors in UNESCO, it should be borne in mind that any action of the Organization towards WIPO should be taken as a whole and it would be advisable that the question be submitted to the next session of the UNESCO Executive Board.

303 **The Executive Council urged** Member States to bring to the attention of their national authorities and academic institutions, as well as their representatives to WIPO regarding the possible implications of the proposed treaty for science, education and capacity building in order to help in developing a balanced approach at the national level.

304 **The Executive Council**, having considered the invitation and terms of reference which had been received from the IHO to the IOC, to co-sponsor with IHO and the International Association of Geodesy, the joint Advisory Board on the Law of the Sea, **instructed** the Executive Secretary to accept the invitation.

9. **THE ROLE OF IOC IN INTEGRATED ASSESSMENT OF AVAILABLE SCIENTIFIC UNDERSTANDING, OBSERVATIONS AND DATA FOR SUSTAINABLE DEVELOPMENT AND OCEAN MANAGEMENT**

305 The Executive Secretary IOC gave an overall introduction to this agenda item, referring to Document IOC/EC-XXIX/2. He also drew attention to discussions under Agenda Items 3.2, 5.1, 5.3 and 8 which are relevant to this agenda item.

306 He recalled the discussions of the Eighteenth Session of the Assembly under the Assembly Agenda Items 6 and 7. These brought out, *inter alia*, the need for reinforcement of ocean partnership for integrated management and an increasing dialogue with management, economic and socio-economic sectors, with an associated strengthening of links to user-communities, as well as evaluation and assessment.

- 307 He informed the Executive Council about the activities of assessment under the GESAMP within the review of the state of the marine environment; the CSD review of implementation of UNCED after 5 years in 1997; a proposal to prepare an "integrated assessment of environmental problems of the oceans" by SCOPE, the Scientific Committee on Problems of the Environment of ICSU. He referred to the Independent World Commission on Oceans and its aim to obtain an overview of ocean-related issues of primary interest to society. He informed the Executive Council about a consultation arranged by Executive Secretary IOC held at IMO, London, 30 May 1996, after the fourth session of the ACC Sub-Committee on Oceans and Coastal Areas. This consultation had involved: UNEP, GESAMP, ICSU-SCOPE, IWCO, IOC, SCOR, IMO, GEF-STAP. At this meeting, a need identified by GEF-STAP to prepare an International Assessment of the International Waters Problems was also presented and discussed. There is clearly a need for co-operation/co-ordination, and IOC can help in this respect. There is also a need, it appears, for IOC to actively associate itself with these assessment efforts. It is certainly one factor relevant to previous discussions on the evolving role of IOC.
- 308 The Chairman IOC also emphasized that there is an increasing debate about the oceans, their importance and their interaction with many aspects of our life and society. This debate would be helped by a scientific assessment of where we stand with regard to our ability to handle present and future ocean issues.
- 309 This scientific assessment would not discuss the political situation, jurisdictions, the legal regime, demographic changes and societal pressures, such considerations will, of course, dictate many, if not all, of the problems to be addressed. The assessment would evaluate the ocean knowledge that we have, or need to have, to solve present and future problems, including the capacity of countries, at all levels, to deal with these problems.
- 310 The Chairman IOC expressed belief that IOC is well placed to provide such an assessment and it would be timely.
- 311 The IOC is intergovernmental, it is a body in the UN system and, as we have been reminded frequently, a body whose programmes are founded in ocean science and services. Its Member States contain most of the coastal states of the world and certainly all of these with major ocean science capability. The Commission works through the concerted efforts of its Member States and therefore has the potential power of the combined resources of all these Member States should they so desire. Although the Commission has a modest voice in the world community at large and is not seen by many as the focus of the world effort in marine science, it has programmes that influence this effort in many ways: data formats, standards, manuals, global and regional co-ordination, training and capacity building. This network of IOC programmes and the links that have been forged with other intergovernmental and international bodies and organizations could be used in putting together the scientific assessment that is needed.
- 312 If such an assessment was carried out, it would need to address specific ocean issues and discuss the scientific and technical ability available, and needed to resolve them. The assessment would need to look ahead at least 25 years in addition to building on past experience and the present status.
- 313 The Chairman IOC felt that a scientific assessment of this sort would complement those considered or already underway and contribute to them. It could also form the basis for a strategic outlook at the ocean science programmes of the future, set priorities for scientific capacity building and evaluate the impact of technological development.
- 314 Several delegations provided their views on the proposed action. There was a general trend in favour of proceeding with the proposed action, although with great care so as to avoid any duplication. The IOC should continue to co-operate with, or seek co-operation with other ongoing or planned related activities. In particular the IOC should continue to work with and support the related work within GESAMP. Co-operation should be sought with the SCOPE-SCOR-ICSU proposed assessment.

- 315 Specific points made in the debate include:
- (i) aim for a review of modern ocean research and related capacities;
 - (ii) base the review on the IOC programme structure;
 - (iii) the IOC Member States should provide input and feel an ownership of the assessment;
 - (iv) the relation to and co-operation with IWCO was emphasized and clarifications were sought which were provided by the Delegate of Portugal;
 - (v) an assessment should be made of marine science and its role in relation to sustainable ocean and coastal area development, management and socio-economics;
 - (vi) an exercise like the one proposed would fill a gap in the IOC vision and help ensure that scientific results and options for solutions to problems are transmitted in understandable form useful for user-sectors and managers;
 - (vii) various mechanisms of the IOC, including Bruun Memorial Lectures could be used to contribute to the assessment work;
 - (viii) we know about the issues, the problems and we have solutions, but nevertheless the marine environment continues to degrade - why?;
 - (ix) why scientific results and solutions are not applied?;
 - (x) the assessment product should fill a gap in addressing users and needs at national and regional level;
 - (xi) the assessment action of the IOC should be focused and specifically address scientific capacity and understanding, and such a product would also be useful for the GOOS establishment;
 - (xii) we should aim to provide an interim product for 1998, and the related work should also serve as an input to the programme for 1998;
 - (xiii) the assessment work of the IOC could also support and give inputs to the implementation of GPA-LBA, the GESAMP review of the state of the marine environment and the SCOPE-SCOR-ICSU work.
- 316 The Executive Secretary proposed that an assessment undertaken by the IOC as specified by the IOC Assembly would imply an ownership and a commitment on the part of IOC Member States, so that the assessment product would be appropriately used at national and other levels.
- 317 The Chair concluded that the Executive Council basically endorsed the proposal with the provision that there is no duplication, that co-operation is maintained with others and that the assessment work is well focused.
- 318 **The Executive Council established** a small *ad hoc* sessional group to further elaborate the proposal and scope and to give guidance to the Executive Secretary. This should be used by the Executive Secretary to prepare, with the help of experts involved in IOC programmes, a substantial document to be presented to the Nineteenth Session of the Assembly, for its consideration and decision on possible further work of IOC on this matter. The Chair of the *ad hoc* sessional group reported briefly on the results of the deliberations, and provided advice to the Chair and the Executive Secretary IOC.

10. ADJUSTMENTS TO THE IOC PROGRAMME AND BUDGET FOR 1996-97 AS REQUIRED AND WORKPLANS

- 319 In introducing this subject, the Chair first recalled the suggestion made by the Executive Secretary at the opening session that the scope of this agenda item be enlarged to include preliminary considerations of future workplans. The Executive Council would thus consider matters dealing with the present budgetary period and also provide initial guidance to the Executive Secretary that he may use in developing proposals in regard to the IOC component of the UNESCO Draft 29 C/5 for 1998-99. He noted that relevant information is provided in the Budgetary Status Report (Document IOC/EC-XXIX/2 Annex 6) and in the Expanded Annotated Agenda (Document IOC/EC-XXIX/2: paras 177-184).
- 320 The Chair also reminded the Executive Council that previous discussion on this matter by IOC Governing Bodies had indicated the desire of Member States to have before them a more transparent and clear presentation of the programme and budget. The present report had been developed within that perspective. He requested the Executive Council to provide its views as to any further improvements that could be made.
- 321 Note was also taken that the primary role of the Executive Council as a management body is indeed to provide guidance and instruction regarding the use of IOC resources in support of its programmes during the intersessional period between the Assemblies. Such considerations are based upon two complementary elements.
- 322 One element, as reflected under previous agenda items, concerns the reports of subsidiary bodies and related draft resolutions. The Assembly has requested IOC Subsidiary Bodies to submit financial implications within their reporting functions.
- 323 Discussion under this Agenda Item indicated strong support for the proposals made, including the new budgetary reporting methodology. A number of suggestions were made to improve the presentation, including:
- (i) to the extent possible, prepare budgetary documents in such a way that they show precisely by objective and, within each objective, by programme, the desired objectives, the actions planned and budgetary forecasts and receipts (with an operational timetable, personnel assigned, etc). The documents should allow the Secretariat and IOC Member States to follow periodically the execution of the programme;
 - (ii) greater detail to link the four objectives to IOC programmes, including regional and capacity building components;
 - (iii) more explanatory information regarding the linkages between reporting by object-of-expenditure (with selected case studies), the four IOC objectives and their overall impact in regard to required, forecast and real expenditure;
 - (iv) the need to ensure that relevant documentation is prepared in the four working languages of the IOC and distributed in advance of IOC Governing Body sessions, eventually with an addendum to update tabular material.
- 324 For budgetary implications to the present biennial period, **the Executive Council instructed** the Executive Secretary, based upon the present forecast of available funding, to give priority to ensuring that the IOC Programme of Work and Budget for 1996-97 is respected, as approved by the Eighteenth Session of the Assembly as a basis for planning.
- 325 Depending upon the receipt and timing during the remainder of the present biennial period of general and special purpose voluntary contributions to the IOC Trust Fund, **the Executive Council charged** the Executive Secretary, in consultation with the Chair as required, to ensure that the forecast distribution of funding between the four basic objectives of the IOC programme are respected. In this

regard the necessity of ensuring implementation of activities throughout the IOC programmes for capacity building and TEMA was highlighted.

326 The Chair then turned to the second element under agenda item 10 in regard to preliminary considerations of the IOC Programme and Budget for the next biennium (1998-99). He encouraged the Executive Council to exercise its managerial role to guide the Executive Secretary and the Officers in further development of the IOC Programmes, as found in section 2 of Document IOC/EC-XXIX/2 Annex 6.

327 For budgetary implications of draft resolutions to the next biennial period, **the Executive Council instructed** the Executive Secretary to include requested provisions within the draft workplans for the 1998-99 biennium and alert the Assembly to any activities that cannot be accommodated within the anticipated funding.

328 **The Executive Council instructed** the Executive Secretary IOC to prepare detailed budgetary forecasts by programme with a view to their inclusion in Document 29 C/5.

329 **The Executive Council endorsed** the preliminary framework for the 1998-99 budgetary period within which the four objective structure is maintained and a proposal is made for increase in support both from UNESCO and from Member States to the IOC Trust Fund, given the unique opportunity offered by the 1998 UN International Year of the Ocean as a focus for greater impetus.

