



IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE)

Seventh Session
Veracruz, Mexico
25-28 February 2002

**IOC Sub-Commission
for the Caribbean and Adjacent
Regions (IOCARIBE)**

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IOC/SC-IOCARIBE-VII/3
Paris, 15 November 2002
Original: Spanish*

(SC-2002/WS/26 Rev)

* Translated only in English

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1. OPENING

1 The Seventh Intergovernmental Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE) was opened by the Constitutional Governor of the State of Veracruz, Lic. Miguel Aleman Velasco at 09:00 on Monday 25 February 2002, at the World Trade Convention Centre in Veracruz, Mexico. The Seventh Intergovernmental Session took place two (2) years and nine (9) months after the previous IOCARIBE-VI Session held in Costa Rica in April 1999, where the Mexican delegation kindly offered to host this Session and it was accepted by participating delegates and IOC-UNESCO.

2 The Executive Secretary for the Intergovernmental Oceanographic Commission of UNESCO, Dr Patricio Bernal, responded on behalf of UNESCO - IOC. He thanked the Government of Mexico and its Local Organizing Committee for the hospitality and excellent facilities provided for the meeting. In his opening speech Dr Bernal informed the audience about the new structure of the IOC's Ocean Science Section which comprises three main programmes: Oceans and Climate, Ocean Ecosystems Science and Operational Observing System. This new structure follows the challenge of maintaining a sustainable use of the ocean and its resources.

3 Dr Reyes Tamez Guerra, Secretary of Public Education of Mexico welcomed the participants and delegates from Member States, countries and regional organizations. He expressed the satisfaction of the city of Veracruz for hosting all delegations attending the Session and inaugurated the Seventh Intergovernmental Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions.

4 The IOCARIBE Chairman, Dr Bradford Brown (USA), welcomed the participants and officially declared opened the Seventh Intergovernmental Session. He highlighted that this was the first meeting of the Sub-Commission in this century and also stressed that the meeting precedes the 2002 World Summit on Sustainable Development to be held next September in Johannesburg, South Africa.

5 In his Opening remarks, Dr Bradford Brown emphasized the importance of the meeting and the fact that the decisions made towards scientific development should be based on scientific knowledge.

2. ADMINISTRATIVE ARRANGEMENTS

2.1 ADOPTION OF THE AGENDA

6 The Provisional Agenda for the Session (Doc. SC-IOCARIBE-VII/1 Prov.) was submitted to delegates for their review.

7 The Delegate of Cuba, Dr Guillermo Garcia-Montero provided advice on agenda item 6. He suggested that the meeting should concentrate on projects that have advanced during the intersessional period. He also mentioned that in order to discuss the other projects, one must rely on the information provided by the Secretary in his report.

8 The approved Agenda as adopted during the Session is included in Annex I.

9 **The Sub-Commission adopted** the Agenda with some corrections.

2.2 DESIGNATION OF RAPPORTEUR FOR THE SESSION

10 The Sub-Commission appointed Mr Jose Luis Frias from Mexico as Rapporteur for Spanish and Mr Alan Duncan, from Trinidad and Tobago as English Rapporteur for the Session.

11 **The Sub-Commission unanimously approved** this motion.

2.3 CONDUCT OF THE SESSION, TIMETABLE AND DOCUMENTATION

12 The IOC Secretary for IOCARIBE, Dr Cesar Toro, introduced the Provisional Timetable for the Session (Doc. SC-IOCARIBE-VII/1 Prov. Add.) and the Provisional List of Documents (Doc. SC-IOCARIBE-VII/4 Prov.).

13 Regarding the schedule proposed in the timetable, delegates suggested that the meeting should begin at 09:00 hrs for the remaining days of the Session.

14 The IOC Secretary for IOCARIBE informed the session about planned social activities.

15 **The Session approved** the proposed Provisional Timetable and the Provisional List of Documents with some modifications.

16 Dr Toro provided some details on the documentation and arrangements for the meeting and informed the Session that the basic working document was the Annotated Provisional Agenda (Doc. SC-IOCARIBE-VII/2 Prov).

17 He stressed that the Session would work in plenary as far as possible. However, where deemed necessary, ad hoc sessional drafting groups might be formed to deal with specific questions arising from particular agenda items. These drafting groups were to meet simultaneously or after plenary. Their product should serve as the basis for and to facilitate the debate in plenary.

18 The Delegates should also take into consideration the guidance of the Board of Officers, acting as the Steering Committee for this Session of the Sub-Commission, to successfully complete the meeting.

19 The List of Participants is given in Annex III.

3. REPORT OF THE IOCARIBE SECRETARY ON INTERSESSIONAL ACTIVITIES

3.1 PROGRESS REPORT ON PROGRAMMES AND BUDGET

20 The IOC Secretary for IOCARIBE reviewed the state of the Sub-commission, since the Sixth Session of IOCARIBE (San Jose, Costa Rica, April 1999). The Secretary introduced the document: Report of the Secretary of IOCARIBE (Doc. SC-IOCARIBE-VII/6 Prov.).

21 The IOCARIBE Secretary reported on the current status of the standing agreement between UNESCO and the Colombian Government to furnish the Headquarters for the Regional Secretariat in Cartagena de Indias. In his report he indicated that the most important element was the appointment of the new IOC Secretary for IOCARIBE, Head of the Regional Office.

- 22 The IOCARIBE Secretary reported on the staff situation of the IOCARIBE Secretariat stating that staff includes only an administrative assistant and a secretary. He suggested that Member States should increase their contribution of associated experts, to further develop and support scientific projects. He emphasized that support represents a key element in the success of programme implementation. He further informed on the current situation of staff and budget at the regional office and its evolution with time. Both UNESCO-IOC staff and local staff have been accounted for. The Session was requested to comment and make recommendations on the staffing situation. He highlighted that the Colombian contribution has been a reliable support steadily received from the Government of Colombia.
- 23 Dr Toro indicated that a further detailed analysis on the budget would be provided during the meeting. Based on such draft budget for 2002-2003, decisions have been made. According to the Proposal on the Draft Programme and Budget 2002-2003 (draft 31/C5) the regular programme of IOC has a total estimate of USD 3,243,900 and an estimate of extra-budgetary resources to be mobilized by Member States and IOC Secretariat of USD 6,500,000.
- 24 It is essential that Member States begin searching for funding for specific projects. It is suggested that experts should be supported by their own countries. One of the mechanisms could be granting sabbaticals to experts to handle directly one of the specific activities. Alternatively, young professionals should be integrated into the projects. In this way the critical mass could be renewed.
- 25 He reported to the Session on improvements of contacts with other agencies, NGOs, the direct contact established with the FAO, AMD, and UNEP in order to promote joint research activities and projects.
- 26 Dr Toro introduced to the Session the Document SC-IOCARIBE-VI/3 Summary Report of the Sixth Intergovernmental Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions (San José, Costa Rica, 26-29 April, 1999), which was published in December 2001.
- 27 The IOC Secretary for IOCARIBE reported on the current status and achievements of SC-IOCARIBE-VI Recommendations as follows:
- 28 SC-IOCARIBE-VI.1 “Establishment of the Regional Component of the Global Ocean Observing System GOOS IOCARIBE-GOOS”. Since IOCARIBE-VI the ad hoc Advisory Group for IOCARIBE-GOOS held three sessions devoted to the drafting of a strategic plan for GOOS in the IOCARIBE region, and the draft plans had been unveiled in a well-attended session of the Oceanology International Americas meeting in Miami on 5 April 2001.
- 29 A follow-up meeting was held by the two Vice-chairs (Drs. G. Garcia and D. Wilson) and IOCARIBE Secretary in Miami (October 2001). A review of the 3rd meeting instructions and actions was carried out. A closed follow up by electronic mail was effectuated and review of all chapters of the strategy document was accomplished. Prior to IOCARIBE VII Session the 4th Meeting of the Ad Hoc Advisory Group was held in Veracruz, Mexico from 21 to 23 of February 2002. A strategy was outlined as a result of this meeting and the terms of references for establishing a Steering Committee were provided. The work done by the Group of Experts is an example of what can be achieved.
- 30 SC-IOCARIBE-VI.2 “Global Ocean Oceanographic Data and Archaeology and Rescue”. Under this recommendation a meeting of the IOCARIBE GODAR Group of Experts was organized in Cartagena, Colombia, 21-23 February 2000.

- 31 SC-IOCARIBE-VI.3 “Hurricane Effects and Mitigation in the Coastal Zones of the IOCARIBE Region”. He reported that on this particular recommendation no progress has been achieved mainly due to the lack of a Project Co-ordinator. Given the importance of this activity and its relationship with GOOS, he proposed the establishment of this recommendation as a reflective element of IOCARIBE-GOOS.
- 32 SC-IOCARIBE-VI.4 “Humpback Whales Research”. He reported that the observation process of the humpback whales took place in March 2000. The report of this work was presented to the International Whaling Commission.
- 33 SC-IOCARIBE-VI.5 “Large Marine Ecosystems LME Projects”. The LME Project for the Caribbean has made significant progress. Mr Robin Mahon, Regional Project Co-ordinator for LME Project will present a detailed report on achievements of this regional project in Agenda Item 6.2.1. Concerning the Pacific Central American LME Project, Dr Daniel Lluch Regional Project Co-ordinator will present the project status.
- 34 SC-IOCARIBE-VI.6 “Regional Component of the GLOSS Programme”. IOCARIBE Secretary informed that a report that updates the Regional GLOSS reports of May 1999, February 1997, January 1995, October 1992, October 1990, and June 1989 of the IOCARIBE Group of Experts (GE) on Ocean Processes and Climate (OPC) was issued and it is available to all Members. A major proposal for CARICOM nations through the Organization of American States to the Global Environment Fund entitled “Caribbean: Planning for Adaptation to Climate Change” (CPACC) has been completed. Dr Toro stressed that there is a clear necessity for updating the equipment of the global network.
- 35 SC-IOCARIBE-VI.7 “Tsunami Warning System for the Caribbean”. A detailed progress report will be presented by the Regional Project Co-ordinator in Agenda Item 6.3.3.
- 36 SC-IOCARIBE-VI.8 “Harmful Algal Blooms in the Caribbean”. A Workshop was held in Mexico. Its objectives were to increase knowledge of toxic phytoplankton. Dr. Toro informed the Session about elections of the new members of the Board of the IOCARIBE-HAB ANCA Working Group, which new members are: Chairperson, Ms. Roxana Viquez (Costa Rica), Vice-Chairperson, Ms. Amelia La Barbera (Venezuela), Secretary, Mr. Arturo Sierra (Mexico).
- 37 SC-IOCARIBE-VI.9 “International Bathymetric Chart of the Caribbean and the Gulf of Mexico, IBCCA”. On this respect he informed the Session that actions to promote elaboration of the charts were proposed. Mr Jose Luis Frias, Regional Project Co-ordinator would give a detailed progress report on this project. Bathymetric mapping is crucial. The need to make progress is important. A more dynamic support to the project needs to be taken into account. Ocean mapping is a product that is easily tangible. It is important to promote and support the group.
- 38 SC-IOCARIBE-VI.10 “Evaluation and Upgrading of the Scientific Research and Training Component in the Regional Projects”. During a meeting (December 1999), main guidelines were developed to elaborate the Strategic Plan. This document was presented in the IOC Assembly 2001. The Assembly asked for support in the implementation of its recommendation. In this respect a Meeting was organized in Colima, Mexico, 14 – 16 November 2001 where main guidelines for the preparation of the IOCARIBE Strategic Plan were presented.

