



INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

Twenty-third Session of the Assembly
Paris, 21–30 June 2005

ACTION PAPER

This Action Paper provides the information necessary for effective participation in the discussion of the agenda items. This information includes: (i) the identification of the relevant documentation*; (ii) identification of the issue before the Assembly and the expected decision; (iii) background information (if the relevant background information requires a separate presentation, it will be issued as an Annex to the present Action Paper, and this will be specifically mentioned); (iv) if deemed to facilitate debate, Draft Resolutions are proposed under the corresponding Agenda items without prejudice to the wishes of the Assembly or the recommendations of its Resolutions Committee.

The blank right-hand pages are provided to allow participants to make notes, if they so wish.

* Additional documents may be distributed to participants for information only and included in the Provisional List of Documents, IOC-XXIII/4 prov.)

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1. OPENING

1 The Chairman, David Pugh, will open the 23rd Session of the IOC Assembly at 10.00hr on Tuesday 21 June 2005. The Director-General or his representative will address the Assembly. The Chairman will ask the participants to stand in silence for one minute as a mark of respect for distinguished individuals who have collaborated with the Commission and have passed away during the past year.

2. ORGANISATION OF THE SESSION

2.1 ADOPTION OF THE AGENDA

Documentation:

IOC-XXIII/1 prov. rev.2

Second Revised Provisional Agenda

IOC/EC-XXXVIII/3

Summary Report of the 38th Session of the IOC Executive Council

2 The Executive Secretary will introduce this item. Taking into account comments by the Executive Council, at its 38th Session, acting as the Steering Committee for this session of the Assembly [Rule of Procedure 19(2)], the Revised Provisional Agenda will be submitted to the Assembly for adoption. Pursuant to Rule 10(2), the Provisional Agenda may be amended by the Assembly at any time during the session.

3 The Executive Secretary will point out that two items were withdrawn from the original provisional agenda: one on the Fourth Session of the IOC Regional Committee for the Indian Ocean which has been postponed to later this year, owing to a low response to the invitation; the other is the progress report on the evaluation of the Tsunami Programme which was suspended, owing to the Indian Ocean tsunami catastrophe of 26 December 2004.

4 Member State representatives are reminded that the formal and final deadline for informing the Executive Secretary of their nominations for the elections of Officers and members of the Executive Council is Wednesday 22 June 2005 at 18.00hr. Similarly, the final deadline for the submission of Draft Resolutions is Saturday 25 June 2005 at 13.00hr.

DECISION 2.1: The Assembly will be invited to adopt the Second Revised Provisional Agenda, as is or as amended by the Assembly at the present session.

2.2 DESIGNATION OF THE RAPPORTEUR

DECISION 2.2: The Chairman will invite the Assembly to designate the Rapporteur for the present session to assist the Chairman and the Executive Secretary in the preparation of the Draft Summary Report.

2.3 ESTABLISHMENT OF INTRASESSIONAL COMMITTEES

5 The Assembly will be invited to constitute sessional committees pursuant to the recommendations of the 38th Session of the IOC Executive Council, acting as the Steering Committee for the Assembly under Rule of Procedure 19(2), to work on specific questions that will require decisions by the Assembly (Rule of Procedure 12(2)), as follows:

- (i) Nominations Committee (Agenda item 5.3)
- (ii) Resolutions Committee (Agenda item 6)
- (iii) Financial Committee, under the Chairmanship of Captain Javier Valladares (Argentina), Vice-Chairman responsible for finance matters (Agenda items 3.2, 3.3, 5.1 and 5.2)

DECISION 2.3: The Assembly will be invited to constitute the following open-ended working groups:

- Sessional working group to work on the final version of the Terms of Reference of the Intergovernmental Committee for GOOS (I-GOOS), the GOOS Scientific Steering Committee (GSSC) and the GOOS Project Office (GPO), under the Chairmanship of Dr K. Radakrishnan (India), Vice-Chairman responsible for Operational Observing Systems (Agenda item 4.4.1)
- Sessional Working Group on the IOC contribution to the establishment of a Global Tsunami Early Warning System, under the chairmanship of [to be decided] ([country]) (Agenda item 4.8.2)
- Sessional drafting group on the Concept Paper on the Modalities of Implementation of IOC Programmes in Regions, under the Chairmanship of Professor Mario Ruivo (Portugal), Vice-Chairman responsible for regions (Agenda item 4.5.1).

2.4 INTRODUCTION OF DOCUMENTATION AND TIMETABLE

Documentation:

IOC-XXIII/1 Add. prov. rev. 2	<i>Second Revised Provisional Timetable</i>
IOC-XXIII/4 prov.	<i>Provisional List of Documents</i>
IOC-XXIII/Inf.1	<i>Information and Guidelines for Participants</i>

6 The Executive Secretary will introduce the documentation.

7 The Chairman will invite the Assembly to adopt the Second Revised Provisional Timetable taking into account: (i) any Assembly decision to include supplementary items; (ii) the time likely to be required by the sessional committees and working groups to report in plenary; (iii) the preparation of the Draft Summary Report in all the Commission's working languages; and (iv) the need to benefit from interpretation.

2.5 ANTON BRUUN AND N.K. PANIKAAR MEMORIAL LECTURES

Documentation:

IOC-XXII/Inf.2	<i>Presentation and Abstracts of A. Bruun and N.K. Panikkar Memorial lectures, 2005</i>
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8 Dr Donald M. Anderson, Senior Scientist and Director, Coastal Ocean Institute at Woods Hole Oceanographic Institution, will deliver the Bruun Memorial Lecture 2005 on "The ecology and oceanography of harmful algal blooms: multidisciplinary approaches to research and management".

- 9 Dr Laura Kong, Director of the International Tsunami Information Centre (Hawaii, USA), will deliver the N.K. Panikkar Memorial Lecture 2005 on a “People-centred tsunami warning system and the challenge of building preparedness at the national and local level”.

3. STATUTORY REPORTS

3.1 STATEMENT OF THE CHAIRPERSON ON THE STATE OF IOC [Rule of Procedure No.8.1. (a)]

Documentation:

IOC-XXIII/7

Statement of the Chairman on the State of the IOC

- 10 In accordance with Rule of Procedure No.8.1(a), the Chairman will deliver his statement on recent developments in the work of the Commission and perspectives for the coming years. Among other matters he will refer to the Medium-term Strategy 2008–2013 and will inform the Assembly that, following consultations at the meeting of the Chairpersons of the Major Subsidiary Bodies prior to the 37th Session of the Executive Council, he had presented a first draft of the Strategy to the Officers meeting in Tunisia, 3–5 February 2005. Although, formally, the Assembly should approve the Medium Term Strategy 2008–2013 at its 24th Session, in 2007, the Executive Council, at its 39th Session, should review an advance draft, in order to provide in time the IOC input to the review of the UNESCO Medium-term Strategy.

3.2 REPORT BY THE EXECUTIVE SECRETARY ON PROGRAMME AND BUDGET IMPLEMENTATION (2003–2005) [Rules of Procedure No.8.1. (b) and No.49.1]

Documentation:

IOC-XXIII/2 Annex 1

Report by the IOC Executive Secretary on Programme Implementation

IOC-XXIII/2 Annex 1 Add. 1

SISTER Follow-up Qualitative Report for the IOC

IOC-XXIII/2 Annex 1 Add. 2

Implementation of IOC Governing Bodies' Resolutions

IOC-XXIII/2 Annex 2

Progress Report on Budget Execution (2002–2003, and 2004)

IOC-XXIII/2 Annex 2 Add.

Update for the Period 1 January–30 April 2005

IOC/INF-1204

IOS Audit Report on the Intergovernmental Oceanographic Commission (IOC): Special Account and controls generally

IOC Annual Report No. 10

IOC Annual Report, 2004

IOC Annual Report No. 9

IOC Annual Report, 2003

- 11 The Executive Secretary will introduce this item. He will refer to documents IOC-XXIII/2 Annex 1, Annex 1 add.1, Annex 1 add.2 and Annex 2, as well as to the IOC Annual Report No. 9 and No. 10. He will point out that, from 2004 onwards, the Annual Report will contain the IOC Financial Statement signed by UNESCO’s Chief Accountant. In this connection, at the request of the Executive Secretary, the Internal Oversight Service of UNESCO (IOS) carried out an Audit to review the IOC Special Account financial statement of 31 December 2003 and the effectiveness of controls in the major IOC administrative/operational procedures. The Audit Report is available as document IOC/INF-1204, *Audit Report on the Intergovernmental Oceanographic Commission (IOC): special account and controls generally*. The IOS concluded that: “generally the internal controls in the IOC secretariat in Paris are functioning effectively and recommended measures to strengthen controls. Considering the effectiveness of the controls identified by the Audit, the IOS recommended increasing delegation of authority to IOC.”

- 12 The Executive Secretary will then remind the Assembly that SISTER (System of Information on Strategies, Tasks and the Evaluation of Results) and SAP (System Applications and Products) have enabled the Commission to achieve significant improvements in programme evaluation, accounting and budgetary systems. The detailed reports in SISTER are online and open for consultation by the Member States' permanent delegations to UNESCO, up to the Main Line of Action level.
- 13 The Executive Secretary will also provide information on Budget execution for the biennium 2002–2003 and for the year 2004. Document IOC-XXII/2 Annex 2 Progress Report on Budget Execution (2002–2003, and 2004) contains an overview of the current status of revenue and expenditure in relation to the IOC Regular Programme and the IOC special account. An update for the period 1 January 2005–30 April 2005 will also be made available for the session.
- 14 Regarding staff issues, all established professional and administrative posts in the IOC Secretariat are filled. The chances of effectively coping with the growing workload generated by the expansion of the programme of the Commission are seriously affected by the continuous staff reductions in UNESCO. This is in sharp contrast to the advice of the External Evaluation of IOC (Agenda item 4.1.3) which requested UNESCO to consider doubling the number of permanent posts in the Commission from 9 to 18 in a reasonable period of time. The Draft Programme and Budget 2006–2007 includes in the baseline the creation of only one professional post directly related to the reinforcement of human resources for the building of the Indian Ocean Tsunami Early Warning System. The Executive Secretary will inform the Plenary that the option of using Regular Budget for staff costs under the newly created Appointments of Limited Duration (ALD) as announced by the Director-general in his speech before the IOC Assembly at its 20th Session has not yet been possible, owing to the conditions established by the Executive Board of UNESCO of which IOC was not exempted.
- 15 The Executive Secretary will report on some tasks assigned to the Secretariat by the IOC Assembly, namely the completion of the process of signing a Memorandum of Understanding with ICES (Res. XXII.9), the participation of IOC in the Organizing Committee of the International Polar Year 2007–2008 (Res. EC-XXXVII.3) and the signature of a Memorandum of Understanding with UNEP concerning the cooperation of GOOS and the UNEP Regional Seas Programme. All of these tasks were completed.
- 16 Regarding strategic matters impacting the future development of the IOC, the Executive Secretary will report on the growing gap between the tasks assumed by the Commission and the resources available for fulfilling them. While this has become apparent with the implementation phase that GOOS has reached, it has also been discussed in relation to the proposed Regular Assessment of the State of the Marine Environment and the effective participation of IOC and GOOS in the GEO process. However, this gap has become critical in the face of the responsibilities that the international community is requesting from the Commission in the aftermath of the Indian Ocean tsunami catastrophe of 26 December 2004. The IOC is the only intergovernmental body to have worked on problems posed by tsunamis for more than 40 years now, but with a low rate of support given the reduced resources of the Commission. IOC Officers, at their last meeting (Tunisia, 3–5 February 2005), decided that Member States need to discuss the funding mechanisms available to the Commission in depth and prepared a document proposing some new alternatives, document IOC-XXIII/2 Annex 9, “*We have a Problem*” tabled for consideration under Agenda item 5.1.

- 17 The Chairman will invite the Chairman of the Financial Committee, Captain Javier Valladares, to report to the Assembly on the Committee's review of the Executive Secretary's report on Budget Implementation.

DECISION 3.2: The Assembly will be invited to: (i) comment on the Executive Secretary's report on Programme Implementation; (ii) consider the Executive Secretary's report on Budget Implementation.

3.3 PRESENTATION BY THE EXECUTIVE SECRETARY OF THE DRAFT PROGRAMME AND BUDGET FOR THE BIENNIUM 2006–2007

[Rule of Procedure No.8.1(c)]

Documentation:

IOC-XXIII/2 Annex 3

Draft Programme and Budget 2006–2007 (draft 33 C/5)

- 18 The Executive Secretary will introduce this item. He will briefly refer to the recommendations of the 170th Executive Board of UNESCO, on the draft 33 C/5, that are relevant to IOC. Pursuant to Resolution XXII-14, the Executive Council at its 37th Session identified the Main Lines of Action (MLAs) for the Programme and Budget for the biennium 2006–2007, as an early input to the preparation of the UNESCO Draft Programme and Budget for 2006–2007 (referred to as Draft 33 C/5).

- 19 The Executive Secretary will refer first to the Zero Nominal Growth (ZNG) budget ceiling approved as a guideline for finalizing the Draft 33 C/5 at the 170th Executive Board of UNESCO. He will then inform the Assembly that the Executive Board did not mark IOC as a priority. As a consequence, the IOC envelope for planning 2006–2007 was reduced in ca. US\$ 900,000, from 4,721,600 to 3,821,600 US dollars. Document IOC-XXIII/2 Annex 3 provides detailed information on the proposed distribution of the reduced resources. The Executive Secretary will explain that the net impact on programme support will be a reduction of 20%, since a reduction in staff costs was not considered to be an option, given the already understaffed situation of the Commission. The budgetary reduction leads to a reduction in the number of the MLAs integrated into the Draft 33 C/5, concentrating the programme only on three of the MLAs adopted: Science, Operational Services, and Capacity-Building. He will then inform the Assembly that a specific reinforcement, of one professional staff, in the baseline was included in the Draft Programme and Budget to reinforce IOC's response to the Indian Ocean tsunami catastrophe of December 2004. An additional reinforcement of the Programme is included in the Draft 33 C/5, for an amount of US\$ 478,400, but pending approval by the UNESCO General Conference of an additional amount requested by the Director-General over and above the ZNG. If this additional amount were approved, the total amount for the Programme 2006–2007 would be about US\$ 4,300,000, which is 10% less than the amount available for 2004–2005. If not approved, then the reduction would be about 20% in Programme costs, unless the additional resources requested by the Director-General are financed from other sources

- 20 The IOC Budget includes IOC's renewed participation in two UNESCO cross-cutting projects: (i) The application of remote sensing for integrated management of ecosystems and water resources in Africa (\$200,000), presented in co-operation with the Education sector; and (ii) Community-based information portals on oceans for the African, Latin American and Caribbean regions (\$100,000); both projects are included in the Draft 33 C/5.

21 The Executive Secretary will inform the Assembly that the instruction contained in resolution EC-XXXVII.11, regarding the appropriate allocation of permanent professional staff to fulfil effectively and efficiently the IOC's objectives in the next Medium-Term Strategy for 2008–2013, will be prepared once the draft Medium-Term Strategy becomes available.

22 The Chairman will invite the Chairman of the Financial Committee, Captain Javier Valladares, to report to the Assembly on the Committee's consideration of the IOC Draft Programme and Budget for the biennium 2006–2007 (Draft 33 C/5) taking due account of comments expressed by Member States in Plenary.