330 In regard to the present resources from UNESCO, **the Executive Council expressed** appreciation to its parent body for the steps taken to ensure an "incompressible" budget.

331 In expressing its appreciation to the Executive Secretary for the considerable progress made in presenting programme and budget matters for its consideration, **the Executive Council instructed** the Executive Secretary to take into account specific suggestions proposed for further improvement.

11. ARRANGEMENTS FOR THE THIRTIETH SESSION OF THE EXECUTIVE COUNCIL AND THE NINETEENTH SESSION OF THE ASSEMBLY

332 The Executive Secretary IOC introduced this item referring to Document IOC/EC-XXIX/2. He recalled that the presently proposed dates for the Executive Council, 1 July 1997, and the Assembly, 2-17 July 1997, were different from those identified at the Eighteenth Session of the IOC Assembly, due to the need to adjust these dates in light of the meeting of the Executive Board of UNESCO.

333 He recalled that the Executive Council, under this agenda item, also normally gave consideration to the theme for the Bruun Memorial Lecture, and recalled that as a possible theme "Aspects of Coastal Area Management, including Socio-economic Ones" had been proposed at the Assembly. He gave further elaboration on this theme. He also recalled that other current issues could well be the address of the Bruun Memorial Lecture.

334 The Executive Secretary IOC finally recalled the decision of the Assembly to establish the Dr Panikhar lecture on TEMA-related matters, and that the TEMA Group of Experts has addressed this and identified the first one for the Nineteenth Session of the Assembly. This would be given during the one-day extended debate on TEMA and would consist of 2 parts given by separate lecturers. In view of this extended debate, it may also be required to extend the session of the Assembly for one day, so as to be 2-18 July 1997.

335 The Chair then referred to the discussions in relation to the 1998 International Year of the Ocean and suggested that the Executive Council give preliminary consideration to convene its regular session in 1998 in Lisbon during EXPO 98, should an invitation to this effect be forthcoming from the Government of Portugal. He stressed that no such invitation had, as yet, been received.

336 The Chair also suggested that an advance action as regards the election of the rapporteur might be useful and invited delegations to indicate their willingness to provide a rapporteur for the forthcoming session(s).

337 **The Executive Council endorsed** the dates of its next session as well as the Nineteenth Session of the Assembly.

338 **The Executive Council endorsed** the general theme for the Bruun Memorial Lecture of the role of coastal and open sea oceanography and observations for integrated coastal zone management, possibly focusing on some specific examples. The Great Barrier Reef was referred to.

339 **The Executive Council expressed** considerable caution about locating the ordinary Executive Council in 1998 outside UNESCO headquarters. Delegates emphasized that it should not imply any additional cost to the IOC, nor any confusion between the Independent World Commission on the Oceans and the IOC which would not be favourable to the full and entire acknowledgement by the public of the latter. Moreover, one Delegation was worried about the eventual lack of logistics due to the distance between the delegations participating in the IOC Executive Council and their delegations at UNESCO Headquarters.

340 **The Executive Council requested** the Executive Secretary IOC to informally investigate the implications and possibilities, so as to provide the Nineteenth Session of the Assembly with the required information for its decision.

341 The Delegate of the USA volunteered to offer a rapporteur for the Nineteenth Session of the Assembly.

12. ADOPTION OF RESOLUTIONS, SUMMARY REPORT AND CLOSURE

342 The Delegate of Italy had raised a point of order earlier in the session with respect to the use of working languages, referring to the IOC Rules of Procedure No. 33 and 34. He demanded strict adherence to existing rules, and requested a clarification from the Chair. The Delegate of the Netherlands seconded this statement. After consultations the Chair informed the Council that Rules of Procedure No. 33 and 34 are being respected. This was taken note of by the Delegates of Italy and the Netherlands.

343 **The Executive Council reviewed** the draft resolutions and the draft report. **The Executive Council adopted** the resolutions and the report as herein presented.

344 The Chair expressed his thanks to all delegations for their constructive participation in the debates, to the interpreters, the translators, the Secretariat, and in particular thanked Mme J. Dombret for her long-term excellent and distinguished service as Documentalist of IOC and Conference Officer for the IOC Governing Body meetings. He also welcomed her successor, Mr J. Banaag. He closed the Session at 17h50 on 2 October 1996.

ANNEX I

AGENDA

- 1. OPENING**
- 2. ADMINISTRATIVE ARRANGEMENTS**
 - 2.1 ADOPTION OF THE AGENDA
 - 2.2 DESIGNATION OF RAPPORTEUR
 - 2.3 CONDUCT OF THE SESSION, TIMETABLE AND DOCUMENTATION
- 3. DEVELOPMENTS SINCE THE EIGHTEENTH SESSION OF THE IOC ASSEMBLY**
 - 3.1 REPORT ON INTERSESSIONAL ACTIVITIES AND BUDGETARY MATTERS
 - 3.2 DEVELOPMENTS RELEVANT TO IOC WITHIN UNESCO: 28TH GENERAL CONFERENCE AND EXECUTIVE BOARD
- 4. PROGRAMME MATTERS REQUIRING DECISIONS BY THE EXECUTIVE COUNCIL**
 - 4.1 OCEAN AND CLIMATE (JSC; OOPC; FCC; IPCC-RELATED MATTERS)
 - 4.2 OCEAN SCIENCE IN RELATION TO LIVING RESOURCES (OSLR), IPHAB, GLOBEC, LME, CONVENTION ON BIOLOGICAL DIVERSITY
 - 4.3 INTERNATIONAL OCEANOGRAPHIC DATA AND INFORMATION EXCHANGE (IODE)
 - 4.4 INTERNATIONAL TSUNAMI WARNING SYSTEM IN THE PACIFIC (ITSU) AND IDNDR-RELATED MATTERS
 - 4.5 GLOBAL OCEAN OBSERVING SYSTEM DEVELOPMENT AND RELATED MATTERS
 - 4.6 TEMA AND CAPACITY BUILDING
- 5. OTHER MATTERS ARISING FROM THE EIGHTEENTH SESSION OF THE ASSEMBLY**
 - 5.1 PROGRESS REPORT OF THE *AD HOC* STUDY GROUP ON IOC DEVELOPMENT, OPERATIONS, STRUCTURE AND STATUTES (DOSS-II)
 - 5.2 FINANCIAL RULES APPLICABLE TO THE SPECIAL ACCOUNT OF THE IOC
 - 5.3 1998 INTERNATIONAL YEAR OF THE OCEAN: PROPOSALS AND PROGRESS REPORT
 - 5.4 IOC AND UNCLOS: PROGRESS REPORT OF INTERSESSIONAL WORKING GROUP
- 6. GUIDELINES FOR CONSULTATIONS WITH THE DIRECTOR-GENERAL ON THE APPOINTMENT OF THE SECRETARY IOC**
- 7. REGIONAL SUBSIDIARY BODIES**
 - 7.1 IOCARIBE-V
 - 7.2 WESTPAC-III
 - 7.3 SOUTHERN OCEAN FORUM AND REGIONAL COMMITTEE FOR THE SOUTHERN OCEAN

- 7.4 BLACK SEA REGIONAL COMMITTEE
- 7.5 OTHER REGIONAL BODIES

- 8. FOLLOW-UP TO UNCED**

- 9. THE ROLE OF IOC IN INTEGRATED ASSESSMENT OF AVAILABLE SCIENTIFIC UNDERSTANDING, OBSERVATIONS AND DATA FOR SUSTAINABLE DEVELOPMENT AND OCEAN MANAGEMENT**

- 10. ADJUSTMENTS TO THE IOC PROGRAMME AND BUDGET FOR 1996-97 AS REQUIRED AND WORKPLANS**

- 11. ARRANGEMENTS FOR THE THIRTIETH SESSION OF THE EXECUTIVE COUNCIL AND THE NINETEENTH SESSION OF THE ASSEMBLY**

- 12. ADOPTION OF RESOLUTIONS, SUMMARY REPORT AND CLOSURE**

ANNEX II
RESOLUTIONS

No.	Agenda Item	Title
1	4.3	International Oceanographic Data and Information Exchange (IODE)
2	4.4	International tsunami Warning System in the Pacific (ITSU) and IDNDR-related Matters
3	4.5	Seventh Session of the Joint IOC-WMO Committee for the Integrated Global Ocean Services System (IGOSS)
4	7.1	IOC Sub-Commission for the Caribbean and Adjacent Regions
5	7.2	Third Session of the IOC Sub-Commission for the Western Pacific (WESTPAC)
6	7.3	Southern Ocean Forum and Regional Committee for the Southern Ocean
7	7.4	Black Sea Regional Committee (IOC-BSRC)

Resolution EC-XXIX.1

INTERNATIONAL OCEANOGRAPHIC DATA AND INFORMATION EXCHANGE (IODE)

The Executive Council,

Recognizing the high level of interest in marine data and information management due to increasing public and government awareness of sea-level rise and global warming issues and as a tool for decision making, as well as the valuable contributions made by many Member States to the implementation of the programme and especially its IODE/TEMA component,

Noting with satisfaction the significant advances made by IODE in increasing the size of, and access to, the global databases and improving the flow of data through such activities as GODAR, GTSP and OceanPC,

Being concerned with the lack of sufficient secretariat resources allocated to IODE activities, while acknowledging the efforts of the IOC Executive Secretary in creating a professional post in the Secretariat for the IODE programme,

Acknowledging the recommendations of the IODE Think Tank meeting to improve the skill base of IODE centres and to increase the linkages with other marine related programmes, and the efforts made by IODE and IGOSS in responding to the GOOS objectives in data management by the preparation of the joint IGOSS/IODE Data and Information Management Strategy Paper,

Accepts the Summary Report of IODE-XV and **approves** the Recommendations contained therein, particularly to:

- (i) continue the support provided by IODE to the GOOS and GCOS data and information management activities through mechanisms such as the Joint IGOSS/IODE Data and Information Management Strategy Paper and the Joint GCOS/GOOS/GTOS Data and Information Panel,
- (ii) establish the IODE Strategic Sub-Committee to promote IODE and encourage co-operation and collaboration with other marine related programmes both within and outside the UN system, with the Terms of Reference shown in Annex 1 to the Resolution,
- (iii) continue and expand a comprehensive TEMA programme to improve the skill base of IODE centres through the IODE regional co-ordinators, through training courses and fellowships and by developing appropriate electronic training tools,
- (iv) further develop OceanPC and seek extrabudgetary funding for a re-engineering of the system,
- (v) increase the use of technology such as Internet, World Wide Web (WWW) and CD-ROM as methods of data and information exchange and dissemination,
- (vi) support and continue the development of the IOC WWW Home Page as well as its related services and products,
- (vii) continue support for the GODAR project;

Urges Member States to increase their involvement with IODE through facilitating data and information exchanges, improving national data and information management infrastructures and by providing extrabudgetary funding and secondment of experts to the IOC Secretariat to further improve the IODE system;

Instructs the Executive Secretary IOC to assist in seeking extrabudgetary funding for the further development of the IODE programme.

