



정부가해양학위원회(IOC) 제27차 총회 및 제46차 집행이사회 참가보고서



외 교 부
Ministry of Foreign Affairs



해양수산부



국립수산물연구원
National Fisheries Research & Development Institute



국립해양조사원 KHOA
Korea Hydrographic and Oceanographic Administration



기상청
Korea Meteorological Administration



한국해양과학기술원



정부간해양학위원회(IOC)
제27차 총회 및 제46차 집행이사회
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I 회의개요

□ 기간 및 장소

- 회의장소 : 파리, UNESCO 본부
- 회의일정 : '13.6.24~25(제46차 집행이사회), 6.26~7.5(제27차 총회)

□ 참석규모

- 145개 회원국 정부대표 및 옵서버, UNEP, IHO, GOOS, IODE, JOCMM 및 사무국 관계자 등 약 350여명

* 9월 2일자로 바누아투가 회원국에 가입하면서 총회원국 수가 146개국 이 되었음

□ 정부대표단 : 총 16명

- 수석대표 : 주유네스코대표부 이상진 대사
- 교체수석 : 해양수산부 문해남 실장
- 대 표 : 유혜란, 유지완, 강상규(주유네스코대표부), 여기동(해양수산부), 이준수(국립수산과학원), 김영택(국립해양조사원), 엄현민, 이정희(기상청), 박철(충남대학교), 김현영, 박내선(한국해양과학기술원)
- 자 문 : 변상경, 이미혜, 조가람(한국해양과학기술원)

※ 대표단 외에 임현택(해양수산부, IOC 교육파견), 전나연, 허원준(한국해양과학기술원) 참석

II IOC 제27차 총회 및 46차 집행이사회 훈령

1. 금번 제27차 총회 및 제46차 집행이사회는 지난 총회 및 집행이사회 이후 진행사항을 점검하고 2014-17 IOC 중기발전 전략과 예산 계획, IOC 4개 우선순위 목표(HLO)와 이에 대한 예산 배정, UN과의 해양관련 협력, 신규 지역센터 설립 계획, 해양재해, 해양자료 및 정보 서비스, 능력배양, 전지구 해양과학 프로그램 관련사항 등을 집중 논의할 예정인 바, 대표단은 회의 및 국제 동향을 면밀히 파악하여 우리나라 관련 정책수립과 전략에 참고할 수 있도록 할 것.
2. 우리나라는 제17차 총회('93)부터 제26차 총회('11)까지 10회 연속 집행이사국이자 2011년 이후 의장국으로서 선도적인 역할을 담당하고 있는바, 향후 예상되는 IOC에서 우리나라의 역할 증대를 감안하여, 대표단은 각 의제별로 우리의 입장을 표명하고 관련활동을 발표하는 등 회의에 적극적으로 참여·발언할 것.
3. 특히 금번 총회에서 다루게 될 UN과의 해양과학협력, 기후변화 관련 운용해양학 (COMM, GOOS, WCRP), 전지구 해양과학프로그램, 능력배양(capacity development)과 관련한 주요 안건에 대해서는 우리나라의 관심과 활동실적을 알리고, 지속적이고 적극적인 참여의사를 표명할 것.
4. 금번 회의에서 개최되는 의장단 및 집행이사국 선거에서 우리나라가 IOC 의장에 재선출될 수 있도록 적극 추진할 것.
 - 각국 대표단과의 접촉을 통해 지지를 확보하도록 노력하고, 우리나라 의장 출마 또는 양자관계에 직접적인 영향을 미칠 수 있는 지지요청 또는 교환지지 제의에 관해서는 본부에 청훈하여 대처할 것.

5. 2011년 팔레스타인의 UNESCO 가입 이후 미국의 회비 납부 중단 등에 따라 IOC가 겪고 있는 재정난은 금번 회의에서도 주요 안건으로 논의될 것으로 예상되는 바, 이에 대한 아국의 기여방안을 모색하되 규모와 세부 내역에 대해서는 국익과 이미 지원되고 있는 신탁사업의 투자 효율성을 적절히 고려하여 대처할 것.
6. 금번 회의 안건 중 한국의 지원으로 추진된 IOCAFRICA 회의, IPHAB (유해 적조사업), 제4차 JCOMM 총회, IOC/PICES/ICES 공동 기후변화 심포지움 등에 대해서는 이에 대한 한국의 지원과 기여를 적극 홍보할 것.
7. 금번 회의에서는 2015년 1월로 퇴임예정인 IOC 사무총장 선출 계획이 발표·논의될 예정인 바, 아국에 우호적인 국가나 인물이 선출될 수 있도록 신임 사무총장 선임절차와 과정을 면밀히 파악하여 보고할 것.
8. 일본과 중국 등 주변국과는 해양영유권 및 동해 표기 등의 국제 분쟁이 지속되고 있는 바, 동 문제가 거론될 시 반드시 본부에 청훈하여 대처할 것.
9. 본 훈령에 명시되지 않은 사안 중 경미한 사안은 수석대표의 재량으로 대처하고 중대 사안에 대해서는 본부에 청훈할 것.
10. 대표단은 회의종료 후 20일 이내에 결과보고서를 제출할 것.

III IOC 제46차 집행이사회 결과 보고

□ 집행이사회 개회

- 2013년 6월 25일 오전 10시, Room IV에서 변상경 의장이 절차규칙 12(2)에 따라 제26차 총회의 실무위원회 역할을 수행하기 위한 46차 집행이사회를 개회함.
- 이번 총회에 세인트빈센트, 그라나다가 회원국에 가입하면서 총회원국 수가 145개국에 되었음.

□ 의제채택 및 서기 지정

- 집행이사회는 제안된 의제를 채택하고 니콜라이 미카엘(러시아) IOC 부의장을 서기로 지정함.

□ 제26차 총회 추가 의제

- 의장은 2011년 5월 WMO 제16차 총회에서 2015년부터 시작되는 국제극지의 10년(International Polar Decade:IPD)행사에 IOC를 포함한 관련 국제기구 및 프로그램을 초청하기로 한 바, 이번 총회 추가 의제로 다루어 줄 것을 회원국에 제안함.
- 프랑스는 동 의제를 총회 의제에 포함시키지 않을 것을 제안하였으나, 의장은 WMO 총회에서 동 의제가 거론되었기에 늦게 포함될 수밖에 없었음을 설명하고, IPD에서 IOC의 역할이 중요하기에 의제에 포함시켜야 함을 강조함.
- 러시아와 아르헨티나는 금년 5월 WMO에서 결정한 사항을 이번 의제로 다루는 것이 중요함을 언급함.
- 의장은 동 행사가 2015년에 시작되기 때문에 이를 준비할 충분한 시간이 있음을 설명하고 이번 총회에서 동 의제를 다루기로 함.

□ **위원회 구성**

○ 집행이사회는 지명위원회, 결의안준비위원회, 재정위원회와 2개의 회기중 작업반(Rio+20, GOOS)을 다음과 같이 구성하였음.

- 선거관리 위원회 (Nomination Committee)

의 장 : David Pugh(영국)

위원국 : 브라질, 중국, 캐나다, 일본, 한국, 터키, 우크라이나, 러시아, 이집트, 모리셔스

- 결의안 준비위원회 (Resolutions Committee)

의 장 : David Palmer(영국)

위원국 : 프랑스, 러시아, 아르헨티나, 미국, 인도, 호주, 캐나다, 중국, 케냐, 멕시코, 태국, 일본, 한국, 벨기에, 브라질, 세네갈, 남아프리카 공화국

- 재정위원회 (Financial Committee)

의 장 : Savithri Narayanan(캐나다)

위원국 : 브라질, 아르헨티나, 이집트, 남아프리카공화국, 미국, 러시아, 프랑스, 인도, 세네갈, 한국, 일본, 벨기에, 호주, 포르투갈, 멕시코, 중국, 말레이시아, 영국

- Rio+20 IOC 선언문 작업반

의 장 : 변상경(한국)

위원국 : 에콰도르, 프랑스, 캐나다, 아르헨티나, 인도, 브라질, 미국, 중국, 케냐, 말레이시아, 일본, 한국, 포르투갈, 모리셔스, 영국

※ 의장은 이미 배부된 Rio+20 선언문을 UN EC에서 성명서로 변경해줄 것을 요청하여 이름이 변경된 것임을 언급함.

- GOOS 결의안 초안 작업반

의 장 : Shaohua Lin (중국)

위원국 : 브라질, 호주, 중국, 일본, 인도네시아, 한국, 포르투갈, 인도, 이집트, 영국, 터키, 남아프리카공화국, 프랑스, 에콰도르, 스페인, 미국, 스위스, 러시아, 튀니지, 모리셔스

- 우리나라는 선거관리 위원회, 결의안준비위원회, 재정위원회, 상기 2개 작업반 등 모든 회기 중 활동에 위원국으로 참여하기로 하였음.
- 의장은 총회개최 시 상기 위원회 및 작업반그룹에 참여하는 집행이사국 외에 다른 회원국을 포함 시킬 예정임을 언급함.

회의 일정표 점검 및 조정

- 호주는 빠빠한 총회 일정을 감안하여 각종 위원회 활동을 저녁 세션을 활용하는 방안을 제안하였으나, 의장은 통역료 등 예산문제를 언급하며 배정된 시간 안에 해결하지 못한 의제는 토요일까지도 이용할 예정이며 배정된 시간 안에 모든 의제를 다룰 수 있도록 노력할 것임을 언급함.

차기 회의 일시 장소 확정

- 의장은 2012년 제45차 집행이사회는 2012년 6월 19일-29일 간 개최될 예정이며 Rio+20 등 다른 회의 일정과 겹치지 않도록 조정할 예정임을 밝힘.

기념강연 후보 추천

- 의장은 차기 Brunn, Panikkar 기념강연에서는 여성과학자가 기념강연을 할 수 있도록 회원국이 추천해 줄 것을 제안함.

회의록 채택 및 폐회

- 집행이사회는 회의록을 채택하고 폐회함.