DECISION 3.3: The Assembly will be invited to: (i) comment on the IOC Draft Programme and Budget for the biennium 2006–2007 (Draft 33 C/5); and (ii) delegate to the Executive Council, at its 39th Session, the approval of the MLAs for the biennium 2008–2009.

3.4 REPORT ON ACTIVITIES OF THE IOC (2003–2004) FOR PRESENTATION
TO THE 33RD GENERAL CONFERENCE OF UNESCO
[Statutes Art. 3.2; Rule of Procedure No.49.2]

Documentation:

IOC-XXIII/6

Draft Biennial Report of the Commission on its Activities, 2003–2004

23 The Executive Secretary will introduce this item. The 30th Session of the General Conference of UNESCO in 1999 approved a modification of the Statutes of the Commission and confirmed the functional autonomy of IOC and the requirement to report directly to the General Conference.

24 Paragraph 198 of the addendum to the Report of the External Auditor [165 EX/29 Add. Financial report and audited financial statements of UNESCO for the period ended 31 December 2001 and the Report by the External Auditor] recommends that UNESCO, IHP and IOC “*should tailor their performance information reports to their different governing bodies, reflecting the different roles of the General Conference (...) and the IOC Assembly*”. Following this recommendation, the preceding biennial report (for 2000–2001) highlighted achievements of IOC with respect to the main results expected in the UNESCO Medium-term Strategy 2002–2007 (31 C/4). While this approach is maintained in the present version of the biennial report submitted by Executive Secretary, a short section is included to report on results obtained by each Main Line of Action (C/5 format).

DECISION 3.4: The Assembly will be invited to consider, with a view to adopting, the Report by the IOC on its Activities (2003–2004), for submission to the 33rd UNESCO General Conference, as is or as amended by the Assembly.

4. PROGRAMME MATTERS REQUIRING DECISIONS BY THE ASSEMBLY

4.1 GENERAL POLICY ISSUES

4.1.1 The Global Earth Observation System of Systems (GEOSS) and its 10-year Implementation Plan: Report of the Executive Secretary on the Expected Role of the IOC through Its Programmes

[Res. EC-XXXVII.2]

Documentation:

IOC/INF-1205

*GEOSS Ten-Year Implementation Plan; EOS III Resolution; and
Communiqué relating to support for Tsunami & Multi-hazard warning
systems*

- 25 The Executive Secretary will introduce this item. The IOC has a fundamental interest in the development of a comprehensive Earth observing system, and has been deeply involved in the follow-up of the First Earth Observation Summit (EOS-I, Washington, D.C., 30 July–2 August 2003). This and the Second Summit (EOS-II, Tokyo, 25 April 2004) lead the ad hoc intergovernmental Group on Earth Observations (GEO) to develop a comprehensive, coordinated and sustained Earth Observation System of Systems (GEOSS) based on existing observing systems, to enable governments and the international community to understand and address global environmental and economic challenges. This initiative is regarded as an exceptional opportunity to define, at a high political level, firm resources for operational observation of the Earth.
- 26 The GEO based the development of the GEOSS 10-Year Implementation Plan on the Framework Document adopted at the Second Earth Observation Summit describing the fundamental elements of an Earth Observation System and its principal expected benefits to a broad range of user communities. The Third Earth Observation Summit (EOS-III, Brussels, 16 February 2005) endorsed this 10-Year Implementation Plan. The participants in the Third Summit also resolved to meet again before the end of 2007, to take stock of progress, provide further guidance for the successful implementation of GEOSS, and conduct a mid-term assessment of GEO by 2010.
- 27 Regarding the tsunami catastrophe of 26 December 2004 in the Indian Ocean, the Third Earth Observation Summit after listening to a report on the plans to implement an IOTWS by the IOC Executive Secretary, issued a communiqué stressing that disaster-reduction is one of the high priorities of the GEOSS 10-Year Implementation Plan. It also requested the GEO to support the coordinating activities of the IOC and related national and regional initiatives to develop effective tsunami warning systems in the Indian Ocean and other regions of the world, in a multi-hazard approach supported by GEOSS.
- 28 Given the importance of GEO and GEOSS for UNESCO and its IOC, the Director-General decided to offer the secondment of one staff member to the GEO Secretariat in Geneva (WMO).
- 29 The Executive Council, at its 37th Session, stressed that the GOOS should be recognized clearly in the GEOSS Implementation Plan as a key component of Earth Observation, and that existing implementation plans and the GEOSS 10-year Implementation Plan should be mutually consistent. By Resolution EC-XXXVII.2, the Executive Council endorsed the concept of

GEOSS and supported its implementation to the maximum extent possible within IOC's mandate. The Executive Council urged Member States to:

- (i) *become fully involved in the planning and implementation of GEOSS by becoming members of GEO;*
- (ii) *ensure that their GEO national delegations are fully informed about existing and planned ocean observations;*
- (iii) *promote the plans and goals of IOC in this context.*

DECISION 4.1.1: The Assembly will be invited to: (i) consider the Executive Secretary's report; (ii) adopt Draft Resolution IOC-XXIII/DR.(4.1.1), as is or as amended by the Assembly at the present session.

Draft Resolution IOC-XXIII/DR.(4.1.1)

THE GLOBAL EARTH OBSERVATION SYSTEM OF SYSTEMS (GEOSS)

The Intergovernmental Oceanographic Commission of UNESCO,

Recalling the WSSD Plan of Implementation, particularly paragraph 132,

Noting:

- (i) IOC Resolution EC-XXXVII.2 *The Earth Observation Summit (EOS)*,
- (ii) the Resolution of the Third Earth Observation Summit held in Brussels on 16 February 2005,
- (iii) the Global Earth Observation System of Systems (GEOSS) 10-Year Implementation Plan endorsed by the Third Earth Observation Summit, describing the fundamental elements of an Earth Observation System and its principal expected benefits to a broad range of user communities,

Recognizing the exceptional opportunity provided by the GEO's development of the GEOSS 10-year Implementation Plan to define, at a high political level, firm resources for operational observation of the Earth, at the national and international levels, particularly for the observing systems for oceans, coastal areas, natural resources, ecosystems and natural and human-induced hazards,

Noting further the relevance to GEOSS of IOC's programmes, experience and expertise, and the roles and responsibilities of other intergovernmental organizations,

Noting in particular that the IOC pursuing a mandate issued by the UNCED in 1992, has developed in close cooperation with WMO and ICSU, full plans for the establishment of the Global Ocean Observing System (GOOS) and that is now fully engaged in its implementation,

Noting further that full implementation of GOOS requires the sustained operation of *in situ* and space-based systems that are being considered as integral part of GEOSS,

Expressing its appreciation of the work of the GEO,

Endorses the concept of GEOSS and supports its 10-year Implementation Plan to the maximum extent possible within IOC's mandate;

Calls on the GEO to ensure that:

- (i) GEOSS pursues the synergy of existing and planned international and national observing systems, in particular of GOOS, under the lead of the IOC, and recognizes the existing organizational arrangements for these observation systems;
- (ii) GOOS be formally recognized as the ocean and the coastal component of GEOSS;
- (iii) GEOSS comprehends a rational balance of *in situ* measurements, land-based remote sensing, and satellite (oceans and atmosphere) measurements of the earth;
- (iv) the annual Work Plan through which the GEOSS 10-Year Implementation Plan will be executed will focus on meeting users' socio-economic needs and, in particular, the needs of developing countries by enhancing capacity-building;
- (v) the implementation of GEOSS will secure full and open exchange of observational data with minimum delay and cost, will recognize relevant international instruments, national policies and legislation and, in particular, the IOC Oceanographic Data Exchange Policy;

Encourages Member States:

- (i) to become involved in the planning and implementation of GEOSS at national and international levels;
- (ii) to ensure their national coordination for GEO/GEOSS is fully informed and counting on existing and planned ocean observations through GOOS;

Noting with appreciation the Communiqué on support for tsunami and multi-hazard warning systems in the context of the Global Earth Observation System of Systems (GEOSS), adopted at the Third Earth Observation Summit which expressed its support for the coordinating activities of the IOC in the development effective tsunami warning systems in the Indian Ocean and other regions of the world,

Invites the GEO to support the expansion of capabilities to deal with multi-hazard and other types of disaster at relevant national, regional and international levels, taking into account the UN's International Strategy for Disaster Reduction, as well as plans to establish a regional tsunami warning systems under IOC leadership;

Instructs the IOC Executive Secretary:

- (i) to continue to take an active role to fully inform the GEO of the needs of the programmes of the Commission, including GOOS as an essential component of GEOSS, other co-programmes such as JCOMM, IODE, ICAM, and Capacity Building, and expertise;
- (ii) to ensure that the GEO recognizes the coordinating efforts of IOC and other UN agencies for realizing an integrated multi-hazard warning system, and acknowledge the result as an integral part of the GEOSS.

- (iii) to work closely with counterparts in other UN agencies and programmes to ensure an effectively coordinated role for the UN system in the planning and implementation of GEOSS.

Financial implications: None

4.1.2 Mauritius International Meeting to Review the Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States (Barbados+10): Report of the Executive Secretary [Res. EC-XXXVII.1]

Documentation:

United Nations document
A/CONF.207/L.6

Mauritius Declaration of the International Meeting to Review the Implementation of the Programme of Action for the Sustainable Development of Small Islands Developing States

United Nations document
A/CONF.207/CRP.7

Mauritius Strategy for the further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States

30 The IOC Executive Secretary will introduce this item. He will outline the results of the International Meeting to Review Progress on the Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States (Port-Louis, Mauritius, 10–14 January 2005).

31 The statements by the UN Secretary-General and the President of the Meeting reflected the tragic context of the tsunami disaster of 26 December 2004 in the Indian Ocean. The outcomes of the meeting, particularly the Mauritius Strategy, reaffirmed the view that the Barbados Programme of Action remains the blueprint for Small Island Developing States (SIDS) and the international community to address national and regional sustainable development in SIDS, and specified requirements for more effective implementation.

32 The Executive Council at its 37th Session, in June 2004, adopted, as an annex to Resolution EC-XXXVII.1, a Declaration to the Meeting, in which, the Commission affirmed its will to:

- *act as a focal point to encourage interactions in marine science and observations across relevant bodies of the UN system and other organizations;*
- *further develop partnership in capacity-building in marine science and services at regional and national levels, particularly with SIDS;*
- *develop GOOS as an operational system that could provide support to achieve the integrated management of marine and coastal resources of SIDS and also for better forecasts of the conditions of the oceans and seas;*
- *promote the development and implementation of programmes on Integrated Coastal Area Management in SIDS countries;*

- *promote the use of scientific knowledge for management decisions and policy-making and facilitate access to this knowledge through international cooperation in general, and South–South marine science cooperation in particular; and support ocean policy and governance programmes in all regions;*
- *work to increase public awareness of the importance of the oceans and coasts for SIDS' sustainable development, including through the Global Forum on Oceans, Coasts, and Islands.*

33 The adopted Mauritius Strategy recognizes this contribution and specifically highlights the importance of IOC marine science programmes that are of relevance to SIDS as well as the need to support regional monitoring efforts and GOOS (para. 25).

DECISION 4.1.2: The Assembly will be invited to: (i) comment on the Executive Secretary's report on the International Meeting to Review Progress on the Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States; (ii) provide guidance to the Secretariat, as appropriate, on how to strengthen the participation of SIDS in IOC's programmes.

4.1.3 Prioritized Follow-up of Key Recommendations of the External Evaluation

[Rec. XXI, Item 4.4, para. 94; Dec. EC-XXXV, Item 3.3, para. 47]

34 The Executive Secretary will introduce this item. Since the publication of the External Evaluation Report in 2000 (IOC/EC-XXXIII/2 Annex 3), the Assembly and the Executive Council have requested the Executive Secretary to report regularly on follow-up actions and implementation (Documents 2001/IOC-XXI/2 Annex 3, 2002/IOC/EC-XXXV/2 Annex 3, 2003/IOC-XXII/2 Annex 8, 2004/IOC/EC-XXXVII/2 Annex 3). At its 35th Session, the Executive Council decided moreover that the follow-up of actions should be prioritized. Following the guidance of the Executive Council, the follow-up has referred only to pending key recommendations. The most salient issue pending accomplishment was the establishment of the UN–Oceans network which is now in place and will be taken up under Agenda item 4.6.4.

DECISION 4.1.3: The Assembly will be invited to decide to discontinue the follow-up of the key recommendations of the External Evaluation given the adequate completion of the original task.

4.2 OCEAN SCIENCES SECTION

4.2.1 IOC Ocean Sciences Section Overview

[Rule of Procedure No.21.2(c)]

Documentation:

IOC/INF-1206

IOC Ocean Sciences Section: Overview and Expected results, 2005

35 The Head of the IOC Ocean Science Section, Ümit Ünlüata, will introduced this item. He will give a brief report on the work of the Ocean Science Section, the expected results during the present mid-term strategy period and the results achieved in 2004.

DECISION 4.2.1: The Assembly will be invited to: (i) consider the Information Document and the results achieved in 2004; (ii) provide guidance on the further development of the work of the Ocean Sciences Section.

4.2.2 Sponsorship of the World Climate Research Programme

[Rule of Procedure No.21.2(c)]

Documentation:

IOC/INF-1207

Background, progress, and future directions for the WMO-IOC-ICSU World Climate Research Programme

36

The Director of the World Climate Research Programme, David Carson, will introduce this item. IOC has been a sponsor of the WCRP since it signed the Memorandum of Understanding (MoU) with the WMO and ICSU in 1993. He will remind the Assembly that Appendix B of the WCRP MoU requires the Joint Scientific Committee (JSC) of the WCRP to prepare budget estimates for activities of the JSC and its supporting staff in the following biennium, and to submit these for approval to the executive bodies of WMO, IOC and ICSU. He will present to the Assembly the budget proposed for the next biennium, for its consideration.

DECISION 4.2.2: The Assembly will be invited to approve a total annual contribution of US\$ 125 000 for the Joint Climate Research Fund, with US\$ 50,000 coming from the Regular Budget and US\$ 75,000 from contributions to the IOC Special Account earmarked for that purpose.

4.2.3 Seventh Session of the IOC Intergovernmental Panel on Harmful Algal Blooms

[Rule of Procedure No.48.3]

Documentation:

IOC/IPHAB-VII/3s

Executive Summary Report of the Seventh Session of the IOC Intergovernmental Panel on Harmful Algal Blooms (IPHAB), Paris, 16–18 March 2005

Joint FAO-IOC-WHO
Advance Report

Report of the Joint FAO/IOC/WHO ad hoc Expert Consultation on Biotoxins in Bivalve Molluscs, Oslo, Norway, 26–30 September 2004
[short summary]

37

The Chairwoman of the IOC Intergovernmental Panel on Harmful Algal Blooms (IPHAB), Beatriz Reguera, will introduce this item. As a primary subsidiary body of the Commission, the Panel is required to report to the Assembly (or Executive Council) on its sessions.

38

The 7th Session of IPHAB was held at UNESCO, Paris, 16–18 March 2005. It focused on: further strengthening the capacity-building aspects of the programme; assisting the IOC–SCOR Global Ecology and Oceanography of Harmful Algal Blooms (GEOHAB) Programme in its implementation phase; initiatives to overcome international incompatibilities in biotoxin regulation; ensuring the consolidation and further development of IOC HAB data bases; and the further development of the regional components of the programme. The Panel made a number of recommendations to the Assembly.