Annex 1 to Resolution EC-XXIX.1

Terms of Reference for IODE Strategic Sub-Committee

- (i) Create additional collaborative and co-operative linkages with other Global and Regional Programmes in the field of marine data and information management and exchange;
- (ii) Undertake these tasks through expert consultations with appropriate data managers and other senior managers from programmes and funding agencies;
- (iii) Work at a senior level to maintain the linkages as they are developed and assist the IODE Committee with planning and implementation of the joint projects that may arise between IODE and other programmes.

Annex 2 to Resolution EC-XXIX.1

IODE Work Plan and Provisional Budgetary Implications

- Note: *
- * Figures are given as (extra-budgetary)/(UNESCO regular funds) all in thousand US dollars;
 - * An average of 2-2.5 thousand dollars per person is assumed for travel and per diem for meetings;
 - * Secretariat support other than travel is not included.

Activity	1996	1997
Fifteenth Session of IOC Committee on IODE, GEMIM Meeting (Athens, Jan.'96)	>150/30	
GTSP (Apr.'96, Washington; 1998, place to be identified)	10/15	
GODAR-V, for Central & South America (Colombia, Sept.'96)	35/20	
GODAR-VI for Western Africa (Lagos, Nigeria, Feb.'97)		40/10
GODAR Global Conference (Washington DC, 2 nd half '97)		100/30
OceanPC Meeting of Experts		10/10
IODE Officers Meetings		15
Seminar of IODE Regional Co-ordinators (co-joint with IODE Officers Meeting)		10
GETADE Meetings (1997, co-joint with Workshop on New Technology; 1999, co-joint with IODE Officers Meeting)		5/10
Strategy Sub-Committee Meeting (up to 8 participants, 2 nd half '96)	10/15	
Data Managers Consultation on Co-operation & Sharing Responsibilities		20/10
Workshop on Biological & Chemical Data Management (Hamburg, May '96, up to 50 participants)	60/10	
Workshop on New Technology for Ocean Data Management, Ireland, Mar.'97		40/25
Development & Maintenance of the IOC WWW Home Page (equipment, software)		10

Activity	1996	1997
Production, Distribution & Updating of IOC CD-ROM		10
IOC ASFA input	2	2
Support to IAMSLIC Conference participants	6	10
Support to EURASLIC Conference participants	15/10	
MEDI Pilot Project Technical Workshop		30/10
NOPs & MEDI WWW Server & System Development	6	
Marine-related Document Delivery over Internet - Pilot Project	10/5	10/5
Participation of IODE Officers, Experts & Staff in Data Management-related Meetings: of other International Organizations (Bremerhaven Conference on Southern Oceans); IGBP & WCRP; GOOS & GCOS; Remote-sensed Data (CEOS & IGOSS/IODE/CMM)	10 3	10 10 5 3
TEMA <u>Training Courses</u> WESTPAC (Japanese NODC) ROPME/PERSGA & Caspian Sea area (Iranian NODC) Black & Caspian Sea Member States (WDC-B, MGG, On Marine Geological & Geophysical Data) RECOSCIX-CEA IOCINCWIO (MIM/ASFA) Eastern Africa (on OceanPC) Western Africa (Mauritania, on OceanPC) Central & South America (Argentinean NODC, for spanish & portuguese-speaking countries) On Development of National WWW Servers IOCINCWIO/IOCINDIO (RNODC-INDO, Goa) Western & Eastern Europe (LOICZ/ICES, Copenhagen) Eastern Mediterranean & North African Countries (Hellenic NODC)	15/ 20/10 20/5 40/10	15/ 20/10 20/20 20/20 20/10
<u>Missions (Feasibility Study & Assistance)</u> Western Africa Cuba (Sept, co-joint with GODAR-V) Ecuador (WDC-A, Oceanography offer) Colombia (Sept, co-joint with GODAR-V) ROPME/PERSGA (Nov/Dec)	 1/1 3/ 1/2 3/1.5	 10/5
<u>Study Grants & Fellowships</u> Not more than 2 per year		15

Activity	1996	1997
Regions RECOSCIX-CEA Development (staff travel & contract) RECOSCIX-CAR Feasibility Study & Implementation Black Sea Pilot Project Data Meeting ROPME/PERSGA Data Workshops MEDATLAS Implementation ODINA Project	13 15/10	20 5/ 5/5 10/5 10 20/10
Publications Global Directory of Scientists & Marine Institutions IGOSS/IODE Brochure Manuals & Guides N° 5 (consultant contract) Revised version of IOC-CEC QC Manual	1/2 5/5 3	5/2.5
Awareness IODE participation in the Year of the Oceans, 1998 (development of demonstration material, travel) Development & Publication of IODE Posters & Logo		5 5
IODE Programme Implementation Communication costs, Office supplies, Word processing equipment, etc.	10	10
Total	>400/204.5	>400/357.5

Resolution EC-XXIX.2

**INTERNATIONAL TSUNAMI WARNING SYSTEM IN THE PACIFIC (ITSU)
AND IDNDR-RELATED MATTERS**

The Executive Council,

Noting the Summary Report and the Recommendations of the Fifteenth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific (ICG/ITSU), Papeete, Tahiti, French Polynesia, 24-28 July 1995,

Recognizing the progress achieved by the Group in the implementation of the IOC Tsunami programme,

Concurring with the view of the ICG/ITSU of the need to facilitate the ITIC activities through increased financial support and nominating candidates for the position of the ITIC Associate Director,

Acknowledging the importance of the IOC Tsunami Programme in saving lives and diminishing the socio-economic impact of natural disasters and the contribution made by the programme in meeting IDNDR objectives,

Being aware that the establishment of Tsunami Warning Systems for the Caribbean and Adjacent Regions (IOCARIBE) and the Mediterranean Sea is now being considered,

Accepts the Summary Report of ITSU-XV and **approves** the Recommendations of the ICG/ITSU Fifteenth Session;

Invites Member States to support the programme through contributions to the IOC Trust Fund and in-kind, through national and regional efforts, to make national authorities aware of the programme and of the potential benefits of tsunami disaster reduction and preparedness by making commitments and allocating resources;

Urges all Member States to share the burden of operational costs of the Tsunami Warning System and of the resources required for the implementation of the programme;

Expresses concern that extending the programme to other geographical regions may hamper the effectiveness of the Tsunami Warning System in the Pacific, unless additional funding is provided;

Urges the Member States of IOCARIBE and the Mediterranean Sea region to spare no efforts in ensuring that additional funds are made available for the establishment of tsunami warning systems in these regions and **instructs** the Executive Secretary IOC to assist in this effort.

Financial implications:

Required funds based on the ITSU programme of work for 1997: US\$ 100,000; IOC Budget for 1997: US\$ 50,000.

Resolution EC-XXIX.3

**SEVENTH SESSION OF THE JOINT IOC-WMO COMMITTEE
FOR THE INTEGRATED GLOBAL OCEAN SERVICES SYSTEM (IGOSS)**

The Executive Council,

Having considered the Summary Report of the seventh session of the Joint IOC-WMO Committee for IGOS, together with the 5 Resolutions and the 7 Recommendations adopted at the session,

Noting Resolution 2 (EC-XLVIII) adopted by the WMO Executive Council on the same topic,

Takes note of the report and **endorses** the Resolutions,

Decides to take the following action on the Recommendations:

Recommendation 1 (JC-IGOSS-VII) - IGOS Ship-of-Opportunity Programme Plan

- (i) **Approves** the Recommendation;
- (ii) **Invites** WCRP, GOOS and GCOS to co-sponsor the SOOP Management Committee (SMC) with the terms of reference and membership as given in the annex to the Recommendation;
- (iii) **Urges** Member States to support continued SOO XBT operations through the long-term maintenance of SOO lines;
- (iv) **Requests** I-GOOS to support the implementation of the Plan, in particular through identifying and generating resources at the national level for use by operational agencies;

Recommendation 2 (JC-IGOSS-VII) - IGOS GTS Data Flow Monitoring

- (i) **Approves** the Recommendation;
- (ii) **Urges** Member States to designate focal points for the exchange of oceanographic bulletins over the GTS, within both GTS and oceanographic centres;

Recommendation 3 (JC-IGOSS-VII) - Global Temperature Salinity Programme

- (i) **Approves** the Recommendation;
- (ii) **Urges** Member States to expand their participation in the Programme, and especially Canada and the USA to maintain and support the Programme;
- (iii) **Agrees** to retain the former recognized acronym GTSP and hence call the Programme Global Temperature Salinity Profile Programme;

Recommendation 4 (JC-IGOSS-VII) - IGOSS Products in support of GOOS and GCOS

- (i) **Approves** the Recommendation;
- (ii) **Invites** the Joint IOC-WMO-ICSU Scientific and Technical Committee for GOOS (J-GOOS) to call upon IGOSS experts to participate in the work of its panels, as appropriate;

Recommendation 5 (JC-IGOSS-VII) - Draft IGOSS-IODE Data Management Strategy

Acknowledges with satisfaction that the Recommendation has already been implemented.

Recommendation 6 (JC-IGOSS-VII) - IGOSS Plan and Implementation Programme 1996-2003

- (i) **Approves** the Recommendation;
- (ii) **Urges** Member States to participate actively in IGOSS through the implementation of the various components of the System as detailed in the Plan;

Recommendation 7 (JC-IGOSS-VII) - Review of Previous Resolutions of the IOC and WMO governing bodies relevant to the field of activity of the Joint IOC-WMO Committee for IGOSS

Approves the Recommendation.