IV IOC 제27차 총회 결과 보고

회의 의 제

1. 개회

2. 회기 구성

- 2.1 의제 채택
- 2.2 서기 지정
- 2.3 회기중 위원회 및 실무위원회 구성
- 2.4 안건 및 회의 일정 소개
- 2.5 A. BRUUN, N.K. PANIKKAR 기념 강의

3. 법정보고

- 3.1 IOC 의장 보고
- 3.2 2012-2013 프로그램/예산 및 2008-2013중기 전략에 대한 사무총장 보고 (중요)
- 3.3 IOC 하부기구 의장 보고
 - 3.3.1 IOC 아프리카 및 주변 도서국 위원회(IOCAFRICA)
 - 3.3.2 IOC 서태평양 위원회(WESTPAC)
 - 3.3.3 IOC 카리브해 및 주변 지역 위원회(IOCARIBE)
- 3.4 UNESCO 37차 총회에 대한 2012-2013년 IOC 보고

4. IOC 프로그램(안), 2014-2017년 예산 및 2014-2021년 IOC 중기 전략 보고

- 4.1 2014 - 2021년 IOC 중기 전략 보고
- 4.2 2014 - 2017년 IOC 프로그램(안) 및 예산 보고

5. 전략적 발전

- 5.1 거버넌스
 - 5.1.1 UN 협의 및 조정 사항

5.1.2 기타 협력

5.1.2.1 이란 이슬람 공화국 카테고리-2 UNESCO서아시아 해양학지역교육연구센터 제안 (중요)

5.1.2.2 인도 하이데라바드 해양학국제훈련센터 설립 제안

5.1.2.3 러시아 연방 오브닌스크 해양데이터포털센터 파트너십 설립 제안

5.1.2.4 IHO-IOC/GEBCO (SCRUM) 와의 협력

5.1.3 IOC 하부기구 및 지역 사무소의 역할

5.1.3.1 호주 퍼스 지역 사무소

5.1.3.2 IOCARIBE 사무국

5.2 해양재해

5.2.1 지역별 쓰나미 경보시스템

5.2.1.1 태평양 쓰나미 경보시스템

5.2.1.2 인도양 쓰나미 경보 및 저감시스템

5.2.1.3 카리브해 및 주변 지역 쓰나미 경보 및 저감시스템

5.2.1.4 북동대서양, 지중해 쓰나미 조기 경보 및 저감시스템

5.2.2 전지구 해양위험 경보 및 저감 시스템 조정 실무그룹(TOWS-WG)

5.3 관측 시스템, 자료 관리

5.3.1 IOC의 미래(중요)

5.3.2 전지구해양관측시스템(GOOS)

5.3.3 IOC-WMO 해양학 및 해양기상 합동기술위원회(JCOMM)

5.3.4 IOC 국제해양학데이터정보교류위원회(IODE)

5.3.4.1 해양 생물지리적 정보시스템 (OBIS)

5.3.5 WMO-ICSU-IOC-UNEP 전지구기후관측시스템(GCOS)

5.4 해양 과학

5.4.1 WMO-IOC-ICSU 세계기후연구프로그램(WCRP)

5.4.2 유해조류 정부간 패널(IPHAB)

5.4.3 부영양화

5.4.4 연안지역통합관리(ICAM)

5.4.5 세계해양환경평가(UN Regular Process)

5.5 능력배양

5.5.1 새로운 능력배양 전략 개발

5.5.2 IOC 전지구과학능력평가사업보고 (중요)

6. 행정 및 관리

6.1 2014-2021년 IOC 중기 전략(안) (중요)

6.2 2014 - 2017년 IOC 프로그램 및 예산(안) (중요)

6.3 선거 (중요)

6.3.1 의장 선거

6.3.2 부의장 선거

6.3.3 집행이사국 선거

6.4 결의안 초안 관련 가이드라인 개정(안)

6.5 28차 총회 및 47차, 48차 집행이사회 일시 및 장소

6.6 28차 IOC 총회 A. BRUUN, N.K. PANIKKAR 기념 강의 주제

7. 요약 보고서 및 결의안 채택

8. 폐회

1. 총회 개회

- 2013년 6월 26일 오전 10시 30분 변상경 의장이 제 27차 총회 개회를 선언함.
- 의장은 이번 총회가 UNESCO 사무총장의 긴급예산(Emergency Fund) 제공 승인을 통해 개최가 가능하였음을 언급함.
- 개회에 앞서 의장은 지난 회기 중 서거한 저명 과학자들의 명복을 빌기 위한 기립 묵념을 제안하여 약 1분간 묵념이 있었음.
 - Phil Busby(1947-2014/뉴질랜드), Carlo Heip(1945-2013/벨기에), Klaus Wyrski (1925-2013/미국), Carles S. Yents(1927-2012/미국)
- 의장은 이번 회기 중 가입한 세인트 빈센트, 그라나다의 가입을 환영하고, 총 145개 회원국이 되었음을 알림.

2. 회기구성

2.1. 의제채택

- 의장은 집행이사회에서 포르투갈이 의제 3.2 “Future of IOC”에 관한 회기중 작업반 구성을 건의했음을 알리고 동 건의 사항을 포함한 의제를 채택함.
- 또한 집행이사국과 의장단 선거 후보자 등록 마감일이 6월 30일(금) 오후 6시까지임을 알리고, 각 회원국은 발언문을 지정양식에 맞추어 사무국에 보내줄 것을 요청함.

2.2. 서기지정

- 나이지리아 대표의 추천 및 콜롬비아의 재청에 의해 미국 대표가 이번 회기 회의록 작성을 위한 서기로 지정되었음.

2.3. 회기간 위원회 구성

- 금번 총회 기간 중 구성될 후보추천위원회(Nomination Committee), 결의안 준비위원회(Resolutions Committee), 재무위원회(Financial Committee)의 3개 위원회와 ‘새로운 능력배양전략개발 작업반’, ‘IOC의 미래 전략 작업반’ 2개의 작업반은 이미 46차 집행이사회에서 구성된 위원국 외에 추가로 참가를 원하는 회원국은 회의에 참석할 수 있음을 알림.

- 후보추천위원회 (Nomination Committee): Room VI, 6.26 13:15~
- 결의안 준비위원회(Resolutions Committee): Room VIII, 6. 27 08:00~9:45
- 재무위원회(Financial Committee): 장소미정, 6.26 13:15~14:25
- 새로운 능력배양전략 개발 작업반: Room. VI, 7.02 13:00~
- IOC의 미래 전략 작업반: Room VII, 6.27 08:00~09:45

※ 한국은 26일 집행이사회에서 상기 위원회 및 작업반에 모두 참여 의사를 밝혔으며 업무를 분장하여 부여 받은 위원회에 참석기로 함.

2.4. 안건 및 회의 일정 소개

- 사무총장은 추가 의제를 반영한 개정된 총회일정표를 채택하고 회원국이 발언한 내용은 당일 저녁까지 지정양식에 의거 메일로 송부하여 줄 것을 다시 한 번 안내함.

2.5 A. Brunn, N.K. Panikkar 기념강의

- A.Brunn 기념강연
 - 강연자: Benjamin Halpern(미국 캘리포니아 대학 산타 바버라 국립 생태분석 및 합성센터)

- 주제: 해양건강지표(전지구적 및 지역별 활용 및 향후 방향)

○ N.K. Panikkar 기념강연

- 강연자: Shubha Sathyendranath(전지구해양과학협의회)

- 주제 : POGO의 능력배양 활동을 통해 얻은 교훈

3. 법정보고

- 법정보고에 앞서 UNESCO 사무총장인 Dr. Irina Bokova는 IOC 총회의 중요성을 강조하며, 회의에 참석한 회원국에 감사를 포함. 사무총장은 해양 및 연안의 지속적인 발전을 위한 청사진 발간, Rio+20 회의 참가, 전지구 GOOS 사업 추진 등 지난 회기간 IOC의 중요한 업적을 치하함. 또한 IOC는 UNESCO의 중요한 부분임을 강조하며 최근 인도양과 대서양에 6개의 IOC 쓰나미 경보센터 설립 등 주요한 사업에 긴급예산(Emergency Fund)이 지속적으로 투입되었음을 언급함.
- UNESCO 사무총장은 한국의 지원으로 2012년 설립 추진된IOCAFRICA의 경우 IOC 의장의 지도력을 보여주는 좋은 사례임을 치하하고, UNESCO와 IOC가 직면한 문제는 함께 풀어나가야 하므로 회원국의 지속적인 관심과 협조를 요청함.

3.1. 의장 보고

- 의장보고에 앞서 IOC 의장단을 대표하여 중남미 부의장(Capt. Frederico Antonio Sariavia Noguera)이 IOC 의장단 합동 성명서를 발표함. IOC 의장단은 현재 IOC가 당면한 재정위기를 극복하기 위해 모든 회원국이 재정 지원을 검토해 줄 것을 요청함.

- 변상경 의장은 IOC 의장 보고를 통해 IOC 전 의장인 Capt. Javier Valladaras의 지속적인 관심과 지원에 감사를 표하고, IOC가 직면한 재정 위기 상황(활동 예산 76% 삭감, 인력 예산 8% 삭감)을 설명하며 IOC와 UNESCO의 적절한 대응을 통해 어려움을 해쳐나가고 있음을 밝힘. 또한 당면한 여러 가지 어려움을 지속적으로 해결할 수 있도록 UNESCO 사무총장의 결정으로 IOC 사무총장의 임기가 2015년 1월 11일까지 연장되었음을 밝히고, 지난 회기간의 여러 중요한 활동을 소개함.
- 특히, 변상경 의장은 한국이 지원하여 추진된 동구권과 중남미 지역을 대상으로 한 IOC의 미래와 운용해양학 포럼 개최 결과를 소개하고, 동 포럼이 회원국의 정책입안에 도움을 줄 수 있는 해양 및 연안 관련 정보 지식 공유하고 IOC가 해양관측을 통한 해양예보 등 해양 서비스 분야에 더욱 관심을 가질 수 있도록 장려하는데 목적이 있음을 강조하였음. 또한 현재 IOC가 예산 등 여러 문제에 직면해있지만 회원국 간 협력을 통해 함께 노력해야 함을 강조함.
- 다음과 같은 발언을 함.
 - **(포르투갈)** 의장이 발표한 IOC의 명확한 비전이 IOC가 직면한 문제 해결에 큰 도움이 될 것임을 언급하며 “IOC의 미래”가 총회 기간 중 주요 의제로 논의되기를 희망하고, 또한 서태평양지역위원회, 아프리카지역위원회 등 지역 하부기구 역할의 중요성을 강조함.
 - **(한국)** 변상경 의장의 리더십과 성공적인 업적을 치하하고, 향후에도 지속적으로 IOC 산하 지역별 위원회의 활동을 지원할 계획임을 밝힘.
 - **(중국)** 지난 2년 동안 IOC가 직면한 재정 및 인력문제를 비롯한 모든 문제에 모든 회원국의 노력과 지원이 필수적임을 밝히고, IOC와 회원국 간의 소통을 강화해야 함을 언급함. 또한 중국 정부는 앞으로도 샤먼 포럼과 같은 여러 다양한 회의 개최 주최를 통하여 IOC 활동을 지원할 계획임을 밝힘.

- (남아공, 코트디부아르, 나이지리아) IOC의 미래는 회원국의 노력에 달려 있으며 재정문제에 대해 회원국 모두가 함께 생각해야 함을 언급하며 아프리카에 대한 한국 정부의 지원에 감사를 포함.
- (일본) IOC가 현재 직면한 어려운 상황에도 불구하고 지난 3년간의 여러 업적들(쓰나미 경보, 전지구해양관측시스템(GOOS))을 치하함. 2012년 1월부터 일본이 IOC 사무국에 인력 지원을 하고 있음을 밝힘.
- (이란) 자국이 추진하고 있는 UNESCO 카테고리 2 센터 설립을 위해 지속적인 관심을 요청함.
- (러시아) IOC 활동과 관련한 여러 회의를 개최할 예정임을 밝히고 지역하부 기구를 위한 다양한 회의 개최를 지원할 계획임을 밝히고, 한국이 지난 동구권 포럼을 지원한 것에 감사의 뜻을 포함.
- (말레이시아) 해양신재생에너지 워크숍을 주최한 한국정부에 감사를 표하며 향후 지속적인 협력을 통해 상호 발전이 이루어지길 희망함.