- 39 SC-IOCARIBE-VI.11 "Regional Scientific Agenda". The history of this recommendation was presented to the Session by the Chairman of the Sub-Commission. He stressed that some elements should be taken into consideration without waiting for the fulfilment of others.
- 40 SC-IOCARIBE-VI.12 "Liaison with existing Projects and Initiatives". Under this Recommendation he reminded the Session that three groups were to be considered. IASI, LOICZ and CARIACO Project. This Recommendation should be reinforced. Joint tasks with other organizations have already been established in the region.
- 41 The IOCARIBE Secretary urged Member States to actively use the facilities available at the Secretariat, including the electronic tools and Web Site to publish their own activities and promote their products, as well as the facilities of the Headquarters for hosting meetings and workshops.
- 42 The IOC Secretary for IOCARIBE informed the Session that following the thrust of the discussions held in the UN General Assembly 2nd Informal Consultative Process on Oceans, to explore the mechanisms of co-ordination between the work of the Sub-Commission with that of the regional bodies of FAO and UNEP in the region, a Memorandum of Co-operation will be signed during this Seventh Intergovernmental Session of the IOC Sub-Commission between the Caribbean Regional Co-ordinating Unit of the United Nations Environment Programme (UNEP-CAR/RCU) and IOCARIBE. He stressed that this issue should be thoroughly discussed on Agenda Item 8.2 "Status of Co-operation with other Organizations and the Private Sector".
- 43 The Board of Officers was also complimented for its work. He reported to the Session that the active role played by the IOCARIBE Board of Officers maintained the interactions and transfer of know-how among Member States. He emphasized that the use of the Board of Officers as a managerial instrument has proved to be effective. Previously, one Vice-Chairman held responsibility for an individual aspect of the work of the Sub-Commission but the final result showed that this strategy was not successful. It was subsequently found that the managerial group concept works better. The accomplishment of having a permanent Head of IOCARIBE Secretariat was highlighted.
- 44 The IOCARIBE Chairman thanked Dr Toro for his excellent Intersessional Report.
- 45 The Delegate of Colombia, Mr Rafael Steer-Ruiz congratulated the IOCARIBE Secretary for the Intersessional Report. The Delegate emphasized the success of the Board of Officers scheme adopted since the IOCARIBE-V Session (Barbados, 1995), and he further recommended continuing it. He also highlighted the remarks of Dr Patricio Bernal on the importance of the work done by the Member States at the regional level.
- 46 He also thanked on behalf of his Government the Secretary of IOC for appointing a full contract Officer as Regional Secretary of IOCARIBE. It was a long awaited decision, one that means benefits for the region by improving the stability, representation and continuity in the post, different from the previous situation of a consultant on short-term basis.
- 47 The Delegate of Colombia reiterated the will of his Government to continue supporting the Headquarters of the Regional Secretariat in Cartagena, in accordance with the existing Agreement with UNESCO, by means of which the Government of Colombia has continuously provided support to IOCARIBE in kind and through the Colombian contribution.
- 48 However, the Delegate of Colombia regretted to note that the report of the previous Intergovernmental Session IOCARIBE-VI, held in Costa Rica on April 1999, was only printed

on December 2001, over two years later and only in English, and was distributed just at the opening of the current Session. The absence of this report deprived Member States of a needed instrument to forward the important decisions made. He requested to IOC the publication of the Spanish version; and that for this Session the report be published and distributed a reasonable time after the Session.

49 The IOCARIBE Chairman in his response hoped that the report of IOCARIBE-VII would be timely printed and mentioned that the previous report was available at the IOCARIBE Web Page some months before this Session.

50 The Delegate of Cuba congratulated Dr Toro for the synthesis. He also reconfirmed his support to fulfilling the Recommendation SC-IOCARIBE-VI.11. He said that the Caribbean is a particular region and must find unity. There was a need to know what vision there is for the future and for the stability of the region. This was an important aspect.

51 The IOC Secretary for IOCARIBE also informed the Session that the Secretariat Headquarters Office was likely to be relocated within the walled city of Cartagena de Indias in the near future. The whole house was to be renovated.

52 Dr Bernal gave further clarifications by explaining the general budget of UNESCO.

53 **The Sub-Commission endorsed** the report of the Secretary.

4. POLICY ISSUES

4.1 FRAMEWORK OF THE IOCARIBE STRATEGIC SCIENCE PLAN AND RELATED SERVICES FOR IOCARIBE 2001-2010

54 Dr Bradford Brown, Chairman of IOCARIBE introduced this Agenda Item. He presented to the Session the document entitled Framework of the IOCARIBE Strategic Science Plan and Related Services for IOCARIBE 2001-2010 (Doc. SC-IOCARIBE-VII/7 prov.).

55 He reminded the Session that this document was the result of the implementation of the Recommendation SC-IOCARIBE-VI.10 "Evaluation and Upgrading of the Scientific Research and Training Component in Regional Projects" of the Sixth Intergovernmental Session of the IOCARIBE Sub-Commission (San Jose, Costa Rica, 26-29 April 1999). This Recommendation stressed the need to formulate a Strategic Science Action Plan and Related Services for the IOCARIBE Secretariat in the medium term (2001-2010). This Framework should take into consideration the priorities and capacities of Member States of the Sub-Commission and should be capable of identifying regional requirements on scientific research and ocean services.

56 This document was prepared during the IOCARIBE ad hoc Group of Experts Workshop to Formulate the Strategic Science Plan (SSP) 2001-2010, held at the Hotel Las Hadas in Manzanillo, Colima, Mexico, from 14-16 November 2001. It built on the work achieved during the previous meeting held in Veracruz, Mexico in December 1999.

57 The final version of this document should be prepared by a group of scientists of the Caribbean Region with IOC support. The Framework takes into consideration the new IOC's approach on its Ocean Science section.

58 Dr Brown also reviewed the status of ecosystem ocean science in the region, its objectives, and strategies for implementation. He also mentioned the developments underway in marine science for integrated coastal management (ICAM).

59 The IOC Executive Secretary, Dr Patricio Bernal noted the necessity of identifying a cohesive set of themes that would allow IOC to play its functional role. He said that the IOC has a responsibility for providing the system to oversee policies, identify needs, and bridging the gaps. It is necessary to determine how to put strategic perspective into every day working plans. He indicated that a suite of specific projects would allow us to move forward to a more permanent agenda. He also saw the IOC as having a clear political mandate as a legitimate body within the UN, albeit the overlapping mandates with other UN agencies. He stressed the need for coordinating and identifying with sister organizations within the system the priorities in a specific planning exercise. He noted that it was desirable for long-term planning and the establishment of proper implementation tools.

60 The Delegate of Colombia recalled that this Strategic Science Plan should be a complement to the Mid-term Strategy of IOCARIBE, 1999-2003 (Doc. IOC/INF-1130, June 1999), adopted at the IOCARIBE-VI Session, with emphasis on institutional strengthening of the Sub-Commission and National Coordination Networks.

61 The Delegate of Colombia expressed the support of his country to the broad Framework of the Strategic Science Plan, as elaborated in the workshops of Veracruz (December 1999) and Manzanillo (November 2001) under the kind hospitality of Mexico. He recognized that further work have to be done to achieve the final Plan.

62 Nevertheless, he stated the concern of his Government because the final Strategic Science Plan should have been "circulated to all Member States six months prior to the Seventh Session of IOCARIBE with a view to be adopted by the Sub-Commission" (Recommendation SC-IOCARIBE-VI.10). He noted this delay in schedule means the Plan could be submitted to the next IOC Executive Council without been reviewed neither endorsed by all Member States of the Region.

63 The Delegate of Colombia also noted that not all the experts appointed at the IOCARIBE-VI Session to the ad hoc Group of Experts were called to the second meeting, which could have affected participation and continuity. He ratified his willingness to continue to work in the IOCARIBE Strategic Scientific Plan as a Colombian expert and to contribute with his experience of over 20 years implementing an effective and renewed National Marine Science Plan in his country.

64 The Representative from the Caribbean Community Secretariat (CARICOM), Mr Milton Houghton, thanked IOCARIBE for the excellent work done. He said that training and good scientific research to generate information are the cornerstone of the strategic plan and that close cooperation between individual countries and individual organizations is integral to success. He also commended the integration of the work of UN agencies into IOCARIBE programmes. He stated that duplication of efforts and the constraints of meeting together were counterproductive and saw the need for greater efficiency and effectiveness. He observed that Recommendation SC-IOCARIBE-VI.11 was not adequately addressed regarding the regional meeting of organizations involved in the Caribbean and Adjacent Regions. There was a lot more to be done in order to successfully deal with the challenges.

65 The Representative from UNEP, Mr Nelson Andrade remarked on the synergy among UN organizations in the region, and particularly with IOCARIBE. UNEP works for several

governments and with the scientific community. He observed that there is competition for the same funds and saw the need to approach donors in a coordinated way. He also commented on UNEP's partnership with CARICOM for programmes in the insular Caribbean.

66 The Delegate from the United States of America, Ms Essie Duffie said she was pleased with the number of references made to IOCARIBE-GOOS and that it demonstrates IOCARIBE integration.

67 The Delegate from Cuba stressed that all IOCARIBE projects should be properly reflected in a coordinated way in the IOCARIBE Strategy.

68 The Chairman indicated that the timing of implementation lies with IOC Assembly. He said there is a need to move very quickly with Recommendation SC-IOCARIBE-VI.11 and referred on aspects most critical to meeting its management objectives. He hoped this would be accomplished by the next calendar year.

69 The IOC Executive Secretary indicated that the IOC planning process follows a two-year medium term strategy. Today, this has been translated into the medium term plan of UNESCO. He indicated that several subsidiary organizations, e.g. WESTPAC, reflect very well that such a strategic planning should be consistent. He pointed out that it should be an evaluation mechanism for reviewing and adjusting the process.

70 **The Sub-Commission endorsed** the document and **decided** that after further development it would be presented before the IOC Governing Bodies for approval.

71 **The Sub-Commission was requested to call** upon Member States to promote and support the fulfilment of Recommendation SC-IOCARIBE-VI.11.

4.2 REGIONAL SCIENTIFIC AGENDA

72 The IOCARIBE Chairman Dr Bradford Brown introduced this Agenda Item. Formal initiation of this effort with fellow agencies and organizations awaits completion of the IOCARIBE Strategic Plan. This work will be expected to begin in the last half of 2002.

4.3 AGENDA 21 AND THE 2002 WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT

4.3.1 World Summit on Sustainable Development, Johannesburg, 2002

73 The IOC Executive Secretary, Dr Patricio Bernal, introduced the document "Resolution EC-Ext. 1.1 Preparation for the 2002 World Summit on Sustainable Development (WSSD)". He provided a short briefing about the content of the resolution.

74 He emphasized that the governments must work together. The collective effort of all States is required to resolve global issues. Governmental cooperation at global and regional levels is necessary. There is the need to develop strong regional institutions to support this, and to bring science and policy makers together. The countries whose economies and social structures depend on the ocean must be able to address local problemmes. That is the case we face in the Caribbean Region.

75 He stressed that in the resolution, Member States of the Intergovernmental Oceanographic Commission reaffirmed the importance of the oceans for sustainable development.

76 The Sub-Commission was requested to promote and encourage the support of their national delegations to this Resolution at the World Summit on Sustainable Development to be held in Johannesburg this year.

77 He highlighted that, as the African process was one of the main elements of the Johannesburg World Summit on Sustainable Development, also special importance will be granted to the regions. Therefore the Caribbean Region must be taken into consideration.

78 He encouraged the Session to promote a draft text to be included in the resolution for the Preparation for the 2002 World Summit on Sustainable Development.

79 For this purpose, a special Drafting Group was formed to work on the preparation of the draft text.

80 **The Sub-Commission endorsed** this initiative.

81 Dr Bernal informed the Session that two preparatory Committee meetings to WSSD (PREPCOMs) had been held in New York, the UN Committee of Sustainable Development (CSD) acting as coordinator of the meetings. More recently, in February 2002 UNEP held a meeting in Cartagena, Colombia.

82 He stressed also, that there had been a proliferation of international agreements in the area of the environment. Integration must be conducted at the regional natural groupings of countries with common problemmes There is easier coordination at the regional level than at the global level.

83 IOC, at its last Assembly, addressed the 2002 World Summit on Sustainable Development (WSSD). A Conference was convened in December 2001 to address Rio+10. The Extraordinary Session of the Executive Council convened immediately after this Session approved a resolution, which was sent to CSD in New York in January 2002. The documents and (working paper No. 7), and the IOC Declaration are available on the IOC Web Site.

84 The Chairman, Dr Brown, asked what could IOCARIBE do to highlight the region as a focus of the oceans and coastal management process. He saw the African process as one way of moving forward the Agenda –strategy not present in the Caribbean and saw the need to have such a process in the Caribbean for working forward the Agenda. He suggested that a small drafting group could be assembled to prepare a statement of the gains that could be made from a coordinated Caribbean process.

85 The Delegate from Cuba recommended that the drafting group discuss the Declaration of IOC as the basis of the IOCARIBE statement.

86 The Chairman invited Cuba, the United States and Venezuela to be members of the drafting group, in addition to any other delegates who might wish to contribute.

87 **The Sub-Commission approved** Recommendation SC-IOCARIBE-VII.7.

5. THE NEW STRUCTURE OF IOC'S OCEAN SCIENCE SECTION

88 The IOC Executive Secretary Dr Patricio Bernal presented this Agenda Item. He indicated that several evaluations of IOC had been done since 1988 and briefly discussed them. He referred to the document entitled "IOC Ocean Science Section: A Basis for Restructuring" (IOC/INF-1155) presented at IOC-XXI (Paris, 3-13 July 2001) and duly endorsed. Dr Bernal comprehensively reviewed the three components of the Section: Oceans and Climate; Ocean Ecosystems Science; and Marine Science for Integrated Coastal Area Management. He also mentioned the programmes and partners associated with this initiative indicating their respective areas of activity.