Annex to Resolution EC-XXIX.3

**Estimate of Financial and Staff Requirements
for the Bienniums 1996-1997 and 1998-1999 (in US\$)**

Activities	1996-1997	1998-1999	Total
IGOSS Bureau - 2nd session (end 97)	participants travel: 12 500 staff travel: 2 500 <u>15 000</u>	-	15 000
Group of Experts on Communications and Products - 1st session (mid 98)	-	participants travel: 12 500 staff travel: 2 500 <u>15 000</u>	15 000
SOOP Management Committee (SMC) - 2 sessions (96 & 97)	participants travel: 2x8 500 staff travel: 2x2 500 <u>22 000</u>	-	22 000

Activities	1996-1997	1998-1999	Total
SOOP Implementation Panel (SOOPIP) - 2 sessions (97 & 99)	participants travel: 12 500 staff <u>travel: 2 500</u> 15 000	participants travel: 12 500 staff <u>travel: 2 500</u> 15 000	30 000
SOOPIP <i>ad hoc</i> task team - 2 sessions (96 & 98)	participants travel: 12 500 staff <u>travel: 2 500</u> 15 000	participants travel: 12 500 staff <u>travel: 2 500</u> 15 000	30 000
Joint CMM-IGOSS-IODE Sub-Group on Ocean Satellites and Remote Sensing (OSRS) - 2 sessions (97 & 98)	participants travel: 7 500 staff <u>travel: 2 500</u> 10 000	participants travel: 7 500 staff <u>travel: 2 500</u> 10 000	20 000
IGOSS-VIII (1999)	-	participants travel: 10 000 2 staff <u>travel: 5 000</u> 15 000	15 000
Expert/Staff participation in various meetings (4 per year)	<u>travel: 8x2000</u> 16 000	<u>travel: 8x2000</u> 16 000	32 000
Training courses on use of remote sensing (97 & 99)	30 000	30 000	60 000
Communications	6 000	6 000	12 000
TOTAL (not including staff)	129 000	122 000	251 000
STAFF REQUIREMENTS (IOC)			
IGOSS Operations Co-ordinator (full time) (seconded)	-	-	-
Assistant Secretary IOC (½ time) (seconded)	-	-	-
Consultant (¼ time) (fund in trust)	55 000	58 000	113 000
TOTAL (staff)	55 000	58 000	113 000

Resolution EC-XXIX.4

IOC SUB-COMMISSION FOR THE CARIBBEAN AND ADJACENT REGIONS

The Executive Council,

Noting the Report on IOCARIBE Evaluation (Document IOC/INF-1043), the Report of the Fifth Session of IOCARIBE (Barbados, December 1995) and the IOCARIBE Medium-Term Strategy 1996-2000 (Document IOC/INF-1027),

Expressing its appreciation to the Government of Barbados for hosting the Fifth Session of the Sub-Commission,

Also expressing its appreciation to the Government of Colombia for hosting the Secretariat of IOCARIBE in Cartagena and for its continuous interest and support provided to this UNESCO field office,

Noting with satisfaction the unanimous endorsement of IOCARIBE Member States of the continuation and reinforcement of the Sub-Commission,

Accepts the Report on IOCARIBE Evaluation, which is considered a valuable instrument to determine the future course of the Sub-Commission;

Also accepts the Report of the Fifth Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions, **approves** the Recommendations **and notes** the IOCARIBE Action Plan 1996-1998, as shown in Annex II and Annex V of the Report of the Fifth Session of IOCARIBE, respectively;

Instructs the Executive Secretary IOC to take all possible measures to obtain financial support for the implementation of the IOCARIBE Action Plan;

Endorses the IOCARIBE Medium-Term Strategy 1996-2000;

Takes note of the offers made by several delegations for seconding experts, who would be based in their respective home countries, **and instructs** the Executive Secretary IOC to set up proper mechanisms to implement this offer, establishing clear terms of reference;

Recognizes that the IOCARIBE Symposium and the IOCARIBE Award are important contributions from the Sub-Commission to the 1998 International Year of the Ocean; **thanks** Cuba for its offer to host the IOCARIBE Symposium in La Havana, in early 1998, **and instructs** the Executive Secretary IOC to establish the necessary co-ordinating mechanisms to implement both activities;

Notes with concern the difficulties reported by the Executive Secretary IOC for implementing previous Resolutions of the IOC Assembly regarding provision of UNESCO/IOC staff in the regional Secretariat, **and instructs** him to continue searching for ways and means to provide staffing for the IOCARIBE Secretariat;

Urges Member States to support the Sub-Commission for IOCARIBE and make contributions to the IOC Trust Fund for implementing IOCARIBE programmes and activities, including the operation of the regional Secretariat in Cartagena; **and instructs** the Executive Secretary IOC to take appropriate measures to ensure its implementation with respect to the present biennium.

Financial implications: US\$ 145,000 - Action Plan 96/97, of which for IOC US\$ 40,000
US\$ 40,000 - Operational Costs (1997)
US\$ 60,000 - Secretary IOCARIBE (1997)
Total **\$245,000**

Resolution EC-XXIX.5

THIRD SESSION OF THE IOC-SUB-COMMISSION FOR THE WESTERN PACIFIC (WESTPAC)

The Executive Council,

Noting the Summary Report of the Third Session of the IOC Sub-Commission for the Western Pacific together with six Recommendations adopted by the Session,

Expressing its appreciation to the Government of Japan for hosting the Third Session of the Sub-Commission, 26 February-1 March 1996,

Noting with appreciation the offer of the Republic of Korea for hosting the Fourth Session of the Sub-Commission in Seoul, March 1999,

Decides to take the following actions on the Recommendations:

Recommendation SC-WESTPAC-III.1 - International IOC/WESTPAC Scientific Symposium

- (i) **Approves** the Recommendation, including the establishment of a Scientific Organizing Committee charged to organize the Symposium in Okinawa, Japan, 2-7 February 1998;
- (ii) **Instructs** the Executive Secretary IOC to provide, within available financial resources, support for the Symposium and to take appropriate actions to invite other regional and international organizations to support and co-sponsor the Symposium.

Recommendation SC-WESTPAC-III.2 - Work Programme and Budget Estimate of the Sub-Commission for 1996-1998

- (i) **Approves** the Recommendation;
- (ii) **Instructs** the Executive Secretary IOC to provide support from the IOC Regular Budget and Trust Fund for the implementation of the 1996-1997 regional activities, as well as the operation of the IOC Regional Secretariat for WESTPAC, taking into account the overall requirements of the IOC programmes;
- (iii) **Urges** Member States of the IOC and of the Sub-Commission in particular, to provide further financial support through the IOC Trust Fund dedicated to the Sub-Commission's programme implementation.

Recommendation SC-WESTPAC-III.3 - Asian-Australian Monsoon Oceanography

- (i) **Approves** the Recommendation;
- (ii) **Instructs** the Executive Secretary IOC to find all possible ways to ensure the co-ordination of this activity with other relevant programmes sponsored by the IOC and/or other national, regional and international organizations;
- (iii) **Calls** upon the Member States to provide further support in terms of financial and human resources to implement the project activity.

Recommendation SC-WESTPAC-III.4 - Near-GOOS Co-ordinating Committee

- (i) **Approves** the Recommendation;
- (ii) **Agrees** to initiate the Near-GOOS operational phase as soon as possible, accompanied by relevant training activities;
- (iii) **Instructs** the Executive Secretary IOC to provide necessary resources to ensure the effective implementation of the Near-GOOS project;
- (iv) **Urges** all participating countries to make further efforts in supporting the implementation of the system, including provision of oceanographic data and facilities necessary for the on-line data exchange required by the Near-GOOS operation.

Recommendation SC-WESTPAC-III.5 - International Coral Reef Initiative

- (i) **Approves** the Recommendation;
- (ii) **Instructs** the Executive Secretary IOC to use all possible means to encourage the widest participation of Member States in the implementation of the Global Coral Reef Monitoring Network at the regional level;
- (iii) **Urges** Member States to mobilize financial and human resources towards the implementation of the project.

Recommendation SC-WESTPAC-III.6 - Dates and Place of the Next Session

- (i) **Approves** the Recommendation;
- (ii) **Instructs** the Executive Secretary IOC to take appropriate actions, to confirm the dates and place of the next session, in consultation with the Officers of the Sub-Commission and the governments concerned, and to ensure the widest possible participation in the Fourth Session of the WESTPAC Sub-Commission by the Member States.

Financial implications: US\$ 503,700 - Action Plan (96-98; US\$ 30,000 - Operational costs (1997); US\$ 202,000 - two staff in WESTPAC (1997).

Resolution EC-XXIX.6

SOUTHERN OCEAN FORUM AND REGIONAL COMMITTEE FOR THE SOUTHERN OCEAN

The Executive Council,

Having considered the Executive Summary of the First Southern Ocean Forum and the Sixth Session of the IOC Regional Committee for the Southern Ocean (Document IOC/SOC-VI/3S), held in Bremerhaven, Germany, 9-13 September 1996,

Noting with satisfaction that the Forum has reviewed the present knowledge, gaps and needs for future ocean research and related services in the Southern Ocean, as well as the international framework for co-operation,

Having reviewed the recommendations of the Sixth Session of the Regional Committee (Document IOC/SOC-VI/3S) prepared on the basis of the Forum's conclusions and proposals, covering the following broad themes: International cooperation in the Southern Ocean; Climate Change; Southern Ocean Ecosystems and their living resources; Pollution and monitoring; GOOS and data management,

Noting also that many important events have taken place since the establishment of the IOC Regional Committee for the Southern Ocean in 1967, in particular, UNCED and its Agenda 21, the entering into force of UNCLOS, UN Framework Convention on Climate Change (FCCC), UN Convention on Biological Diversity (CBD), the initiatives of the Antarctic Treaty Consultative Meeting (ATCM), the Protocol on Environmental Protection to the Antarctic Treaty, the development of global research and observational programmes such as WCRP, IGBP, GOOS and GCOS as joint efforts of intergovernmental and non-governmental international organizations,

Emphasizing that the Southern Ocean is unique in its physical and biological characteristics; that its study is of great importance for the understanding of the world's climate and climate change, as well as for the global cycling of carbon and other elements; and that it is a potential source of marine living resources,

Recognizing that the study of the Southern Ocean and its resources, as well as the development of observing systems, require close co-operation with other international governmental and non-

governmental organizations, particularly WMO, UNEP, FAO, IHO, CCAMLR, IWC, COMNAP, ATCM, ICSU/SCAR/SCOR,

Expressing its strong intention to continue close collaboration with WMO, UNEP and ICSU in the planning and implementation of the Southern Ocean components of WCRP, particularly CLIVAR, IGBP and its projects JGOFS and GLOBEC, GOOS and GCOS,

Approves the recommendations of the Sixth Session of the IOC Regional Committee for the Southern Ocean (Document IOCSOC-VI/3S);

Decides to revise the terms of reference of the IOC Regional Committee for the Southern Ocean as shown in the Annex to this Resolution;

Invites SCAR, SCOR, CCAMLR, COMNAP and IWC to consider adequate ways and means to strengthen co-operation with the IOC Regional Committee for the Southern Ocean, particularly within the framework of GOOS, as well as the exchange of environmental data and information on Southern Ocean ecology and marine living resources;

Invites the JSC for WCRP, SC for IGBP, I-GOOS, DBCP, GE/GLOSS to bear in mind the recommendations of the Regional Committee with a view to establishing close interaction with its activities;

Urges Member States of IOC to participate in the activities of the Regional Committee and designate official national contacts for SOC;

Instructs the Executive Secretary to establish and maintain the information network on the Southern Ocean national and international activities through World Wide Web and to arrange for publication of the proceedings of the First Southern Ocean Forum.