3.2. 사무총장의 사업집행 및 결산 보고

- 사무총장은 IOC 중기계획(2008-2013) 및 2012년 제45차 집행이사회 이후 2012-2013년도 사업집행 결과를 다음과 같이 보고함.
 - 우선순위목표(HLO) 1: 새로운 쓰나미 경보시스템 센터의 설립, 4개 지역 쓰나미 경보시스템에 기여하는 표준 운영 절차에 따른 훈련 및 실시간 해수면 데이터 제공관련 발전 사항 강조
 - 우선순위목표(HLO) 2: 기후변동성에 대비한 해양의 역할, 아프리카의 연안 변화 적응 등 기후변화와 관련 활동 보고

- 우선순위목표(HLO) 3: 유해적조(HAB) 프로그램, 해양공간계획 및 해양 생물 지리적 정보시스템(OBIS) 등 해양 건강을 보전하기 위한 활동 보고
- 우선순위목표(HLO) 4: Rio+20 회의 및 UN Oceans Compact 작성 등과 같은 IOC의 역할에 대해 보고*

* '세계해양평가(Regular Process)'와 관련한 활동 및 능력배양 활동, 아프리카 및 군소 도서국을 위한 IOC 지역하부기구 설치 강조

- 2012~2013년도 사업 집행 결과 보고에서 HLO1과 관련되어 4개 쓰나미 지역에서의 쓰나미 서비스 제공과 관련된 발전사항을 보고하였으며, HLO2과 관련되어 전지구해양관측시스템(GOOS), WMO-IOC 해양학 및 해양기상 합동기술위원회(JCOMM) 활동 그리고 새로운 GOOS 운영위원회의 작업계획 등을 강조함. HLO3과 관련해서 사무총장은 HAB, OBIS, 해양공간계획 이니셔티브 등을 보고함. HLO4와 관련하여 세계해양평가(Regular Process), 미세플라스틱에 대해 보고함.

- 다음과 같은 발언을 함.

- (호주) IOC가 각 회원국에서 어떠한 의미를 가지고 있는지와 IOC의 발전을 위하여 각국의 역할을 검토해줄 것을 언급함. 벨기에는 회원국들이 국제 사회에서 서로 협력하기 위하여 IOC를 잘 활용해야함을 언급함.
- (캐나다, 칠레, 에콰도르, 러시아, 미국, 벨기에 등 회원국) 금번 재정 위기가 IOC의 우선순위를 결정하는 데 좋은 기회가 될 수 있음을 언급함. 특히 벨기에는 UNESCO에서 IOC의 위치를 공고히 하기위해 회원국의 역할이 중요하며, 회원국의 장기 기여가 필요함을 언급함.
- (한국) IOC의 추가예산이 상당히 감소한 것에 대하여 회원국들의 관심을 상기시키고, 이러한 감소가 쓰나미 조기경보시스템과 오션 컴팩트의 후속 조치 등에 영향을 줄 것임을 우려하면서, 향후 이들 사업들을 차질 없이

수행하여 줄 것을 강조함. 또한 한국이 신정부 들어 해양수산부를 신설하였음을 회원국에 공지하였음.

- (미국) 지난 2011년부터 유네스코 재정지원 유보 방침에 따라 IOC 지원 활동에 제약이 있음을 설명하고, 그럼에도 자국이 추진하고 있는 IOC 관련 사업을 강화하여 IOC를 지원할 수 있도록 노력하고 있음을 설명하였음.
- (아이티) 지난 2010년 지진피해가 아이티에 큰 교훈이 되었음을 언급하며 지진피해 복구에 도움을 준 회원국에 감사를 표함. 또한 IOC의 교육훈련을 통하여 지진 및 쓰나미 피해에 대한 사전예방교육효과가 증가하였음을 언급함.
- (남아공, 세네갈) IOC의 목표달성의 중요성을 잘 인식하고 있음을 언급하며 해양데이터관리프로그램, 해양데이터프로그램 등의 참여를 통해 해양과 연안에 대한 이해를 증진시킬 수 있었음을 밝힘. 이와 관련하여 IOCAFRICA의 다음 목표 달성을 위해 회원국이 함께 노력해줄 것을 요청함.

3.3 IOC 하부기구 의장 보고

3.3.1 IOC 아프리카 및 주변 도서국 위원회(IOCAFRICA)

- IOCAFRICA 의장인 Mr. Monde Mayekiso는 IOCAFRICA의 제2차 총회('13.04.03~04/ 남아프리카공화국 케이프타운)의 주요결과를 보고하고, IOCAFRICA의 전략계획 개발과 채택 진전상황, 아프리카 지역 능력 배양 활동개발 및 하부기구 강화를 강조함.
- 다음과 같은 발언을 함.
 - (앙골라, 토고) 아프리카 국가들이 협력하여 IOCAFRICA 프로그램 및 활동에 참여하고 있음을 강조함. IOCAFRICA를 통해서 아프리카 지역의 해양과학 능력배양이 성공적으로 이루어지길 기대함을 밝힘.

- (중국) IOCAFRICA 설립 후 두 번의 총회를 거쳐 IOCAFRICA 전략을 채택한 것을 축하함. 또한 2011년부터 중국이 꾸준히 30,000불씩 아프리카에 지원해왔음을 밝히며 능력배양을 위한 연구센터 설립 및 인력지원을 통해 IOCAFRICA 발전에 기여할 것임을 언급함.
- (한국) 아프리카 하부기구 내 예정된 활동들이 IOC의 최근 재정난으로 인해 적절하게 지원을 받을 수 있는지에 우려를 표하고, 한국이 아프리카 국가들에 대한 UN의 우선순위 결정을 존중하며, IOCAFRICA가 전략 계획에 따라 IOC 체제하에서 지속적으로 발전할 수 있도록 한국의 다양한 개발원조 프로그램(ODA)을 통해 계속 지원할 계획임을 밝힘.

3.3.2 IOC 서태평양 지역위원회(WESTPAC)

- IOC 서태평양 지역위원회(WESTPAC) 의장인 Dr. Somkiat Khokiattiwong은 2008년 이후 WESTPAC의 주요 업적을 보고함.
 - WESTPAC 지역 특화된 프로그램/사업 개발, 설립, 수행을 위한 체계적인 협력을 통한 회원국 간의 노력을 강조
- 해양과학, 관측, 서비스 및 능력배양과 관련된 서태평양 지역 국가들의 중요성을 감안할 때, 앞으로 더 많은 업적을 남기기 위해 WESTPAC 사무국 강화가 필요함.
- 다음과 같은 발언을 함.
 - (인도네시아) 인도양과 서태평양 국가들의 협력이 중요함을 강조하며, 2013년 WESTPAC 제25주년 기념 한국과 중국이 공동으로 참여하여 공동 항해 조사를 시행했음을 언급함.
 - (베트남) IOC 및 WESTPAC과의 협력을 통해 능력배양과 네트워크 구축을

성공적으로 진행할 수 있었음을 밝힘. 이를 위한 WESTPAC의 노력을 치하하고, 제9차 WESTPAC 국제과학심포지움을 2014년 4월 베트남 정부의 지원을 받아 베트남 나트랑에서 개최할 예정임을 밝힘.

- **(중국, 일본, 태국, 말레이시아 등 WESTPAC 회원국)** 지역하부기구의 중요성을 강조하고, 재정, 인력 지원 등 다양한 방법을 통해 지속적인 지원을 할 예정임을 밝힘. 또한 앞으로 더 많은 중요한 업적 달성을 위해서는 WESTPAC 사무국 강화의 중요성을 언급함.
- **(토고)** 제9차 WESTPAC 총회에 참여하여 협력을 도모할 수 있게 도와준 한국에 감사를 표시하고, WESTPAC의 경험과 노하우는 아프리카지역하부기구 발전에 큰 도움이 될 것임을 밝힘.
- **(한국)** 부족한 예산과 인력에도 불구하고 많은 결과물을 생산한 WESTPAC에 감사를 표함. 한국은 서태평양지역의 중요성을 잘 인식하고 있으며 이를 위해 다양한 활동에 적극적으로 참여할 계획임을 밝힘.
- **(러시아)** 조사선을 이용한 탐사를 통해 WESTPAC 지역 국가들과 협력하고 있음을 언급함.
- **(호주)** 2007년 WESTPAC이 재정적 어려움에 직면했지만 많은 혁신과 변화를 통해 훌륭한 업적을 달성한 것을 축하함. 호주는 퍼스 지역사무소를 통해 WESTPAC과 지속적으로 협력할 계획임을 밝힘.
- **(미국)** 어려운 상황에서도 훌륭한 업적을 달성한 WESTPAC의 사례가 다른 지역 하부기구의 귀감이 될 것임을 언급함. IOC 재정 위기도 WESTPAC의 사례와 같이 적극적인 협력과 혁신을 통해 이겨내길 희망함.
- **(WESTPAC 의장)** 사무국의 노력을 다시 한 번 상기시키며, WESTPAC은 IOC의 미래와 맞물려 다양한 프로그램을 구상하고 있음을 밝힘. IOC의

재정난은 WESTPAC에도 많은 영향을 미쳤지만 회원국들의 지원이 많은 도움이 되었음을 언급함.

3.3.3 IOC 카리브해 및 주변 지역 위원회(IOCARIBE)

- IOCARIBE 의장인 Dr. Bonnie Ponwith는 2012-2013년도 IOCARIBE 프로그램인 카리브 지역 광역 해양 생태계(CLIME), 전지구해양관측시스템(IOCARIBE-GOOS), 카리브해와 주변 지역 유해적조(HAB-ANCA), 연안지역통합관리(ICAM), 국제해양학데이터정보교류(IODE), IOCARIBE와 남아메리카지역 관련 해양 데이터 및 정보 네트워크(ODINCARSA), 카리브해 지도작성 및 능력배양 등의 진전사항을 보고함. 특히 카리브해와 멕시코만 국제 해저 지형도(IBCCA)는 자료수집이 거의 완료되어 곧 보고서를 출판할 예정임을 밝힘.
- 또한 사무국에 기술직원이 공석이므로 효과성과 지속성을 유지하는데 어려움을 밝히며, IOCARIBE 사무국장을 정직원으로 채용하는 것이 최우선 과제이며, 회원국의 재정, 인력 지원이 필요함을 언급함.
- **(IOC 사무총장)** IOCARIBE 사무국장 정직원 채용을 위해서는 IOC, IOCARIBE 및 회원국의 3자지원이 있어야 가능할 것임을 밝힘.
- 다음과 같은 발언을 함.
 - **(콜롬비아)** IOCARIBE의 중요성을 강조하고, 카리브해 지역 국가들은 꾸준히 성장해왔고, 해양분야에 지속적인 투자를 해왔음을 밝히고, 콜롬비아는 IOCARIBE에 인력지원을 할 예정임을 밝힘. 앞으로 IOCARIBE 사무국장의 정직원 채용 관련 문제가 잘 해결 되기를 희망함.
 - **(벨기에, 프랑스, 도미니카, 멕시코, 쿠바, 아이티 등 IOCARIBE 지역 국가들)** IOCARIBE의 강화는 IOC의 발전을 위해 절대적으로 필요한 요소임을

강조하고, IOCARIBE 사무국장의 정직원 전환을 전적으로 동의함을 밝히고, 이를 위한 노력을 계속할 것임을 밝힘.