89 The new structure of the IOC's Ocean Science Section resulted after an external evaluation during the year 1998 of the IOC. This evaluation was done at the request of the Director-General of UNESCO. The report contains conclusions and recommendations addressing scientific, organizational and administrative issues.

90 The Sub-Commission was invited to take into consideration the new IOC scheme and make recommendations on the best way to apply these lines of action policy at the regional level. Based on the IOC Executive Secretary's presentation, the Delegate from Trinidad and Tobago, Ms Hazel McShine inquired about the need to include an emphasis on technology in the IOCARIBE Science Plan.

91 The IOC Executive Secretary agreed that there was such a need.

6. IMPLEMENTATION OF REGIONAL PROJECTS

92 Following the proposed changes in the approved Agenda under this Agenda Item, those projects that have had major advances during the Intersessional Period were presented by their Regional Project Coordinators (RPC). He pointed out the need to ensure that all and each Regional Project has a fully appointed RPC and SGC in accordance with the procedures established by the IOCARIBE Manual.

93 The IOC Secretary for IOCARIBE, Dr Cesar Toro, presented a brief review of the remaining projects and referred to them separately in the Secretary's Report (Doc. SC-IOCARIBE-VII/6 Prov.).

94 **The Sub-Commission approved Recommendation SC-IOCARIBE-VII.5.**

6.1 OPERATIONAL OBSERVING SYSTEM

6.1.1 Global Ocean Observing System (GOOS)

95 This Agenda Item was presented by Dr Douglas Wilson, Co-Chairman of the IOCARIBE-GOOS Advisory Group.

96 He reported on the status of the project and what should be done by IOCARIBE. He noted the applicability of IOCARIBE-GOOS for providing the data and information and the top priority areas in the region that needed to be addressed. He elaborated on the objectives and activities of the project.

97 An important outcome is the preparation of a Draft Strategic Plan that will guide the Steering Committee. The document drew upon the principles of GOOS in its preparation.

- 98 A symposium on the IOCARIBE-GOOS was carried out at Oceanology International Americas 2001 held in Miami, USA, April 2001. The presentations of invited speakers are to be made available on CD-ROM and in the IOCARIBE-GOOS Web Site.
- 99 Dr Wilson also elaborated on what recommendations were expected to come from IOCARIBE-VII including an implementation plan based on the IOCARIBE-GOOS Strategic Plan.
- 100 Dr Guillermo Garcia, Co-Chair of IOCARIBE-GOOS, referred to the recommendations of the ad hoc group and suggested that the report should be finalized and published before the end of 2002.
- 101 The IOCARIBE Board of Officers should assist in the selection of the members of the Steering Committee.
- 102 The Delegate of Brazil, Ms Marilia Giovanetti de Albuquerque congratulated the ad hoc group on the work they had done and emphasized the importance of the users needs. She should present the draft to the Executive Committee of GOOS in Brazil on her return home for its consideration. She expressed the hope of implementation of the project.
- 103 The Delegate of Colombia also congratulated the group and the Co-chairs on the work presented. He indicated that Colombia had several projects that are in the framework of the GOOS Programme.
- 104 He also referred to the periodicity and duration of the members of the Steering Committee and suggested consideration of what is indicated in the IOC Manual. He suggested that the duration could be in accordance with the timing of the intergovernmental meetings.
- 105 The IOC Secretary for IOCARIBE, Dr Cesar Toro, commented on the work that was done and highlighted the importance and effectiveness of the methodology. He suggested the use of similar methodology to other projects.
- 106 The Delegate of Barbados, Ms Lorna Inniss referred to comments regarding integration of government agencies and NGOs. She pointed out that National GOOS Committees should be formed quickly, without waiting for funding, proving that Member States are committed to the project.
- 107 Mr Bruce Potter, Observer from the Island Resources Foundation, raised the issue of the explicit role of NGOs in the programme on an on-going basis. He emphasized that for Member States and some countries in the region there is the need to increase capacity building.
- 108 The Representative of UNEP stated that the project was very useful for the region and referred to the ways that the data information would contribute to understanding the region environment. He inquired into the possibility of UNEP CAR/RCU participating in the Steering Committee. He referred to UNEP's CEPNET project and wished to explore mechanisms of participation with IOCARIBE-GOOS.
- 109 The Delegate of Venezuela, Mr Ruben Aparicio commented that IOCARIBE-GOOS rests in the concept of operational oceanography and the activity of integration of disciplines and sectors that operate in the ocean. The integration would encourage basic support financially and politically.

- 110 The Representative of CARICOM congratulated the group for the work done in the realization of the case for IOCARIBE-GOOS. He referred to the difficulties of Small Island States in implementing the project and stated that some countries might not be able to participate.
- 111 He pointed out the need for careful attention to be given to these countries in building their capacity. He mentioned as well the need for additional guidelines in implementing such a project.
- 112 The IOCARIBE-GOOS Co-Chair Dr Guillermo Garcia clarified some points in particular to reinforce the participation of small countries. He indicated that the group would be counting on the participation of UNEP/CAR/RCU.
- 113 The Chairman commented on the recommendation regarding the establishment of the Steering Committee. There was a need for appropriate membership to this body. Co-chairs asked to confer with the IOCARIBE Secretary in refining the document.
- 114 The Delegate of Venezuela raised the issue that the Small Islands States and its particular problems should be given a higher priority. He informed the Session that the First Session of JCOMM was held in Iceland and Venezuela was one of the countries representing the Caribbean.
- 115 A draft was approved by the Sub-Commission following the established Terms of Reference for IOCARIBE-GOOS for the establishment of a Steering Committee for GOOS.
- 116 **The Sub-Commission noted** with satisfaction the progress achieved in the IOCARIBE-GOOS Programme.
- 117 **The Sub-Commission endorsed** the document entitled "The Case for IOCARIBE-GOOS".
- 118 **The Sub-Commission approved** Recommendation SC-IOCARIBE-VII.1 with its Annexes A and B.

6.1.2 Global Sea Level Observing System (GLOSS)

- 119 The Delegate of Venezuela referred to the work of Dr George Maul, Regional Project Coordinator for GLOSS over the last 15 years in the area of sea level. He informed the meeting of the progress made by Venezuela in modernizing and upgrading its sea level sensors in an area representing more than half of the southern basin of the Caribbean.
- 120 The Delegate of Colombia similarly reported that Colombia has also been updating their tide gauges.

6.2 OCEAN SCIENCES

6.2.1 Caribbean Large Marine Ecosystems (CLME)

- 121 The status report for the project was presented by the Regional Project Coordinator, Dr Robin Mahon. He presented a brief update on the project, giving its global context, an overview of its LME concept and indicated what would be necessary for IOCARIBE to take the project forward.

122 Dr Mahon briefly described the contents of the Concept Paper that was required by GEF. The project has a technical focus on transboundary resource management issues. The institutional focus is on using and enhancing existing national and regional institutions “strengthening by doing”.

123 The draft of the PDF-B and signatures are expected to be obtained by May 2002. The period of 18 months PDF-B should begin by September 2002.

124 The proposal is a starting point for a process that will enable all countries to be involved. Considerable help is required from IOCARIBE Focal Points in getting the project implemented.

125 The Delegate of Colombia said that they are pleased and satisfied that finally the project had started. It follows the methodology similar to IOCARIBE-GOOS in establishing a Steering Committee to assist the Regional Project Coordinators.

126 The Chairman emphasized the linkage between CLME and IOCARIBE-GOOS, mentioning the significant elements of the latter that related to the objectives of the CLME. There was a need for a very close relationship during the planning phase of PDF-B to ensure integration.

127 The Representative of CARICOM associated with the remarks of the Delegate from Colombia and thanked Dr Mahon for the work done. He urged the support of the countries involved to sign the document. He suggested that there was a need for enhancing public awareness of the project and the benefits to be derived from it. Stakeholders and other beneficiaries should be made aware early in order to gain full participation and support of Member States.

128 The Chairman inquired whether special issue of the *IOCARIBE Newsletter* could address this need.

129 The Delegate of Venezuela endorsed the suggestion of the Chairman and suggested that a special edition of *IOCARIBE Newsletter* would be a good vehicle to make information more generally widespread.

130 The Delegate of Cuba suggested that the IOCARIBE Secretary update countries on how the signing process is proceeding.

131 The Chairman indicated that the IOCARIBE Secretary could identify GEF Focal Points and the signatories and IOCARIBE Focal Points could then initiate discussions.

6.2.2 Pacific Central American Large Marine Ecosystem Project

132 The Pacific Coast LME Project was presented by Dr Daniel Lluch, Regional Project Coordinator for the Pacific Central American Large Marine Ecosystem Project. He traced the history of the project and the developments that followed. Ecuador is included in the project. The project is expected to be included in the GEF pipeline by October 2002. El Niño and La Niña phenomena affect the region and it requires attention and consideration of these in implementing the project.

133 The Delegate of Colombia expressed support for the project and reminded Member States of the recommendation taken at IOCARIBE-VI addressing this issue.

134 **The Sub-Commission approved Recommendation SC-IOCARIBE-VII.4.**

6.3 OCEAN SERVICES

6.3.1 Marine Data and Information Management

6.3.1.1 GODAR

135 This Agenda Item was presented by Mr Alan Duncan, IOCARIBE Advisor on behalf of the Regional Project Coordinator, Dr Paul Geerders. He outlined the history of the project and described the progress made and mentioned the benefits to be derived by Member States through the participation in the project.

136 Mr Duncan urged Member States that had not yet done so, to nominate their contact person.

6.3.1.2 ODINCARSA

137 This Agenda Item was introduced by the IOC Secretary for IOCARIBE, Dr Cesar Toro. A copy of the document IOC Workshop Report No. 177, UNESCO 2001 was distributed. He explained to the Session that ODINCARSA is the Ocean Data and Information Network for the IOCARIBE and South America regions. He outlined the First Planning Workshop for the "Ocean Data and Information Network for the IOCARIBE and South America regions (ODINCARSA)" that was held in Guayaquil, Ecuador between 24 and 26 October 2001, hosted by the Instituto Oceanográfico de la Armada del Ecuador (INOCAR). The meeting was attended by participants from fourteen countries in the Caribbean (IOCARIBE) and South America regions. The meeting reviewed the ocean data and information management capacity available in the regions, identified capacity building requirements and developed a comprehensive work-plan and timetable to develop a regional co-operative network for the management and exchange of oceanographic data and information in the regions.

138 The IOCARIBE Secretary pointed out that ODINCARSA is an IODE initiative and presented the history of the project. He explained that after some years of preparation by a group of people in the region under the leadership of Ricardo Rojas (Chile) and with advice from Paul Geerders (Netherlands), a proposal was submitted to IODE-XVI for a project called ODINLAC (Ocean Data and Information Network for Latin America and the Caribbean). The resulting positive Recommendation was submitted to the IOC Assembly (July 2001) and approved for further action. The initiative was renamed ODINCARSA (Ocean Data and Information Network for the Caribbean and South America regions).

139 Dr Toro also described the main elements of the project and particularly stressed the importance of capacity building in ODINCARSA. He mentioned that considering existing capacity building advantages in the region, ODINCARSA should promote collaboration and knowledge transfer within the region itself, not only at the National Oceanographic Data Centres level, but with a reach to the whole marine and coastal community (institutions, agencies) of the region countries.

140 The IOCARIBE Secretary referred to the ODINCARSA web site where all the information can be accessed and inform the Session about the forthcoming ODINCARSA Technical Workshop to be held in May 2002 in Guayaquil, Ecuador.

141 Dr Toro also referred to the linkages between GODAR and ODINCARSA and IOCARIBE-GOOS, noting also the wide geographic spread of the participating countries.

142 Bearing in mind the advances in capacity building and in the implementation phase of ODINCARSA, the plenary of the Session acknowledged the work done by the IODE Secretary at IOC Headquarters, and by the ODINCARSA Regional Project Co-ordinator and the accomplishments reached.

143 The IOCARIBE Member States representatives also decided to continue supporting the programme and future related activities with the view to implement an appropriate network on marine data and information management. To this end, the meeting instructed the IOCARIBE Secretary to inform the IOC Secretariat and the IOC Governing Bodies in order to warrant all future activities and to provide adequate support for its implementation.

144 **The Sub-Commission also requested** the IOCARIBE Secretary to maintain updated information on this issue to all Member States of the Regional Sub-Commission and to promote their active participation in ODINCARSA.