Annex to Resolution EC-XXIX.6

Terms of Reference of the IOC Regional Committee for the Southern Ocean (IOCSOC)

The IOC Regional Committee for the Southern Ocean (IOCSOC) shall:

- (i) promote plans for a comprehensive study of the Southern Ocean, within the context of global scientific issues and programmes;
- (ii) promote the development and coordination of joint ocean research and systematic ocean observations in the Southern Ocean, the latter in particular within the framework of WCRP and IGBP, GOOS and the GCOS;
- (iii) promote co-operation, training, education and mutual assistance among Member States and relevant international organizations in the study of the role of the Southern Ocean in global environmental and climate change; and in the investigation of marine pollution, living marine resources and ocean ecosystem dynamics; particularly within the frameworks of WCRP, IGBP, GIPME, OSLR and TEMA;
- (iv) closely co-operate and encourage exchange of relevant information with relevant international governmental and non-governmental organizations (e.g. ATCM, CCAMLR, WMO, FAO, UNEP, IWC, ICSU, SCAR, SCOR);
- (v) encourage timely exchange and evaluation of various types of oceanographic data and information in this region among Member States and relevant international organizations;
- (vi) in performing its activities, the Committee will take into account the need to not affect the respective sovereignties and jurisdictions of the coastal states of the region, nor to affect the rights and obligations emanating from the Antarctic Treaty and related instruments.

Estimate of financial requirements (in US\$) for 1996-1997 only:

<u>Activity</u>	<u>1996</u>	<u>1997</u>
Participation of the Chairman in the Antarctic Treaty Consultative Meeting, May, New-Zealand	--	3,500
Preparation, scientific editing and publication of proceedings of the Forum	--	4,000
		=====
Total:		7,500

Resolution EC-XXIX.7

BLACK SEA REGIONAL COMMITTEE (IOC-BSRC)

The Executive Council,

Noting the Summary Report of the First Session of the IOC Black Sea Regional Committee (Document IOC/BS-RC-I/3) held in Varna, Bulgaria, 9-13 September 1996,

Noting with satisfaction that the IOC Black Sea Regional Committee has reviewed the present knowledge, gaps and needs for future Black Sea research and related services in this region, as well as the international framework for co-operation with GEF, WMO, IAEA, UNEP, EU, NATO and other international governmental and non-governmental organizations,

Emphasizing that the Black Sea is unique in its physical and biochemical characteristics, and that its state plays an important role in the socio-economic aspects of the region,

Accepts the Summary Report, **approves** the Recommendations of the First Session of the IOC Black Sea Regional Committee and **notes** the workplan for 1996-1997 (Annex II of Document IOC/BS-RC-I/3);

Invites GEF, WMO, IAEA, UNEP, EU and NATO to consider ways and means to strengthen co-operation with the IOC Black Sea Regional Committee (BSRC), particularly within the framework of GOOS, JGOFS, GIPME, including the exchange of environmental data and information on Black Sea ecology and marine living resources;

Urges Member States of IOC to participate in the activities of the Regional Committee and designate official national contacts for the BSRC;

Requests the Executive Secretary IOC, *inter alia* in his capacity as Chairman of the Black Sea Regional Committee, to investigate the possibilities of financial and technical support for this programme from UNESCO and other international organizations, as well as interested institutes of countries not only from the Black Sea region.

Financial implications: US\$ 357,500 ; for the IOC: US\$ 60,000.

ANNEX III

ADDRESSES

A. Opening Address by Mr. Geoffrey L. Holland, Chairman, Intergovernmental Oceanographic Commission (IOC)

Mr. Executive Secretary,
Vice-Chairman,
Members of Delegations,
Representatives of governmental organizations and of non-governmental
bodies and organizations,
Ladies and Gentlemen,

It is a pleasure to welcome you to the Twenty-ninth Session of the Executive Council of the Intergovernmental Oceanographic Commission.

This is the first governing body meeting over which I have had the honour to preside. I feel particularly privileged, because I regard this Session as a most important one. We are in a time of opportunity, time when the decisions that we make and the actions that we take can and will influence global ocean programmes well into the next century.

It is easy to appreciate the relevance of this particular period. This decade has already seen many important events that have generated global issues and actions of direct concern to the oceans.

Over the last ten years we have seen the launching of many intergovernmental and international research programmes of global significance, most with direct or indirect ocean interests, the World Ocean Circulation Experiment (WOCE), the Joint Global Ocean Flux Study (JGOFS) and others, such as CLIVAR, GEWEX, GLOBEC, ACSYS and LOICZ.

Four years ago, the widely acclaimed UN Conference on Environment and Development made its recommendations regarding the future of the planet and its resources, resulting in many global programmes, activities and agreements involving the oceans and the work of our Commission. Notable among these are the Framework Convention on Climate Change, the Biodiversity Convention and our own Global Ocean Observing System which the IOC Assembly established in 1993.

Less than two years ago, the long-awaited UN Convention on the Law of the Sea came into force. The IOC has specific responsibilities within that convention, the role of which we will be addressing later in our agenda.

Only a year ago, an intergovernmental agreement was reached in Washington on the protection of the marine environment from land-based activities - an agreement with obvious implications for the Commission.

In May of this year, with the IOC assistance, the UN Commission on Sustainable Development reviewed the follow-up to the ocean activities in Chapter 17 of the UNCED Agenda 21, and in just over a year from now, the 1998 UN Year of the Ocean will commence with all its potential for focusing attention on ocean issues and emphasizing the need for collective national action.

This Session of the Executive Council will provide a springboard for the IOC programmes and initiatives leading up to, and beyond 1998. On the one hand, we are faced with an unparalleled opportunity for progress; on the other hand, if we fail to deliver, the future of the Commission as a global intergovernmental organization for the oceans will be jeopardized.

At this Session, as usual, you will hear from the Executive Secretary how the IOC programmes have fared over the past intersessional period, of the successes and of the weaknesses of our activities. We will be dealing with the development of the Commission within UNESCO, the programmes of that development and the need to evaluate our role and the need to strengthen our influence in Global Ocean Affairs. The DOSS-II *ad hoc* Study Group will be reporting on the results of its deliberations in the past intersessional period. We will need to supply guidance to the Executive Secretary on many matters relating to the capability of the Secretariat to manage our programmes over the next few critical years.

In May of this year, a meeting took place to further review the role of the Commission in the UN Convention on the Law of the Sea. You will be receiving the report of that meeting and be able to advise on future actions to complete these deliberations. In this respect, although the present emphasis is on the response to the existing articles, an equally important, but yet to be debated issue, is the future role of the Commission in revisions to the UNCLOS. Although in itself a landmark of international law, the UNCLOS is already dated and must surely be revised in the next ten years. Accurate data and dependable scientific advice will be needed to identify issues and to guide the subsequent debate and implementation. It is my personal opinion that the Commission must assume some responsibility in this regard.

This Session will need to consider actions and give guidance on many aspects of ocean observation and science. The Global Ocean Observing System is a necessary part of our future, but progress to-date has been disappointing. During the intersessional period, there have been several meetings related to GOOS and guidance as to the direction of this programme and how to obtain further commitments by Member States will be required. Related service programmes of the Commission such as IGOSS, IODE and ITSU, must also be considered in the future development of our ocean service related programmes.

Ocean measurements must be guided by science and the promotion and co-ordination of research programmes must remain an essential element of our activities. The Commission is a full partner in the continuing quest to reduce the scientific uncertainty of climate prediction, in the provision of seasonal forecasts of ocean and atmospheric environments, in the understandings of ocean ecology and productivity, in the health of the ocean and in the exploration of its living and non-living resources. Some of these issues are well in hand, others need to be examined and implemented.

Data and scientific advice relating to ocean issues are two important contributions that the IOC can make to the solution of national, regional and global problems. The Commission should also consider its role as a contributor to intergovernmental ocean management and policy development.

As a global organization, the Commission needs the full involvement of all of its Member States. This Session will hear the Summary Report from the First Meeting of the TEMA Group of Experts, and must advise on actions to be taken to improve our Training, Education and Assistance programme.

The IOC Statutes proclaim that the Commission will carry out ocean programmes through the collective efforts of its Member States. Unfortunately, we often make decisions and take actions at our governing body meetings that we then leave in the hands of the Secretariat to accomplish. If the Commission is to fulfil its role and function, we as Member States must take charge of the intersessional programme. The Secretariat has neither the capacity nor the responsibility to carry out programmes. The role of the Secretariat is to facilitate and co-ordinate the programmes and efforts of the Member States, to provide information, organize necessary meetings and to generally monitor the work of the Commission. It is up to ourselves, as Member States, to implement the actual programmes and to supply the political will to make things happen.

I hope that during this meeting, we will not only take the necessary steps to generate action but to make commitments to follow-up these actions through our national efforts.

**B. Opening Address by Mr. Federico Mayor,
Director-General of the United Nations Educational, Scientific and Cultural Organization
(UNESCO)**

Mr Chairperson,
Distinguished Delegates and Observers,
Ladies and Gentlemen,

I am very pleased to welcome you all to the Twenty-ninth Session of the IOC Executive Council, which is of course the first meeting of the new Council. The issues on your agenda are of importance for IOC, for UNESCO and for the world at large and I wish you a successful and constructive meeting.

In my address to the IOC Assembly in June 1995, I referred to the status and development of the Commission within UNESCO, in particular the implications for the IOC of the relevant proposals in the draft Medium-Term Strategy. I am pleased that these proposals to the 28th General Conference were in principle endorsed. The IOC was given an incompressible budget with respect to both programme and staffing components. The Executive Board had debated these matters in detail at its 147th session before the General Conference, as well as the experimental elements of administrative and operational flexibility which I gave to the IOC by delegating certain of my responsibilities to the Executive Secretary IOC. All these measures were taken in response to the general endorsement given by the General Conference at its 27th session to the proposals made by the IOC Assembly at its Seventeenth Session in 1993.

Since the General Conference in 1987 when the present Statutes of the IOC were adopted, there has been continuous and carefully monitored progress toward the functional autonomy of the IOC within UNESCO. Dialogue with the Executive Board on this question has benefitted from close reporting of developments concerning IOC.

At its 149th Session the Executive Board requested me "to submit to it for decision at its next session a detailed report, specifying the scope of the measures aimed at conferring operational flexibility on the Intergovernmental Oceanographic Commission (IOC) at the administrative and financial level, and reviewing the work of the *ad hoc* Group on the Development, Operations, Structure and Statutes (DOSS II) of IOC." This has been done in document 150EX/9. I would like to emphasize that I have specifically referred in this report to the wishes and proposals expressed by the IOC Assembly and Executive Council. Allow me to re-emphasize in this context your responsibility to ensure that proper briefing and information is provided at the national level so that the views and positions adopted in the IOC bodies are properly reflected in the debates and decisions of the Executive Board. It is your responsibility to inform your relevant national bodies about the importance of the IOC and your wishes concerning its development within UNESCO.