- **(포르투갈)** IOCARIBE와 UNEP의 협력이 매우 오래되었음을 언급하며, 공동의 목표인 지속가능한 자원 개발 및 관리에 대한 IOC, 정부, UNEP 간의 협력이 매우 중요함을 강조함.
- **(UNEP)** IOCARIBE의 업적을 치하하고, 앞으로도 두 기구간의 지속적인 협력을 통해 지역 발전에 기여할 수 있길 희망함.
- **(IOCARIBE 의장)** 회원국의 발언이 IOCARIBE에 큰 힘이 되었음을 밝히고, 지원을 아끼지 않은 회원국에 감사를 표하며 지역하부기구 발전을 위해 노력할 것임을 밝힘.*

* IOCARIBE 지역위원회 논의에서는, IOCARIBE 회원국들의 UNESCO에 대한 재정지원 요구가 어느 지역위원회보다 적극적이었음. 특히 사무국장의 정직원 채용을 위한 재정지원을 유네스코가 담당할지, 회원국들의 추가예산(Extra Budget)로 할 것인지에 대한 논쟁이 장시간 지속되었음.

3.4. 제37차 UNESCO 총회에 대한 2012-2013년도 IOC 보고

- 사무총장은 제37차 UNESCO 총회(2013년 10월 25일-11월 11일/프랑스 파리)에 제출될 활동에 대한 정기 보고를 언급함. 동 의제는 3.2 사무총장보고에 포함되어 발표되었기 때문에 간략하게 소개함.

4. IOC 프로그램(안), 2014-2017년 예산 및 2014-2021년 IOC 중기 전략 보고

- IOC의 프로그램 및 예산을 담당하고 있는 IOC 부의장(Peter Haugan)은 총회 기간 중 개최된 재정 위원회에서 논의된 사항을 보고함. 부의장은 작년 제45차 집행이사회에서 IOC 중기 전략 2014-2021 초기 발전전략을 토대로 위원회를 구성하였음을 설명하였음.

○ 다음과 같은 발언을 함.

- (포르투갈) Peter Haugen 의장의 리더십과 성공적인 중기전략 구성을 위한 노력을 치하함. 총회에서 논의하기 전에 선부르게 결의문을 채택하는 것은 부정적인 영향을 가져올 수 있으므로 회원국의 의견을 먼저 수렴한 후 결의문을 채택할 것을 건의함.
- (캐나다) "Recognizing the importance of in-depth discussion during the Assembly on financial matters"를 문단 1에 넣어줄 것을 요청함.
- (멕시코) 이 의제가 회원국의 의견 수렴없이 결정되는 것에 우려를 표하며 문단 2의 내용을 “Decides to waive to on an exceptional basis the submission”으로 변경하여 줄 것을 요청함.

4.1 2014-2021년 IOC 중기 전략 보고

- Peter Haugan 부의장은 UNESCO의 우선순위 정책과 연계된 IOC 중기전략 구성에 대해 설명함. IOC 중기전략은 IOC의 미션에 의거하여 구성될 것이며 동 전략에 따라 우선순위목표(HLO), 프로그램, 활동이 설정될 것임을 발표함.

4.2 2014-2017 IOC 프로그램(안) 및 예산 보고

- Peter Haugan 부의장은 IOC의 프로그램은 2014-2017년(4년 단위)으로 구성되며, 예산은 2014-2015년(2년 단위)으로 구성됨을 언급하며 예산(안)을 발표함. UN 세계해양평가, UN 사무총장의 “Oceans Compact”, 전지구해양과학 보고서는 유엔시스템 내에서 IOC의 가치를 인정받을 수 있는 중요한 부분임을 강조함.
- 또한 부의장은 2014-2015년의 예상 예산에 근거하여 예산 배분 우선순위를 발표함. 동 내용은 회기중 재정위원회를 통해 계속적으로 수정을 거칠 예정임을 밝힘.

- **(호주)** 재정위원회에서 동 안건을 열심히 검토해주고 있는 것에 감사를 포함.
- **(중국)** 중기전략의 비전 내용 중 "Ocean ecosystem"에 주목해야하는 이유를 질의하였고 이에 Peter Haugan의장은 동 질문을 재정위원회에서 논의하기로 함.
- **(아르헨티나, 멕시코, 칠레, 에콰도르, 베네수엘라, 파키스탄, 쿠바 등 중남미 회원국)** 재정위원회에서도 논의된 바 있는 "Oceans Compact"의 삭제와 더불어 세계은행이 주도하는 Global Partnership 부분을 삭제할 것을 요청함.
- **(독일)** 중기전략에 포함된 IOC의 많은 활동을 환영하고, 우선순위목표 (HLO)에 동의함을 밝힘. 또한 능력배양 등은 긴급하게 시행되어야 하며, 데이터 교환, 해양관측, 아프리카 등에 주목할 필요가 있음을 언급함. 또한 IOC의 제한된 예산을 고려하여 지원할 예산에 대해 신중하게 고려해줄 것을 요청함. 또한, IOC에서 1~2개의 활동을 지원할 예정임을 밝힘.
- **(중국)** IOC의 중기전략이 IOC의 최신 예산 상황 등을 반영하여 작성되었다고 생각하며, 동 중기전략이 회원국의 정부 및 UN 사무총장 등 주요 관련자들과도 논의가 되어야 함을 언급함. 또한 IOC의 중기전략이 다른 국제기구들과도 협력할 수 있는 전지구적으로 영향을 미칠 수 있는 범위에서 만들어져야 함을 언급함.
- **(일본)** IOC가 현재 인력난과 재정난 등의 어려운 상황을 중기전략에 반영해야 함을 언급하며 지속가능한 발전전략을 포함하고 있는 중기전략을 환영함.
- **(멕시코)** IOC 중기전략에 언급된 "emerging issue" 문구와 관련하여 "emerging"에 어떠한 의미가 내포되었는지 회원국과 논의되지 않았음을 언급하며 동 문구를 재정위원회에서 논의해줄 것을 요청함.
- Peter Haugan 의장은 코멘트 준 회원국에 감사를 표하고 총회에서 받은 회원국의 의견을 재정위원회에서 신중히 논의할 것임을 밝힘.

5. 전략적 발전

5.1 거버넌스

5.1.1 UN 협의 및 조정사항

- IOC 해양과학부분담당인 Dr. Luis Valdes는 다양한 해양 관련 유엔 기구간 활동에 대한 IOC의 기여에 대하여 아래와 같이 보고함.
 - UN Oceans, GESAMP, Rio+20 후속조치 및 지속가능 목표 프로세스 활동, 유엔사무총장의 Oceans Compact, World Bank의 해양을 위한 전지구협력, 전지구기후서비스체제(GFCS), 해저케이블에 대한 국제전기통신연합(ITU)-정부간해양학위원회(IOC)-세계기상기구(WMO) 공동 대책위원회 등 몇몇 최근 진행 경과 보고
- 사무총장은 회원국의 의견을 듣기 전에 재정위원회에서 의제 4를 다루면서 Oceans Compact 문구에 대한 논의를 나누었음. 중기전략에서 Oceans Compact 문구를 삭제할 예정임을 언급함.
- 회원국들은 아래와 같은 발언을 함.
- **(미국)** IOC에서 다양한 주제를 다루는 것을 매우 기쁘게 생각하며, IOC의 미래를 생각했을 때 UN 시스템이 IOC의 활동에 어떤 영향을 주고 있는지와 어떻게 대응할 것인지 생각해 보아야한다고 언급함. 또한 중복되는IOC의 활동을 조정할 필요가 있다고 함
- **(베네수알라)** Oceans Compact와 관련하여 중국을 포함한 G77 및 개발도상국을 대표하여 동 내용을 다루는 것을 반대함을 밝힘.
- **(아르헨티나)** Oceans Compact 및 전세계 해양평가는 회원국이 참석한 자리에서 다루진 적이 없음을 언급하며 동 내용에 대해 언급하는 것은 문제가 있음을 지적함. 이를 고려하여 5.1.1에 대하여 적절히 수정하여 주길 요청함.

- (프랑스) 다음주에 논의 예정인 IOC 미래에서 Oceans Compact에 대한 내용이 논의되길 희망함을 밝힘.
- (한국) IOC가 UNESCO의 다른 기구들과 협력을 통하여 해양과학분야에 기여한 것을 높이 평가함. 그리고 G77과 중국이 Oceans Compact에 대하여 부정적인 이유가 다른 회원국들과 명확하게 공유되지 못하고 있음을 지적하며, Valderas가 발표에서 언급한 앞으로 나갈 방향에 있어 문제가 되고 있는 점이 무엇인지 밝혀주길 요청함.
- Dr. Luis Valdes는 IOC가 더 이상 다른 UN 기구들의 그림자에 가려지면 안됨을 강조하며 IOC의 능력과 범위 안에서 해양의 중요성을 강조하고 자주성을 지켜나가야 함을 언급함. UN 시스템 뿐만 아닌 다른 국제기구와의 관계형성에 있어서도 IOC의 리더십을 유지해야함을 밝힘.
- (니카라과) G77과 중국이 UN사무총장에게 보낸 서한을 낭독함으로써, Oceans Compact를 채택하는 과정에 있어서 의견수렴절차가 없었으며, 의견수렴을 요구를 받아들이지 않았기 때문에 유효성을 부정한다고 밝힘.
- 결의안 채택과 관련하여 Oceans Compact 부분이 포함되어 있는 문단 3을 삭제하는 방안과 문구를 폭넓게 수정하는 방안이 제기되었으나 토론 끝에 문단 3을 삭제하기로 함.

5.1.2 기타협력

- IOC 부사무총장이자 IOC 능력배양담당인 Dr. Mtrasen Bhikajee는 국제인도양 탐사조사(IIOE) 50주년을 맞이하였음을 언급하며 2차 인도양탐사에 대한 협력을 소개함.
- 회원국들은 아래와 같은 발언을 함.

- **(호주)** IOC의 존재감을 확실히 하기 위해서는 플래그십 활동이 필요함을 언급하며 인도양 탐사가 그러한 영향을 담당할 것임을 언급함.
- **(미국)** 첫 번째 탐사 이후 기술의 발전을 통해 자료수집 방법이 개선되었음을 언급하며 미국도 탐사에 참여할 계획임을 밝힘.
- **(영국)** IOC의 우선순위목표(HLO) 달성을 위하여 협력이 필수적임을 언급함.
- **(남아공)** 해양과학과 서비스를 제공하는 것은 중요한 임무임을 언급하며 인도양 탐사를 통한 자료공유가 아프리카 지역에 긍정적인 영향을 미칠 수 있도록 노력할 것임을 밝힘.
- **(독일)** 탐사에 대한 세부적인 추진 일정 및 세부내용이 정해지지 않았으므로 지지를 보류할 것임을 밝힘.
- **(SCOR)** 1959-1965년 동안 이루어진 인도양 탐사가 첫 번째 국제적 해양 탐사임을 언급하며 동 탐사를 통해 해양에 대한 여러 가지 정보를 수집하고 이해할 수 있었음을 밝힘. 또한 현대 과학의 발전으로 해양 정보 수집이 매우 수월해 졌음을 언급하며 IOC 회원국의 적극적인 참여를 요청함.
- 사무총장은 50년전의 인도양 탐사를 통해 현재 IOC가 있을 수 있었음을 언급하며 동 협력의 필요성을 강조함.