- 39 The Panel recommended that the IOC Member States actively assist in the identification and provision of the necessary and sustained support for the IOC–SCOR International Programme Office for GEOHAB.
- 40 The Panel recognized the possible effects of climatic trends and oscillations, as well as of exceptional events, on the spatial and temporal occurrence of ciguatera fish poisoning (CFP), and that the Tsunami disaster on 26 December 2004 significantly impacted the coastal environment of several countries (*e.g.* Indonesia, Thailand, Sri Lanka and India) bordering the Andaman Sea. CFP events have occurred after such devastation of the coastal environment, because decay of corals provides opportunities for the proliferation of seaweeds, on which toxic benthic microalgae responsible for CFP grow. Through Recommendation IPHAB-VII.2 the Panel urge the Assembly to take these aspects fully into account in IOC follow-up of the tsunami catastrophe of 26 December 2004 in the Indian Ocean.
- 41 The Chairwoman of the IPHAB will inform the Assembly of the work of the IPHAB Task Team on Biotoxins in assisting the FAO–WHO Codex Committee on Fish and Fisheries Products (CCFFP). The Task Team was absorbed into the Joint FAO–IOC–WHO ad hoc Expert Consultation on Biotoxins in Bivalve Molluscs, with the objective of recommending revision of the CCFFP Standard and Code of Practice for Live Bivalve Molluscs. The Panel restated its concern, however, on the limited co-ordination and potential incompatibility of regulations on the contamination of seafood by phycotoxins and the associated impediment to trade in seafood products.
- 42 The Chairwoman of IPHAB will urge the IOC Member States to carefully match the HAB Programme Work Plan with national priorities and potential funding in order to interact effectively with and support its implementation.

DECISION 4.2.3: The Assembly will be invited to adopt Draft Resolution XXIII-(4.2.3) as is or as amended by the Assembly at the present session.

Draft Resolution IOC-XXIII.(4.2.3)

**SEVENTH SESSION OF THE IOC INTERGOVERNMENTAL PANEL
ON HARMFUL ALGAL BLOOMS (IPHAB)**

The Intergovernmental Oceanographic Commission,

Having considered the Executive Summary Report of the 7th Session of the IOC Intergovernmental Panel on Harmful Algal Blooms (IPHAB), including the four Resolutions, six Recommendations, and the Work Plan for 2006–2007 adopted at the Session (IOC/IPHAB-VII/3);

Accepts the Report, including the four Resolutions, six Recommendations;

Decides to act on the following Recommendations of the IPHAB:

Recommendation IPHAB-VII.1 GEOHAB Development

Urges Member States to provide resources for the establishment of an International Programme Office for GEOHAB;

Recommendation IPHAB-VII.2 Assessment of the Potential Effect of Tsunamis on the Temporal and Spatial Changes in Ciguatera Occurrence

Calls on the Executive Secretary IOC to take this IPHAB Recommendation fully into account in IOC follow-up of the tsunami catastrophe of 26 December 2004 in the Indian Ocean;

Recommendation IPHAB-VII.5 HAB Workplan 2006–2007

Accepts the Recommendation proposed HAB Workplan 2006–2007 within the limits of the relevant resources in the Regular Programme and of the extrabudgetary resources identified for this purpose;

Recommendation IPHAB-VI.6 Operation of the IOC Intergovernmental Panel on Harmful Algal Blooms

Instructs the IPHAB to: (i) co-operate with the Executive Secretary IOC with a view to convening the 8th Session of the Panel prior to the 24th Session of the Assembly; (ii) provide an executive summary of the Summary Report of its 8th Session, with a Draft Resolution on possible action, including an estimate of financial implications, for the consideration of the Assembly at its 24th Session.

ANNEX TO DRAFT RESOLUTION XXIII-(4.2.3)

Summary of budgetary implications for the IPHAB Work Plan for 2006–2007 (in USD)

ACTIVITY: Re. IPHAB Work Plan 2006–2007	A. Total financial implication of IPHAB-VII Resolutions and Recommendations	B. Estimated available Regular Programme funds * <i>including UNESCO Cross- cutting Projects</i>	C. Expected extra- budgetary contributions specifically for HAB	D. Required additional extra-budgetary contributions for full programme implementation [A–(B+C)]
PROGRAMME OPERATION	34,000	12,000	22,000	—
Travel	317,000	20,000	297,000	—
IOC HAB Science and Communication Centres				
EDUCATIONAL ELEMENTS	400,000	10,000	224,000	166,000
Capacity-building	30,000	17,000		13,000
Publications				

SCIENTIFIC ELEMENTS	145,000	48,000	—	97,000
REGIONAL NETWORKS	180,000	88,000*	—	92,000
TOTAL	1,106,000	195,000	543,000	368,000

4.2.4 Terms of Reference and status of the SCOR–IOC Advisory Panel on Ocean Carbon Dioxide

[Rule of Procedure No.21.2(c)

]

Documentation:

IOC/INF-1208

Terms of reference and Status of IOC/SCOR Advisory Panel on Ocean Carbon Dioxide

43 Dr Maria Hood, IOC programme specialist and technical secretary for the “CO₂ Panel”, will introduce this agenda item. At the 2002 meeting of the IOC-SCOR Advisory Panel on Ocean CO₂ (“the CO₂ Panel”), it became clear that, while the CO₂ Panel was an effective mechanism for identifying areas requiring closer collaboration in ocean carbon observations, there was a need for a group to implement the necessary actions at the international level. In response to this need, the CO₂ Panel, in partnership with the Global Carbon Project, developed a pilot project in 2003, International Ocean Carbon Coordination Project (IOCCP), to implement targeted, time-bound coordination activities for the ocean carbon community.

44 In its first two years of its operation, the IOCCP has been successful at meeting the needs of the community, working directly with over 100 scientists from 17 countries, and attracting external financial support from national agencies and programmes to implement its activities. Several global, regional, and national research programmes have now asked the IOCCP to expand its programme to provide coordination services for research programmes as well as for observation activities.

45 To meet this request without developing a new IOC programme and keeping the financial implications at existing levels, it is proposed to replace the Terms of Reference of the present SCOR–IOC Advisory Panel on Ocean Carbon Dioxide by those of the newly expanded IOCCP, given below and in Information Document IOC/INF-1208 and rename the Panel the International Ocean Carbon Coordination Project.

DECISION 4.2.4: The Assembly will be invited to: (i) consider the revised Terms of Reference and the proposed change of title for the SCOR–IOC Advisory Panel on Ocean Carbon Dioxide; (ii) adopt them, as is or as amended by the Assembly at the present session; (iii) inform ICSU/SCOR of its position.

Proposed Terms of Reference for the International Ocean Carbon Coordination Project (replaces the title “Advisory Panel on Ocean CO₂”)

General Description of Activities

IOC and SCOR will provide financing, in-kind assistance, and stewardship for the IOCCP.

The IOCCP will undertake specific tasks (as listed in Specific Terms of Reference, below) and provide ready expertise on ocean carbon observations and research, including ocean carbon sequestration issues, as required by SCOR, IOC, their programmes (e.g., IMBER, SOLAS, OOPC, GOOS, GCOS, and JCOMM) and the IOC Member States.

Specific Terms of Reference

- i. To develop an international communication centre on ocean carbon activities through the development and maintenance of Web-based compilations and syntheses of ocean carbon observation and research activities, and through e-mail and/or Web-based newsletters and other publications;
- ii. To provide an international forum for initiatives to promote high-quality observations to understand the ocean component of the global carbon cycle, through international agreements on standards, including:
 - a. Methods / Best Practices
 - b. Quality Control and Quality Assurance Procedures
 - c. Data and Meta-data Formats
 - d. Use of Certified Reference Materials
- iii. To facilitate data collection, management, data product development, and archival of ocean carbon and related data by:
 - a. Aiding regional and global data syntheses being developed through ocean carbon research programs, as requested;
 - b. Facilitating and aiding the development of historical data bases for ocean carbon, including data recovery activities, as necessary;
 - c. Ensuring long-term data availability by working with data management groups and World Data Centres to archive data sets beyond the lifetime of the individual projects.
- iv. To work with global research and observation programmes to promote and document the development and status of a sustained ocean carbon observing system;
- v. To liaise with integrated programmes (IGCO, GCP) to promote the integration of ocean carbon into earth system studies.

Financial Implications and Staff Requirements

Support from IOC is requested at a level of 12,500 US dollars per year to convene one annual meeting of a small scientific steering group (with matching financial contributions from SCOR). This represents no change from the existing support level, approved by the 33rd Session of the Executive Council in 2000. Financial support for IOCCP activities beyond the annual meeting is to be raised through extra-budgetary grants and in-kind contributions.

4.2.5 The Census of Marine Life

[Rule of Procedure No.21.2(c)]

46 The Senior Scientist for the Census of Marine Life (CoML) at the Consortium for Oceanographic Research and Education, Ron O'Dor, will introduce this item.

47 CoML is a growing global network of researchers in more than 70 nations engaged in a 10-year initiative to assess and explain the diversity, distribution, and abundance of life in the ocean and how it changes over time. The findings will help identify threatened species and important breeding areas, thus helping authorities to develop effective strategies for the sustainable management and rational exploitation of living marine resources.

48 The Census has three parts: the biological history of the ocean; exploration to assess the present ocean living marine resources; prediction of future resources. To quantify the diversity, distribution, and abundance of marine life, CoML is structured around six biotopic realms, from the nearshore surface to the deep-ocean floor. Field-project data are put into the Ocean Biogeographic Information System (OBIS), a web-based catalogue of global geo-referenced information on marine species, with on-line tools for visualizing relationships among species and their environment. These data are being synthesized and mathematical ecosystem models developed to predict changes in marine animal populations caused by environmental or human influences.

DECISION 4.2.5: The Assembly will be invited to adopt Draft Resolution XXIII-(4.2.5) as is or as amended by the Assembly at the present session.

Draft Resolution IOC-(4.2.5)

CENSUS OF MARINE LIFE

The Intergovernmental Oceanographic Commission of UNESCO,

Recalling the progress in the Census of Marine Life initiative since the establishment of the Scientific Steering Committee in 2000,

Recognizing that a critical mass of Member States is taking active part in CoML,

Acknowledging CoML as the international community's main vehicle for the development of a sustainable source of information on marine life,

Urges Member States not already involved in CoML and OBIS to participate actively in them, with a view to achieving CoML's goals for 2010;

Instructs the Executive Secretary to develop a plan of action for IOC cooperation with CoML for the consideration of, and possible adoption by, the Executive Council at its 39th Session.

No financial Implication

4.3 OCEAN SERVICES SECTION

4.3.1 Progress Report on the Strategic Plan for Oceanographic Data and Information Management

[Res. EC-XXXV.2; Rec. XXII, Item 4.3.1, para. 132]

Documentation:

IOC/IODE-XVIII/3s

Executive Summary Report of the 18th Session of the IOC Committee on International Oceanographic Data and Information Exchange (IODE), Ostend, Belgium, 26–30 April 2005

49

The Chairwoman of the Committee on International Oceanographic Data and Information Exchange (IODE), Lesley Rickards, will introduce this item. She will report on the discussions of the Task Team on the Strategic Plan for Oceanographic Data and Information Management during the 18th Session of IODE.

DECISION 4.3.1: The Assembly will be invited to provide further guidance to the Task Team on its future work, taking into consideration, *inter alia*, the work of the JCOMM Data Management Coordination Group, the Summary Report of IODE-XVIII, and the data-management requirements of other IOC programmes and of the future tsunami-related activities.

4.3.2 Eighteenth Session of the IOC Committee on International Oceanographic Data and Information Exchange (IODE)

[Rule of Procedure No.48.3]

Documentation:

IOC/IODE-XVIII/3s

Executive Summary Report of the 18th Session of the IOC Committee on International Oceanographic Data and Information Exchange (IODE), Ostend, Belgium, 26–30 April 2005

50

The Chairwoman of the Committee on International Oceanographic Data and Information Exchange (IODE), Lesley Rickards, will introduce this item. She will briefly review the results of the IODE Committee's 18th Session, and in particular the Committee's Recommendations. She will also report on the official inauguration of the IOC Project Office for IODE on 25 April 2005, on the facilities available, and on the activities planned for 2005–2006.

DECISION 4.3.2: The Assembly will be invited to: (i) consider, with a view to accepting the Executive Summary of the 18th Session of IODE and the Recommendations it contains; (ii) adopt Draft Resolution XXIII-(4.3.2) as is or as amended by the Assembly at the present session.

4.4 OPERATIONAL OBSERVING SYSTEM SECTION

4.4.1 Terms of Reference of the Intergovernmental Committee for GOOS (I-GOOS), the GOOS Scientific Steering Committee (GSSC) and the GOOS Project Office (GPO): Consolidated proposal

[Res. XXI-7; Res. XXII-4 and Res. EC-XXXVII.6]

Documentation:

IOC-XXIII/2 Annex 4

Consolidated Proposal for GSC, I-GOOS and GPO terms of reference

51 The Chairman of the GOOS Scientific and Technical Committee (GSC), John Field, will introduce this item. Pursuant to Resolution EC-XXXVII.6, Member States were invited [by IOC Circular Letter No. 2147] to submit their comments on the terms of reference before 31 December 2004. The views of the three co-sponsoring organizations (UNEP, WMO and ICSU) were solicited by personal correspondence with the Director GPO. The proposed consolidated terms of reference took into account all suggestions received.

52 Nevertheless, the financial and human resources available to the GPO are clearly inadequate to meet the obligations arising from the proposed consolidated Terms of Reference.

DECISION 4.4.1: The Assembly will be invited to: (i) consider, with a view to approving the proposed revised Terms of Reference for the I-GOOS, GSC and the GPO; (ii) urge Member states to provide additional resources to GOOS, either through secondment of staff to the GPO or financial contributions to GOOS via the IOC Special Account earmarked for support to the GPO.

4.4.2 Seventh Session of the Intergovernmental Committee for the Global Ocean Observing System (I-GOOS)

[Rule of Procedure No.48.3]

Documentation:

WMO-UNEP-IOC/I-GOOS VII/3s

Executive Summary Report of the Seventh Session of the Intergovernmental Committee for the Global Ocean Observing System, Paris, 4–7 April 2005

53 The newly elected chairperson of I-GOOS will introduce this item. She or he will briefly summarize the results of I-GOOS-VII, with particular reference to the Programme of Work for the 2006–2007 biennium, and the Intergovernmental Committee's Recommendations.

54 The financial and human resources available to the GPO are clearly inadequate to meet the obligations arising from the Decisions and Recommendations of the Intergovernmental Committee's 7th Session.

DECISION 4.4.2: The Assembly will be invited to: (i) consider with a view to accepting the Summary Report of the 7th Session of I-GOOS, including the recommendations therein; (ii) urge Member States to provide the necessary additional resources to GOOS, either through secondment of staff to the GPO or financial contributions to the IOC Special Account earmarked for support to the GPO.

4.4.3 WMO–IOC Joint Technical Commission for Oceanography and Marine Meteorology (JCOMM): Report on Activities

[Inst. XXII; Item 4.4.5; para. 241 & 242; Rule of Procedure No.48.3]

Documentation:

IOC/INF-1209

Report by JCOMM Co-Presidents on recent activities, 2005

55 The Co-President of the Joint IOC–WMO Technical Commission for Oceanography and Marine Meteorology (JCOMM), Ms Savi Narayanan, will introduce this item. The Commission is preparing for its Second Session (19–27 September 2005, Halifax, Canada), which will include a comprehensive review of all JCOMM activities in the past four years and of proposals

on the major issues, directions and activities concerning the Commission's work in the next intersessional period.