At its 147th session, the Executive Board had recommended in 147 EX/Decision 5.1 that: "a report be presented to the Executive Board at its 150th session on the possibility of establishing a financial allocation for the functioning of IOC, to which the Member States of IOC, non-members of UNESCO, will be invited, through an appropriate mechanism, to make a regular contribution". The response to this recommendation is also to be found in document 150 EX/9. I should like to underline the special importance of this matter, which I know the Executive Secretary is presenting to you in one of your agenda items.

I am very pleased that the Executive Secretary now has the rank of Assistant Director-General. I am also very pleased to confirm that three senior professional posts are under recruitment for the IOC, including that of Deputy Secretary. You should be aware that IOC is privileged in this respect within UNESCO, as we are generally not able to recruit staff given our present resource situation. As regards further staff evolution, I consider that the proper way forward for UNESCO at the present juncture is further decentralization to Field Offices. The possibility exists of a UNESCO Office being established for the IOC in Lisbon. I consider this an attractive option, and I understand that the Executive Secretary is waiting for a firm offer from Portugal.

Do not hesitate to request new modalities of action, new procedures, etc. We must adapt, we must anticipate... we must respond to the pace of life... to the pace of the oceans. It is not an excuse to say that institutional obstacles prevented us succeeding. I am ready to dare.

With respect to the future evolution of IOC, I would encourage you to reflect on the importance of the United Nations 1998 International Year of the Ocean and related initiatives. One such initiative is the Independent World Commission on Oceans started in 1995, to which I attach great significance. I would like the IOC to co-operate with that Commission to the extent possible. With respect to the 1998 Year of the Ocean, it is important to me that you define the overall aim of the undertaking and that you spell out the means to achieve them.

I agree that the overall aim of our joint efforts should be to focus attention on the importance of the oceans and the marine environment as a resource for sustainable development in its own right. To achieve this goal, it is necessary for IOC to ensure that its Member States give to ocean issues the level of priority they deserve. This is most important in view of the finite resource the oceans represent and increasing pollution threats, population pressures and overfishing. We now understand that without healthy oceans the life-support systems of the Earth would be seriously endangered. The goal of the IOC must be to underscore this point strongly. To this end, the IOC should project itself as a body which can deliver both the scientific rationale and the elements of a global management system based on the sustainable use of oceans. Co-operation with the Independent World Commission on Oceans will be important in this connection.

I also propose that a major objective of IOC in 1998 should be to obtain a commitment from governments to further strengthen the IOC within UNESCO. This means: (i) increasing the operational budget from contributions and extrabudgetary resources; (ii) expanding the staff through secondment from governments and organizations to boost intellectual and working capacity; (iii) ensuring the availability of international leadership for the development and expansion of GOOS. In order to achieve all this, it is first necessary to demonstrate the importance of the oceans for life and sustainable development, and the consequent need for a mechanism such as the IOC. Thus the programme should include actions which sensitize governments, the public and society at large to the significance of oceans for our common future.

In your discussions on these matters, I hope you will bear the following aspect in mind. I consider that science and systematic observations can provide solutions to many of our problems, but that we should offer not only diagnoses but also prognoses and remedies. It is therefore important that the IOC should provide users and decision-makers with a clear assessment of the problems and summaries of the results of its efforts. I suspect that the IOC - like UNESCO as a whole - can improve substantially in this regard. It is also of utmost importance that GOOS receive all possible support and that IOC maintain its leadership in this programme. The follow-up to UNCED and response to UNCLOS is of great relevance for IOC and must be continued and strengthened. These are important matters for you to evaluate in order to ensure a more effective IOC for the 21st Century.

I wish you every success in your work and I take this opportunity to underline my strong commitment to the Oceans and my support to the IOC of UNESCO.

**C. Statement by Dr. Gunnar Kullenberg,
Executive Secretary IOC, on his Intersessional Report**

Mr. Chairman,
Distinguished Delegates and Observers,
Colleagues,
Ladies and Gentlemen,

It is an honor for me to briefly present again the intersessional report on activities since the Assembly, June 1995. My presentation is essentially based on the Annual Report 1995 which you should have received. I will only highlight certain matters which I consider the Council needs to address, and inform you about some programmes which do not appear on this EC agenda. I address both items 3.1 and 3.2. Refer to Annual Report 95, Annotated Agenda and Annexes.

The structure of the Annual Report follows the suggestions and instructions brought out by the Assembly and EC in 1993 and 1994. First the implementation of the Resolutions is reviewed. I wish to draw attention to Resolution XVIII-7 on Coastal Regions and Small Islands. The instructions have been implemented. After the 28th Session of the General Conference, the Director-General issued instructions on the establishment of the CSI unit, the joint management committee for the Project, and the role of the Executive Secretary IOC as Vice-Chairman of that committee. The co-operation between the intergovernmental programmes, including the social programme on Management of Social Transformations (MOST) follows the Joint Statement of the Chairs of these programmes and the IOC. The implementation of the Joint Statement has a high priority in UNESCO. The expert meeting on the Coastal Zones and Small Islands project is now scheduled for 25-28 November 1996 here at UNESCO. The Chairman IOC will attend ex-officio, and the Fourth Vice Chairman, Dr Okemwa, has also been invited. Mr Chairman, discussion about the project and related matters can also be made under EC Agenda item 8, point (II).

I would like to bring to your attention the developments regarding Resolutions XVIII-10, 11 and 12, in particular as regards the staffing situation within IOC Secretariat. The post of Director of the GOOS Support Office is expected to be filled by the end of this year. A short list of the preferred candidates has been presented to the Director-General of UNESCO, following consultations with WMO, UNEP and ICSU, co-sponsors of GOOS. The Director-General will make the final selection and appointment, (possibly after consultation with the UNESCO Executive Board). Two other senior posts are in the process of being filled. The P-5 in charge of GIPME is expected to be recruited by the end of the year, and the P-4 stationed at the WESTPAC Secretariat in Bangkok fairly early in 1997. I wish to point out that the so-called lapse factor maintaining vacant posts vacant for a period of time in order to save money, is also being applied to the IOC despite our so-called functional autonomy and incompressible budget! Although we are allowed to use the money from vacant posts, this situation has caused considerable problems in relation to the recruitment of the post of documentalist, chief clerk. In the case of one secretary, the delay is until end March 1997, despite the fact that this secretary has been duly selected, nominated, appointed, and is working in the IOC Secretariat. With respect to the Coral Reef Co-ordinator (Resolution XVIII-12), it must be noted that we do not have funds beyond 12-18 months. I hope other Member States will contribute dedicated funds in addition to the USA. I would also like to inform you about the support of the UK-ODA through the secondment of an expert to the IOC to be out stationed in the Indian Ocean Region to prepare a consolidated project for that region. This is a very positive development.

The section on Resolutions is followed by a brief General Overview in which the Executive Secretary brings to the attention of Member States certain important points. This policy-oriented statement responds to wishes expressed at the Assembly in 1993 and EC 27 in 1994.

First, I wish of course to refer to the very considerable positive developments regarding the IOC within UNESCO, on the basis of decisions of the Executive Board and the 28th General Conference. The Financial Regulations for the Special Account were adopted. Following your instructions, draft financial rules are presented to you in Annex 2 to the Annotated Agenda for

preliminary consideration and advice. The General Conference approved an incompressible budget for the IOC, including a total staff allocation of 22 UNESCO staff. We have 7 filled UNESCO professional posts and 2 vacant, and 13 General Service. In addition, 1 P-4 for WESTPAC, Bangkok and 1 P-4 and 1 GS from WMO, IMO and FAO. This should be compared with the statement in 1993 by the DDG in his address to the Assembly. It was stated that there were 39 posts in all under supervision of the Secretary IOC. So, we have been cut in half! Mind you, I have many dedicated staff who work hard for the IOC and I wish to express my appreciation and thanks to all of them.

An overview of reasonable staff requirements was presented to DOSS-II at its first meeting. We need to at least double professional posts to cover the programme demands. The project on coastal zones and small islands reduced the IOC-MRI office to only IOC, in that the MRI part was transferred to the CSI Unit, including the financial resources. This was, in all, 4 professional posts. At the same time, the IOC Secretariat has been requested to take over fully or partly some of the former MRI programmes, in particular, the floating university and part of the remote sensing modules, both as regards finances and services of these actions. At the same time we have lost the publication unit which we shared: this is now listed as CSI.

The CSI project itself and the Joint Statement of the Chairs also put additional demands on the staff. Several joint activities involving IOC and IHP, MAB, IGCP are underway. Of course, these and other programmes also contribute to ocean activities. We have additionally made a drive for intersectoral co-operation and we are leading a task team for UNESCO preparations for 1998. I wish to emphasize that 1998 preparations will demand special attention from now on and that I will have to dedicate one professional for that purpose alone. The question is who? We need a co-ordinator for that purpose, and we can only obtain one by secondment. Who is willing and able to provide this quickly?

However, it is not only this positive result. It is also the implications as regards the changing role of the IOC and the IOC evolving role as an on-going process, highlighted in Lisbon in 1994. In UNESCO, the IOC is not viewed as having a larger role in relation to interpretation or research results than before, as regards the implications for policy and sustainable management, as regards preparing synthesis and assessments and options for solutions and decisions. Science can produce and suggest solutions to problems of society, and the IOC has now a confirmed role to play in this process. The IOC must now follow-up these implications of the positive development in UNESCO - and take on our role in sustainable development, ocean management and coastal area development, as real follow-up to UNCED, as well as to support Member States' efforts in UNCLOS, in global and regional change. We have been given the task of protecting/safeguarding humanity with respect to physical changes resulting from changes of the oceans. This is the most important implication for IOC and we must live up to it - we must now take this on.

The IOC can no longer be a specialized club of government marine scientists and the various research projects - we are now viewed as much more. This follows not only from the decision of the Executive Board and General Conference, but is fully in line with the Assembly's adoption of the IOC Medium-Term Strategy last year, and of GOOS, etc. This is also why the Agenda item 9 on assessment is on the Agenda; as well as UNCED follow-up.

The IOC Secretariat is hard pressed to deliver. Following your concurrence, the Director of the GOOS Support Office post is the former Deputy Secretary. The Assembly in its Resolution XVIII-11 instructed me to arrange so - and this was the only way of doing it at the level we have agreed. This means that the Executive Secretary will have continuous work with all details in the Office. It will have to fall on the professional staff to ensure delivery of programme actions. There are many new developments which IOC should follow closely. The Independent World Commission on Oceans is one; preparations of assessments and synthesis of results for presentation to users, governments, Member States are becoming increasingly important, and IOC needs to produce these materials; information and public awareness material likewise. This is required not only for 1998 but also for the CSD 1997 session, the special session of the UNGA with the review of UNGA of follow-up to UNCED, etc.

I am very well aware that we are not achieving what we want to achieve in this regard. Unfortunately, I have not been able to dedicate sufficient resources for this very important part. Neither

have I been able to obtain support for additional dedicated staff for OSLR and OSNLR and Ocean Mapping. This cannot be achieved without more help from the Member States. I would like in this context to refer to evaluation - this is being much discussed - I would welcome evaluation - please refer to Statutes of IOC.