5.1.2.1 이란 이슬람공화국 카테고리-2 UNESCO 서아시아 해양학 지역교육센터 설립

- IOC 사무총장 Dr. Wendy Watson-Wright는 이란이 2012년 9월 제출한 카테고리-2 UNESCO 서아시아 해양학지역교육연구센터 설립 제안을 알리고 동 의제의 목적을 설명함.
 - 해양재해, 해양생물, 해양화학, 해양환경, 해양엔지니어링, 해양정책 등에 센터

교육의 중점을 맞춰 해양자연재해, 기후변화 및 영향, 모니터링, 자료 수집 및 관리 등을 포함한 해양서비스, 해양거버넌스 및 해양법 등의 교육을 제공할 예정이다.

○ 회원국들은 아래와 같은 발언을 함.

- (이란) 지역교육센터 설립을 지지해준 회원국(스페인, 파키스탄, 아프가니스탄 등)에 감사를 표함. 이란은 이란 대학, 이란해양연구원 등 현재 이란의 해양과학지원 및 연구 현황을 설명함. 이란은 이란이 가지고 있는 해양과학 기반을 토대로 교육센터를 효율적으로 운영할 것임을 언급함.

- (니카라구아, 파키스탄, 카메룬, 태국, 튀니지, 스리랑카, 베네수엘라, 호주, 카메룬, 태국, 튀니지, 스리랑카, 베네수엘라, 호주, 에콰도르, 알제리, 쿠바, 이집트, 쿠웨이트, 영국, 말레이시아, 레바논, 탄자니아, 일본, 남아프리카 공화국, 인도, 프랑스 등 회원국) 이란의 교육센터 설립을 지지함. 특히 서아시아 지역 국가들은 이란의 교육훈련센터 설립을 적극 지지하고 동 센터가 지역 협력에 큰 역할을 할 것임을 언급함. 파키스탄은 전 세계적인 재정난 중에 이란의 센터 설립은 다른 지역에게도 귀감이 될 것이며 여러 지원을 아끼지 않을 것임을 밝힘.

5.1.2.2 IHO-IOC/GEBCO(SERUM) 하부기구 승인

○ 일반해저지형도(GEBCO) 사무국장인 Dr. David Clark이 GEBCO의 개요에 대해 설명함.

○ 아래와 같은 발언을 함.

- (칠레) IHO 국제해저지형도의 중요성을 언급하며 SCRUM을 전적으로 지지함을 밝힘.

- (독일, 이탈리아, 에콰도르, 아르헨티나 등 회원국) SCRUM이 GEBCO의

하부기구로 들어가는 것을 지지하며 이는 해양의 다양한 분야를 이해하는데 중요한 역할을 할 것임을 언급함.

- (인도) 인도양의 공해지역의 해저지형도 제작에 GEBCO와 긴밀하게 협력할 예정임을 밝힘.
- (중국) 북극과 Southern Ocean에 대한 해저지형도를 제작하여 출판할 필요가 있음을 언급하며 SCRUM을 GEBCO의 하부기구로 만드는 것에 동의함을 밝힘. 또한 중국은 전문인력 제공을 통해 적극 참여할 것임을 밝힘.
- (일본) 지난 10년간 Nippon Foundation을 통해 GEBCO의 훈련 프로그램을 지원하였음을 밝히며, 하부기구 설립에 동의함.

○ IHO는 해저지형도 제작을 위해 해저탐사 및 맵핑 프로그램 등을 통해 다양한 자료를 축적하고 있음을 밝히며, 여러 연구를 통해 얻은 해양 데이터를 GEBCO와 공유하여 데이터베이스 업데이트에 기여해 줄 것을 요청함.

5.1.3 IOC 하부기구 및 지역 사무소의 역할

○ IOC 부의장 Prof. Adote Blivi 박사가 6월 24일 지역하부기구(RSB) 회의를 개최하여 지역위원회를 강화하기위한 지역적 전략에 초점을 맞춘 UN 및 지역 파트너와의 협력 강화, 능력 배양 및 IOC 중기전략에 기여하는 방안, 사업, 재정 및 인력파견을 포함한 현물지원 등 회원국이 각 지역위원회에 기여할 수 있는 방안 등의 결과를 아래와 같이 보고함.

- 지역하부기구 강화를 위하여 IOC의 가능한 추가예산 투입
- 지역별 전략 개발
- 회원국에 전문인력 지원 요청

○ 아래와 같은 발언을 함.

- **(PICES)** 북태평양 해양과학 발전을 위한 기구로 PICES는 WESTPAC과 협력을 진행해 왔음을 언급하며, 과학적인 능력배양과 관련하여 여러 과학기구의 지역적 중복성을 감안하여 협력이 필요함을 밝힘.
- **(일본)** 지역하부기구를 통한 활동을 지지함을 언급하며, 지역 파트너와의 협력의 필요성을 강조함.
- **(코트디부아르)** 사무국에 아프리카지역하부기구에 대한 지원에 감사를 표하고, 아프리카지역하부기구에 단 1명의 직원이 있음을 언급하며 더 많은 지원이 필요함을 밝힘.

5.1.3.1 호주 퍼스 지역 사무소

- 호주의 Dr. Peter Dexter는 호주 정부 기상청과 IOC의 공동프로젝트로 시작한 퍼스 지역 프로그램이 호주 지역의 해양관측, 해양연구 및 능력배양 그리고 해양 운영서비스 제공에 큰 역할을 하고 있음을 설명함. 호주는 새로운 협약을 통해 재정 및 프로그램 매니저 인력 제공, 예산 지원을 계속할 예정임을 밝히며 동 호주 퍼스 지역 사무소 전환은 효율적이고 효과적인 사무소 운영에 큰 영향을 미칠 것임을 언급하며 사무소의 정식 명칭을 퍼스프로그램사무소 (Perth Program Office: PPO)로 명명하고 금년 10월 개소식을 할 예정임을 보고함.
- **(WESTPAC 의장)** WESTPAC이 1998년부터 퍼스사무소와 긴밀히 협력해 왔음을 밝히며 사무소 공식화를 환영함.
- 아래와 같은 발언을 함.
 - **(일본)** 퍼스지역사무소 공식화를 환영하며 이는 지역 해양 프로그램에 많은 도움이 될 것임을 언급함. 호주의 지속적이고 효과적인 지원에 감사를 표함. 단, 지역간, 활동간에 중복이 되지 않도록 주의할 필요가 있음을 밝히며 일본은 퍼스지역사무소와 지속적으로 협력할 것임을 언급함.

- (중국, 미국, 이란, 독일, 콩고 등 회원국) 호주 퍼스지역사무소의 공식화를 환영하고 동 활동을 허가해준 호주 정부에 감사를 포함.

5.2 해양재해

5.2.1 지역별 쓰나미 경보 시스템

- 지역별 쓰나미 경보 시스템에 대한 보고를 각 지역 의장들이 함.

5.2.1.1 태평양 쓰나미 경보 시스템

- 태평양 해역에 대해서 쓰나미 예측 모형을 통해 해안 지역에 대한 예측 정보를 생산하고 2회의 지진해일 훈련 (PacWave'11, PreWave'13)을 하였음. 쓰나미 예측과 가능한 해일고에 대한 평가를 수행하고 있음.
- 2013년 하반기에 ICG/PTWS-XXV 회의가 있으며, 남중국해 지역 쓰나미 감시 시스템을 구축하였음.
- 관련국의 협력을 통한 지진해일 위험성 평가와 훈련을 위한 재정, 쓰나미에 대한 관심을 유지하기 위한 지속적인 교육이 필요함을 언급함.

5.2.1.2 인도양 쓰나미 경보 및 저감 시스템

- 28개의 회원국으로 구성되어 있음. 거대지진해일(쓰나미)에 대한 대비가 필요함을 언급함. 예측 모형을 통한 쓰나미 정보를 생산하고 있음. 해안 예측 대상 지역을 선정하고 쓰나미 재해 예측도 및 위험도 평가를 수행할 필요가 있음.
- 쓰나미 훈련(IOWAVE Exercises)을 2009년과 2011년에 수행했으며, 2014년에도 훈련할 계획이며 지난 2004년 지진을 참고로 하여 쓰나미가 발생한 상황에 따른 정보 전달, 대응 체계 등에 대해 훈련할 계획임.

5.2.1.3 카리브해 및 주변 지역 쓰나미 조기 경보 및 저감시스템

- 2005년에 설립되어 현재 32개 회원국(캐나다, 스리랑카 옵저버 참여)으로 구성되어 있음. 카리브해에서는 과거 500년간 75회의 쓰나미가 발생하였으며 앞으로 적어도 50,000명 이상이 해안 지역에 1일 이상 머물 것으로 예상됨.
- 실시간으로 쓰나미를 감시하고 관측하는 체계를 구축함. 현재 107개 관측소 중 50개 지점의 자료를 공유하고 있으며, 2020년까지 100% 까지 확대하는 것을 목표로 하고 있음.
- 또한 GPS 감시체계를 구축하여 지점간 움직임을 분석하고 있으며, 쓰나미 훈련 (CARIBE WAVE 2014)을 계획하고 있음.
- ‘TsunamiReady’ 프로그램을 통해 쓰나미에 대한 대비를 하고 있음. 앞으로도 지속적으로 사업을 지속하고, 갑작스럽게 발생하는 쓰나미에 대한 대비해야 할 필요성이 있음.

5.2.1.4 북동 대서양과 지중해 및 부속해에 대한 쓰나미 조기 경보 및 저감 시스템

- 쓰나미 훈련 (NEAMWAVE12)을 하였으며, NEAMTIC 프로젝트를 통해 교육과 관측 체계, 관계국간의 협력 등을 진전시킬 계획임. 앞으로 위험성 평가, 대비, 감시 부분에 대한 지속적인 수행이 필요함.

5.2.2 전지구 해양위험 경보 및 저감시스템 조정 실무그룹(TOWS-WG-VI WG)

- 4개의 쓰나미 경보시스템의 협력과 조화가 지속적으로 필요하며, 재해에 대한 관리와 선제적인 대비, 쓰나미 감시에 대한 규칙적인 운영에 대해 언급함.

5.3 관측 시스템, 자료 관리

5.3.1 IOC의 미래

- 본 의제의 주요 핵심은 flexible monitoring으로,
 - 1) 체계적인 IOC 활동에 대한 위원회간의 활발한 논의 촉구
 - 2) IOC의 내외부적인 커뮤니케이션 및 네트워킹 강화를 위해 IOC의 기능을 어떻게 향상 할 수 있는지
 - 3) 해양 과학 기반 서비스 제공 능력 향상 및 HLO 달성을 위해 IOC의 정체성 향상에 대해 논의함.
- IOC의 미래를 위해서는 예산 확보가 필수적이라는 의견에 회원국들은 공감을 표시하였으며 예산 현황 개선에 대하여 논의함.
- 회원국들의 적극적인 참여를 독려하며 2015년 제28차 IOC 총회에서 이 문제를 정리하고자 함.
- 아래와 같은 발언을 함.
 - **(포르투갈)** IOC의 미래의 중요성을 언급하며 이번 기회를 통해 IOC의 미래의 방향이 잘 정해지기를 바란다고 언급함.
 - **(미국)** 145개국의 회원국이 과학과 서비스를 중심으로 해양과학에 대해 직, 간접적인 기여를 하는 것에 감사를 표하며 해양과학기구로써 정치적인 논쟁은 피하고 순수한 과학적 논의가 이루어지길 희망함. 또한, 세계적 해양과학 강국들이 모여 과학적 전문성과 기술적 능력을 통해 IOC의 미래에 기여할 것임.
 - **(한국)** 본 의제를 전적으로 지지하며 IOC 내부 회원국과 국가위원회 간의 네트워크를 향상하고 국제기구들과의 협력도 향상해야함을 발언함.