145 The Delegate of Venezuela stressed the fact that several problems related with the process of collecting marine data in the region need to be addressed. The IOCARIBE Chairman suggested to refer separately with this specific issue under the Agenda Item. 11 "Other Matters".

146 **The Sub-Commission agreed** with this suggestion.

6.3.2 Ocean Mapping

6.3.2.1 IBCCA

147 This Agenda Item was presented by Mr José Luis Frias, Regional Project Coordinator for IBCCA.

148 In his report he stated that IBCCA is part of the regional projects to develop a world bathymetric chart. He traced the origin of the project and referred to its start at the IOC Assembly. The new Chart will have a complete coverage of the Caribbean region. The Editorial Board includes Cuba, Colombia, Costa Rica, France, Mexico, US, and Venezuela, and each of them with a designated area of responsibility.

149 A Digital Database has been developed and is regularly updated, as new information becomes available.

150 He elaborated on how the data is collected and organized and described the preparation of the charts and its usefulness to the end users. However, there are some difficulties involved. Eight charts are to be printed. Overlapped charts of the residual magnetic energy, gravity anomalies and magnetic anomalies are also being considered.

151 Most of the required bathymetric information has been compiled and only two areas for data acquisition remain uncompleted. There is a need to encourage Costa Rica and France to provide the required information.

152 It is expected that sheets would become available in the IBCCA Web Site in March 2002.

153 The Chairman observed that the work done on the project was a tremendous accomplishment.

154 The Delegate of the USA joined the Chairman in congratulating the Regional Project Coordinator on the work accomplished and urged the continuation of this important work. He asked when the information is expected to be available.

155 Mr Frias indicated that countries had been asked to state their requirements for the sheets. In April 2002 the charts would be available on CD-ROM.

156 The Representative of CARICOM congratulated the Regional Project Coordinator on the work and sought clarification on the dissemination of the outputs of the project to IOCARIBE Member States.

157 The IOCARIBE Secretary emphasized the importance of publicizing the project.

158 The Delegate from Colombia referred to the importance of having a task well organized and managed on a full time basis by a Regional Project Coordinator.

6.3.3 TSUNAMI Programme and International Strategy for Disaster Reduction

6.3.3.1 Tsunami Warning System for the Caribbean

159 This Agenda Item was presented by Dr Charles McCreery, Designated Project Coordinator for this Session and Vice-Chairman of the IOC International Coordination Group for the Tsunami Warning System in the Pacific (ICG/ITSU).

160 He outlined the history of the Intra-Americas Sea Tsunami Warning System Project Proposal and pointed out changes to the proposal made since it was presented at the Eighteenth Session of the ICG/ITSU held in October 2001 in Cartagena, Colombia.

161 Dr McCreery gave a brief overview of the tsunami phenomenon and highlighted differences between it and other ocean waves. He also explained the special characteristics of tsunami waves that make them a hazard. He described the natural warning signs for tsunamis and noted that a strong programme of public education is a key element for an effective tsunami warning system.

162 He reiterated that the Caribbean Region is threatened by tsunamis of both local and distant origin and from seismic, volcanic, and landslides or submarine slump sources, and that mitigation of the adverse effects of tsunamis is of considerable importance to the socio-economic development of Member States.

163 He noted that the mitigation strategies for tsunamis are based on three key components: hazard assessment, warning, and preparedness, and he described some of the activities proposed in these categories.

164 He emphasized the importance of increasing tsunami education and awareness and that training programmes are proposed for studying the concepts and techniques of tsunami hazard assessment and mapping, vulnerability analysis, etc.

165 Dr McCreery explained that warnings would be based initially on seismic data and then continued, cancelled, or upgraded based on the sea level data. He described upgrades to the seismic and sea level capabilities of the region that are proposed, as well as communications links for the flow of critical data and warning messages.

166 He noted that it would be left up to the region to determine whether to have one or more centralized warning centres or to have a more distributed system with seismic and sea level data flowing to each of the Member States for their local interpretation.

167 Dr McCreery pointed out that a research element is included in the proposal to help advance the Tsunami Warning System in all of its elements.

168 He gave an overview of the proposed management structure, highlighting elements at both the national and regional levels that need to be put in place for successful implementation of the project.

169 He described the key activities to be carried out in each of the three years of the project, with the final result being a fully operational Tsunami Warning System for the Intra-Americas Sea.

170 **The Sub-Commission thanked** Dr McCreery for his presentation.

171 The Delegate of USA offered comments on the importance of the research component and encouraged Member States to contribute to the historical data, an activity that can be done with little cost. The Delegate of Venezuela inquired regarding the criteria for certain new sea level stations being proposed and Dr McCreery responded they were needed to fill spatial gaps in the coverage provided by existing gauges.

172 Following these brief discussions, **the Sub-Commission fully endorsed** the proposal.

173 **The Sub-Commission approved** Recommendation IOCARIBE-VII.2.

7. CAPACITY BUILDING IN MARINE SCIENCES, SERVICES AND OBSERVATIONS: DEVELOPMENT OF A MAJOR ASSISTANCE PROGRAMME

7.1 SCIENTIFIC NATIONAL PLANS

174 The IOC Secretary for IOCARIBE introduced this Agenda Item and presented the document entitled “Marine Science Capacity and Structure in the Caribbean and Adjacent Regions”, first published in 1997 and available in the IOCARIBE web site since 1998, containing a brief description and information on the national marine policy or plan in all Caribbean States. Basic information on country profiles was periodically updated and is available in the IOCARIBE Web Site.

175 He informed the Session about the proposed new mechanisms to increase the capacity building activities across all IOCARIBE scientific programmes. He stated that Member States had been invited by circular letters to submit information on their national ocean science plans. A modest response has been obtained to date. He reported on the national plans received from Trinidad and Tobago, Cuba, Brazil, Mexico, United States and Colombia.

176 The opportunity was taken to reiterate the request to those Member States that have not yet done so, to forward the information as soon as possible. He asked delegates present, to contact the appropriate authorities in their respective countries to verify and to obtain the information requested. He stressed the scientific and policy importance of having such plans.

177 Circular letters have also been sent to Member States to update the information of their country profiles. A few have already done so.

178 Dr Cesar Toro outlined the benefits to be derived from the identifying training needs and the programmes to be pursued in such training. This would lead to the development of projects in the areas of interest to IOCARIBE. One of the tools is the web site, which informs available opportunities.

179 The Delegate of Venezuela referred to the non-fulfilment of the request for national information on their marine science plans. Within the last years, an interministerial group representing many environmental and science agencies has been formulated to deal with the management of marine aquatic space.

7.2 PRIORITIES AND EXPECTATIONS OF MEMBER STATES

180 The IOCARIBE Vice-Chairman, Dr José Vargas, introduced this Agenda Item.

181 The Delegate of Cuba shared the Vice-Chairman concept on training and indicated that a strong training component was needed and that the Sub-Commission identified the necessary steps for training the professionals of our region. He made reference to the changed concept regarding TEMA. He suggested every project should identify the necessary training components. He offered to draft a recommendation to this effect.

182 The Delegate of Colombia supported the statements made by the Delegate of Cuba and referred to Recommendation IOCARIBE-VI.10 regarding Training, Evaluation and Upgrading of the Scientific Research and Training Component in the Regional Projects. He offered to collaborate in this drafting effort.

183 The Chairman thanked the Delegates for their offer of collaboration.

184 The Delegate of Brazil referred to a policy document, which defines the main themes on marine research as far as the Ministry of Science and Technology is concerned, and outlined the steps being taken to implement these activities. She highlighted that this document does not exclude or overlap with other existing policy documents. She also referred to the existing unit of the Train-Sea-Coast Programme, at the Federal University of Río Grande (FURG), which could be used in a joint programme for capacity building in the region, pending on further conversations with the coordinator of the programme in Brazil. She distributed a copy of a folder on the subject, and specified the on-going training courses.

185 The Representative of CARICOM reiterated the priority placed on training and education and urged the mobilization of resources to ensure successful implementation of the programme.

186 The component Training, Educational and Mutual Assistance should be a permanent element in all programmes and projects of the Sub-Commission.

187 **The Sub-Commission approved Recommendation SC-IOCARIBE-VII.8.**

8. INSTITUTIONAL AND LEGAL FRAMEWORK

8.1 REGIONAL AND GLOBAL FRAMEWORK

188 The IOC Executive Secretary, Dr Patricio Bernal, introduced this Agenda Item by describing the existing IOC contemporary institutional and legal framework in the Caribbean and Adjacent Regions. He reported on advances of the IOC regional cooperation and its implication within the new overall IOC Programme structure.

189 He observed that the network on sea level was a significant contribution. The strength of the IOC was its provision of financial support. In the Caribbean region there is a wide geographic working area. The IOC has always recognized the position of the Sub-Commission is well placed. Work is done through the coordination with other UN Agencies in the Region. He referred to the other instances of working with Sub-Commissions for example WESTPAC.

190 He suggested there was a need to establish a dialogue and the signing of an Agreement with CARICOM for coordinating scientific research, e.g. fishing.

191 He recognized the importance of CARICOM, the need to establish systems of monitoring and participation in joint efforts of research by the countries.

192 He also mentioned that the Gulf of Mexico is another good example of the application of this coordination approach, e.g. the Gulf of Mexico LME Project.

193 The IOC Executive Secretary informed the Session that IOC is working closely with industries to develop partnerships for ocean observations.

8.2 STATUS OF COOPERATION WITH OTHER ORGANIZATIONS AND THE PRIVATE SECTOR

194 The IOC Executive Secretary, Dr Patricio Bernal, gave a general introduction on the progress made in the established co-operation with international organizations and other regional programmes.

195 He also referred to the close level of cooperation with the military in making ocean observations that did not exist five years ago.

196 The Representative from UNEP/CAR/RCU informed on a recent meeting on the participation of UN with the private sector in the solution of environmental problemmes. He mentioned the work being done in cooperation with the tourism industry, the cruise ship companies and the petroleum tankers sector. Pesticide use is also getting attention and in particular training and education of the users. He also outlined other efforts at cooperation and linkages with IOCARIBE in protecting the environment in the Caribbean Region.

197 The Representative from CARICOM stated the focus of CARICOM Fisheries Unit on resource management. The CFRAMP project established in 1991 was founded with Canadian assistance. A Caribbean Fisheries Mechanism is now in place, a successor to CFRAMP now in its closing stages, and requires the full participation of all countries in the region in the management of shared fisheries resources.

198 This mechanism involves research and information gathered, community participation and public awareness, the management of resources and global marketing among others.

- 199 He informed the Session of a Project to promote Community based fisheries resource management in the region. This project is being financed by IDRC. The project is entering its second phase and a call for proposals was sent.
- 200 The Representative of CARICOM also mentioned a project funded by the EU – Integrated Agriculture and Fisheries, and seeks to extend CFRAMP to countries that were not part of the regional project, e.g. Haiti and the Dominican Republic. It will strengthen human resources, capacity building and sustainable resources management.
- 201 He looked forward to close cooperation with IOCARIBE and other organizations in the region.
- 202 The Representative from Island Resources Foundation (IRF) mentioned close contacts with CCA, the oldest NGO organization. One area of interest in working with IOCARIBE is the expansion of Caribbean e-mail list and how is it managed.
- 203 He also mentioned the participation of IOCARIBE in the Caribbean Blue Flag Campaign.
- 204 The Delegate from Barbados responded to a comment on the Blue Flag Campaign. She mentioned her affiliation with the CCA and the relevance of the organizations programme areas to IOCARIBE. The collaboration of CCA with IOCARIBE would be useful.
- 205 She also mentioned another affiliation as a Research Fellow at the University of the West Indies (UWI). She noticed the absence of some Small Island States in the meeting and suggested that closer linkages of IOCARIBE with UWI would be one way of encouraging participation of these states in IOCARIBE.
- 206 The Chairman observed that a major reason for the decrease in attendance of countries is due to the financial constraints of both the countries and the IOC.
- 207 Mr Kent Berger, Observer from Canada, thanked the Secretariat for his invitation to the meeting. He also thanked the Representative of CARICOM for bringing to attention of IOCARIBE the contributions of Canada to the CARICOM Fisheries Unit.
- 208 He saw the meeting as an excellent forum for a two-way sharing of information and welcomed the opportunity for the private sector to participate.
- 209 The Delegate of the USA sought an explanation on when other countries might be allowed to participate in the Caribbean Fisheries Mechanism sharing these resources.
- 210 The Representative of CARICOM indicated this would probably take place later this year and stated that interaction with countries in the region is a priority.
- 211 The Delegate of Colombia emphasized the IOCARIBE Medium Term Strategy 1999 - 2001 with regard to other organizations and industry and its coincidence with Dr Bernal's remarks. He was pleased with the progress that IOC has made in this regard.
- 212 The Delegate of Venezuela reminded the Session that the success of IOCARIBE-GOOS will depend on the participation of all organizations mentioned. He reiterated that the maritime, oil industry and these large-scale fisheries sectors should participate at the highest level in these deliberations through their inclusion in the National Committees supporting IOCARIBE-GOOS to be implemented for Member States.