The credibility of the IOC is strongly dependent upon our ability to deliver results and to meet our commitments as regards joint programmes, e.g., GOOS, GCOS, GIPME, where we have signed agreements. I have to admit some difficulties in this context. We have difficulties in providing the financial support required for our co-sponsorship of the WCRP, GCOS and even GIPME. We can anticipate further similar problems in relation to UNCLOS and possibly ICAM. Furthermore, the 1998 programme will require large commitments which must be met by the IOC. Several of these points should be discussed under other Agenda items of this EC.

With respect to programme implementation which is presented in Section B. of the Report, I wish to emphasize: the climate programme, in which IOC is playing an important role, including in relation to the UNFCCC. At COP II we delivered a CD ROM with all sea level data and presented it to the Secretariat for delivery to small island states.

OSLR: there is a strong need for a professional post in the Secretariat, especially for the successful HAB, but also to cover biodiversity, and regional OSLR projects. OSNLR and OSLR are important for our coastal zone activities; OSNLR is concentrating on these matters. Ocean Mapping also needs a post. The GIPME programme is going well, but we have problems with our co-operation with IAEA-MESL and UNEP with respect to resources. The IOC is not in a position to provide sufficient financial support to MESL under the present conditions. This was never intended, but is now increasingly demanded by our partners. My inclination is to provide financial support for specific joint actions only, and clarify that the IOC support to GIPME is the main base for GIPME.

However, we are presently endeavoring to match the contribution of UNEP so as to maintain the base for this very important and unique activity. Consultations with UNEP have agreed that we for the time being maintain the GIPME Panel and aim at convening a meeting in Nairobi at the General Conference in 1997.

The Ocean Services programmes require and deserve more attention. It is clear that there is a shift in interests and that IOC must ensure adequate delivery. The IODE is developing very well but GOOS could do better. Specific elements which are related to GOOS, like GLOSS, IGOSS, Ocean PC are developing very well. Many of the IOC programmes are contributing towards the development of GOOS. In several regions regional GOOS are emerging - e.g. NEAR-GOOS, Black Sea GOOS, IOCARIBE-GOOS. These are all related to IOC efforts. However, GOOS needs much more attention from Governments, and they have to decide on using IOC as the intergovernmental mechanism for GOOS. Commitments and clear signals and some leaderships from the Member States are necessary now.

The TEMA activities cover all programmes of IOC, and at least 50% of our resources in different ways are allocated to, and used for, capacity building. Special attention is given to TEMA in a separate agenda item.

The regional activities and associated bodies are becoming increasingly important. We must maintain these, and at the same time obtain increasing support for them from the regions themselves. You must help in this process. Most of them are relevant for coastal zones and for follow-up to UNCED and UNCLOS. We have brought these regional mechanisms to the attention of national donor agencies, such as SIDA (SAREC), CIDA, DANIDA, Flanders, and have achieved some response and success. However the Governments must also come out and stand behind IOC.

The co-operation with other bodies and joint programming has obtained additional importance after UNCED. It is now mandatory - but is also putting an increasing pressure on us. It is most difficult for IOC to achieve proper acknowledgment; since we are a part of UNESCO we are not noted in our own right except in cases where we have penetrated sufficiently. I would have thought we had achieved this in UNEP, but it does not appear so. There are an increasing number of UNEP

documents in which there is no reference to IOC even when we have joint programmes relevant to the subject, e.g., GIPME, GOOS, WCP. I have referred to the increasing interaction with UNESCO.

Follow-up to UNCED and UNCLOS is of course essential for IOC. However, it is not enough for the IOC Secretariat to try as well as it can. Member States must help at the national level. The CSD delegation must know about the existence of IOC - most of them do not. You must help there. Likewise as regards UNCLOS - you must inform your national delegations about IOC. We are well known in WMO, and now in COP of FCCC and biodiversity, thanks to dedicated efforts on the part of the IOC Secretariat. We do not have enough resources to achieve this for other important bodies only through the Secretariat. You need to work nationally to obtain a high-level champion for IOC! Or you have to decide that you do not want IOC - so serious people like myself can go somewhere else to work.

With respect to 1998, some ideas and plans are given in the report, and more in Annex 3 to the Annotated Agenda. I wish to call this to your particular attention, especially with reference to the Section headed "Overall Aim and the Means to Achieve It". You must provide your advice on these matters and give instructions. And you must get yourself engaged in this process for 1998. Additional information and ideas are given in the Appendix to Annex 3 - by the Chair IOC. However, now we need action - not only ideas.

A special section of the Annual Report is devoted to the Developments of IOC within UNESCO. This is given in order to provide a record of developments since about 1990. I think it is important that such a record exists, and this account was reviewed by the IOC Officers earlier this year.

You will recall that the Assembly instructed me to present a model of a programme and budget presentation for 1998-1999 for your comments and advice. This is being done in conjunction with the item on programme and budget, i.e. item 10 of the Agenda; in Annex 6, the model relates to the structure used for the IOC TF in the Special Account and to the structure of the IOC Secretariat.

You will recall that the Assembly endorsed a structure based on three major pillars: sciences, services, TEMA and regional activities (IOC-XVIII, para 74). This is essentially the model now being used, and gradually strengthened. Ultimately, the expected contributions to the IOC TF are related to the financial model.

Allow me also to draw to your special attention my own situation. I have informed the Director-General that I consider it best for the IOC that I retire end of 1997 or early 1998 and I prepared a post description earlier this year. The Chairman IOC has reviewed it, and I was hoping it would appear and that the post would be announced soon. The EC meeting during the next Assembly will have to express its views as regards the candidates to the Director-General in accordance with the Statutes, Article 9(2). This is why the agenda item on clarification or guidance for the EC procedure is on the Agenda.

Let me conclude with some personal remarks. The credibility of the IOC and ability to deliver is of paramount importance in relation to all our efforts and especially the follow-up to UNCED, development of GOOS, the related conventions as well as with respect to UNCLOS. It is the actions which now count - not talk. It appears to me that one most important positive action which can be obtained is that Member States positively acknowledge and support the IOC as an instrument and existing body which should be used, which can deliver, and which is made to work and function.

It is time for Member States to make up their minds with the respect to the IOC. I have recently visited Member States which represent the majority of the population of the Earth - and their strong support of the IOC is at least very clearly communicated to me. However, I told them that they should also inform other important Member States about their views. The IOC is established within UNESCO and much support is provided from the mother organization. I hope that you will seriously consider what the IOC wants or should get out of 1998. I have indicated in Annex 3 of the Annotated Agenda what I consider we should aim for.

Thank you for your attention.

ANNEX IV

LIST OF WORKING DOCUMENTS ¹

IOC/EC-XXIX/1	Agenda
IOC/EC-XXIX/1 Add.prov.	Provisional Timetable
IOC/EC-XXIX/2	Annotated Provisional Agenda (Expanded)
IOC/EC-XXIX/2 Annex 1	Mechanisms to Facilitate the Provision of Dependable Resources to the IOC Special Account also from Member States of IOC not Member States of UNESCO
IOC/EC-XXIX/2 Annex 2	Draft Financial Rules for the Special Account of the IOC
IOC/EC-XXIX/2 Annex 2 Add.	Financial Regulations applicable to the Special Account of the IOC
IOC/EC-XXIX/2 Annex 3	Programme proposal for the IOC Contribution to 1998 International Year of the Ocean
IOC/EC-XXIX/2 Annex 3 Add.	1998 International Year of the Ocean: A Prospectus for Development
IOC/EC-XXIX/2 Annex 4	Progress report of the Intersessional Working Group on IOC's Possible Role in Relation to UNCLOS
IOC/EC-XXIX/2 Annex 5	Proposed Clarifications for Consultations with the Director-General on the Appointment of the Secretary IOC
IOC/EC-XXIX/2 Annex 6	Budgetary Status Report
IOC/EC-XXIX/2 Appendix 1	Draft Terms of Reference for the Working Group on the Transfer of Organisms by Ballast Water
IOC/EC-XXIX/3	Summary Report
IOC/EC-XXIX/4	List of Documents
IOC/EC-XXIX/5	List of Participants
IOC/EC-XXIX/6	Progress Report of DOSS-II
IOC/EC-XXIX/Inf.1	UNEP Statement to the Twenty-ninth Session of the IOC Executive Council
IOC/EC-XXIX/Inf.2	Status of Implementation of Resolution XVIII-9 on Marine Biodiversity and Related Work Plan 1995-1997 and Co-operation with the Convention on Biological Diversity
IOC/EC-XXIX/Inf.3	<i>Ad hoc</i> Informal Meeting - Discussion of DOSS matters

¹ This list is for reference only. No stocks of these documents are maintained, except for the Summary Report.

IOC/EC-XXIX/Inf.4

Ad hoc Informal Meeting of DOSS-II

IOC/EC-XXIX/Inf.5

Proposed Draft Text. Proposed by the Chairman's *ad hoc* Group, for Consideration in Plenary, of Mechanisms to facilitate the Provision of Dependable Resources from Member States of the IOC non-Members of UNESCO

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ANNEX VI

STATEMENT BY THE BRAZILIAN DELEGATION ON ITEM 5.4

My Delegation wishes to recognize, for the records, the excellent work done by the intersessional working group on IOC's role in relation to the UNCLOS, whose report the Brazilian Delegation wishes to see approved by this Executive Council.

I believe, Mr Chairman, that this document is highly satisfactory to all Member States that do not wish to see a duplication of efforts nor a conflict of tasks of international organizations who deal with matters related to the sea.

My Delegation proposes that the document IOC/EC-XXIX/2 Annex 4 is approved and recommends that it is also approved by the Nineteenth Session of the IOC Assembly to be held in 1997.

The Brazilian Delegation also wishes to make a statement on another topic, mentioned by the Technical Secretary, related to the edition of a technical and scientific publication on the definition of the continental shelf of coastal states.

I could not abstain from stating that my Delegation was surprised as it took notice of document IOC/INF-1040 yesterday, containing the report of the meeting of the IOC-IHO Editorial Board about the preparation of the said publication.

I noticed that the report of the First Session of the Editorial Board states that it will focus on technical and scientific aspects of the definition of the continental shelf of coastal states. But, Mr Chairman, even though it is so intended, the matter involves political and legal implications, which means a due evaluation must be taken by the governments of the Member States of IOC and UNCLOS.

In the light of these comments, I must say that my Delegation has many objections to formulate. If not objections, at least some serious doubts which undermine my country's support to the mentioned initiative of IOC-IHO.

First of all, my Delegation was puzzled by the fact that there were neither official consultations with the Brazilian Government, nor with other Governments about the elaboration of a manual on the definition of the continental shelf. We were also surprised that many steps were taken regarding the subject without any information being circulated among Member States of IOC.