- (프랑스) 본 의제를 전적으로 지지하며 지속적인 참여를 약속함.
 - (캐나다) IOC가 주요 과학에서 정책과 활용 쪽으로 기울고 있지만 과학 프로그램에 더욱 집중할 필요가 있음을 언급함. 또한, IOC의 미래 작업반과 재정위원회가 긴밀히 협력하여 재정적인 부분을 논의 하여야 하며 다음 집행이사회때 심도있는 논의가 진행되길 원한다고 발언함.
 - (독일) IOC가 해양기후 및 관측, 해양 과학데이터 수집 등을 관장하는 해양 과학기구로서의 성격을 확실히 해야한다고 발언함.
- 의장은 2014년 집행이사회에서 회원국들의 의견이 논의될 수 있도록 준비할 것을 약속하며 의제 채택함.

5.3.2 전지구해양관측시스템(GOOS)

- IOC-WMO-UNEP-ICSU GOOS 조정위원회(GOOS-SC)의 공동의장인 John Gunn이 의제를 소개함.
- Dr. Gunn은 GOOS의 현황, 파트너 및 과학 커뮤니티와의 연대, GOOS-SC (조정위원회)와 그 패널들의 활동에 대해 보고하고, 제안된 2014-2015 GOOS 워크플랜(GOOS-199 ES report)에 대해 소개함.
- 지난 IOC 제26차 총회에서 GOOS 거버넌스 개정에 대한 결의안 XXVI-8를 통해 GOOS-SC가 “격년 워크플랜을 만들고 이를 총회에서 승인을 받는다”고 결정하였음.
- 2012년 1월에 GOOS-SC를 구성하여, 2차례 회의를 통해 새로운 생물학과 생지화학 패널에 대한 위임사항 및 2년간의 워크플랜을 작성하였음.
- 그러나, GOOS IOC Core(RP) 예산은 2012년부터 급격히 감소하여 약 \$450k 에서 약 \$50k로 감소 (나머지 \$200k는 Emergency Fund)임. 또한, 다음 회기

2년동안 \$961k가 필요하지만 현재 확인된 자금은 \$431k(UNESCO 자금)와 \$70k(외부예산)로 현재 \$460k가 부족한 상황이고, IOC 인력지원도 부족함.

- GOOS 지원사무소 설립, 파견을 통한 인력지원, 현금 및 현물지원 등 회원국들의 지원이 절실히 필요한 상황임.
- Dr. Gunn은 제6차 GOOS 지역포럼(2013.5.14.-16, 하와이)의 소득과 수정된 GOOS 구조를 반영한 GOOS 지역정책의 수정을 제안함.
- GOOS 지역정책에 대한 총회의 역할과 일치하게, 조정위원회는 GOOS 지역 연합을 인정하도록 총회에 요청했음.
 - 기존의 MedGOOS GRA와 EuroGOOS 지중해 운용해양네트워크가 합쳐져 GOOS 지중해 해양학네트워크(MONGOOS)로 지역연합 결성
- GOOS-SC 지역회원을 그룹별로 결정하였고, 그룹IV에서는 중국의 Prof. Shaohua Lin이 연임하기로 함.

5.3.3 IOC-WMO 해양학 및 해양기상 합동기술위원회(JCOMM)

- 공동 의장중 한명인 Dr Nadia Pinardi가 보고함. 2012년 5월에 여수에서 4차 JCOMM 회의가 열렸으며 47개 회원국과 4개 국제기구에서 140명 정도가 참가함. 이 회의에서 Mr Johan Stander(남아공)과 Dr Nadia Pinardi(이탈리아)가 공동 의장으로 선출됨.
- JCOMM의 목표와 역할, 구성, 활동 사항 및 JCOMM과 IOC-중기 전략과의 관계 등에 대해 보고함. JCOMM은 전세계 해양기상, 해양관측, 자료 공유, 정보제공, 능력 배양 프로그램 등에 관련되며 이 분야들의 국제적인 조정에서 리더십을 발휘하고자 함.
- 해양기상과 해양 정보 서비스 확대, 전지구 관측 자료 관련 체계에 대한 지속적

유지, 서비스 개선, 회원들의 참여를 목표로 함. WMO와 IOC 프로그램들간 연결고리를 하고 있으며, 서비스 및 예측 체계, 관측 (Argo 부이, 국제 해양 탄소 조정 프로젝트 (IOCCP) 등), 자료관리 (해양 기후 자료 체계 (MCDS)) 그룹으로 구성됨.

- 계류/표류 부이의 운영과 자료 관리, 해양 기후 자료 체계를 위한 테스트팀을 구성 및 폭풍해일과 파랑 예측에 대한 훈련(SSW-8, 케냐 나이로비, 2012. 11. 19-23) 등의 활동을 함.
- 앞으로 JCOMM과 IOC 중기 전략 간에 시너지를 내기 위해 거버넌스 증진, 사회 이익을 위한 적용 및 과학적 지식 수립 작업과 더불어서 관측 체계/자료 관리, 조기 경보 시스템, 능력 배양 (자료 관리와 예측 서비스에 대한 훈련 계획) 부분에서 지속적으로 활동하겠음.
- 회원국들은 아래와 같은 발언을 함.
 - **(일본)** 최근 재정난에도 불구하고 JCOMM 지원에 대해 감사를 표하며 WMO와의 협력을 통해 지속적인 JCOMM활동을 약속함.
 - **(호주)** 운용해양예측시스템에 대해 많은 관심을 갖고 있으며 개발도상국이 여러 재해에 대응할 수 있는 체계를 수립하기 위해서는 JCOMM은 필수적임을 강조함.
 - **(미국, 중국)** IOC, IODE와의 긴밀한 협력을 통해 통합관측 네트워크 구축을 지지하며 연구, 서비스 데이터 관리 등 회원국들의 활동의 중요성을 언급함. JCOMM활동은 이러한 목표 달성을 위해 지속되어야 한다고 주장함.
 - **(독일)** WMO/IOC 데이터 센터가 2000년 개소했을 때부터 수집을 통해 새로운 기후 모델을 만드는데 그 목적을 두고 있으며, 회원국 간 정보 수집 및 배포를 통해 대응책 수립에 중요한 역할을 할 것이라 발언함.

- (이란) 기후변화와 관련하여 페르시아만의 해수면 상승 및 극한 상황에 대한 위험성을 언급하면서 관심을 요구함.

○ 서비스 자료 관리, 관측에 중요한 역할 수행, IODE, 특히 해양 기후 자료 체계와의 공조 및 GOOS 지역 기관과 협력의 지속 등의 가이드라인을 마련함.

5.3.4 IOC 국제해양학데이터정보교류위원회(IODE)

○ 2013년 3월 멕시코 엔세나다에서 열린 IODE 22차 회의의 간략개요를 IODE 공동의장인 Mr. Ariel Troisi가 설명함.

○ 이 회의에서 IODE 구조조정과 조직개편에 대한 선명한 방향성을 제시한 20개의 권고안을 채택하였음.

○ 그 핵심 권고안은, IAMSLIC-IODE 공동 해양정보관리 전문가 그룹, 해양자료 표준화와 실행 프로젝트 및 관련된 자료/정보 관리 실행을 위한 클리어링 하우스, 새로운 구성요소로서 IODE 전지구 자료취합센터와 IODE 협력자료기구 설립, IODE 품질관리 프레임워크, IODE 목표 수정임.

○ 위원회는 UNESCO 재정 위기를 고려해서, 주로 외부예산 수입에 기반한 워크플랜과 예산을 채택하였음.

○ 수정된 해양자료 및 정보교환 2013-2016 전략플랜을 채택함.

○ IODE 공동의장 보고에 대해, 멕시코, 터키, 브라질, 아르헨티나 등 대부분의 국가가 IOC의 핵심 프로그램으로서 IODE가 중요함을 공감하였고, 적극적인 참여를 표명함.

○ 회원국들은 아래와 같은 발언을 함.

- (벨기에, 러시아, 인도) IODE 프로젝트 사무소, 해양자료포털 파트너십 센터,

훈련프로그램 제공 등 in-kind contribution 상황에 대해 설명하고 타 회원국의 참여를 촉구함.

- (한국) IODE의 새로운 품질관리 프레임워크(QMF)에 대해 지지를 표현하고, 새로운 구성요소인 Associated Data Unit (ADU)에 대한 QMF 인증과정의 없음을 지적하였으며, IODE 활동에 적극적으로 참여할 것임을 표명하였음.

5.3.4.1 해양 생물지리적 정보시스템(OBIS)

- 2013년 7월 2일 IOC 사무총장인 Ms. Wendy Watson-Wright 가 소개함.
- OBIS는 세계 80여개국의 2700여명의 과학자들이 참여하여 2000년부터 2010년 까지 11년동안 해양생물의 서식장소와 개체수 현황에 대해 조사한 CoML(해양 생물조사 프로그램)의 정보저장 및 배포 시스템으로 설립되었음.
- 2009년 IOC 제25차 총회의 결의로 IODE의 프로그램으로 받아들이기로 결정하여, Rutgers 대학으로부터 이관을 받아 운영하고 있으나, 현재 2014년 이후의 재정이 확보 되지 않아 2014년 6월 1일부터 프로젝트 자체가 무산될 위기에 처해있음.
- 현재 OBIS는 약 12만종 3천5백만개 이상의 해양생물지리정보를 확보하였고, 지속적으로 자료수 및 이용자수가 증가하고 있음.
- 회의의 핵심 논의사항인 OBIS 재정확보와 관련하여, OBIS를 위한 IOC 특별 계좌에 기부, 신탁기금, 현물공여, 인력파견, 프로젝트 파트너십, 워크숍 및 회의 개최를 통한 지원 등 다양한 지원방안에 대해 설명함.
- 회원국들은 아래와 같은 발언을 함.
 - (미국, 벨기에, 브라질, 아르헨티나, 인도, 우크라이나, 베네수엘라, 호주, 중국, 프랑스, 영국 등의 회원국) 발언을 통해 OBIS가 IODE의 프로젝트로서 지속되어야 한다는 것에 공감하고, OBIS의 재정문제와 관련하여 OBIS 지역노드를

통한 기여, in-kind contribution, IOC의 정규예산 지원 등 다양한 자원마련 방안에 대해 의견을 제시하였음.