213 The IOC Secretary for IOCARIBE, Dr Cesar Toro, informed the Session that the IOCARIBE Secretariat in co-ordination with IOC continues actively enhancing and strengthening existing links with other United Nations programmes and organisms. In this respect, on Monday 25 February 2002 during the afternoon session, a Memorandum of Co-operation was signed in Veracruz, Mexico between the Secretariat of the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region represented by Mr Nelson Andrade Colmenares, UNEP-CAR/RCU Coordinator and IOCARIBE of the Intergovernmental Oceanographic Commission (IOC) of UNESCO, represented by Dr Patricio Bernal, IOC-UNESCO Executive Secretary. This Memorandum of Co-operation establishes a framework for cooperation for the protection of the marine and coastal environment of the Wider Caribbean Region. Dr Toro pointed out as well, that joint efforts with other agencies and NGOs should be encouraged in order to increase the benefits and reduce costs.

214 The Complete text of the Memorandum of Cooperation between UNEP-CAR/RCU and IOCARIBE is included in Annex IV.

215 **The Sub-Commission approved Recommendation SC-IOCARIBE-VII.6.**

9. MARINE INFORMATION MANAGEMENT AND OUTREACH ACTIVITIES

216 Mr Alan Duncan, IOCARIBE Advisor introduced this Agenda Item. The set of databases constituting the "strategic information" for management of the scientific and technical cooperation in the region was presented.

217 Significant progress has been made during the intersessional period in the area of information management in the IOCARIBE Secretariat. He provided a short review of the Secretariat's information management system and a progress report on the newly designed IOCARIBE web site.

218 The IOCARIBE web site is intended to be available to all users. It is a dynamic information management tool and will be improved and continuously updated. It may be accessed at <http://www.unesco.ioc.org/iocaribe/home.htm>.

219 The site contains, among other information, the full-text of the marine science profiles of IOCARIBE Member States, an important management tool for capacity building decision making, and links to relevant international and regional marine science sites of interest to Member States.

220 Mr Duncan also reviewed the present state of the *IOCARIBE Newsletter* and the mechanisms for its timely and widespread distribution. The newsletter was initially prepared in 1994 and its format redesigned in September 2001. There are three versions available: (i) a printed version, (ii) web edition, and (iii) e-mail version. The paper edition will be phased out by mid-2002, mainly due to financial reasons. The web version was introduced in late 2001 together with the e-mail edition.

221 The Delegate of Colombia congratulated Mr Duncan for the excellent work achieved in the gathering and compilation of the information included in the web site and in the newsletter. Costa Rica and Venezuela associated themselves with these remarks.

10. PROPOSALS FOR NEW PROJECTS

222 The Chairman of IOCARIBE, Dr Bradford Brown, invited Member States to present scientific proposals to be studied and implemented.

223 The Sub-Commission did not considered any new project to be reviewed under this Agenda Item.

11. OTHER MATTERS

224 This Agenda Item was introduced by the IOCARIBE Chairman. He invited participating delegations and observers to present issues to be discussed under this theme.

225 The Delegate of Venezuela raised the issue of research vessels entering national waters and referred to varying existing situations in dealing with requests for permission to conduct research in the waters under its jurisdiction.

226 **The Sub-Commission approved Recommendation SC-IOCARIBE-VII.3.**

11.1 REGIONAL FUNDING STRATEGY AND PROMOTION

227 The Chairman of IOCARIBE, Dr Bradford Brown, introduced this Agenda Item.

228 The Session was requested to present ideas and proposals on means and ways to obtain funding for the projects of the Sub-Commission.

229 The IOC Executive Secretary stressed that the GOOS initiative for the Caribbean needs to obtain funding under this initiative. The Global Climate Observation System (GCOS) have received financial support.

230 He mentioned that some specific projects such as the Coastal Zone Management and Operational Networks like the implementation of the Argo project will be convenient to deal them at the regional level.

231 **The Sub-Commission requested** attending delegates to urge their respective governments to support and reinforce the national institutions as well as the projects.

12. IOCARIBE AWARD

232 This Agenda Item was introduced by the Chairman of IOCARIBE, Dr Bradford Brown.

233 He reminded the Session that the IOCARIBE Award recognition was created during the Fifth Intergovernmental Session of the Sub-Commission (Barbados, 1995). The Award winners would either have made a significant contribution to solving regional problems through marine scientific research, services and capacity building; or would have made a significant contribution to the fulfilment of IOCARIBE's objectives through their enthusiastic work in the Sub-Commission.

234 The award is a pre-Columbian winged fish "of mythical significance because of its power over two elements: water and air" (San Agustín Culture, 100 BC-500 BC, Gold Museum, Bogotá, Colombia).

235 After a thorough review of the nominations received in advance, the Members of the IOCARIBE Board of Officers in consultation with the IOCARIBE Secretary for IOCARIBE, decided to grant the IOCARIBE Award to Mr Rafael Steer-Ruiz, former Chairman and Acting Secretary of IOCARIBE for his remarkable involvement and support to the Sub-Commission. It was presented by the Chairman of IOCARIBE, Dr Bradford Brown, on behalf of the IOCARIBE Sub-Commission.

236 Mr Rafael Steer-Ruiz expressed his deepest gratitude to the Board of Officers of IOCARIBE for conferring upon him the Award. He recalled how the proposal to create the Award was approved by the Fifth IOCARIBE Intergovernmental Session in 1995, and evoked with gratitude the memory of Fred Berry, who inspired its creation and was himself an example to follow. He remembered how Fred and Gunnar Kullenberg recruited him for the Regional Secretariat in Cartagena, since 1995, for his latest stage serving IOCARIBE ending the year 2000.

237 Mr Steer-Ruiz also recalled his first contact with the earlier phase of what later would become IOCARIBE, back in 1973 in Cartagena, when as young oceanographer he attended the Sixth Meeting of Coordinators for CICAR. Shortly latter, he had the opportunity to be at the commencement of IOCARIBE as experimental Association and subsequently participated in most meetings as well as many projects. Ultimately he had the honour to be elected Chairman of IOCARIBE, in the role of delegate of Colombia, at its very first intergovernmental meeting as an IOC Sub-Commission in Curacao (1984), and was re-elected in Cuba (1985).

238 Mr Steer-Ruiz finally expressed his satisfaction and hope that the time and energy invested have contributed to success and would be the basis for further progress in the future. He committed himself to continue supporting regional activities to the best of his abilities until his final retirement.

13. ELECTION OF THE BOARD OF OFFICERS

239 The IOC Secretary for IOCARIBE, Dr Cesar Toro, introduced this Agenda Item and briefly reviewed the rules of procedures and practical arrangements established for the elections of the Members of the Board of Officers of the IOCARIBE Sub-Commission.

240 The Sub-Commission was requested to elect one (1) Chairperson and three (3) Vice-Chairpersons to constitute the IOCARIBE Board of Officers for the next intersessional period and the Eight Session of the Sub-Commission, seeking an equitable sub-regional representation.

241 One candidate was nominated by Mexico for the Chair and four candidates were nominated by the following countries: Barbados, Costa Rica, Cuba and United States of America, for three Vice-Chairs, therefore a ballot was conducted.

242 **The Sub-Commission unanimously elected** Eng. Marco Polo Bernal-Yarahuan (Mexico) as Chairman of IOCARIBE for the next Intersessional period and the Eight Session of the Sub-Commission.

243 **The Sub-Commission elected** as well, the following Vice-Chairs:

Dr Guillermo Garcia (Cuba, newly elected)
Dr Bradford Brown (USA, newly elected)
Mrs. Lorna Inniss (Barbados, newly elected)

14. DATE AND PLACE OF THE EIGHTH SESSION OF THE SUB-COMMISSION

244 The IOC Secretary for IOCARIBE recalled that the regional sub-commissions of IOC met every two (2) years, preferably before the IOC Assembly, to review their activities and timely submit their recommendations and budgetary request to the main governing body of IOC.

245 The Sub-Commission was requested to indicate a preferred date and place for its Eighth Session. The Sub-Commission stressed the need of keeping its pace and meeting every two years in order to better manage the different tasks and activities and is of the view that the Eight IOCARIBE Session should occur not later than March 2004.

246 Member States wishing to host that Session were invited to present their invitations. The Delegate of Brazil referred to the consultations with different participants about the possibility of having the next IOCARIBE Session in Brazil. She explained that at this point of time she has not received formal instructions. She also mentioned that she should do all necessary efforts for hosting the meeting in Brazil. However, she stressed that this is subject to confirmation from her Government.

247 **The Sub-Commission acknowledged** this kind offer with appreciation.

15. ADOPTION OF THE DRAFT SUMMARY REPORT AND RECOMMENDATIONS

248 **The Sub-Commission adopted** the Summary Report and eight (8) Recommendations from the Seventh Session, as reviewed during this Agenda Item.

249 Complete text of approved Recommendations is included in Annex II.

16. CLOSURE

250 The Chairman, on behalf of the IOCARIBE Sub-Commission and of the present delegations, thanked the Government of Mexico and of the State of Veracruz, the Local Organizing Committee headed by Dr Marco Polo Bernal-Yarahuan with the assistance of Mr Francisco Brizuela and Ms Elia Moreno, the Secretariat and local staff for the warm hospitality received and the excellent facilities provided for this meeting.

251 He also thanked all delegates and participants, local staff, interpreters and supporting personnel. In particular he expressed his appreciation to the IOC Secretary for IOCARIBE and the IOCARIBE staff who organized the Session.

252 The Session was closed at 13:00, Thursday 28 February 2002.

ANNEX I

AGENDA

- 1. OPENING**
- 2. ADMINISTRATIVE ARRANGEMENTS**
 - 2.1 ADOPTION OF THE AGENDA
 - 2.2 DESIGNATION OF RAPPORTEUR FOR THE SESSION
 - 2.3 CONDUCT OF THE SESSION, TIMETABLE AND DOCUMENTATION
- 3. REPORT OF THE IOCARIBE SECRETARY ON INTERSESSIONAL ACTIVITIES**
 - 3.1 PROGRESS REPORT ON PROGRAMMES AND BUDGET
- 4. POLICY ISSUES**
 - 4.1 FRAMEWORK OF THE IOCARIBE STRATEGIC SCIENCE PLAN AND RELATED SERVICES FOR IOCARIBE 2001 - 2010
 - 4.2 REGIONAL SCIENTIFIC AGENDA
 - 4.3 AGENDA 21 AND THE 2002 WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT
 - 4.3.1 World Summit on Sustainable Development, Johannesburg, 2002**
- 5. THE NEW STRUCTURE OF IOC'S OCEAN SCIENCE SECTION**
 - 5.1 OCEANS AND CLIMATE
 - 5.2 OCEAN ECOSYSTEMS SCIENCE
 - 5.3 MARINE SCIENCE FOR INTEGRATED COASTAL AREA MANAGEMENT
- 6. IMPLEMENTATION OF REGIONAL PROJECTS**
 - 6.1 OPERATIONAL OBSERVING SYSTEM
 - 6.1.1 Global Observing System (GOOS)**
 - 6.1.2 Global Sea Level Observing System (GLOSS)**
 - 6.2 OCEAN SCIENCES
 - 6.2.1 Caribbean Large Marine Ecosystem (CLME)**
 - 6.2.2 Pacific Central American Large Marine Ecosystem Project**
 - 6.3 OCEAN SERVICES
 - 6.3.1 Marine Data and Information Management**
 - 6.3.1.1 GODAR
 - 6.3.1.2 ODINCARSA
 - 6.3.2 Ocean Mapping**
 - 6.3.2.1 IBCCA
 - 6.3.3 Tsunami Programme and the International Strategy for Disaster Reduction**
 - 6.3.3.1 TSUNAMI Warning System for the Caribbean
- 7. CAPACITY BUILDING IN MARINE SCIENCES, SERVICES AND OBSERVATIONS: DEVELOPMENT OF A MAJOR ASSISTANCE PROGRAMME**
 - 7.1 SCIENTIFIC NATIONAL PLANS
 - 7.2 PRIORITIES AND EXPECTATIONS OF MEMBER STATES
- 8. INSTITUTIONAL AND LEGAL FRAMEWORK**