56 JCOMM has clearly demonstrated that the appropriate intergovernmental/international mechanism is now in place to enhance cooperation and coordination in the implementation of a fully integrated marine-observing, data-management and services system. However, there is much that remains to be done, at the national, regional and international levels, and between the oceanographic and meteorological communities, to ensure that the plans defined by the JCOMM programme are fully implemented. Better definition of the different modalities used for implementing the systems, monitoring of the commitments made, and better integration of the four JCOMM Programme Areas, the GOOS Regional Alliances and the relevant programmes of other UN Specialized Agencies, will be required, and with the private sector as well.

57 In response to the tsunami catastrophe of 26 December 2004 in the Indian Ocean, JCOMM mainly through GLOSS has assisted and will continue to assist in the planning and setting-up of the *in situ* observational array and services necessary for an effective, robust and comprehensive natural marine-hazard warning system in all the main ocean basins. The proposed interagency project on Marine Impacts on Lowland Agriculture and Coastal Resources (MILAC) aimed at reducing the impact of storm surges and waves caused by tropical cyclones in the Indian Ocean will be incorporated into the overall planning for a Tsunami Warning and Impact-Mitigation System for the Indian Ocean.

58 Current levels of resources are inadequate to support JCOMM activities for: (i) programme planning, coordination and management; (ii) system implementation and maintenance.

59 The full implementation of the new ocean services and products that are being defined in JCOMM requires the concerted action of IOC and WMO, as well as the development of specific pilot projects at the regional level. Although pilot projects, like MILAC, might be eligible for support from international aid for development, the maintenance and continuity of the operational system underpinning the new ocean services, requires increased and sustained contributions from Member States to meet agreed national and international (i.e. IOC and WMO) requirements.

60 The Assembly will be informed of the continuing contribution by the USA of an expert (Candyce Clark) to the JCOMM Secretariat, and the intention of the WMO to fill the Scientific Officer post vacated in 2003.

DECISION 4.4.3: The Assembly will be invited to urge Member States to commit sufficient national resources to allow for the full implementation of JCOMM activities. The Assembly will also be invited to instruct the Executive Secretary to work with the Secretary-General of WMO to: (i) generally ensure adequate resources and staff for the IOC–WMO JCOMM Secretariat through regular budget and extrabudgetary contributions; (ii) especially to fill the WMO Scientific Officer post assigned to IOC, Paris.

4.4.4 Ocean Component of the GCOS Implementation Plan and GOOS contribution to COP-10

[Rules of Procedure No.21.2(c)]

Documentation:

GCOS-92 (ES)	<i>Implementation Plan for the Global Observing System for Climate in Support of the UNFCCC [Executive Summary]</i>
WMO/TD No. 1244	
GCOS-92	<i>Implementation Plan for the Global Observing System for Climate in Support of the UNFCCC</i>
WMO/TD No. 1244	
IOC/INF-1214	<i>Progress with the Initial Ocean Climate Observing System: A Report to the UNFCCC, April 2005</i>
GOOS Report 146	

61 The Chairman of the GCOS–GOOS–WCRP Ocean Observations Panel for Climate, Ed Harrison, will introduce this item. He will first remind the Assembly that the Climate module of GOOS is the ocean component of the Global Climate Observing System (GCOS). After a request from the Secretariat of the UN Framework Convention on Climate Change (UNFCCC), GCOS has engaged, with broad input, in the evaluation and planning of sustained global observations for climate purposes. This included the publication in 2003 of *The Second Report on the Adequacy of the Global Observing Systems for Climate in Support of the UNFCCC (GCOS-82)*, which noted that ocean networks are not yet adequate... for data on most variables and in most regions of the planet. After a broad consultation, GCOS submitted in October 2004 an Implementation Plan for the Global Observing System for Climate in Support of the UNFCCC (GCOS IP) to the UNFCCC Tenth Conference of the Parties (COP-10). The GCOS IP calls for a sustained global observing system for climate, based on a mix of high-quality satellite measurements, *in situ* measurements, dedicated analytical infrastructure, and targeted capacity-building. While designed for the monitoring and prediction of climate change and variability, the global component of the ocean observing system will contribute to many other goals, including improved marine and weather forecasts, ocean forecasts and marine hazard warning. The GCOS IP identifies 41 specific actions in the ocean chapter. COP-10 encouraged the Parties to strengthen their efforts in implementing priority activities identified in the GCOS IP; it also asked GCOS for regular reports on the progress in implementing the actions identified in the GCOS IP.

DECISION 4.4.4: The Assembly will be invited to instruct the Executive Secretary to put in place a regular system of reporting from Member States on the status of their contribution to the Climate module of the Global Ocean Observing System; and to urge Member States to: (i) incorporate elements of the GCOS IP, as appropriate and to the extent possible, into national ocean-observing plans, (ii) respond to requests from the GOOS Project Office for regular reports on progress in implementing actions identified in the GCOS IP.

4.5 REGIONAL ACTIVITIES

4.5.1 Concept Paper on the Modalities of Implementation of IOC Programmes in Regions [Inst. XXXVII, Item 4.5.3, para. 228]

Documentation:

IOC-XXIII/2 Annex 5	<i>The Role of the IOC Regional Subsidiary Bodies in the Coming Decade</i>
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62 The Vice-Chairman IOC responsible for regional affairs, Mario Ruivo, will introduce this item. He will recall that an outline of the preferred basis of a Concept Paper on the Modalities of Implementation of IOC Programmes in Regions was given in a Working Document (IOC/EC-XXXVII/2 Annex 12) for the consideration of the Executive Council at its 37th Session (23–29 June 2004); the Executive Council suggested, as a first step, an assessment of the needs of the regions, relating the regional science and services programmes to the assessed needs, and documenting the total resource base (i.e. extrabudgetary and regular-programme funding and cost of supporting offices) of each Sub-Commission and Regional Committee. The Council also endorsed the following suggestions for finalizing the concept paper (para. 228 of its summary report IOC/EC-XXXVII/3):

- (i) *To establish an intersessional working group of IOC Regional Subsidiary Body representatives, under the Chairmanship of the Vice-Chair of IOC dealing with regions, which, working by electronic communication should construct the Concept Paper (experts and associates may be invited to contribute, if appropriate);*
- (ii) *To organize broader consultations, also by electronic means, to keep all Member States informed about the evolution of the draft Concept Paper;*
- (iii) *To finalize the draft Concept Paper within the statutory guidelines, so as to enable its translation into the working languages of the Commission and timely distribution to Member States for consideration by the 23rd Session of the Assembly in 2005;*
- (iv) *To convene a "wrap-up" meeting with representatives of the RSBs on the draft Concept Paper, on the day prior to the opening day of the 23rd Session of the Assembly, in 2005;*
- (v) *To present the draft Concept Paper to the Assembly in 2005, for its consideration.*

63 The Vice-Chairman will briefly review the intersessional work on the development of the proposed concept paper and outline the thrust of the document submitted for the consideration of the Assembly. It proposes a strategy for enhancing the role and work of the Commission's regional subsidiary bodies, taking into account the major concerns of the Member States at the regional as well as the international level. [It has been given a different title from the one used for the Working Document submitted to the Executive Council at its 37th Session (June 2004), to avoid any confusion between the two documents].

DECISION 4.5.1: The Assembly will be invited to consider, with a view to approving, the proposed strategy for strengthening the role and work of the Commission's regional subsidiary bodies in implementing the IOC global and regional programmes.

4.5.2 Sixth Session of the IOC Regional Sub-Commission for the Western Pacific (WESTPAC): WESTPAC-VI Report

[Rule of Procedure No.48.3]

Documentation:

IOC/SC-WESTPAC-VI/3s

Executive Summary Report of the Sixth Session of the IOC Regional Sub Commission for the Western Pacific (WESTPAC), Nha Trang, 23–27 May 2005

64 The Chairman of the IOC Sub-Commission for the Western Pacific, Hyung Tack Huh (Republic of Korea), will introduced this item. He will report on the main results of the 6th Session of WESTPAC that will take place in Nha Trang, Viet Nam, from 23 to 27 May 2005. The main points of the Agenda are: follow up actions on the recommendations of WESTPAC-V; reform of programmes and project structure in the light of new developments in ocean sciences and operational oceanography and the Indian Ocean tsunami catastrophe of 26 December 2004; WESTPAC response to the IOC global strategy for the establishment of a tsunami warning system for the Indian Ocean; adoption of the WESTPAC Strategy and Implementation Plan for Capacity Building 2005–2012; and inputs of WESTPAC to the 23rd Session of the IOC Assembly.

65 The major problems hampering the delivery to Member States of benefits from WESTPAC programme include: the ineffective transfer of data and information from the primary sources down to the users; the inability of the majority of Members States to fully participate in programme activities; and the lack of funds to support the establishment of the institutional infrastructure needed. To substantially address these problems, the Sub-Commission will adopt the WESTPAC Strategy and Implementation Plan for Capacity Building 2005–2012 designed to provide access for the Sub-commission to multilateral and bilateral development funds. The text will be part of the “Draft Implementation and Business Plan of the IOC Strategy for Capacity-building” which will be put before the Assembly under agenda item 4.7.2 for its endorsement. Although the Strategy and the Implementation Plan are based essentially on the existing programmes and resources of the Commission, they identify the interventions needed, responsibilities and accountabilities, and the financial and partnership requirements to solve the priority problems and generally meet the concerns of the western Pacific region at least in this decade.

DECISION 4.5.2: The Assembly will be invited to: (i) consider with a view to accepting the Executive Summary report of SC-WESTPAC-VI and the recommendations therein; (ii) consider, with a view to endorsing, the WESTPAC Strategy and Implementation Plan for Capacity-Building, 2005–2012.

4.6 UN CONVENTIONS AND AGREEMENTS

4.6.1 Fifth Meeting of the IOC Advisory Body of Experts on the Law of the Sea (IOC/ABE-LOS-V): Report of the Chairman

[Rule of Procedure No.48.3]

Documentation:

IOC/ABE-LOS V/3s

Fifth Meeting of the IOC Advisory Body of Experts on the Law of the Sea (IOC/ABE-LOS V), Buenos Aires, 11–15 April 2005

A/RES/59/24

UN General Assembly Resolution 59/24 on ‘The Law of the Sea’ (4 February 2005)

66 The Chairman of the IOC Advisory Body of Experts on the Law of the Sea (IOC/ABE-LOS), Elie Jarmache, will introduce this item. He will briefly summarize the work of the Advisory Body over the last five years and the obstacles encountered. He will report particularly on the following matters discussed at the 5th Session of IOC/ABE-LOS in Buenos Aires, Argentina:

- (i) The practices of IOC Member States in the application of Parts XIII (Marine Scientific Research) and XIV (Development and Transfer of Marine Technology) of UNCLOS: a sub-group chaired by Elisabeth Tirpak (U.S.A.) has been dealing with this subject during the intersessional period, particularly the compilation of the responses to the IOC Questionnaire No. 3 and the initial conclusions drawn from them. The cooperation of the Member States' national institutions charged with the implementation of Parts XIII and XIV of UNCLOS has been extremely important, notwithstanding the fact that several Member States did not respond to Questionnaire No. 3.
- (ii) The legal framework within the context of UNCLOS that is applicable to the collection of oceanographic data: a sub-group chaired by Kari Hakapää (Finland) has been dealing with this subject during the intersessional period. The Chairman of IOC/ABE-LOS will report on the progress and will explain the expectations of the international community regarding the work of this sub-group.

DECISION 4.6.1: The Assembly will be invited to: (i) consider the oral report on the deliberations at the 5th Session of IOC/ABE-LOS presented by its Chairman; (ii) provide guidance on the actions to be taken in respect of points 1 and 2, mentioned above, with a view to the submission of a report on the IOC/ABE-LOS' work to the Executive Council at its 39th Session.

4.6.2 Appropriate IOC Internal Procedure Related to an Effective Use of Article 247 of the UN Convention on the Law of the Sea: IOC/ABE-LOS proposal

[Res. EC-XXXVII.8, Res. XXII-12 and Rec. EC-XXXVII, Item 4.6.1, para. 237]

Documentation:

IOC/ABE-LOS V/3s

Fifth Meeting of the IOC Advisory Body of Experts on the Law of the Sea (IOC/ABE-LOS V), Buenos Aires, 11–15 April 2005

67

The Chairman of the IOC Advisory Body of Experts on the Law of the Sea (IOC/ABE-LOS), Elie Jarmache, will introduce this item. He will summarize the work undertaken by the sub-group on an Appropriate IOC Internal Procedure Related to an Effective Use of Article 247 of the UN Convention on the Law of the Sea, chaired by Alfred Soons (The Netherlands) for the last four years.

DECISION 4.6.2: The Assembly will be invited to decide the steps to be taken in respect of future work IOC/ABE-LOS on Article 247.

4.6.3 Criteria and Guidelines on the Transfer of Marine Technology: Dissemination and Implementation Report

[Res. EC-XXXVII.8]

Documentation:

IOC/ABE-LOS V/3s

Fifth Meeting of the IOC Advisory Body of Experts on the Law of the Sea (IOC/ABE-LOS V), Buenos Aires, 11–15 April 2005

IOC/INF-1203

IOC Criteria and Guidelines on the Transfer of Marine Technology (CGTMT)

68 The Chairman of the IOC Advisory Body of Experts on the Law of the Sea (IOC/ABE-LOS), Elie Jarmache, will introduce this item. He will briefly review the IOC Publication on the Criteria and Guidelines on the Transfer on Marine Technology, adopted by the Assembly by Resolution XXII-12, and the complementary Brochure edited by the IOC.

69 The Criteria and Guidelines provide guidance to the Member States on the implementation of Part XIV of UNCLOS. Part XIV states that 1. States, directly or through competent international organizations, shall cooperate in accordance with their capabilities to promote actively the development and transfer of marine science and marine technology on fair and reasonable terms and conditions. The Chairman of IOC/ABE-LOS will explain the purpose of the IOC publication on the basis that Part XIV of UNCLOS stands clearly on its own merits and comprehends a new imperative and a renewed mandate.

DECISION 4.6.3: The Assembly will invite Member States to make full use of the agreed guidelines through their appropriate national institutions.

4.6.4 United Nations Oceans and Coastal Areas Network (UN-Oceans): Report on activities

[Rule of Procedure No.21.2(c)]

Documentation:

Draft IOC/INF-1210

Report of the First Inter-Agency Meeting of UN-Oceans [advance copy]

70 The Head of the IOC Ocean Science Section, Ümit Ünlüata, will introduce this item. The IOC has provided the secretariat of the Sub-committee on Oceans and Coastal Areas of the UN Administrative Committee on Coordination (ACC-SOCA) since its establishment in 1993; IOC has also chaired the Sub-Committee since 1999. In November 2001, the ACC concluded that all its subsidiary bodies should cease to exist by the end of 2001 and that future inter-agency support requirements would best be handled through ad hoc, time-bound, task-oriented arrangements using a lead-agency approach. Subsequent consultations among the UN Programmes and Specialized Agencies participating in the coordination of ocean and coastal area activities indicated a strong interest in developing a new inter-agency coordinating mechanism consistent with the new arrangements being developed in the United Nations system.

71 In September 2003, the United Nations High-Level Committee on Programmes approved the creation of an Oceans and Coastal Areas Network (subsequently named UN-Oceans) to build on ACC-SOCA, covering a wide range of issues and composed of the concerned bodies of the UN system, including the International Seabed Authority, and the secretariats of the relevant international conventions, notably the Convention on Biological Diversity. Following recommendations of the UN Informal Consultative Process and taking into account the decisions adopted by the World Summit on Sustainable Development (Johannesburg, 2002) in this regard, the 57th Session of the General Assembly invited the Secretary-General to establish an effective, transparent and regular inter-agency coordination mechanism on oceans and coastal issues within the United Nations system.