5.3.5 WMO-IOC-ICSU-UNEP 전지구 기후 관측 체계 (GCOS)

- GCOS 사무국장이 2016년까지의 계획과 실행 부분에 대해 보고함. 이 프로그램은 1997년에 시작되고 WMO, IOC, UNEP과 ICSU로부터 지원을 받고 있음. GCOS는 GOOS를 포함한 관측 시스템들의 국제적인 네트워크이며 이 네트워크를 지원하고 개선하기 위한 프로그램임.
- 해양, 대기, 육지, 성층이상, 탄소 순환 등을 포함한 요소들을 대상으로 하고 있으며 기후의 물리적인 상태에 대한 변화를 관측하기 위한 프로그램임. 기후변화에 대한 적용, 적응, 저감 등 다양한 회의, 기구 및 프로그램에 연관되어 있음. 프로그램의 추가적인 가치 개발과 변화를 고려하고 관측에 대한 요구 사항에 대응하기 위해 검토 집단을 구성해 옴.
- 앞으로의 계획에는 이미 수행되어 검증되었고 노력이 들어간 사업과 기후 변화에 대해 적응하기 위한 정보 생산과 제공에 필요한 내용들을 포함하였음.

5.4 해양 과학

5.4.1 WMO-ICSU-IOC 세계기후연구프로그램(WCRP)

- Dr. Ghassem Asrar을 대신하여 Dr. Vladimir Ryabinin 가 보고함.
- WCRP는 기후를 예측하여 영향을 판단하기 위해 기후 시스템에 대한 근본적인 과학적 이해를 증진시키기 위해 활동함.
- 1차 WCRP 열린 과학 학회(2011, Oct. 24-28, Denver)를 해양 과학과 관측을 주제로 하여 개최함. 86개국에서 1907명이 참석하였으며, 이외에도 여수(2012), 브뤼셀(Brussels, 2013), 아구샤(Agusha, 2013) 등의 심포지움을 주최함.

- 정책 결정에 도움을 주고 기후 위험성에 대한 관리에 유용하게 사용될 수 있도록 지역 기후 정보, 기후 극한 변화, 지역 해수면, 기후 민감도, 물 이용성 변화, 기후변화에 따른 성층경계면 변화에 대한 과학적인 지식을 증가시킬 수 있는 활동을 하고 있음.
- 해수위 변동에 대한 태스크 그룹을 구성하여, 2010년에 말레이시아와 네덜란드가 2011년에 프랑스에서 미팅을 개최함. 이외에 미래 평균해수면의 불확실성, 해수면 상승에 미치는 빙하의 영향 등을 분석함.
- 10년 후 해양의 상태를 예측할 수 있도록 노력해 왔으며, 해양 관측과 세계 해양 순환 실험(1990-2002), 적도 계류 부이 관측, 대양(대서양, 인도양 등)에서의 해류(용승 포함) 및 빙하 등에 대해서도 연구함.
- WGOMD(해양 수치모델링), CHFP(계절 예측), CORDEX(지역 모델링) 및 CMIP(중장기 기후변화 예측 비교) 등의 프로그램을 통해 모델과 관측을 연결 하고 자료를 사용자에게 전달하는 업무를 수행함.
- 회원국들은 아래와 같은 발언을 함.
 - (미국) WCRP에 재정적 지원을 하고 있으며 앞으로도 지원할 것을 약속함. WCRP 프로그램의 성공을 위해서는 연구향해일정 확보 및 보장이 매우 중요하며 이를 위한 논의가 필요함. 미국은 인명구조 및 재산보호에 중점을 두고 있으나 유네스코의 재정 중 1.7%만이 이를 위해 사용되고 있어 유감임. IOC가 유네스코에 상황개선을 위한 의견 피력이 필요할 것임.
 - (브라질) 제3차 기후변화 국제 심포지움을 2015년 5월 개최를 확정지었으며 해양에 대한 관측, 모델, 아이디어 등을 공유하길 기대함.
 - (나이지리아) 국가, 지역 수준의 기후 예측이 중요성에 대해 발언함. 그러나 아직까지 포괄적인 데이터가 수집되지 않아 아쉬우며, 전지구 및 지역 수준에서 수집되는 정보가 공유되어야 한다고 생각함.

- (PICES) 여수에서 개최되었던 기후변화심포지움은 매우 중요했으며 2014년 브라질에서 개최될 심포지움도 기대가 큼. 또한, 1,2차 심포지움의 주요 스폰서였던 PICES와 ICES는 능력배양 및 훈련을 위한 지원을 지속할 것이며, 한국의 해양수산부 등 정부부처들도 이 심포지움에 참여할 예정임.
- Dr. Vladimir Ryabinin는 나이지리아의 지역별 정보의 중요성에 대한 강조는 매우 중요하며 전지구적 모델은 각국의 데이터 관리 방식의 차이로 인해 통합이 어려움. 그러므로 표준화된 자료구조 형식이 필수적이며 이를 위해 노력할 것임.

5.4.2 유해조류 정부간 패널(IPHAB)

- IPHAB 의장인 Dr. Robert E. Magnien이 이 의제에 대해 소개하고, 2013년 4월 28-30일에 파리에서 열린 11차 IPHAB의 결과보고와 워크플랜, 결정 및 권고에 대해 발표함.
- IPHAB 의장은 유해조류의 국제적 협력연구를 위한 국제적 전략에 관한 결정과 권고(사회적 요구를 충족시키는 유해조류에 대한 새로운 전지구적 접근; 전지구 유해조류 현황 보고서 개발; 역량개발; 프로그램의 지역적 개발)를 강조함.
- 의장은 아직 IPHAB 회원이 아닌 회원국들이 확실히 참여하도록 총회가 도울 것과, IPHAB를 위한 적절한 국가기관 및 단체를 승인할 것을 요청.
- IPHAB 의장은 HAB 프로그램 워크플랜에 국가적 우선사항들과 잠재적 재정지원을 고려해 지원해줄 것을 IOC 회원국들에게 촉구함.
- 총회는 IPHAB-XI의 요약보고와 그 안에 포함된 권고안(IOC/IPHAB-XI/3s)을 승인하였음.

- 회원국들은 아래와 같은 발언을 함.
 - **(한국)** 유해조류와 어류폐사 태스크팀에 적조관련 경험이 풍부한 한국전문가를 포함시켜줄 것을 요청함.

5.4.4 연안지역통합관리(ICAM)

- ICAM의 코디네이터인 Mr Julian Barbière이 보고함.
- 해양공간계획(MSP), 해안 위험 완화 및 해양관리를 위한 의사 결정 지원 도구 분야에서 개발되고 있는 활동을 포함한 ICAM전략의 실행에 대한 진행보고서를 제공함.
- 광역해양생태계(LME) 프로젝트 ‘광역해양생태계(LME)와 해안의 전지구 가버넌스 강화’라는 제목의 새로운 지구환경기금(GEF)프로젝트의 개발계획과 목표를 제시함.
- 다양한 연안재해의 대응을 위해 연안지역통합관리의 중요성에 대해 이란 및 에콰도르가 발언함.
- 회원국들은 아래와 같은 발언을 함.
 - **(토고)** 현재 해적문제에 직면해 있으며 이로인해 해양공간계획에 대해 관심이 많음. 나이지리아, 가나, 토고는 가스 파이프를 소유하고 있으며 이와 관련된 수산 및 사회경제적 측면에 대해 연구를 하고 싶음. 이 부분에 대한 IOC의 지원여부가 궁금함.
 - **(인도)** 해양오염 및 자연재해 등으로 인해 해양생태계에 대한 영향이 점점 커지고 있으니 지역적, 국제적 대응의 필요성을 역설함. 인도는 인근 국가들과 함께 생태계 영향에 대해 검토 및 연구를 진행할 것이며 국가 간의 자료 공유 및 협력이 필요하다고 발언함.

- Mr Julian Barbière은 토고의 해양공간계획에 대한 내용을 수렴할 것을 약속함. GEF의 기반은 서아프리카로 첫 번째 파트에 대해서는 문제가 없으나 연안 대응 관련 재정이 확실치 않아 아직 두 번째 파트는 승인을 받지 못한 상황임. UNIDO 및 기타 유엔기구들과 함께 협력할 것이며 새로운 IME 프로그램을 위해 평가가 이루어질 예정이라고 발표함.

5.4.5 세계해양환경평가(UN Regular Process)

- 회원국들은 아래와 같은 발언을 함.
 - **(한국)** UNRP의 중요성을 잘 인식하고 있으며 대규모는 아니지만 재정적 기여를 하고 있음. 앞으로도 적극적인 참여를 약속한다고 발언함.
 - **(아르헨티나)** WOA가 정책결정자들에게 많은 도움을 주었으며 IOC의 참여를 긍정적으로 평가함. 또한, IOC가 지속적으로 DOALAS와의 협력을 통해 WOA에 기여하였으면 함.
 - **(캐나다)** WOA의 전문가 그룹에 많은 지원을 하고 있으며 사회경제적 측면과 정책결정부문에 WOA를 활용하고 있음. 새로운 보고서의 출판보다는 WOA 체제 하에 정보 공유를 통해 WOA를 보완하는 것이 효과적일 것으로 판단됨.
 - **(WESTPAC)** 다양한 세션 및 워크숍 유치를 통해 협력을 장을 마련하는 등 WOA에 활발하게 참여중이며 특히, PICES와의 협력을 논의중에 있음.
 - **(인도)** 인도의 10명의 전문가들이 WOA에 참여중에 있으며 지역별 워크숍을 2013년 12월에 개최될 예정임.
 - **(포르투갈)** 수산물 관리에 대해서는 해양생태계 현황을 감안하여 이루어져야 하며 유럽국가들도 동의하였음. IOC와 UNEP의 상호협력은 필수불가결하며 각 지역 하부기구들은 WOA에 참여하여 지금까지 모은 데이터 및 자료의 공유는 WOA의 완성도를 높일 것으로 기대함.

- **(PICES)** 북태평양 지표에 대한 회의가 호놀룰루에서 개최되었음. 영국, 한국, 미국 등 전문가들이 모여 WOA에 대해 논의함. PICES는 과학적 자문을 WOA에 제공할 수 있으며 UN과 PICES가 공식적인 관계를 수립하여 중요 정보 및 데이터를 UN에 분석하고 제공하기를 희망한다고 발언함.
- 개발도상국 과학자들의 WOA 참여가 매우 중요하다고 생각하며 아르헨티나, 브라질, 우루과이 전문가들의 참여를 환영함. 기술이전 및 능력배양은 WOA 추진에 필수적이며 WOA 지원을 위한 지역별 워크숍이 8월에 개최될 예정임.

5.5 능력배양

5.5.1 새로운 능력배양 전략 개발

- 새로운 전략계획은 해양 및 연안 관리에 필요한 회원국의 능력뿐만 아니라 정책 및 의식고취에도 중점을 둬. 이를 위해 회원국 내 정식 학술 자격 강화, 회원국 정책개발 및 이행지원, 회원국 현지 기반 구축, IOC 기술훈련과정 확장 및 강화 등의 새로운 행동이 필요함.
- 전체적인 전략 및 해양과학인력의 대학 수준 자격 향상을 위한 제안(안)에 대해 회원국들은 지지 및 발언을 함.
- 회원국들은 아래와 같은 발언을 함.
 - **(토고)** IOC 중기전략은 능력배양에 필요한 아이디어를 모으는 구심점이 될 것이라고 발언함. 효과적이고 효율적인 능력배양을 위해서는 연구 참여자들에 대한 훈련, 거버넌스의 수립이 필요함.
 - **(중국)** IOC 사무국이 제안한 전략에 적극적인 참여를 약속함. 또한, IOC 사무국 및 다른 회원국들과의 능력배양을 위해 다방면으로 협력하기를 원하며 재정지원을 계획 중에 있음.