- 8.1 REGIONAL AND GLOBAL FRAMEWORK
- 8.2 STATUS OF COOPERATION WITH OTHER ORGANIZATIONS AND THE PRIVATE SECTOR

- 9. MARINE INFORMATION MANAGEMENT AND OUTREACH ACTIVITIES**
 - 9.1 IOCARIBE WEB PAGE
 - 9.2 IOCARIBE NEWSLETTER
 - 9.3 IOCARIBE DATA BASES

- 10. PROPOSALS FOR NEW PROJECTS**

- 11. OTHER MATTERS**
 - 11.1 REGIONAL FUNDING STRATEGY AND PROMOTION

- 12. IOCARIBE AWARD**

- 13. ELECTION OF THE BOARD OF OFFICERS**

- 14. DATE AND PLACE OF THE EIGHTH SESSION OF THE SUB-COMMISSION**

- 15. ADOPTION OF THE DRAFT SUMMARY REPORT AND RECOMMENDATIONS**

- 16. CLOSURE**

ANNEX II

RECOMMENDATIONS

Recommendation SC-IOCARIBE-VII.1

WORK OF THE IOCARIBE-GOOS AD HOC ADVISORY GROUP AND THE STRATEGIC PLAN FOR THE DEVELOPMENT OF AN OCEAN OBSERVING SYSTEM FOR THE IOCARIBE REGION

The IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE),

Recognizing the continuous and sustained development of the Global Ocean Observing System (GOOS), and its regional components, in particular IOCARIBE-GOOS, as a mechanism for forecasting and anticipating marine impacts, dissemination of marine products, and management the marine environment,

Recalling the Report from the IOCARIBE Users and GOOS Capacity Building Workshop, held in San Jose, Costa Rica, 22-24 April 1999,

Recalling also the Recommendation SC-IOCARIBE-VI.1 approved by the IOCARIBE Sub-Commission at its VI session held in San Jose, Costa Rica, 26-29 April 1999, and the establishment of the ad hoc Advisory Group for IOCARIBE-GOOS,

Recognizing that a system of marine information, services and products to support sustainable social and economic development, welfare, and safety, through systematic observations and associated research on coasts and seas in the IOCARIBE region is needed,

Acknowledges the work accomplished by the ad hoc Advisory Group for IOCARIBE-GOOS, during its mandate from 1999 to 2002;

Endorses the Report from the IV Session of the IOCARIBE-GOOS ad hoc Advisory Group, held in Veracruz, Mexico, 21-23 February 2002;

Endorses also the draft document "*The Case for IOCARIBE-GOOS*" as the strategic plan for regional GOOS development, **and decides** that any suggestion of changes to this text, are to be communicated to the chairs of the ad hoc advisory group before March 31 so that the final document can be published before year end 2002;

Reaffirms the recommendation SC-IOCARIBE-VI.1 to establish a Steering Committee with the following Terms of Reference:

- (a) to produce an Implementation Plan during 2002 – 2003,
- (b) to develop one or more concept-demonstration projects, to start as soon as possible, ideally in 2003,
- (c) to initiate an IOCARIBE-GOOS Initial Observing System, to start in 2003,
- (d) to complete a survey of user requirements as the basis for consolidating the design of the system (by early 2003),
- (e) to implement other actions as detailed in the Annex A to this Recommendation,

Further recommends:

- (i) publication of “*The Case for IOCARIBE-GOOS*” to serve as the strategic plan for regional GOOS development;
- (ii) that the IOCARIBE-GOOS Steering Committee be created bearing in mind the broader geographic representation possible, particularly small island developing States, and following the Guidelines in Annex B;

Requests all IOCARIBE Member States to support the development of the IOCARIBE-GOOS Regional Project and any other initiative for this purpose at the coming sessions of the IOC Governing bodies.

ANNEX A

General Plan of Actions for the Steering Committee for IOCARIBE-GOOS

Bearing in mind the content of “*The case for IOCARIBE-GOOS. Strategic Plan*” the Steering Committee should:

1. carry out a survey among the marine-related communities of the participating IOCARIBE Member States (i) to construct an appropriate set of user scenarios, and (ii) to determine what end-products and services are required by the users community;
2. evaluate the costs and benefits of implementing IOCARIBE-GOOS for discrete user sectors (e.g. tourism, offshore industry, fishing);
3. develop an inventory of existing activities relevant to IOCARIBE-GOOS including: (i) operational systems and programmes; (ii) organisations; (iii) scientific programmes; (iv) services and products; (v) commercial interests; and (vi) training and capacity building;
4. devise an Implementation Plan that meets both the advice from the GOOS advisory panels and the needs of the region;
5. establish an integrated Initial Observing System building on existing national and sub-national level observing systems;
6. identify key gaps in the existing observing systems, and make plans to fill them;
7. prepare an engineering and design analysis to integrate the various existing and planned ocean observations and provide for the future adaptability of the system;
8. develop and implement concept-demonstration projects that will contribute to the long-term health and stability of IOCARIBE-GOOS, beginning by organising a regional workshop on concept-demonstration projects;
9. organize data management among the IOCARIBE-GOOS Initial Observing System elements, to improve data collection, storage, exchange and dissemination, building on existing structures, and exploiting the proposed Ocean Data and Information Network for the Caribbean and South America (ODINCARSA);

10. establish an appropriate capacity building programme, building initially on existing and planned capacity building activities;
11. work to ensure not only the effectiveness and efficiency of the observing system, but also its sustainability for the long term;
12. ensure that GOOS design principles and principles of involvement are maintained within IOCARIBE-GOOS activities;
13. encourage the development of National GOOS Coordinating Committees and appropriate national GOOS focal points in IOCARIBE Member States;
14. take full advantage of the creation of JCOMM to bring together meteorologists and oceanographers to design IOCARIBE-GOOS in such a way as to extract the maximum benefit from JCOMM as an implementation mechanism for GOOS;
15. develop appropriate synergies with global programmes having activities in the region;
16. hold a regional applications-oriented science conference (like the biennial Operational Oceanography conferences of EuroGOOS or the science conferences of WESTPAC), to bring the community together behind the development of IOCARIBE-GOOS;
17. develop the case for establishing and funding an Administrative Officer to supply the Secretariat support required for implementing IOCARIBE-GOOS;
18. (with the secretariats of IOCARIBE and IOC) solicit external funding from potential sponsors to implement aspects of the work programme;
19. co-ordinate with the GOOS Steering Committee Advisory Panels on scientific and technical developments;
20. develop appropriate marketing and communications strategies including a web site and newsletter for IOCARIBE-GOOS.

ANNEX B

Guidelines to the appointment and the work of the members to the IOCARIBE-GOOS Steering Committee

- (a) The Member States will be invited by Circular Letter to nominate experts having appropriate experience to serve on the IOCARIBE-GOOS Steering Committee.
- (b) The nominated experts should be primarily from ocean organisations or meteorological agencies, with some from fisheries and environmental agencies, to ensure appropriate discipline coverage and to enable the Steering Committee to be aligned closely with JCOMM.
- (c) The IOCARIBE Board, with the assistance of the IOCARIBE Secretariat, and in consultation with the GOOS Project Office, and bearing in mind the need for geographical balance, will consider the nominations and select the members of the Steering Group. In the same way they will consider adding experts if that seems necessary to guarantee appropriate discipline coverage. The selectors will also bear in mind the regional interests of the sponsors of GOOS

(namely IOC, WMO, UNEP/CAR-RCU, and, for the Coastal Panel of GOOS, the FAO), and others governmental and non-governmental organisations as appropriate.

- (d) The Steering Committee will comprise no more than 20 people, will be appointed for 2 intersessional periods in the first instance, will meet annually, and will report through its Chairperson to the biennial meetings of the IOC Sub-commission for the Caribbean and Adjacent Regions.
- (e) To ensure an effective transition from the ad hoc Advisory Group for IOCARIBE-GOOS to the fully functioning Steering Group for IOCARIBE-GOOS, it is recommended that the members of the Advisory Group form part of the Steering Committee for the first intersessional period.
- (f) To ensure that the Steering Committee continues to function efficiently and effectively:
 - (1) its performance should be reviewed at two intersessional periods intervals (i.e. at every second biennial meeting of the Regional Sub-Commission);
 - (2) its members should be appointed at least for two intersessional periods;
 - (3) at least 30% of its members should be renovated every two intersessional periods with the object of maintaining fresh perspectives; and,
 - (4) no member should serve more than three intersessional periods.
- (g) The Steering Committee will elect a geographically representative Executive Committee of no more than five persons to carry out business intersessionally.
- (h) IOCARIBE will work to obtain the resources to support the appointment of a full time Administrative Officer to act as the Technical Secretary to the Steering Group for IOCARIBE-GOOS, who will be a member of the Executive Committee.
- (i) The Steering Committee will create such scientific and technical working groups as appropriate, drawing on members of the Steering Committee and outside experts as necessary.

Recommendation SC-IOCARIBE-VII.2

TSUNAMI WARNING SYSTEM FOR THE CARIBBEAN

The IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE),

Noting that destructive tsunamis (maremotos) are a significant threat to life, infrastructure and development for the coastal regions of all IOCARIBE Member States and that these waves can propagate across the full width of the basins of the region in less than two hours or strike from sources across the Atlantic in only a few hours,

Recognizing the continued tsunami threat presented by the seismically active areas near the borders of the Caribbean tectonic plate, by subaerial and submarine volcanoes such as Soufrière Hills on Monserrat and Kick ‘em Jenny near Grenada, and by slump-prone bathymetric features,

Further recognizing that recent sharp increases in coastal population and development make the region more susceptible to tsunami casualties and damages,

Acknowledging that the Caribbean region does not currently have adequate plans nor is carrying out appropriate coordinated activities necessary to best mitigate the adverse socio-economic impacts of future tsunamis,

Considering that projects capable of contributing to a Regional Tsunami Warning System have been initiated by the Seismic Research Unit (SRU) in Trinidad and Tobago, by the Middle-America Seismograph Consortium (MIDAS) in Puerto Rico, and by others; and that the CPACC sea-level monitoring project offers the opportunity to increase the efficacy of a system that detects the transit of tsunamis,

Noting that the Draft Project Proposal for a Tsunami Warning System for the Caribbean that was accepted by the Group at the last Session (Recommendation SC-IOCARIBE-VI.7) has now been significantly revised,

Acknowledging and **appreciating** the work done by tsunami experts from the Caribbean and Pacific regions at the December 2000 Workshop in Mayaguez and the October 2001 Eighteenth Session of the ICG/ITSU in Cartagena to improve the Project Proposal,

Endorses the revised Project Proposal for an Intra-Americas Sea Tsunami Warning System;

Asks the Tsunami Steering Group of Experts and the Regional Project Coordinator to continue coordinating with the SRU, MIDAS and the emergency preparedness organizations of the region (CDERA, Defensa Civil de Puerto Rico, VITEMA, etc.), as well as with the Joint *ad hoc* Advisory Group for the IOCARIBE-GOOS; and

Urges Member States to support regional collaboration by financial contributions and by communicating directly with the IOCARIBE Tsunami Steering Group of Experts on all developments related to tsunami preparedness as well as warning and education.

Recommendation SC-IOCARIBE-VII.3

SCIENTIFIC RESEARCH CRUISES

The IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE),

Recognizing that scientific research cruises are an essential part of the efforts for data and information gathering,

Recalling that clearance for the cruises is a legal requirement to be covered by the Nation leading the expedition,

Acknowledges the existence of a wealth of data and information to be gathered to inform the decision making process and the sustainable management of the natural and marine resources of the region;

Recommends that IOCARIBE create a small working group to review the regulations dealing with this matter with a view to facilitate the acquisition of the necessary clearance.

Recommendation SC-IOCARIBE-VII.4

PACIFIC CENTRAL AMERICAN LARGE MARINE ECOSYSTEM PROJECT

The IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE),

Recalling that the Pacific Central American Large Marine Ecosystem Project was initiated during IOCARIBE VI, Recommendation VI.5: “*Decides to support and coordinate the development of a new project proposal for monitoring and assessment of the Pacific Coast of Central American LME and its resources, for submission to the GEF by the countries in this sub-region for funding,*”

Acknowledges the progress achieved in the integration of the project;

Notes the recommendation of the UNEP/CAR/RCU representative that the project proposal be considered as a contribution of IOC to the development of the Action Plan for the Protection and Sustainable Development of the coastal and marine environment of the Northeast Pacific;

Supports the implementation of the project by its Regional Coordinator, instructing the IOCARIBE Secretariat to participate in the integration of an ad hoc Committee to submit a PDF block A project in 2002, with the purpose of further defining the scope and reach of the project, including UNEP/CAR/RCU among its participants.