72 The IOC hosted the first meeting of UN-Oceans in January 2005, and the partners adopted the Rules of Procedure and the Terms of Reference given in Document IOC/INF-1210. The group unanimously elected the IOC Executive Secretary as Coordinator of UN-Oceans; it also called on the IOC Secretariat to serve as the implementing secretariat for UN-Oceans. Four UN-Oceans Task Forces were established: (i) on Post-Tsunami Response; (ii) on the Regular

Process for Global Assessment of the Marine Environment; (iii) on Biodiversity in Marine Areas Beyond National Jurisdictions; (iv) on the Second Intergovernmental Review of the Global Programme of Action for Protection of the Marine Environment from Land-based Activities. UN-Oceans will hold its second meeting on 2–3 June 2005, in conjunction with the UN Open-Ended Informal Consultative Process on Oceans and the Law of the Sea.

DECISION 4.6.4: The Assembly will be invited to endorse: (i) the establishment of UN-OCEANS; (ii) the nomination of the IOC Secretariat as the implementing secretariat of UN-OCEANS; (iii) the election of the IOC Executive Secretary as the Coordinator of UN-OCEANS.

4.7 CAPACITY BUILDING

4.7.1 IOC Principles and Strategy for Capacity-Building: Final Draft

[Res. EC-XXXVII.9]

Documentation:

IOC-XXIII/2 Annex 6	<i>Executive Summary of 'Draft IOC Principles and Strategy for Capacity building'</i>
IOC/INF-1211 prov.	<i>Draft IOC Principles and Strategy for Capacity building</i>

73 The Director of the Centre for Marine Tropical Ecology (Bremen, Germany) and Chairman of the IOC Consultative Group on Capacity-Building (CGCB), Venugopal Ittekkot, will introduce this item. A draft Strategy for Capacity-Building was presented to the Executive Council at its 37th Session, in June 2004. By Resolution EC-XXXVII.9, the Council instructed the IOC Executive Secretary to produce a final draft Strategy for Capacity-Building for consideration by the Assembly at its 23rd Session, based on inputs from Member States.

74 A first draft Strategy document was produced. It was subsequently developed by incorporating comments from Member States (made during the discussion at the 37th Session of the Executive Council, and through written responses to Circular Letter no. 2119 inviting further comments), and a revised draft was produced by January 2005. This draft was put on the IOC website to stimulate further inputs and ideas. The status of the draft was discussed at the Meeting of Experts on the IOC Capacity Building Strategy (UNESCO, Paris, 9–11 March 2005). The finalized draft presented to the Assembly at the present session is therefore the result of wide and inclusive consultations. Many parts of the earlier draft have been significantly modified or overhauled in order to best incorporate the advice from Member States and the CGCB. An important step was to establish an acceptable vision statement; it has been commented upon and critically debated, since it set the Medium Term goals for the Capacity-Building Section of IOC. The final version reads:

The vision of IOC Capacity-Building is to establish networks of scientists, managers and other practitioners working within regional mechanisms, to create demand-driven science and provide operational oceanographic services for the benefit of all humanity.

75 The Strategy is articulated to operate within the larger IOC mandate; in particular, it will harmonize all on-going IOC capacity-building initiatives so that they operate within the frame of the IOC Principles of Capacity-Building. Other important points of the Strategy document are:

- (i) On-going regional projects to be the primary vehicles for capacity-building, including active assistance to scientist networks in the conception of capacity-building pilot programmes and in the drafting of proposals to secure the necessary funding.
- (ii) Rapid demonstration of results to decision-makers and thus make the case for national contributions to long-term monitoring, training in the development of GOOS operational products, application of remote-sensing data and the use of robust models, in close partnership with GOOS, JCOMM, CEOS and other relevant organizations and programmes.
- (iii) Education and research to be given due priority in capacity-building pilot programmes; know-why is the necessary long-term component to complement the shorter-term know-how that training fulfils.
- (iv) Country-specific programmes paying special attention to building-up institutional and legal frameworks, mutual assistance, and transfer of technology, taking into account the different capacities for marine scientific research of the countries in a given region.
- (v) Information and technology and awareness-raising to be sought at all levels: decision- or policy-making, scientific institutions, general public and students.
- (vi) Development of mechanisms to obtain funding; the primary one is IOC-assisted drafting of funding proposals addressed to potential donors, including industry; some restructuring of the modes by which IOC can entertain such donors will have to be devised.
- (vii) Development and application of performance indicators useful to scientists, funding agencies, decision-makers and the general public.

DECISION 4.7.1: The Assembly will be invited to: (i) adopt the Principles and Strategy for Capacity-Building in IOC Information Document no. 1211 prov.; (ii) adopt Draft Resolution XXIII-(4.7.1).

Draft Resolution IOC-(4.7.1)

IOC PRINCIPLES AND STRATEGY FOR CAPACITY-BUILDING

The Intergovernmental Oceanographic Commission of UNESCO,

Noting the wish Member States expressed at the 37th Session of the Executive Council requesting the IOC Executive Secretary to produce a final draft Strategy for Capacity-Building, based on spoken and written comments received from Member States on the original draft presented and in response to Circular Letter 2119;

Endorses the Principles and Strategy for Capacity-Building given in document IOC/INF-1211 prov.;

Instructs the IOC Executive Secretary to:

- (i) conduct regional assessments of existing capacities to undertake marine scientific research and operational oceanography that can improve planning, and programme execution through networking; this should be structured to allow more cost-effective future assessments;
- (ii) provide updated assessments to each ordinary session of the Assembly so that trends in capacity-building can be evaluated, bilateral sponsorships can be focussed and effectiveness of IOC leadership can be assessed; and
- (iii) report on the benefits to communities and the environment of capacity-building efforts in order to increase awareness, visibility and leadership of the IOC.

Financial Implications (2005–2006):

- US\$300,000 for six regional assessments of capacity for marine scientific research and operational oceanography (US\$50,000/region), based on US\$10,000 from Regular Programme Funds, supplemented by extra budgetary funds;
- US\$130,000 for consultancies in capacity-building coordination, IT expertise, liaison with sponsoring agencies, based on US\$10,000 from Regular Programme Funds, supplemented by extra budgetary resources;
- US\$42,000 for a seconded expert through earmarked IOC Trust Funds to assist in coordination of other capacity-building activities.

4.7.2 Implementation Plan for the IOC Strategy for Capacity-Building: Final Draft; Guidelines on Best Practices in Capacity-Building [Res. EC-XXXVII.9]

Documentation:

IOC-XXIII/2 Annex 7

Executive Summary of 'Draft Implementation Plan for Capacity-Building'

IOC/INF-1212 prov.

Draft Implementation Plan for Capacity-Building; and Assessment of Best Practices for Capacity-Building

76 The Director of the Centre for Marine Tropical Ecology (Bremen, Germany) and Chairman of the IOC Consultative Group on Capacity-Building [CGCB], Professor Venugopal Ittekkot, will introduce this item. Resolution EC-XXXVII.9 instructed the Executive Secretary to produce a final draft Strategy for Capacity-Building and develop an associated Implementation Plan, building on existing initiatives, for consideration by the 23rd Session of the IOC Assembly that:

- (i) is in accordance with the new IOC Medium-Term Strategy;
- (ii) assesses the extent and impact of existing and past capacity-building efforts;
- (iii) has specific terms of reference and associated performance measures for all elements;
- (iv) takes account of GOOS and JCOMM capacity-building action plans; and
- (v) outlines a feasible and robust means of support and resources for capacity-building.

77 Supporting the Executive Council's instruction was an offer from the U.S.A. to fund: (i) an expert workshop to facilitate the drafting of an Implementation Plan for the IOC Strategy for Capacity-Building; and (ii) an assessment of capacity-building carried out by IOC over the last five years.

78 In response to the Executive Council's instruction, the IOC Secretariat produced a draft Plan by:

- (i) inviting all Member States (through Circular Letter no 2140), the Chairpersons of IOC regional subsidiary bodies, members of the Consultative Group for Capacity-Building, and donors, to participate in the workshop to draft an Implementation Plan;
- (ii) preparing a draft framework for the Implementation Plan for the IOC Strategy for Capacity-Building, in consultation with the IOC regional offices;
- (iii) uploading the draft to a Discussion Group website to facilitate further inputs and ideas from regions;
- (iv) discussing further regional input and prioritisation at the Experts meeting on the IOC Capacity Building Strategy (Paris, 9–11 March 2005); and
- (v) Finalizing the document in consultation with the regions after the Workshop.

79 The Plan presented to the Assembly is therefore the result of wide and inclusive consultations with IOC regions on the:

- identification of regional projects that address issues of regional concern and are in the frame of the IOC Medium-term Strategy;
- definition and prioritising of capacity-building needs in more effectively meeting these regional project objectives;
- detailing of interventions, deliverables with performance indicators, and associated timelines required for meeting identified capacity-building needs.

80 Most regional requests called for training in operational oceanography, capacity-building schemes, and ocean sciences; the Indian Ocean tsunami catastrophe of December 2004 and data/information exchange together accounted for 20% of the requests. Harmonization between the Strategy and the Implementation Plan was evident from the following analysis of the main groups of requests interventions.

- Training in Integrated Coastal Area Management tools, when coupled to coastal ecosystems monitoring/protection, and coastal model demonstrations for decision-makers, were the most requested set of interventions;
- Training in GOOS operational products, remote sensing/GIS tools, and sea-level issues were the most requested set of interventions in operations;
- Research and education were perceived as the most important avenues for long-term “sustainable” capacity-building, whilst leadership-training/exchange visits for leaders coupled to proposal writing were the most requested set of capacity-building interventions in the short-term;

- Training in mitigating the effects of tsunamis and other marine hazards, and associated coastal bathymetry and mapping of vulnerabilities were the most requested set of interventions in preparedness for extreme events;
- Data and information management and exchange was perceived as important by all regions.

81 Developing global modules has emerged as a viable approach to capacity-building given the universal requirements for tools for integrated coastal-area management (ICAM), training in remote sensing and coastal modelling, and training in sea-level instrumentation/monitoring/analysis.

82 JCOMM, with GOOS/COOP and the satellite community (e.g. CEOS, COSPAR, PORSEC) were perceived as partner entities/programmes. Deliverables, measured against quantifiable performance indicators, were defined with professional assistance.

83 The regional consultations that followed the Executive Council directives to document best practices, define performance measures, and outline feasible and robust means of support and resources for capacity-building, has resulted in the draft of an Implementation and Business Plan that is in agreement with the IOC Principles and Strategy for Capacity-Building, and is the expressed requirements of the regions. It needs to be mentioned that IOC regional bodies group 78 of its 129 Member States. As new IOC regional bodies may be constituted, their Implementation and Business Plans will accordingly be drawn up in consultation and presented for Assembly approval. The same applies for the needs of individual Member States that will be addressed within the guidelines of the Principles and Strategy of Capacity-Building.

DECISION 4.7.2: The Assembly will be invited to adopt: (i) the Draft Implementation Plan in Working Document IOC-XXIII/2 Annex 7 and the Strategy in IOC Information Document 1212 prov.; (ii) Draft Resolution XXIII-(4.7.2).

Draft Resolution IOC-(4.7.2)

**IMPLEMENTATION PLAN
FOR THE IOC STRATEGY FOR CAPACITY-BUILDING NG**

The Intergovernmental Oceanographic Commission of UNESCO,

Noting the Executive Council's instruction to the IOC Executive Secretary, at its 37th Session, to develop an Implementation Plan for Capacity-Building based on regional inputs from an Experts Workshop, and to undertake a study on Best Practices of IOC in Capacity-Building, and

Recognizing that the draft Implementation Plan produced is in accordance with the associated Principles and Strategy for Capacity-Building, within the main IOC themes, and harmonizes the capacity-building components of all IOC activities as an effective measure in working with partners and optimising the use of resources,

Decides to:

- (i) facilitate innovative leadership and team-building workshops for heads of institutes and scientists in realizing their vision for capacity-building;

- (ii) conduct follow-up regional workshops to draft project proposals addressing high-priority regional issues with clearly defined deliverables and associated performance indicators, in the belief that, with this primary funding strategy, regional networks will deliver quality demand-driven science and products;
- (iii) conduct regional workshops on the application of GOOS products in dealing with issues identified in project proposals so that ‘know-how’ training results in rapid and visible returns;
- (iv) network universities–research institutes–industries, creating ensembles of regional leaders who can best define and address long-term education and research needs of the region.

Financial Implications (2005–2006):

- US\$210,000 for six regional innovative leadership workshops (10 heads of institutes per region for 4 days with professional facilitation);
- US\$300,000 for six regional team-building workshops (20 scientists per region for 3 days with professional facilitation);
- US\$150,000 for six regional network-building and proposal-writing workshops (10 heads of institutes and 20 scientists for 2 days of brain-storming inputs enabling facilitator to formulate proposal for major funding agency).

4.7.3 IOC Plan for Capacity-Building in Remote Sensing in Oceanography: Progress Report

[Res. EC-XXXVII.10]

84 The Chairperson of the Pan-Ocean Remote Sensing Conference (PORSEC), Dr Kristina Katsaros, will introduce this item. At its 37th Session, the Executive Council, by Resolution EC-XXXVII.10, endorsed a “Plan for the Use of Remote Sensing in Oceanography by Developing Countries” and instructed the Executive Secretary to implement the Plan and to report on progress to the IOC Assembly at its 23rd Session. The financial implications of the implementation were also quantified for five action items.

85 The following remote sensing activities were supported by IOC in 2004–2005:

IOC supported activity during 2004–2005	EC instructions	Funds/ source
<i>Infrastructural Support</i>		
BILKO Project support, University of Southampton, UK	Yes	72,000\$ GOOS
<i>Satellite Remote Sensing Conferences, Courses and Workshops</i>		
African Regional Development Workshop (South Africa, 2005)	Yes	20,000\$ GOOS
Regional Training Course on Satellite Altimetry for Oceanography [Train The Trainers] (Kenya, 2004)	Yes	6,000\$ TEMA
UNESCO Remote-Sensing Project in Africa in 2004 and 2005 [project extended to 2006–07 biennium]	Yes	210,000\$ UNESCO CCT (RP)

IOC supported activity during 2004–2005	EC instructions	Funds/ source
<i>Infrastructural Support</i>		
IOCCG support in 2004 and 2005	Yes	20,000\$ Policy
PORSEC 2004, Special Sessions for Capacity-Building in Remote Sensing (Chile)	Yes	3,000\$ GOOS
Pre-PORSEC Workshop on Capacity-Building Needs for Latin America and the Caribbean (Chile, 2004)	Yes	7,500\$ TEMA
Post-graduate course in oceanography: Use of RS and GIS for Coastal Water Applications (Chile, 2004)	Yes	5,000\$ TEMA
COSPAR Workshop (Morocco, 2005)	Yes	7,000\$ TEMA
Travel grant: Conference in Austria (Mexico)	Yes	2,000\$ TEMA
Research grant: study on upwelling systems (Senegal)	Yes	5,000\$ TEMA
Fellowship: GIS for data management Indonesia and Malaysia	Yes	3,000\$ IOC-POGO
Fellowship: GIS modelling in Canada (Argentina)	Yes	5,000\$ IOC-POGO
<i>International Coordination, meetings with CEOS and space partners</i>		
UNESCO Cross Cutting (CCT) Project on Applications of RS for Integrated Management of Ecosystems & Water resources in Africa	Yes	1,500\$ UNESCO CCT

86 The tabulation shows that Remote Sensing activities sponsored by the IOC, and in partnership with CEOS and IGOS partners and the UNESCO Crosscutting Project on remote sensing in Africa, have adequately met the decisions of the 22nd Assembly as well as the instructions contained in the 37th Executive Council Resolutions.