I should also add that my Government was not officially notified about the existence of a formal request of DOALOS to elaborate the manual. It seems most probable that some parallel understandings took place, either between experts or IOC and DOALOS Secretariats.

Finally, Mr Chairman, considering the implications I have just referred to, bearing in mind the inevitable legal and political aspects that concern the matter and considering the co-operation between DOALOS, IOC and IHO, my Delegation believes that this initiative of publishing the manual should be submitted beforehand, to the forthcoming IOC Assembly.

I also wish to state that my Government recognizes the efforts carried out by the IOC Secretariat. In this case, however, there are reservations that lead me to express my Delegation's disapproval of the manner in which the subject was carried on.

I have to state, as well, that it seems impossible that Brazil participate in the efforts to elaborate the manual or that it endorse the initiative if the manner in which the subject is carried out persists.

Thank you, Mr Chairman.

ANNEX VII

LIST OF ACRONYMS

ABLOS	Advisory Board on the Law of the Sea
ACC	Administrative Committee on Co-ordination (UN)
ACSYS	Arctic Climate System Study
ALACE	Autonomous Lagrangian Circulation Explorer
AODC	Australian Oceanographic Data Centre
APEC	Asia-Pacific Economic Co-operation Council
ASEAN	Association of South-East Asian Nations
ASFA	Aquatic Sciences and Fisheries Abstracts
ASOS	Automated Seismological Observation System
ASOS	Programa Subregional del Atlántico Sud-Occidental Superior/Sub-regional Programme for the Upper Southwest Atlantic Ocean (Argentina, Brazil, Uruguay)
ATCM	Antarctic Treaty Consultative Meeting
AVHRR	Advanced Very High Resolution Radiometer
BRGM	Bureau de recherches géologiques et minières (France)
BSRC	Black Sea Regional Committee
CBD	Convention on Biological Diversity
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CCOP	Committee for Co-ordination of Joint Prospecting for Mineral Resources in Asian Offshore Areas
CEA	Commissariat à l'énergie atomique (France)
CEC	Commission of the European Communities
CEOS	Committee on Earth Observation Satellites
CERESCOR	Centre de recherche scientifique de Conakry (Guinea)
CICESE	Centro de Investigación Científica y de Educación Superior de Ensenada (México)
CIDA	Canadian International Development Agency
CIRM	Comissão Interministerial para los Recursos del Mar (Brazil)
CLCS	Commission on the Limits of the Continental Shelf
CLIVAR	Climate Variability and Predictability
CMM	Commission for Marine Meteorology
COMNAP	Council of Managers of National Antarctic Programmes
COMSBLACK	Co-operative Marine Science Programme for the Black Sea
CPR	Continuous Plankton Recorder
CSD	Commission on Sustainable Development
CSI	Project on Environment and Development in Coastal and Small Island Regions (UNESCO)

CSIRO	Commonwealth Scientific and Industrial Research Organization
CTD	Conductivity-Temperature-Depth Probe
DANIDA	Danish Agency for International Development
DBCP	Data Buoy Co-operation Panel
DOALOS	Division for Ocean Affairs and the Law of the Sea (UN)
DOSS	Ad hoc Study Group on IOC Development, Operations, Structure and Statutes
EC	European Community
EEZ	Exclusive Economic Zone
ESCAP	Economic and Social Commission for Asia and the Pacific
ETDB	Expert Tsunami Database for the Pacific
EU	European Union
EURASLIC	European Aquatic Sciences and Libraries and Information Centres
EuroGOOS	European Programme for the Global Ocean Observing System
FANSA	Floraciones Algaes Nocivas en Sudamérica (Harmful Algal Blooms in South America)
FAO	Food and Agriculture Organization of the United Nations
FCCC	Framework Convention on Climate Change
FURES	Ad hoc Study Group on Measures to Ensure Adequate and Dependable Resources for the Commission's Programme of Work
GCOS	Global Climate Observing System
GEBCO	General Bathymetric Chart of the Oceans
GEF	Global Environment Facility
GEMIM	Group of Experts on Marine Information Management
GESAMP	Group of Experts on the Scientific Aspects of Marine Environmental Protection
GETADE	Group of Experts on Technical Aspects of Data Exchange
GEWEX	Global Energy and Water Cycle Experiment
GIPME	Global Investigation of Pollution in the Marine Environment
GLOBEC	Global Ocean Ecosystems Dynamics
GLOSS	Global Sea-Level Observing System
GODAR	Global Oceanographic Data Archaeology and Rescue Project
GOOS	Global Ocean Observing System
GPA	Global Programme Action
GTOS	Global Terrestrial Observing System
GTS	Global Telecommunication System
GTSP	Global Temperature-Salinity Pilot Project
HAB	Harmful Algal Blooms
HOTO	Health of the Oceans (Module of GOOS)
IAEA	International Atomic Energy Agency
IAMSLIC	International Association of Aquatic and Marine Science Libraries and Information Centres

ICAM	Integrated Coastal Areas Management (IOG/GIPME)
ICES	International Council for the Exploration of the Sea
ICG	International Co-ordination Group
ICOD	International Centre for Ocean Development (Canada)
ICSPRO	Inter-secretariat Committee on Scientific Programmes Relating to Oceanography
ICSU	International Council of Scientific Unions
IDNDR	International Decade for Natural Disaster Reduction (1990-1999)
IFREMER	Institut français de recherche pour l'exploitation de la mer
IGBP	International Geosphere-Biosphere Programme (UNESCO)
IGCP	International Geological Correlation Programme (UNESCO)
IGOSS	Integrated Global Ocean Services System
IHDP	International Human Dimensions Programme
IHO	International Hydrographic Organization
IHP	International Hydrological Programme (UNESCO)
IMO	International Maritime Organization
IMS	International Marine Science Newsletter
IOC	Intergovernmental Oceanographic Commission
IOCARIBE	IOC Sub-Commission for the Caribbean & Adjacent Regions
IOCEA	IOC Regional Committee for the Central Eastern Atlantic
IOCINCWIO	IOC Regional Committee for the Co-operative Investigation in the North and Central Western Indian Ocean
IOCINDIO	IOC Regional Committee for the Central Indian Ocean
IOCSOC	IOC Regional Committee for the Southern Ocean
IODE	International Oceanographic Data and Information Exchange
IPCC	Intergovernmental Panel on Climate Change
IPHAB	Intergovernmental Panel on Harmful Algal Blooms
ITIC	International Tsunami Information Centre
ITSU	International Co-ordination Group for the Tsunami Warning System in the Pacific
IUGG	International Union of Geodesy and Geophysics
IWC	International Whaling Commission
IWCO	Independent World Commission on Oceans
JGOFS	Joint Global Ocean Flux Study
JSC	Joint Steering Committee (for WCRP)
JSTC	Joint Scientific and Technical Committee (for GCOS)
KMFRI	Kenya Marine and Fisheries Research Institute
KORDI	Korean Ocean Research and Development Institute
LIPI	Indonesian Institute of Sciences
LME	Large Marine Ecosystems
LMR	Living Marine Resources

LOICZ	Land-Ocean Interaction in the Coastal Zone
MAB	Programme on Man and the Biosphere (UNESCO)
MARPOLMON	Marine Pollution Monitoring System
MAST	Specific Research and Technological Development Programme in the field of Marine and Science Technology
MEDAR	Mediterranean Data Archaeology
MEDATLAS	Mediterranean Atlas
MEDI	Marine Environmental Data Information Referral System
MESL	Marine Environment Studies Laboratory
METU	Middle East Technical University (Turkey)
MFS	Minor Field Study
MGG	Marine Geology and Geophysics
MIM	Marine Information Management
MOU	Memorandum of Understanding
MRI	Meteorological Research Institute
NATO	North Atlantic Treaty Organization
NEAR-GOOS	North-East Asian Regional-Global Ocean Observing System
NGWLMS	Next Generation Water-Level Measurement System
NOAA	National Oceanic and Atmospheric Administration (USA)
NODC	National Oceanographic Data Centre
NOP	National Oceanographic Programme
OCEAN-PC	Ocean Personal Computer Project
ODAS	Ocean Data Acquisition Systems, Aids and Devices
ODINEA	Ocean Data and Information Network for Eastern Africa
OOPC	Ocean Observations Panel for Climate
OOSDP	Ocean Observing System Development Panel
OSLR	Ocean Sciences and Living Resources
OSNLR	Ocean Sciences in Relation to Non-Living Resources
OSRS	Ocean Satellites and Remote Sensing
PERSGA	Red Sea and Gulf of Aden Environment Programme
PICES	North Pacific Marine Science Organization
PIP	Plans and Implementation Programme
PMEL	Pacific Marine Environmental Laboratory
POEM	Physical Oceanography of the Eastern Mediterranean
QC	Quality Control (of Data)
RECOSCIX	Regional Co-operation in Scientific Information and Exchange
RNODC	Responsible National Oceanographic Data Centre
ROPME	Regional Organization for the Protection of the Marine Environment
SAHFOS	Sir Alister Hardy Foundation for Ocean Science (UK)

SAREC	Swedish Agency for Research Co-operation with Developing Countries
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice
SCOPE	Scientific Committee on Problems of the Environment
SCOR	Scientific Committee on Oceanic Research
SEACAMP	South-East Asian Center for Atmospheric and Marine Prediction
SEFC	Southeast Fisheries Centre
SIDA	Swedish International Development Authority
SOA	State Oceanic Administration (China)
SOC	Specialized Oceanographic Centre
SOO	Ship-of-Opportunity
SOOP	Ship-of-Opportunity Programme
SOOPIP	Ship-of-Opportunity Implementation Panel
SOPAC	South Pacific Applied Geoscience Commission
SPACC	Small Pelagic Fish and Climate Change Programme
SSC	Scientific Steering Committee
STAP	Scientific and Technical Advisory Panel
START	Global Change System for Analysis, Research and Training
TAO	Tropical Atmosphere Ocean Array
TOGA	Tropical Ocean and Global Atmosphere
TIME	Tsunami Inundation Modelling Exchange Project
TREMORS	Tsunami Risk Evaluation through Seismic Movement from Real-time System
TEMA	Training, Education and Mutual Assistance in Marine Sciences
UATI	Union internationale des associations et organismes techniques
UNCED	United Nations Conference on Environment and Development
UNCLOS	United Nations Convention on the Law of the Sea
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	United Nations General Assembly
WCP	World Climate Programme
WCRP	World Climate Research Programme
WCS	World Conservation Strategy
WDC	World Data Centre
WESTPAC	IOC Sub-Commission for the Western Pacific
WIO	Western Indian Ocean
WIPO	World Intellectual Property Organization
WMO	World Meteorological Organization
WOCE	World Ocean Circulation Experiment
WWW	World Weather Watch

WWW

World Wide Web

XBT

Expendable Bathythermograph