Recommendation SC-IOCARIBE-VII.5

REGIONAL PROJECT COORDINATORS AND STEERING GROUPS OF EXPERTS

The IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE),

Recognizing that the regional projects are the basic operational entity for IOCARIBE to accomplish its main goals and objectives,

Considering that the limited resources available to the IOCARIBE Secretariat made necessary to delegate the coordination and management of projects to selected experts and institutions in the region,

Further recognizing that the Sub-Commission adopted the figure of Regional Project Coordinators (RPC), and the Steering Group of Experts (SGE) as described in the IOCARIBE Manual,

Noting that the 6th Session of SC-IOCARIBE was the first time that this new scheme was applied, and that at least ten (10) RPC submitted their new project proposals, or reports on their on-going regional projects and that only four (4) of RPC were present at SC-IOCARIBE-VII,

Further noting that the Intergovernmental sessions are the best opportunity for:

- (a) RPC to submit, evaluate and get governmental support for their projects,
- (b) governmental delegates to get first hand and official information on regional projects for decisions – making purposes,

Recommends to the IOCARIBE and IOC Secretariat to ensure that all and each Regional Project have a fully appointed RPC and SGC in accordance with the procedures established by the *IOCARIBE Manual*,

Requests from RPCs to fully assume their duty of project management and fund raising and ensure their presence at the IOCARIBE intergovernmental meetings, as suitable;

Recommends that both RPCs and SGEs be appointed for periods attached to the periodicity of the IOCARIBE intergovernmental sessions.

Recommendation SC-IOCARIBE-VII.6

CARIBBEAN PROCESS

The IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE),

Recognising the existence in the Wider Caribbean of a number of regional and sub-regional organisations working on the implementation of projects and programmes for the development and protection of coastal and marine environment,

Calls on the States members of IOC to develop an initiative for the adoption of a “Caribbean Process” similar in nature to the “African Process”. This initiative should include effective liaisons with, among others, UNEP/CAR/RCU, IOCARIBE, CARICOM, WECAFC, ECLAC, ACS, OECS, as well as NGOs, and other organisations responsible for the advancement of the scientific knowledge, protection, and management of the coastal and marine resources on a sustainable basis, in accordance to the Barbados Action Plan, and the Cartagena Convention.

Recommendation SC-IOCARIBE-VII.7

WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT (WSSD)

The IOC Sub-Commission for the Caribbean and Adjacent Regions IOCARIBE,

Being aware that the WSSD will be addressing issues of sustainable development and will be reviewing the implementation status of the Climate Change and of the Bio-diversity Conventions and also of *Agenda 21*,

Noting that Chapter 17 of *Agenda 21* is dedicated to the oceans and enclosed seas,

Taking note of the deliberations and the Declaration of the World Conference on Oceans and Coastal Zones at Rio+10, realized in Paris from 3 to 7 December 2001,

Taking note also that the Declaration of the IOC Member States of 11 December 2001 to WSSD emphasizes the function of the ocean to the environment,

Recognizing that the region of the Wider Caribbean is extremely dependent on its ocean environment for its well being,

Recommends to IOCARIBE Member States to consider in the context of WSSD, the Caribbean wide projects that have been adopted by IOCARIBE particularly Large Marine Ecosystems

(LME) and Caribbean Global Oceans Observing System (IOCARIBE-GOOS), which provides a data base for sustainable development and the technical capacity building necessary for that effort;

Recommends further that IOCARIBE pursue the steps necessary to promote the Caribbean Sea at WSSD with emphasis on the implementation of the resolutions related to LME projects and IOCARIBE-GOOS.

Recommendation SC-IOCARIBE-VII.8

FUTURE EVALUATION AND FOLLOW-UP OF AN INTEGRATED INVENTORY FOR PROFESSIONAL CAPACITY BUILDING IN REGIONAL PROJECTS

The IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE),

Considering the project based approach of TEMA activities that IOC is applying for the development of the training, education and mutual assistance component in all its programmes and projects,

Noting that Recommendation SC-IOCARIBE-VI.10 (“Regional Strategic Programme: Evaluation and Upgrading of the Scientific Research and Training Component in the Regional Projects”), was only partially fulfilled during the intersessional period,

Recognizing the need for sustained and systematic actions in training, education and mutual assistance in all regional projects,

Acknowledging that training and education through research has proven to be the best way for professional capacity building in marine and coastal sciences and services,

Being aware of the urgent need to define ways and means for national capacity building in terms of human resources, and its systematic evaluation in order to respond to the needs of the Member States of the region,

Decides to establish as a mandatory rule that all approved IOCARIBE programmes and projects will include a clearly defined plan and budget for training, education and mutual assistance activities, so as to ensure human resource capacity building in the region;

Decides further that:

- (i) the Officers of the Sub-Commission, with the assistance of the Regional Secretariat, establish the necessary plan and mechanisms, including the selection of proper indicators, to ensure specific and systematic evaluation, and periodic independent oversight in the long term for all programmes and projects as far as training, education and mutual assistance activities are concerned;
- (ii) a Comprehensive Inventory of Professional Capacity Building for all regional activities in training, education and mutual assistance will be compiled and periodically updated from all the approved regional programmes and projects;
- (iii) the first draft of this Inventory should be sent before 31 August 2002, for information of, and possible actions by, all IOCARIBE Member States as well as the IOC and

IOCARIBE Governing Bodies, as a basis for any future evaluation at next IOCARIBE sessions;

- (iv) any updating in the Inventory will be duly and timely informed to all Member States;

Establishes that all assessments of success or failures in this regard will be developed on the basis of the accomplishment of the above-mentioned Comprehensive Inventory for Professional Capacity Building, starting at the next IOCARIBE Session (VIII).

ANNEX III

LIST OF PARTICIPANTS/LISTA DE PARTICIPANTES

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III. REPRESENTATIVES OF
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**UNITED NATIONS ENVIRONMENT
PROGRAMME - CARIBBEAN
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ANNEX IV

MEMORANDUM OF COOPERATION

BETWEEN

**THE SECRETARIAT OF THE CONVENTION FOR THE PROTECTION AND
DEVELOPMENT OF THE MARINE ENVIRONMENT OF
THE WIDER CARIBBEAN REGION**

AND

**IOCARIBE OF THE INTERGOVERNMENTAL OCEANOGRAPHIC
COMMISSION (IOC) OF UNESCO**

This Memorandum establishes a framework for co-operation between the Caribbean Regional Co-ordinating Unit of the United Nations Environment Programme (UNEP-CAR/RCU) in Kingston, Jamaica, as the Secretariat for the Cartagena Convention and the Caribbean Environment Programme (CEP), and IOCARIBE of the Intergovernmental Oceanographic Commission of (IOC) of UNESCO.

The Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention) is the regional legal instrument for the protection and development of the marine environment of the Wider Caribbean Region (WCR). The States and Territories of the WCR, through the Convention have joined in pursuit of a common goal – protection of the marine and coastal environment through the promotion of ecologically, economically and socially stable developments of their coastal and marine resources.

Having entered into force in October 1986, the Cartagena Convention established the political and legal foundation for regional co-operation. Protocols to the Convention, as integral parts of the Convention, provide the legal operational basis for implementation of specific articles.

- The Oil Spills Protocol entered into force with the Convention in 1986. This protocol provides for cooperation among countries in the region in oil spill response and preparation of national contingency plans.
- The Protocol on Specially Protected Areas and Wildlife (The SPAW Protocol) was adopted 18 January 1990 and has entered into force in June 2000.
- A Protocol on Land-based Sources of Marine Pollution (LBS Protocol) was adopted in October 1999 and the Secretariat expects that it will be into force in 2002.

The IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE), created in November 1982, is a Regional Subsidiary body responsible for the promotion, development and co-ordination of IOC marine scientific research programmes, the ocean services, and related activities, including Training, Education and Mutual Assistance (TEMA) in the Caribbean. It is the physical presence and the representation of IOC-UNESCO in the Caribbean and Adjacent Regions. The Regional Secretariat is located in the city of Cartagena de Indias, Colombia.

The IOCARIBE Sub-Commission deals with a wide range of scientific programmes, dealing with collection, management and exchange of data on physical, chemical and biological properties of the ocean, coastal seas and estuaries; ocean mapping, research, and monitoring; survey and observation programmes and systems at the regional level. The Sub-Commission major activities include: Regional Component of the Global Ocean Observing System (GOOS), IOCARIBE-GOOS, International Oceanographic Data Exchange (IODE), Global Oceanographic Data Archaeology and Rescue (GODAR), Hurricane Effects and Mitigation in the Coastal Zones of the IOCARIBE Region, Humpback Whales Research, Large Marine Ecosystem (LME) concept, regional component of the Global Sea Level Observing System (GLOSS), Tsunami Warning System for the Caribbean, Harmful Algae in the Caribbean (HAB), and the International Bathymetric Chart of the Caribbean and the Gulf of Mexico (IBCCA). The objectives of the Sub-Commission consider IOC's priorities and follow three main interactive lines of action: (i) Oceans and Climate; (ii) Ocean Ecosystems Science; and, (iii) Marine Science for Integrated Coastal Area Management.

UNEP-CAR/RCU and IOCARIBE:

Taking account of the long-standing co-operation between the United Nations Environment Programme and the Intergovernmental Oceanographic Commission at the Headquarters level;

Recalling the co-operation between UNEP-CAR/RCU and IOCARIBE in connection with the former sub-programme on Assessment and Control of Marine Pollution (CEPPOL) of the Caribbean Environment Programme (CEP);

Noting decision #11, taken by the Twelfth Meeting of the Monitoring Committee on the Action Plan for the Caribbean Environment and Special Meeting of the Bureau of the Contracting Parties to the Cartagena Convention, that called on the Secretariat to identify areas of shared programmatic interest and cooperation with IOC/IOCARIBE on their implementation;

Noting the instructions provided by the XXI Session of the IOC Assembly to explore mechanisms to co-ordinate the work of the IOCARIBE Sub-Commission with that of the regional bodies of FAO and UNEP in the region, and taking into account discussions held during the UN General Assembly's 2nd Meeting of the Informal Consultative Process on Oceans;

Aware that UNEP-CAR/RCU and IOCARIBE are prepared to promote co-operation and co-ordination in the WCR on activities related to oceanographic conditions and to monitoring of marine pollution, as well as management of data from these activities;

Agree as follows:

ARTICLE I

INSTITUTIONAL ARRANGEMENTS

UNEP-CAR/RCU and IOCARIBE will be invited to participate as observers at relevant meetings of the other organisation, especially the Inter-Governmental Meetings and Monitoring Committee Meetings of the Cartagena Convention and the Intergovernmental Sessions of the IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE).

UNEP-CAR/RCU and IOCARIBE will inform their respective focal points of the specific areas of co-operation between themselves and provide for periodic reports on the implementation of this Memorandum.

UNEP-CAR/RCU and IOCARIBE will exchange annual reports, work plans and budgets and ensure they are made available to the focal points of each Party.

UNEP-CAR/RCU and IOCARIBE will maintain a prominent hyperlink with the other organisation on their respective websites.

ARTICLE II

PROGRAMMATIC CO-OPERATION AND EXCHANGE OF INFORMATION

UNEP-CAR/RCU and IOCARIBE will co-operate generally on issues related to monitoring surveys in the Wider Caribbean Region, including the compilation, analysis and assessment of data, and information management.

UNEP-CAR/RCU and IOCARIBE will exchange information in their respective fields of responsibility, including information on the implementation and effectiveness of the Cartagena Convention and monitoring data describing the state of the marine environment of the WCR.

UNEP-CAR/RCU and IOCARIBE will develop mechanisms to facilitate the exchange of data, information, knowledge and experiences in their common fields of responsibility. These mechanisms will be developed to take advantage of the World Wide Web and promote easy and free access to marine and coastal information for their respective constituencies.

UNEP-CAR/RCU and IOCARIBE will encourage dissemination of data, information, knowledge and experiences to the Contracting Parties of the other organisation through their different respective means.

UNEP-CAR/RCU and IOCARIBE will identify mechanisms to ensure database compatibility in the area of marine monitoring data and exchange information contained in their respective databases.

UNEP-CAR/RCU and IOCARIBE will encourage integration and consistency between national strategies and national reports for the protection and development of the marine environment.

UNEP-CAR/RCU and IOCARIBE will co-ordinate to facilitate the implementation of the Regional Component of the Global Ocean Observing System (GOOS), IOCARIBE-GOOS to consolidate meteorological, climatological and coastal observations in the Caribbean Region.

ARTICLE III

CO-ORDINATION OF PROGRAMME OF WORK

UNEP-CAR/RCU and IOCARIBE will, to the extent possible, co-ordinate the preparation of their respective work plans and budgets. UNEP-CAR/RCU and IOCARIBE will meet, at a minimum, every two years to collaborate on the development of their respective work plans and to develop project plans and budgets for joint activities.