87 However, these activities were primarily one-off expenditures, not carried out as part of a unified capacity-building programme. Three important events of importance to capacity-building have recently occurred:

- (i) The draft Principles and Strategy for Capacity-Building will be put before the Assembly at the present session. It proposes a capacity-building focus on satellite remote sensing, GIS applications and modelling, within the frame of regional projects; the associated Implementation Plan reflects, in the same sense, the regional requests for capacity-building.
- (ii) The Government of Flanders' support to the IODE programme, with state-of-the-art computational hardware, and the offer of ArcInfo Inc. to make available web-based licences for their GIS software product, make an ideal combination for the integration of *in situ* data sets into training in satellite remote sensing.
- (iii) The Decision of the Director-General to include in the Draft Programme and Budget for 2006–2007 the UNESCO Cross-cutting project on Applications of Remote Sensing for Integrated Management of Ecosystems and Water Resources in Africa (2006–2007) will reinforce on-going activities in Africa.

88 With this, the Commission should be in a position to address regional concerns through regional projects using integrated ensembles of satellite data, GIS and *in situ* data.

DECISION 4.7.3: The Assembly will be invited to: (i) consider the report on progress in the implementation of the Plan for the Use of Remote Sensing in Oceanography by Developing Countries; (ii) endorse the integrative approach proposed.

4.8 RESPONSE IN THE AFTERMATH OF THE 26 DECEMBER 2004 TSUNAMI IN THE INDIAN OCEAN

4.8.1 Early Warning Systems: World Conference on Disaster Reduction (WCDR), Kobe, Japan: Conference results [Rule of Procedure No.21.2(c)]

Documentation:

IOC Workshop Report 196	<i>International Coordination Meeting for the Development of Tsunami Warning and Mitigation System for the Indian Ocean within a Global Framework, UNESCO Headquarters, France, 3–8 March 2005</i>
IOC Workshop Report 198	<i>Second International Coordination Meeting for the Development of Tsunami Warning and Mitigation System for the Indian Ocean, Mauritius, 14–16 April 2005</i>
United Nations document A/CONF.206/6	<i>Report of the World Conference on Disaster Reduction, Kobe, Hyogo, Japan, 18–22 January 2005</i>

89 The Executive Secretary will introduce this item. He will provide a detailed report on the initiatives of the IOC Secretariat following the tsunami that devastated several countries in the Indian Ocean region in December 2004. These initiatives include:

- (i) Provision of up-to-date information on tsunamis and on the Indian Ocean tsunami for public and press use through the IOC/ITSU website (<http://ioc.unesco.org/itsu>) as from 27 December 2004.
- (ii) Establishment, on 30 December 2004, of an e-mail subscription service that sends e-mail copies of tsunami bulletins issued by the Pacific Tsunami Warning Center (PTWC) and by the West Coast and Alaska Tsunami Warning Center (WCATWC).
- (iii) Provision of information to the press through telephone, radio and TV interviews to provide background information on the scientific aspects of tsunamis as well as on the IOC/ITSU system in the Pacific (mainly between 27 December and end of January 2005).
- (iv) Active participation in tsunami-related activities and events organized before (International Workshop on Tsunami Disaster Mitigation in Future, Kobe, Japan, 17–18 January 2005) and during the World Conference on Disaster Reduction (WCDR), Kobe, Japan (18–22 January).
- (v) Active participation in the China–ASEAN Workshop on Tsunami Warning (Beijing, 25–26 January 2005).
- (vi) Active participation in the Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements (Phuket, Thailand, 28–29 January 2005).

- (vii) Establishment, on 10 February 2005, of the Indotsunami website, which is intended to provide information on progress in the development of a Regional Tsunami Warning and Mitigation System for the Indian Ocean.
- (viii) Participation/representation in various other regional events related to tsunami warning and mitigation (in Tokyo, Jakarta, Nice, Trieste etc., February–April 2005).
- (ix) Submission of a joint UN/ISDR–UNESCO/IOC proposal to the first (OCHA) Flash Appeal (6 January 2005) for coordination and preparatory technical activities (March–August 2005).
- (x) Submission of a UNESCO/IOC proposal to the medium-term review of the OCHA Flash Appeal (14 March 2005) for the fast-track implementation of an interim tsunami warning system for the Indian Ocean and initial development of a permanent, operational tsunami warning and mitigation system within a multi-hazard and global framework.
- (xi) Organization of the (First) International Coordination Meeting for the Development of a Tsunami Warning and Mitigation System for the Indian Ocean within a Global Framework (UNESCO, Paris, 3–8 March 2005); the meeting produced a Communiqué that included a proposal to establish an Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS), which will govern the System.
- (xii) Establishment, with the PTWC and the Japan Meteorological Agency (JMA) of an interim tsunami advisory information service, and identification of national contact points for receiving tsunami advisory information (as from April 2005).
- (xiii) Organization of the Second International Coordination Meeting for the Development of an Indian Ocean Tsunami Warning and Mitigation System (Mauritius, 14–16 April 2005).

90

To strengthen the IOC Secretariat, the Commissariat à l'Energie Atomique (CEA, France) agreed to second François Schindelé to the IOC Secretariat on a half-time basis as from 1st February 2005 for a period of six months.

DECISION 4.8.1: The Assembly will be invited to: (i) provide guidance on the establishment of a Tsunami Warning and Mitigation System for the Indian Ocean region; (ii) establish an IOC Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS). See also Agenda Item 4.8.2.

4.8.2 IOC contribution to the establishment of a World Network of Tsunami Early-Warning Centres

[Rule of Procedure No.21.2(c)]

Documentation:

IOC Workshop Report 196

International Coordination Meeting for the Development of Tsunami Warning and Mitigation System for the Indian Ocean within a Global Framework, UNESCO Headquarters, France, 3–8 March 2005

- 91 The Executive Secretary will introduce this item. He will refer particularly to the International Coordination Meeting for the Development of a Tsunami Warning and Mitigation System for the Indian Ocean within a Global Framework, which included, on the last day, some presentations on the possible development of tsunami warning systems in the Caribbean (and central west Atlantic) region, the Mediterranean (and north-east Atlantic) region, and the south-west Pacific region; attention was also called to the need to consider the coast of West African (eastern Atlantic region).

DECISION 4.8.2: The Assembly will be invited to provide guidance on: (i) the establishment of Tsunami Warning and Mitigation Systems for other ocean basins than the Pacific; (ii) the need to harmonize the nomenclature and terms of reference of existing (i.e. ICG/ITSU) and planned IOC International Coordination Groups within the framework of the present IOC Statutes, Rules of Procedure, and Manual regarding primary subsidiary bodies; (iii) the need for a global framework for regional coordination groups created in the present context.

5. ADMINISTRATION AND MANAGEMENT

5.1 FINANCING AND OWNERSHIP OF IOC'S PROGRAMMES [Rule of Procedure No.21.2(c)]

Documentation:

IOC-XXIII/2 Annex 8

“We have a problem”

- 92 The Chairman of the sessional Financial Committee, Captain Javier Valladares (Argentina), Vice-Chairman of IOC, will introduce this item. He will inform the Assembly of the results of the Committee's deliberations. He will also inform the Assembly that, given the reduction of 20% of UNESCO's contribution to the IOC Regular Budget, Member States will have, as soon as possible, to collectively reflect on possible future scenarios as a possible basis for the reformulation of the Commission's medium- and long-term plans. To start that process, a document was prepared for the consideration of the Assembly at the present session; it assesses the overall funding for IOC, analyses the existing, and proposes, new funding mechanisms including extrabudgetary contributions from Member States through a voluntary pledging system.

DECISION 5.1: The Assembly will be invited to: (i) comment on the report of the Chairman of the Financial Committee; (ii) decide whether to constitute an intersessional Working Group with the aim of preparing a set of proposals on new funding mechanisms for adoption by the 24th IOC Assembly to strengthen the capacity of the Commission to meet its adopted obligations in the medium and long terms; (iii) decide on interim measures using existing regulations and arrangements for the biennium 2006–2007.

5.2 DRAFT PROGRAMME AND BUDGET 2006–2007
[Statutes Art. 1.2; Res. EC-XXXVII.11]

Documentation:

IOC-XXIII/2 Annex 3

Draft Programme and Budget 2006–2007 (draft 33 C/5)

93 The Chairman of the sessional Financial Committee, Captain Javier Valladares (Argentina), Vice- Chairman of IOC, will introduce this item. He will inform the Assembly of the results of the Committee's deliberations.

DECISION 5.2: The Assembly will be invited to adopt Draft Resolution XXIII-(XXX), as is or as amended by the Assembly. [This DR will be available during the session and discussed by the open-ended sessional Financial Committee].

5.3 ELECTIONS OF THE OFFICERS OF THE COMMISSION
AND MEMBERS OF THE EXECUTIVE COUNCIL
[Statutes Art. 6.B.5 and 7; Rule of Procedure No. 18; Appendix I to the Rules of
Procedure]

Documentation:

IOC-XXIII/NOM/Inf.1

Updated listing of the IOC electoral groups and listing of the distribution of seats on the Executive Council among the electoral groups

IOC-XXIII/NOM/Inf.2

Report of the Chairman of the Nominations Committee

94 The Chairperson of the Nominations Committee will introduce this item. The Committee will work in conformity with the technical arrangements for the elections of Officers of the Commission and other members of the Executive Council, as laid down in Appendix I of the Rules of Procedure. The Chairperson of the Nominations Committee will present information relating to the existing and equitable geographical distribution of Member States on the Executive Council. The list of nominations (to be received by 18.00hr on 22 June 2005 and deemed valid by the Committee) will be put before the Assembly as document IOC-XXII/NOM-X. [number to be specified in due course]

95 The composition of the Executive Council and the list of Member States of the Commission are given in Annex ___.

5.3.1 Election of the Chairperson of the Commission

5.3.2 Election of the Vice-Chairpersons of the Commission

5.3.3 Election of the Members of the Executive Council

5.4 DATES AND PLACES OF THE TWENTY-FOURTH ASSEMBLY AND THE
THIRTY-NINTH AND FORTIETH SESSIONS OF THE EXECUTIVE COUNCIL
[Rules of Procedure No.4 and No.19.2]

96 The Executive Secretary will introduce this item. The Executive Council, at its 38th Session (20 June 2005) will have confirmed the dates of its 39th Session: from Wednesday 21

June to Tuesday 27 June 2006 or Wednesday 28 June, leaving the final decision to the Officers and the Executive Secretary, taking into account the Provisional Agenda for the 39th Session. In 2007, the Executive Council will act as the Steering Committee of the 24th Session of the Assembly and will meet during half a day on the day [to be decided] preceding the opening of the 24th Session of the Assembly, i.e. [to be decided] June 2007.

5.5 THEMES OF THE NEXT BRUUN AND PANIKKAR MEMORIAL LECTURES

97 The Executive Secretary will explain that the choice of the themes of the IOC three series of memorial lectures (Bruun, Panikkar and Revelle) should guarantee an adequate balance between regional priorities and technical and scientific issues and priorities, and correspond appropriately to the specific category of memorial lecture, as follows:

- (i) Anton Bruun memorial Lecture (1970; at Assembly sessions): to address important inter-session developments summarized by speakers in the fields of solid earth studies, physical and chemical oceanography and meteorology, and marine biology
- (ii) N.K. Panikkar memorial lecture (1995; at Assembly sessions): to address capacity building in marine science issues at regional and/or national levels
- (iii) R. Revelle memorial lecture (1992; at Executive Council sessions): to address marine geology, geological oceanography, and institutional co-operation in these fields and in general, at the national and international levels

98 The Chairpersons of the scientific, technical and regional Major IOC Subsidiary Bodies were called upon through IOC Circular Letter no 2129, to submit proposals on the themes and lecturers to be presented to the Assembly. The IOC Officers considered the proposals received and made the final decision.

DECISION 5.5: The Assembly will be invited: (i) to consider the current form of the IOC memorial lectures and (ii) to recommend the adoption of the procedure outlined above for all IOC Memorial Lectures in the future.

6. ADOPTION OF RESOLUTIONS AND SUMMARY REPORT

DECISION 6: The Chairman will invite the Assembly to consider the report of the Chairperson of the Resolutions Committee, and to adopt the Draft Resolutions and the Draft Summary Report of its present session.

7. CLOSURE

99 The Chairman is expected to close the 23rd Session of the Assembly at 13.00 hours on Thursday 30 June 2005.



INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

Twenty-Third Session of the Assembly
Paris, 21–30 June 2005

ACTION PAPER

ADDENDUM AND CORRIGENDUM

This document updates texts of the Action Paper (document IOC-XXIII/2 of 13 April) under the following agenda items:

- 3.3,
- 4.1.1,
- 4.2.5,
- 4.4.4,
- 4.5.1,
- 4.6.1, 4.6.2,
- 4.7.1, 4.7.2,
- 4.8.1
- 5.1, and 5.5

The blank right-hand pages are provided to allow participants to make notes, if they wish.

3.3 PRESENTATION BY THE EXECUTIVE SECRETARY OF THE DRAFT PROGRAMME AND BUDGET FOR THE BIENNIUM 2006–2007

The following text supersedes **paragraph 19**:

19 The Executive Secretary will refer first to the Zero Nominal Growth (ZNG) budget ceiling approved as a guideline for finalizing the Draft 33 C/5 at the 170th Executive Board of UNESCO. He will then inform the Assembly that the Executive Board did not mark IOC as a principal priority. As a consequence, the IOC envelope for planning 2006–2007 was reduced by about US\$ 900,000, from 4,721,600 to 3,821,600 US dollars. Document IOC-XXIII/2 Annex 3 rev. provides detailed information on the proposed distribution of the reduced resources. The Executive Secretary will explain that the net impact on programme support will be a reduction of 20%, since a reduction in staff costs was not considered to be an option, given the already understaffed situation of the Commission. The budgetary reduction leads to a reduction in the number of the MLAs integrated into the Draft 33 C/5, concentrating the programme only on three of the MLAs adopted: Science, Operational Services, and Capacity-building and cutting significantly on the support for policy and regional activities. He will then inform the Assembly that a specific reinforcement, of one professional staff, in the baseline was included in the Draft Programme and Budget to reinforce IOC's response to the Indian Ocean tsunami catastrophe of December 2004. An additional reinforcement of the Programme is included in the Draft 33 C/5, for an amount of US\$ 478,400, but pending approval by the UNESCO General Conference of an additional amount requested by the Director-General over and above the ZNG. If this additional amount were approved, the total amount for the Programme 2006–2007 would be about US\$ 4,300,000, which is 10% less than the amount available for 2004–2005. If not approved, then the reduction would be about 20% in Programme costs, unless the additional resources requested by the Director-General are financed from other sources.

4.1.1 The Global Earth Observation System of Systems (GEOSS) and its 10-year Implementation Plan: Report of the Executive Secretary on the Expected Role of the IOC through Its Programmes

The following text supersedes **Draft Resolution IOC-XXIII/DR.(4.1.1)**

THE GLOBAL EARTH OBSERVATION SYSTEM OF SYSTEMS (GEOSS)

The Intergovernmental Oceanographic Commission

Recalling the WSSD Plan of Implementation, particularly paragraph 132,

Noting:

- (i) IOC Resolution EC-XXXVII.2 *The Earth Observation Summit (EOS)*,
- (ii) the Resolution of the Third Earth Observation Summit held in Brussels on 16 February 2005,
- (iii) the Global Earth Observation System of Systems (GEOSS) 10-Year Implementation Plan endorsed by the Third Earth Observation Summit, describing the fundamental elements of an Earth Observation System and its principal expected benefits to a broad range of user communities,

Recognizing the exceptional opportunity provided by the GEO's development of the GEOSS 10-year Implementation Plan to define, at a high political level, firm resources for operational observation of the Earth, at the national and international levels, particularly for the observing systems for oceans, coastal areas, natural resources, ecosystems and natural and human-induced hazards,

Noting further the relevance to GEOSS of IOC's programmes, experience and expertise, and the roles and responsibilities of other intergovernmental organizations,

Noting in particular that the IOC is pursuing a mandate by the UNCED in 1992, has developed in close cooperation with WMO and ICSU, full plans for the establishment of the Global Ocean Observing System (GOOS) and is now fully engaged in its implementation,

Noting further that full implementation of GOOS requires the sustained operation of *in situ* and space-based systems that are being considered as an integral part of GEOSS,

Expressing its appreciation of the work of the GEO,

Endorses the concept of GEOSS and supports its 10-year Implementation Plan to the maximum extent possible within IOC's mandate;

Calls on the GEO to ensure that:

- (i) GEOSS pursue the synergy of existing and planned international and national observing systems, in particular of GOOS, under the lead of the IOC, and recognizes the existing organizational arrangements for these observation systems;
- (ii) GOOS be formally recognized as the ocean and the coastal component of GEOSS;
- (iii) GEOSS comprehend a rational balance of *in situ* measurements, land-based remote sensing, and satellite (oceans and atmosphere) measurements of the earth;
- (iv) the annual Work Plan through which the GEOSS 10-Year Implementation Plan will be executed will focus on meeting users' socio-economic needs and, in particular, the needs of developing countries by enhancing capacity-building;
- (v) the implementation of GEOSS will secure full and open exchange of observational data with minimum delay and cost, will recognize relevant international instruments, national policies and legislation and, in particular, the IOC Oceanographic Data Exchange Policy;

Encourages Member States:

- (i) to become involved in the planning and implementation of GEOSS at national and international levels;
- (ii) to ensure their national coordination for GEO/GEOSS is fully informed and counting on existing and planned ocean observations through GOOS;

Noting with appreciation the Communiqué on support for tsunami and multi-hazard warning systems in the context of the Global Earth Observation System of Systems (GEOSS), adopted at the Third Earth Observation Summit, which expressed its support for the coordinating activities of the IOC in the development effective tsunami warning systems in the Indian Ocean and other regions of the world,

Invites the GEO to support the expansion of capabilities to deal with multi-hazard and other types of disaster at relevant national, regional and international levels, taking into account the UN's International Strategy for Disaster Reduction, as well as plans to establish regional tsunami warning systems under IOC leadership;

Instructs the IOC Executive Secretary:

- (i) to keep the GEO fully informed of the needs of the programmes of the Commission, including GOOS as an essential component of GEOSS, other co-programmes such as JCOMM, IODE, ICAM, and Capacity Building, and of the Commission's expertise;
- (ii) to ensure that the GEO recognizes the coordinating efforts of IOC and other UN agencies for realizing an integrated multi-hazard warning system, and acknowledge the result as an integral part of the GEOSS.
- (iii) to work closely with counterparts in other UN agencies and programmes to ensure an effectively coordinated role for the UN system in the planning and implementation of GEOSS.

Identified funding: US\$20,000/year from MLA 3 (action 5: policy)
25% working time of one professional staff (GPO)

4.2.5 The Census of Marine Life

The following text supersedes **Draft Resolution IOC-XXIII/DR.(4.2.5)**

CENSUS OF MARINE LIFE

The Intergovernmental Oceanographic Commission,

Recalling the progress in the Census of Marine Life (CoML) initiative since the establishment of the Scientific Steering Committee in 2000,

Recognizing that a critical mass of Member States is taking active part in CoML, and that there are direct links to IOC through OBIS and GOOS,

Acknowledging CoML as the international community's main vehicle for the development of a sustainable source of information on marine life, and a key provider of methods for biological sensing for GOOS,

Urges Member States not already involved in CoML and OBIS to participate actively in them, with a view to achieving the goals of CoML for 2010;

Instructs the IOC Executive Secretary:

- (i) to report to the Executive Council at its 39th session on the potential for the major elements of CoML (History of Marine Animal Populations (HMAP); Ocean Realm Field Projects; and the Future of Marine Animal Populations (FMAP)) to contribute to the IOC Main Lines of Action, in particular Ocean Sciences and GOOS, as well as to other activities supported by IOC such as the International Polar Year;

- (ii) to support and facilitate the integration of OBIS into the IODE;

Invites Member States to report on their involvement in these major elements of the CoML at the 39th session of the Executive Council.

Identified Funding: Not applicable.

4.4.4 Ocean Component of the GCOS Implementation Plan and GOOS Contribution to COP-10

Para. 61: The Director of the GCOS, Alan Thomas, will introduce this item.

4.5.1 Concept Paper on the Modalities of Implementation of IOC Programmes in Regions

The following text supersedes **Decision 4.5.1**:

DECISION 4.5.1: The Assembly will be invited to consider, with a view to approving, the proposed modality for enhancing the effectiveness of the Commission's regional subsidiary bodies in implementing the IOC global and regional programmes.

4.6.1 Fifth Meeting of the IOC Advisory Body of Experts on the Law of the Sea (IOC/ABE-LOS-V): Report of the Chairman

The following text supersedes **Decision 4.6.1** and adds **Draft Resolution IOC-XXIII/DR.(4.6.1)**:

DECISION 4.6.1: The Assembly will be invited to: (i) consider the oral report on the deliberations at the 5th Session of IOC/ABE-LOS presented by its Chairman and adopt Draft Resolution XXIII-(4.6.1); and (ii) provide guidance on the actions to be taken in respect of points (i) and (ii), mentioned above, with a view to the submission of a report on the IOC/ABE-LOS' work to the Executive Council at its 39th Session.

Draft Resolution IOC-XXIII/DR.(4.6.1)

FIFTH MEETING OF THE IOC ADVISORY BODY OF EXPERTS ON THE LAW OF THE SEA (IOC/ABE-LOS V)

The Intergovernmental Oceanographic Commission of UNESCO,

Noting with satisfaction the progress made by the IOC Advisory Body of Experts on the Law of the Sea at its Fifth Session which was held in Buenos Aires from 11 to 15 April 2005,

Bearing in mind the UNGA Resolution 59/24 and the IOC Resolutions XXII-12 and EC-XXXVII-8 which stated concrete mandates respecting the work of IOC/ABE-LOS on:

- (i) the Practice of Member States with respect to Parts XIII and XIV of UNCLOS,

- (ii) the dissemination and implementation of the Criteria and Guidelines on the Transfer of Marine Technology,
- (iii) the Procedure for the application of Article 247 of the United Nations Convention on the Law of the Sea by the Intergovernmental Oceanographic Commission of UNESCO,
- (iv) the IOC legal framework within the context of UNCLOS which is applicable for the collection of oceanographic data,

Expressing its appreciation to the IOC publication on the Criteria and Guidelines on the Transfer on Marine Technology,

Endorses the recommendations annexed to this Resolution and in particular adopts the “Procedure for the application of Article 247 of the United Nations Convention on the Law of the Sea by the Intergovernmental Oceanographic Commission”;

Encourages the IOC/ABE-LOS sub-group on the legal framework within the context of UNCLOS which is applicable for the collection of oceanographic data to keep working on this matter and **instructs** I-GOOS to provide technical support for such an IOC/ABE-LOS sub-group.

Urges once again to increase the financial support for the organization of IOC/ABE-LOS VI, in addition to the regular programme funds already allocated.

Identified funding: US\$ 17,000 (from Regular programme) for the organization of IOC/ABE-LOS VI session (2006).

Annex to Resolution XXIII-(4.6.1)

RECOMMENDATIONS OF IOC/ABE-LOS V

The IOC Advisory Body of Experts on the Law of the Sea at its fifth meeting (IOC/ABE-LOS V) recommends the following:

1. That, as a first step for the follow-up to the work of the open-ended IOC/ABE-LOS Sub-group on the practice of IOC Member States regarding marine scientific research and transfer of marine technology, the 23rd session of the IOC Assembly approves the following initial actions requesting the IOC Executive Secretary:
 - (a) to establish, in collaboration with the Division for Ocean Affairs and the Law of the Sea of the United Nations (UN/OLA/DOALOS), a single database containing legislation and States practice on marine scientific research and the transfer of marine technology, and to ensure the consistency, visibility and rapid update of such database. This action recognizes the importance of strengthening capacity building in Member States, to meet the needs of developing countries to effectively conduct, within the context of UNCLOS, marine scientific research and sustained observations programmes, to enhance the use of ocean observations, data and warning services, as proposed to UNESCO General Conference by document draft 33 C/5 (*Draft Programme and Budget for 2006–2007*).

- (b) to establish and administer a roster of experts, in order to respond rapidly to requests by Member States for advice or guidance on the development of legislation and practice regarding marine scientific research and transfer of marine technology. The selected experts shall provide such advice on the basis of an “Orientation Guide” to be elaborated by the IOC Executive Secretary, in consultation (by electronic correspondence) with IOC/ABE-LOS Members and DOALOS, and with due regard to the database referred to in paragraph (a) above;
 - (c) to actively implement the “Criteria and Guidelines for the Transfer of Marine Technology” approved by the 22nd session of the Assembly—in particular, as regard the identification and promotion of partnerships or joint ventures between the suppliers and receivers of marine technology;
 - (d) to actively promote the establishment of project offices on the Transfer of Marine Technology, in accordance with the Guidelines for decentralized bodies approved by the 22nd session of the IOC Assembly, in interested Member States that are either suppliers or receivers of marine technology;
 - (e) to periodically report to the Executive Council and the Assembly on the implementation of the above paragraphs (a) to (d), starting at the 39th session of the Executive Council (2006); and
 - (f) to instruct the Sub-group on the practice of IOC Member States regarding marine scientific research and transfer of marine technology to undertake at the Eighth Meeting of IOC/ABE-LOS, an updated evaluation of the questionnaires on marine scientific research and transfer of marine technology, and accordingly encourages those Member States that did not complete the Questionnaire n° 3 to do so.
2. That the 23rd session of the IOC Assembly adopts the “Procedure for the application of Article 247 of the United Nations Convention on the Law of the Sea by the Intergovernmental Oceanographic Commission”, appended to these Recommendations.
 3. That the 23rd session of the IOC Assembly:
 - (a) takes note of the progress report by the Chairman of the open-ended IOC/ABE-LOS Sub-group on the legal framework within the context of UNCLOS which is applicable for the collection of oceanographic data;
 - (b) requests that, as a next step, taking into account the intersessional work, the Sub-group propose at IOC/ABE-LOS VI practical guidelines for the conduct, within the context of UNCLOS, of the following activities: (i) the deployment of floats in high seas which may drift into EEZs, (ii) the deployment of floats and surface drifting buoys into EEZs, and (iii) deployment of XBTs by ships of opportunity into EEZs. Such work shall be carried out in close co-operation with DOALOS and in consultation with I-GOOS, and on the basis of the comments and observations made when discussing this matter at IOC/ABE-LOS V.

APPENDIX TO RECOMMENDATIONS

Procedure for the application of Article 247 of the United Nations Convention on the Law of the Sea by the Intergovernmental Oceanographic Commission of UNESCO

1. This Procedure will apply to a marine scientific research project governed by the provisions of Part XIII of the UN Convention on the Law of the Sea ("the Convention") which the Intergovernmental Oceanographic Commission ("the Commission") wants to carry out in accordance with Article 247 of the Convention.¹
2. The Assembly hereby establishes, in accordance with the Commission's Statutes and Rules of Procedure, an advisory body for the application of this procedure (the Advisory Body for the application of Article 247 of the United Nations Convention on the Law of the Sea by the Commission, the "Advisory Body"). All IOC Member States are entitled to participate in the work of the Advisory Body.
3. An initiative by one or more IOC Member States to submit a proposal that the Commission undertake a marine scientific research project under Article 247 of the Convention shall be referred by the Executive Secretary to the Advisory Body. The Executive Secretary shall ensure that all Member States in whose exclusive economic zone ("EEZ") or on whose continental shelf such project is to be carried out, or otherwise to be involved in the execution of the project, shall be appropriately and timely notified and be invited to participate in the discussion of the proposed project within the Advisory Body.
4. The Advisory Body shall make a recommendation to the Assembly as to whether or not the proposed project should be carried out. A positive recommendation by the Advisory Body that the Commission undertake the proposed project shall be submitted to the Assembly in the form of a draft resolution. To the draft resolution shall be annexed a detailed description of the project containing the information referred to in Article 248 of the Convention and the proposed ways to comply with the conditions set out in Article 249 of the Convention.
5. A decision that the Commission undertake a marine scientific research project under Article 247 of the Convention shall be taken by the Assembly by means of the adoption of a resolution. The draft for such a resolution, together with the Annex as referred to in paragraph 4, shall be communicated to all Member States at least two months in advance of the starting date of the meeting of the Assembly, and shall explicitly indicate that its adoption is for the purpose of applying Article 247 of the Convention.
6. If it is deemed necessary for an effective execution of the proposed project, the Assembly will be convened, in accordance with the Rules of Procedure of the Commission, in an extraordinary session for the purpose of the adoption of the resolution. Such session can only be held if the conditions of paragraphs 3 and 4 are respected.

¹ Article 247 of the UN Convention on the Law of the Sea reads as follows:
"A coastal State which is a member of or has a bilateral agreement with an international organization, and in whose exclusive economic zone or on whose continental shelf that organization wants to carry out a marine scientific research project, directly or under its auspices, shall be deemed to have authorized the project to be carried out in conformity with the agreed specifications if that State approved the detailed project when the decision was made by the organization for the undertaking of the project, or is willing to participate in it, and has not expressed any objection within four months of notification of the project by the organization to the coastal State."

7. Subject to paragraphs 8 and 9, a project shall not be carried out in the EEZ or on the continental shelf of a Member State unless that State has voted in favour of the resolution referred to in paragraph 5 or has otherwise expressed its willingness to participate in the project as described in the Annex to the resolution prior to the notification referred to in paragraph 8.
8. The IOC Executive Secretary shall provide notification through appropriate official channels to each Member State in whose EEZ or on whose continental shelf the research project is to be carried out as soon as possible after the adoption of the resolution, but no later than six months in advance of the actual starting date of the project in the EEZ or on the continental shelf. The notification shall include the text of the adopted resolution and its Annex.
9. The research activities may be commenced in the EEZ or on the continental shelf of a Member State six months after the receipt of the notification referred to in paragraph 8 by the Member State if no objection has been communicated by such State to the IOC Executive Secretary within four months of the receipt of that notification.
10. In case of a marine scientific research project under Article 247, part of which is planned to be carried out in the EEZ or on the continental shelf of a coastal State which is not a Member of the Commission, bilateral negotiations may be initiated by the Commission with the coastal State in question, with a view to conclude an agreement on the conditions under which the research activities may be carried out in those maritime zones. The coastal State shall be invited to contribute to the discussion of the project before its submission to the Assembly. The part of the project concerning such a coastal State may be only carried out if the referred agreement, including in the Annex to the resolution corresponding to the project, has been concluded between the coastal State and the Commission, in conformity with the Statutes and Rules of Procedure of the Commission. In that event, paragraphs 8 and 9 of the present procedure will apply.
11. Nothing in this Procedure shall prejudice the rights, jurisdiction and duties of States under the international law of the sea, in particular the Convention. This Procedure shall be interpreted in the context of and in a manner consistent with the provisions of the Convention.