ARTICLE IV

FINANCIAL ARRANGEMENTS

On a case-by-case basis, UNEP-CAR/RCU and IOCARIBE may choose to combine financial resources for a common project, however, nothing in the Memorandum obligates UNEP-CAR/RCU and IOCARIBE to any financial commitment. The respective work plans and budgets will remain separate.

ARTICLE V

DISPUTE RESOLUTION

Any disputes arising in connection with the implementation of this Memorandum will be resolved by negotiations between UNEP-CAR/RCU and IOCARIBE and if necessary, arbitrated by a third party jointly decided upon by UNEP-CAR/RCU and IOCARIBE.

ARTICLE VI

ENTRY INTO FORCE

Except for the conditions expressed in Article VII, this Memorandum shall enter into force on the date of its signature by UNEP-CAR/RCU and IOCARIBE and shall remain in force for 3 years. It will be extended thereafter by tacit agreement on a biennial basis.

ARTICLE VII

TERMINATION OF MEMORANDUM

UNEP-CAR/RCU or IOCARIBE can terminate this Memorandum with a three-month notice of its intention to terminate.

Signed in two copies in English:

Nelson Andrade Colmenares
Coordinator
UNEP-CAR/RCU

Patricio Bernal
Executive Secretary
IOC-UNESCO

Kingston Date: _____

Paris Date: _____

ANNEX V

LIST OF ACRONYMS AND ABBREVIATIONS

CARICOM	Caribbean Community
CFRAMP	CARICOM Fishery Resource Assessment and Measurement Programme
CSD	Committee of Sustainable Development
FAO	Food and Agriculture Organization of the United Nations
GEBCO	General Bathymetric Chart of the Ocean
GEF	Global Environmental Facility
GLOSS	Global Sea Level Observing System
GODAR	Global Oceanographic Data Archaeology and Rescue Project
GOOS	Global Ocean Observing System
IASI	Intra-Americas Sea Initiative
IBCCA	International Bathymetric Chart of the Caribbean and Gulf of Mexico
ICAM	Integrated Coastal Areas Management
ICM	Integrated Coastal Management
IOC	Intergovernmental Oceanographic Commission
IOCARIBE	IOC Sub-Commission for the Caribbean and Adjacent Regions
IRF	Island Resources Foundation
JCOMM	Joint WMO-IOC Technical Commission for Oceanography and Marine Meteorology
LME	Large Marine Ecosystems
NGOs	Non-Governmental Organizations
ODINCARSA	Ocean Data and Information Network for the IOCARIBE and South America Regions
PREPCOM	Preparatory Committee Meetings
RCU	Regional Coordinating Unit for CEP (UNEP)
RPC	Regional Project Coordinator
SGE	Steering Group of Experts
SSP	Strategic Science Plan
TEMA	Training, Education and Mutual Assistance
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UWI	University of the West Indies
WSSD	World Summit on Sustainable Development, Johannesburg 2002

In this Series	Languages
Reports of Governing and Major Subsidiary Bodies , which was initiated at the beginning of 1984, the reports of the following meetings have already been issued:	
1. Eleventh Session of the Working Committee on international Oceanographic Data Exchange	E, F, S, R
2. Seventeenth Session of the Executive Council	E, F, S, R, Ar
3. Fourth Session of the Working Committee for Training, Education and Mutual Assistance	E, F, S, R
4. Fifth Session of the Working Committee for the Global Investigation of Pollution in the Marine Environment	E, F, S, R
5. First Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions	E, F, S
6. Third Session of the <i>ad hoc</i> Task team to Study the Implications, for the Commission, of the UN Convention on the Law of the Sea and the New Ocean Regime	E, F, S, R
7. First Session of the Programme Group on Ocean Processes and Climate	E, F, S, R, Ar
8. Eighteenth Session of the Executive Council	E, F, S, R, Ar
9. Thirteenth Session of the Assembly	E, F, S, R, Ar
10. Tenth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific	
11. Nineteenth Session of the Executive Council, Paris, 1986	E, F, S, R, Ar
12. Sixth Session of the IOC Scientific Committee for the Global Investigation of Pollution in the Marine Environment	E, F, S
13. Twelfth Session of the IOC Working Committee on International Oceanographic Data Exchange	E, F, S, R
14. Second Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions, Havana, 1986	E, F, S
15. First Session of the IOC Regional Committee for the Central Eastern Atlantic, Praia, 1987	E, F, S
16. Second Session of the IOC Programme Group on Ocean Processes and Climate	E, F, S
17. Twentieth Session of the Executive Council, Paris, 1987	E, F, S, R, Ar
18. Fourteenth Session of the Assembly, Paris, 1987	E, F, S, R, Ar
19. Fifth Session of the IOC Regional Committee for the Southern Ocean	E, F, S, R
20. Eleventh Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific, Beijing, 1987	E, F, S, R
21. Second Session of the IOC Regional Committee for the Co-operative Investigation in the North and Central Western Indian Ocean, Arusha, 1987	E, F
22. Fourth Session of the IOC Regional Committee for the Western Pacific, Bangkok, 1987	E only
23. Twenty-first Session of the Executive Council, Paris, 1988	E, F, S, R
24. Twenty-second Session of the Executive Council, Paris, 1989	E, F, S, R
25. Fifteenth Session of the Assembly, Paris, 1989	E, F, S, R
26. Third Session of the IOC Committee on Ocean Processes and Climate, Paris, 1989	E, F, S, R
27. Twelfth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific, Novosibirski, 1989	E, F, S, R
28. Third Session of the Sub-Commission for the Caribbean and Adjacent Regions, Caracas, 1989	E, S
29. First Session of the IOC Sub-Commission for the Western Pacific, Hangzhou, 1990	E only
30. Fifth Session of the IOC Regional Committee for the Western Pacific, Hangzhou, 1990	E only
31. Twenty-third Session of the Executive Council, Paris, 1990	E, F, S, R
32. Thirteenth Session of the IOC Committee on International Oceanographic Data and Information Exchange, New York, 1990	E only
33. Seventh Session of the IOC Committee for the Global Investigation of Pollution in the Marine Environment, Paris, 1991	E, F, S, R
34. Fifth Session of the IOC Committee for Training, Education and Mutual Assistance in Marine Sciences, Paris, 1991	E, F, S, R
35. Fourth Session of the IOC Committee on Ocean Processes and Climate, Paris, 1991	E, F, S, R
36. Twenty-fourth Session of the Executive Council, Paris, 1991	E, F, S, R
37. Sixteenth Session of the Assembly, Paris, 1991	E, F, S, R, Ar
38. Thirteenth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific, Baja California, 1991	E, F, S, R
39. Second Session of the IOC-WMO Intergovernmental WOCE Panel, Paris, 1992	E only
40. Twenty-fifth Session of the Executive Council, Paris, 1992	E, F, S, R
41. Fifth Session of the IOC Committee on Ocean Processes and Climate, Paris, 1992	E, F, S, R
42. Second Session of the IOC Regional Committee for the Central Eastern Atlantic, Lagos, 1990	E, F
43. First Session of the Joint IOC-UNEP Intergovernmental Panel for the Global Investigation of Pollution in the Marine Environment, Paris, 1992	E, F, S, R
44. First Session of the IOC-FAO Intergovernmental Panel on Harmful Algal Blooms, Paris, 1992	E, F, S
45. Fourteenth Session of the IOC Committee on International Oceanographic Data and Information Exchange, Paris, 1992	E, F, S, R
46. Third Session of the IOC Regional Committee for the Co-operative Investigation in the North and Central Western Indian Ocean, Vascoas, 1992	E, F
47. Second Session of the IOC Sub-Commission for the Western Pacific, Bangkok, 1993	E only
48. Fourth Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions, Veracruz, 1992	E, S
49. Third Session of the IOC Regional Committee for the Central Eastern Atlantic, Dakar, 1993	E, F
50. First Session of the IOC Committee for the Global Ocean Observing System, Paris, 1993	E, F, S, R
51. Twenty-sixth Session of the Executive Council, Paris, 1993	E, F, S, R
52. Seventeenth Session of the Assembly, Paris, 1993	E, F, S, R
53. Fourteenth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific, Tokyo, 1993	E, F, S, R
54. Second Session of the IOC-FAO Intergovernmental Panel on Harmful Algal Blooms, Paris, 1993	E, F, S
55. Twenty-seventh Session of the Executive Council, Paris, 1994	E, F, S, R
56. First Planning Session of the IOC-WMO-UNEP Committee for the Global Ocean Observing System, Melbourne, 1994	E, F, S, R
57. Eighth Session of the IOC-UNEP-IMO Committee for the Global Investigation of Pollution in the Marine Environment, San José, Costa Rica, 1994	E, F, S
58. Twenty-eighth Session of the Executive Council, Paris, 1995	E, F, S, R
59. Eighteenth Session of the Assembly, Paris, 1995	E, F, S, R
60. Second Session of the IOC-WMO-UNEP Committee for the Global Ocean Observing System, Paris, 1995	E, F, S, R

61.	Third Session of the IOC-WMO Intergovernmental WOCE Panel, Paris, 1995	E only
62.	Fifteenth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific, Papete, 1995	E, F, S, R
63.	Third Session of the IOC-FAO Intergovernmental Panel on Harmful Algal Blooms, Paris, 1995	E, F, S
64.	Fifteenth Session of the IOC Committee on International Oceanographic Data and Information Exchange	E, F, S, R
65.	Second Planning Session of the IOC-WMO-UNEP Committee for the Global Ocean Observing System, Paris, 1995	E only
66.	Third Session of the IOC Sub-Commission for the Western Pacific, Tokyo, 1996	E only
67.	Fifth Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions, Christ Church, 1995	E, S
68.	Intergovernmental Meeting on the IOC Black Sea Regional Programme in Marine Sciences and Services	E, R
69.	Fourth Session of the IOC Regional Committee for the Central Eastern Atlantic, Las Palmas, 1995	E, F, S
70.	Twenty-ninth Session of the Executive Council, Paris, 1996	E, F, S, R
71.	Sixth Session for the IOC Regional Committee for the Southern Ocean and the First Southern R Ocean Forum, Bremerhaven, 1996	E, F, S,
72.	IOC Black Sea Regional Committee, First Session, Varna, 1996	E, R
73.	IOC Regional Committee for the Co-operative Investigation in the North and Central Western Indian Ocean, Fourth Session, Mombasa, 1997	E, F
74.	Nineteenth Session of the Assembly, Paris, 1997	E, F, S, R
75.	Third Session of the IOC-WMO-UNEP Committee for the Global Ocean Observing System, Paris, 1997	E, F, S, R
76.	Thirtieth Session of the Executive Council, Paris, 1997	E, F, S, R
77.	Second Session of the IOC Regional Committee for the Central Indian Ocean, Goa, 1996	E only
78.	Sixteenth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific, Lima, 1997	E, F, S, R
79.	Thirty-first Session of the Executive Council, Paris, 1998	E, F, S, R
80.	Thirty-second Session of the Executive Council, Paris, 1999	E, F, S, R
81.	Second Session of the IOC Black Sea Regional Committee, Istanbul, 1999	E only
82.	Twentieth Session of the Assembly, Paris, 1999	E, F, S, R
83.	Fourth Session of the IOC-WMO-UNEP Committee for the Global Ocean Observing System, Paris, 1999	E, F, S, R
84.	Seventeenth Session of the International Coordination Group for the Tsunami Warning System in the Pacific, Seoul, 1999	E, F, S, R
85.	Fourth Session of the IOC Sub-Commission for the Western Pacific, Seoul, 1999	E only
86.	Thirty-third Session of the Executive Council, Paris, 2000	E, F, S, R
87.	Thirty-fourth Session of the Executive Council, Paris, 2001	E, F, S, R
88.	Extraordinary Session of the Executive Council, Paris, 2001	E, F, S, R
89.	Sixth Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions, San José, 1999	E only
90.	Twenty-first Session of the Assembly, Paris, 2002	E, F, S, R
91.	Thirty-fifth Session of the Executive Council, Paris, 2001	E, F, S, R
92.	Sixteenth Session of the IOC Committee on International Oceanographic Data and Information Exchange, Lisbon, 2000	E only
93.	Eighteenth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific, Cartagena, 2001	E, F, S, R
94.	Fifth Session of the IOC-WMO-UNEP Committee for the Global Ocean Observing System, Paris 2001	E, F, S, R
95.	Seventh session of the IOC Sub-commission for the Caribbean and Adjacent Regions (IOCARIBE), Mexico, 2002	E, S