4.6.2 Appropriate IOC Internal Procedure Related to an Effective Use of Article 247 of the UN Convention on the Law of the Sea : IOC/ABE-LOS Proposal

The following text supersedes **Decision 4.6.2**:

DECISION 4.6.2: The Assembly will be invited to consider the proposed internal procedure and decide the steps to be taken for its eventual adoption and implementation.

4.7.1 IOC Principles and Strategy for Capacity-Building : Final Draft

The following text supersedes the **whole text under this item**.

- 73 The Director of the Centre for Marine Tropical Ecology (Bremen, Germany) and Chairman of the IOC Consultative Group on Capacity-Building (CGCB), Venugopal Ittekkot, will introduce this item. A draft Strategy for Capacity-Building was presented to the Executive

Council at its 37th Session, in June 2004. By Resolution EC-XXXVII.9, the Council instructed the IOC Executive Secretary to produce a final draft Strategy for Capacity-Building for consideration by the Assembly at its 23rd Session, based on inputs from Member States.

74 Accordingly, the draft strategy was modified by incorporating comments from Member States (made during the discussion at the 37th Session of the Executive Council, and through written responses to Circular Letter no. 2119 inviting further comments), and in January 2005 was uploaded to an electronic discussion forum to stimulate further inputs and ideas. The status of the draft was discussed at an experts workshop on drafting an Implementation Plan for the IOC Strategy for Capacity Building (UNESCO, Paris, 9–11 March 2005). The finalized draft presented to the Assembly at the present session is therefore the result of wide and inclusive consultations. Many parts of the earlier draft have been significantly modified or overhauled in order to best incorporate the advice from Member States and the CGCB. An important step was to establish an acceptable vision statement; it has been commented upon and critically debated, since it set the Medium-Term goals for the Capacity-Building Section of IOC. The final version reads:

The vision of IOC Capacity-Building is to establish networks of scientists, managers and other practitioners working within regional and similar cooperative mechanisms, to create demand-driven science, enhance sustainable development and protection of the marine environment, and provide operational oceanographic services for the benefit of all humanity.

75 The Strategy is articulated to operate within the larger IOC mandate; most fundamentally, it will harmonize all on-going IOC capacity-building initiatives so that they operate within the frame of the IOC Principles of Capacity-Building. Other important points of the Strategy document are:

- (i) Recognizing on-going regional projects, addressing priority regional concerns, as the primary vehicles for capacity-building interventions. Active assistance needs to be provided to scientist networks, to conceive capacity-building pilot programmes and draft 'business-like' proposals to secure the necessary funding.
- (ii) Making the case to decision-makers by rapid demonstration of results from capacity-building interventions thereby encouraging national contributions to long-term monitoring, training in the development of GOOS operational products, application of remote-sensing data and the use of robust models. All these needs to be in close partnership with GOOS, JCOMM, CEOS and other relevant organizations and programmes.
- (iii) Giving due priority to education and research in capacity-building pilot programmes. Such know-why is the necessary long-term component to complement the shorter-term know-how that training fulfils.
- (iv) Paying special attention to country-specific programmes in building up institutional and legal frameworks, encouraging mutual assistance, and assisting in transfer of technology. All interventions need to take into account the different capacities for marine scientific research of the countries in a given region.
- (v) Raising awareness at all levels of decision and policy-making, scientific institutions, general public and students.

- (vi) Developing funding mechanisms to augment the primary one of IOC-assisted drafting of funding proposals. Besides the standard models of contributions to the IOC Trust Funds, some innovative suggestions to accept industrial donations have been suggested.
- (vii) Developing and applying performance indicators to capacity building interventions that will be useful to scientists, funding agencies, decision-makers and the general public.

DECISION 4.7.1: The Assembly will be invited to: (i) approve the Draft IOC Principles and Strategy for Capacity-Building contained in IOC Information Document no. 1211 prov.; (ii) adopt Draft Resolution IOC-XXIII/DR.(4.7.1).

Draft Resolution IOC-XXIII/DR.(4.7.1)

IOC PRINCIPLES AND STRATEGY FOR CAPACITY-BUILDING

The Intergovernmental Oceanographic Commission of UNESCO,

Noting the wish Member States expressed at the 37th Session of the Executive Council, requesting the IOC Executive Secretary to produce a final draft Strategy for Capacity-Building, based on spoken and written comments received from Member States on the original draft presented and in response to Circular Letter 2119,

Endorses the Principles and Strategy for Capacity-Building given in document IOC/INF-1211 prov.;

Instructs the IOC Executive Secretary to:

- (i) conduct regional assessments of existing capacities to undertake marine scientific research and operational oceanography. These assessments should be structured to allow biennial updated assessments so that trends in CB can be evaluated, bilateral sponsorships can be focussed, and benefits of capacity building efforts evaluated in order to increase awareness, visibility and leadership of the IOC;
- (ii) Identify and secure new sources of funding; and
- (iii) Strengthen the capacity-building efforts of IOC by increasing professional staff at least for the short-term either through hiring a consultant or seconding an expert.

Identified funding (2005–2006): (Further details available in IOC-XXIII/2 Annex 7 – *Working Paper on Implementation Plan for the IOC Strategy for Capacity-Building*)

Action item	Regular Budget	Assembly Request US\$
Assessing baselines on science & operational capacities in countries entailing: field data collection, populating net-based databases, and liaising with national institutions and agencies.	10,000	50,000 per region
External consultant for liaison with sponsoring agencies:	10,000	50,000
Assisting in Capacity-Building activities		42,000 (or secondment)

4.7.2 Implementation Plan for the IOC Strategy for Capacity-Building: Final Draft and Assessment of Best Practices in Capacity-Building

The following text supersedes paragraphs 78 and 79, Decision 4.7.2 and IOC-XXIII/DR.(4.7.2):

78 In response to the Executive Council's instruction, the IOC Secretariat produced a draft Plan by:

- (i) inviting all Member States (through Circular Letter no 2140), the Chairpersons of IOC regional subsidiary bodies, members of the Consultative Group for Capacity-Building, and donors, to participate in the workshop to draft an Implementation Plan;
- (ii) preparing a draft framework for the Implementation Plan for the IOC Strategy for Capacity-Building, in consultation with the IOC regional offices;
- (iii) uploading the draft to a Discussion Group website to facilitate further inputs and ideas from regions;
- (iv) discussing further regional input and prioritization at an Experts Workshop on drafting an Implementation Plan for the IOC Strategy for Capacity-Building (UNESCO, Paris, 9–11 March 2005); and
- (v) Finalizing the document in consultation with the regions after the Workshop.

79 The Plan presented to the Assembly is therefore the result of wide and inclusive consultations with IOC regions on the:

- identification of regional projects that address issues of regional concern and are in the frame of the IOC Medium-term Strategy;
- definition and prioritizing of capacity-building needs in more effectively meeting regional project objectives;
- detailing deliverables of capacity building interventions and associated performance indicators.

DECISION 4.7.2: The Assembly will be invited: (i) to endorse the Implementation Plan contained in IOC Information Document 1212; and (ii) adopt Draft Resolution XXIII-(4.7.2).

Draft Resolution IOC-XXIII/DR.(4.7.2)

**IMPLEMENTATION PLAN
FOR THE IOC STRATEGY FOR CAPACITY-BUILDING**

The Intergovernmental Oceanographic Commission,

Noting the instructions Member States gave the IOC Executive Secretary, at the 37th Session of the Executive Council, to develop an Implementation Plan for Capacity-Building based on regional inputs from an Experts Workshop, and to undertake a study on Best Practices of IOC in Capacity-Building,

Recognizing that the draft Implementation Plan produced is in accordance with the associated Principles and Strategy for Capacity-Building components of all IOC activities as an effective measure in working with partners and optimising the use of resources, and that self-directed Capacity-Building is key to the process,

Decides to:

- (i) facilitate innovative leadership workshops for heads of institutes in realizing their vision for capacity-building;
- (ii) facilitate team-building workshops for effective regional networks of scientists; and
- (iii) conduct regional workshops to draft projects proposals addressing high priority regional issues with clearly defined deliverables and associated performance indicators. (This is the primary funding strategy for self-directed Capacity-building).

Identified funds (2005–2006):

(Further details available in IOC-XXIII/2 Annex 7 – *Working Paper on Implementation Plan for the IOC Strategy for Capacity-Building*; and IOC/INF-1212 – *Information Paper on Implementation Plan for the IOC Strategy for Capacity-Building*)

Workshops for Capacity-Building proposals for funding entailing	Regular Budget	Assembly Request US\$
Leadership programmes for heads of institutes	8,000	35,000 per region
Team-building programmes for regional scientists	8,000	50,000 per region
Proposal writing workshops		25,000 per region

**4.8.1 Early Warning Systems: World Conference on Disaster Reduction (WCDR),
Kobe, Japan: Conference Results**

The following text is an **addition to paragraph 89**:

- (xiv) Fast-track implementation of an interim system in the Indian Ocean by expanding existing networks.

The following text supersedes **Decision 4.8.1** and adds **Draft Resolution IOC-XXIII/DR.(4.8.1)**:

DECISION 4.8.1: The Assembly will be invited to: (i) provide guidance on the establishment of a Tsunami Warning and Mitigation System for the Indian Ocean region; (ii) establish an IOC Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS) through adoption of Draft Resolution XXII-(4.8.1). See also Agenda Item 4.8.2.

Draft Resolution IOC-XXIII/DR.(4.8.1)

**INTERGOVERNMENTAL COORDINATION GROUP FOR THE INDIAN OCEAN
TSUNAMI WARNING AND MITIGATION SYSTEM**

The Intergovernmental Oceanographic Commission of UNESCO,

Extending its deepest sympathies and condolences to the victims of the Indian Ocean tsunami of 26 December 2004 and their families, and the people and Governments of the countries affected, and expressing its deepest concern over the negative economic, social, psychological, environmental and other consequences and impacts of the tsunami disaster,

Recalling the directions and guidances provided by the Special ASEAN Leaders' meeting in Jakarta on 6 January 2005, the Mauritius International Meeting on Small Island Developing States held at Port Louis from 10 to 14 January 2005, the UNGA Resolution 59/279 in New York on 19 January 2005, the Common Statement of the Special Session on Indian Ocean Disaster and the Hyogo Framework for Action 2005-2015 both adopted at the World Conference on Disaster Reduction in Kobe on 22 January 2005, the Ministerial Declaration issued in Phuket on 29 January 2005, the GEO Communiqué issued in Brussels on 16 February 2005, and the technical meetings held in India, China and Indonesia,

Bearing in mind the Communiqué of the International Coordination Meeting for the Development of a Tsunami Warning and Mitigation System for the Indian Ocean within a Global Framework, held in UNESCO headquarters 3-8 March 2005 and the Mauritius Declaration of the Second International Coordination Meeting for the Development of an Indian Ocean Tsunami Warning and Mitigation System held in Grand Baie from 14 to 16 April 2005,

Further recalling that the Assembly through Resolution IOC/XXII-6 approved the IOC Data Exchange Policy, which states that the timely, free and unrestricted international exchange of oceanographic data is essential, among others, for the preservation of life,

Welcoming the many generous offers of financial and technical assistance made by key countries across the globe to help establish a tsunami early warning system for the Indian Ocean, particularly the contributions of Belgium, Finland, Japan, Norway, Sweden, [list to be completed],

Decides:

- (i) to establish an Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS) with the Terms of Reference annexed to this Resolution;
- (ii) that the IOC shall provide the permanent Secretariat of the ICG/IOTWS, and develop a comprehensive programme of capacity building on tsunami protection for the Indian Ocean;

Urges Member States:

- (i) to submit to the IOC Executive Secretary in writing the name of the designated authority acting as National Tsunami Focal Point, with responsibilities to officially receive tsunami related information bulletins and warnings, and the name of the institution acting as National Tsunami Warning Centre, or responsible for its development;
- (ii) to provide voluntary contributions to the IOC Trust Fund in order to assist the Commission in the effective provision of secretariat services for the ICG/IOTWS.

Identified funding: US\$ 50,000 (Regular programme budget. 33 C/5 Supplementary proposal for a total budget of US\$ 1 million.

Annex to Draft Resolution IOC-XXIII/DR.(4.8.1)

**TERMS OF REFERENCE FOR THE INTERGOVERNMENTAL COORDINATION
GROUP FOR THE TSUNAMI WARNING AND MITIGATION SYSTEM
FOR THE INDIAN OCEAN (ICG/IOTWS)**

Will be established as a subsidiary body of the IOC and will report to, and seek guidance from, the IOC Assembly.

Objectives:

1. To coordinate the activities of the ICG/IOTWS;
2. To organize and facilitate as appropriate the exchange of seismic, sea level and other data at or near real-time and information required for the interoperability of the ICG/IOTWS;
- 3.. To promote the sharing of experience and expertise related to tsunami warning and mitigation for the Indian Ocean basin;
4. To promote tsunami research;
5. To promote the establishment and further development of national tsunami warning and mitigation capacities in accordance with standard protocols and methods;
6. To develop, adopt and monitor implementation of work plans of the ICG/IOTWS, and to identify required resources;
7. To promote implementation of relevant capacity building;
8. To liaise and coordinate with other tsunami warning systems;
9. To liaise with other relevant organizations, programmes and projects;
10. To promote the implementation of the ICG/IOTWS within a multi-hazard framework;
11. To keep under constant scrutiny the status of the system and how it satisfies the needs.

The secretariat for the ICG/IOTWS shall:

1. Support meetings of the ICG;
2. Facilitate the liaison among the various national contact points and national tsunami warning centres;
3. Maintain a current list of operational national contact points and facilities and make it available on request to all Member States;
4. Organize the liaison between ICG/IOTWS and the ICG/ITSU, with the PTWC and with other tsunami warning centres to facilitate best practices in tsunami warning;
5. Initiate and support training activities and enhance and enrich tsunami warning in the Indian Ocean.

Membership:

- Member States of the IOC within and bordering the Indian Ocean
- Observers from other IOC Member States
- Invited observers from other organizations (including NGOs), programmes and projects in accordance with the IOC rules and procedures.

5.1 FINANCING AND OWNERSHIP OF IOC'S PROGRAMMES

The following text is **added at the end of paragraph 92:**

Some of the options contained in the document are available to be implemented immediately as interim measures for the biennium 2006–2007, making use of existing financial regulations applicable to the IOC special account and to voluntary contributions from Member States.

5.5 THEMES OF THE NEXT BRUUN AND PANIKKAR MEMORIAL LECTURES

The following text supersedes **paragraph 98:**

98 The Chairpersons of the scientific, technical and regional IOC Primary Subsidiary Bodies were called upon, by IOC Circular Letter no 2129, to submit proposals on the themes and lecturers to be presented to the Assembly. The IOC Officers considered the proposals received and made the final decision.