- (케냐) 개도국 대학의 고수준 교육제공의 필요성을 역설함.
 - (인도) 훈련센터를 통해 운용해양학 관련 훈련을 제공할 것이며 타 회원국의 참여를 기대한다고 발언함.
 - (카메룬) 석박사 과정으로 이어지는 장기적 훈련의 중요성을 강조하였으며 젊은 학생들이 질 좋은 교육훈련을 받을 수 있는 환경이 구축되어야 한다고 주장함.
 - (콩고) 이번 기회를 통하여 IOC가 보유한 기술적, 정책적, 과학적인 지원을 개도국들이 받을 수 있기를 기대한다고 발언함.
 - (브라질 및 코티디부아르) 새로운 전략의 개발이란 의미는 이미 전략이 있었음을 의미한다고 생각함. 그러나 기존 전략에 대한 보고 또는 평가가 없어 아쉬움. 이는 IOC의 존속에 매우 중요하며 해양과학 교육 및 훈련을 받는 사람의 수를 보장하지 못한다면 소용이 없다고 생각함. 이를 위한 기반구축이 절실함.
 - (한국) 새로운 능력배양 전략개발이 지난 Rio+20의 후속조치로써 시기적절하게 시행됨을 발언함. 또한, KORDI는 작년 7월 1일부로 KIOST로 확장되어 교육의 기능도 가지게 되었음.
- Dr Mitrasen Bhikajee는 IMO, IHO, WMO의 자문을 받은바 있지만 이는 아직 초안임을 밝힘. 본격적으로 프로그램에 착수하면 회원국으로부터 의견을 수렴할 계획임.

6. 행정 및 관리

6.2 2014-2017년 IOC 프로그램 및 예산

- Financial Committe 의장은 2012년도 예산 집행 및 2013년도 예상자금에 대한 진행 보고서, 2014-2021년 중기전략 초안, 2014-2017년 프로그램 및 예산 초안에 대해 절차 규정 8.1(c)에 따라 재정위원회의 검토 결과를 총회에 보고함.
- Financial Committe IOC-XXVII/DR.(6.1,6.2)가 작성한 결의안을 채택함.

6.3 선거

- I 그룹 집행이사국 : 노르웨이(부의장국), 벨기에, 캐나다, 프랑스, 독일, 그리스, 포르투갈, 스페인, 영국, 미국(10개국)
 - ※ 무투표 당선
- II 그룹 집행이사국 : 불가리아(부의장국), 러시아, 우크라이나(3개국)
 - ※ 무투표 당선
- III 그룹 집행이사국 : 브라질(부의장국), 아르헨티나, 칠레, 콜롬비아, 쿠바, 그라나다, 멕시코, 페루, 베네수엘라 (9개국)
 - ※ 무투표 당선
- IV 그룹 집행이사국 : 한국(의장국), 일본(부의장국), 호주, 중국, 인도, 이란, 말레이시아, 파키스탄, 태국 (9개국)
- V 그룹 집행이사국 : 토고(부의장국), 알제리아, 이집트, 케냐, 나이지리아, 세네갈, 남아프리카, 튀니지, 탄자니아(9개국)
 - ※ 부의장국을 제외한 9개국이 지원하였으며, 투표를 통해 카메룬을 제외한 8개국이 집행이사국으로 진출함. (부의장국은 자동진출)

구 분	계	I (유럽, 북미)	II (동유럽, 러시아)	III (중남미)	IV (아시아, 오세아니아)	V (아프리카, 중동)	비고
소속 국가수	145	24	14	30	31	46	
집행이사국 정원	40	10	3	9	9	9	의장단국 포함
입후보 국가수	41	10	3	9	9	10	의장단국 포함
낙선 국가수	1	-	-	-	-	1	
당선 국가수	40	10	3	9	9	9	

구 분		국가	이름
의장		한국	Sang-Kyung Byun
부의장	1그룹	노르웨이	Peter Haugan
	2그룹	불가리아	Atanas Palazov
	3그룹	브라질	Frederico Antonio Saraiva Nogueira
	4그룹	일본	Yutaka Michida
	5그룹	토고	Adoté Blim Blivi

6.4 결의안 초안 및 관련 가이드라인 개정(안)

- Resolutions Committee 의장은 제45차 집행이사회에서 결의한 제7차 결의안 초안 가이드라인(안)을 보고하였음.
- 결의안을 채택함

6.6 28차 IOC 총회 A. BRUUN, N.K. PANIKKAR 기념 강의 주제

- IOC 기념강연에 대해 다음과 같은 주제를 제안함.
 - 1) 2014 IOC Roger Revelle 강의: CARIACO Project Times Series, or
 - 해양화학 및 해양산성화 (Dr. Richard Feely)
 - UNESCO의 세계유산해양지역인 Malpelo지역 보호 (Dr. Sandra Bessudo)

2) 2015 IOC Anton Bruun 기념 강의

- Arctic Sea Ice (Dr. Robie MacDonald)

3) 2015 IOC N.K. Panikkar 기념 강의

- Canadian Ranger Watch (Dr. Eddy Carmack)
- 지역내 쓰나미 경고 시스템에 관한 IOC 능력배양의 영향,
- 유해해조류에 관한 능력 발달 (Prof. FUKUYO Yasuwo)
- Challenger Glider Mission (러거스트대학의 Dr. Scott Glenn)
- 인도양탐험 50주년을 맞이하여 과거와 현재, 그리고 미래

7. 결의안 채택

- 요약보고서 초안(Draft Summary Report) Part.1~5을 단락별로 확인하여 검토 완료하였음.
 - 문법적인 오류나 부적절한 단어 사용 등에 대해 수정함.
- 중남미 회원국의 요청에 따라 결의안에 포함되어 있던 “Oceans Compact”에 대한 내용을 삭제하였음.
- 본 회의 중에서 논란이 되어 차기 회기까지 회기간 워킹그룹을 구성하여 준비하기로 한 “전세계 해양과학 현황보고서(Global Ocean Science Report) 작성(의제 5.5.2)”에 대해 일부 문구를 수정하여 중남미 회원국들의 문제제기 내용을 제대로 기록하도록 하였음.
- 2014-2017 IOC 프로그램 및 예산(의제 6.2)은 사무총장 주도로 편성된 GOSR 예산과 관련하여, 일부 회원국들이 우려를 표명했던 내용과 이와 관련한 예산 배정 수정 가능성을 내포한 문구를 추가하기로 하였음.

V 회기 중 각종 위원회 및 작업반 회의 참가 활동

□ IOC 지역하부기구(RSBs) 회의 결과보고(2013.6.24)

- WESTPAC, IOCARIBE, IOCAFRICA 등 3개 IOC 지역위원회 활성을 위한 회의가 그룹 V 부의장인 Dr. Blivi(토고) 주재로 IOC 사무총장, 각 지역위원회 사무국장, 관련 회원국 대표가 참석한 가운데 개최되었음.
- 주요 의제는 1) 각 지역위원회의 강화를 위한 지역적 전략에 초점을 맞추어 유엔 또는 다른 적절한 지역 파트너와의 협력 강화, Capacity Building 과 IOC 중기전략에 기여하는 방안 등이 논의, 2) 사업, 재정 또는 인력파견을 포함한 현물지원 등 회원국이 각 지역위원회에 기여할 수 있는 방안, 3) UNESCO 의 개혁이 미치는 영향을 포함한 각 지역위원회가 공동으로 직면한 문제점 등을 논의하였으며, WESTPAC 이 모범적으로 운영되고 있음을 감안하여 운영사례를 청취하였음.
- 특히 이란은 금번 총회에 Capacity Building 등을 지원할 카테고리 II 지역센터 설립을 제안하였음.

□ 재정위원회 결과보고(2013.6.24)

- 의장인 Peter Haugan의 주재로 아래와 같이 회의가 진행됨.
- 2014-2021년 IOC 중기전략(안)은 IOC와 UNESCO와의 관성 확립 및 IOC의 미션과 비전을 중심으로 작성되어야 함.
- 중기전략(안)의 각 목표가 다루는 범위의 수준의 차이를 조정할 것을 요청함. 특히, 독일은 비전에 지속가능한 개발을 추가할 것을 제안하였고, 포르투갈은 IOC 중기전략(안)의 관련 문서들과 용어들을 재검토해 줄 것을 요청함.

- 유네스코는 프로그램의 우선순위 선정에 있어서 사업의 중요도에 따라 순위를 부여하고 예산을 배정할 예정인바, IOC도 자체 예산 배분 시스템을 구축하기 위한 독자적인 우선순위 목표를 재설정해야 함을 논의함.

□ 후보추천 위원회 결과보고

- 의장인 Javier Valladaras의 주재로 진행된 후보추천 위원회는 일본, 한국, 중국, 독일, 브라질 등 15명 내외가 참석하여 부의장과 집행이사국들에 대한 추천서를 아래와 같이 검토함.

- 4개 그룹(I, II, III, V)의 부의장 후보에 대한 추천

I: 노르웨이, II: 불가리아, III: 브라질, V: 토고 각 1인

- 집행이사회 후보

I 그룹 (9개국): 벨기에, 캐나다, 스페인, 프랑스, 독일, 그리스, 포르투갈, 영국, 미국

III 그룹 (10개국)*: 아르헨티나, 브라질, 칠레, 콜롬비아, 쿠바, 그레나다, 멕시코, 베네수엘라

- * III그룹 중 페루와 에콰도르의 추천인이 불명확하여 총 10개국의 회원국 중 8개 회원국에 대해서만 검토함.

IV 그룹 (7개국): 호주, 중국, 인도, 이란, 말레이시아, 파키스탄, 태국

V 그룹 (6개국): 알제리, 이집트, 케냐, 나이지리아, 세네갈, 탄자니아

- 모든 참석자가 후보추천에 대해 모두 동의함.

- 6월 27일(목) 오전까지 추가 신청이 있을 경우 당일 점심시간을 이용하여 동 위원회를 다시 개최할 예정이며, 후보 마감일은 6월 28일 18시까지이며 선거는 7월 3일 오전 2번째 세션에서 진행예정임.

□ 재정위원회 결과보고(2013.6.26)

- 재정위원회에서는 의제 3.2 2012년-2013년 프로그램 및 예산, 2008년-2013년 중기전략 실행방안에 대한 사무총장 보고, 의제 6.1 2014년-2021년 IOC 중기전략(안), 의제 6.2 2014년-2017년 IOC 프로그램 및 예산(안), 의제 5.1.3 퍼스지역사무소 개소, 의제 5.5.2 전지구해양과학보고 결의안을 검토함.
- 재정위원회 의장은 결의안에 IOC 예산에 대한 내용이 포함되어야 하나 재정난으로 인해 정확한 예산을 명시하기 어려움을 언급함.
- 의제 5.1.3 퍼스지역사무소 개소와 관련하여 회원국은 호주가 지원할 금액과 IOC에서 지원할 수 있는 금액을 회원국에 공지해줄 것을 요청함. 또한 회원국들은 호주대표에게 IOC가 퍼스지역사무소 설립을 위해 지원해야 하는 금액을 정확하게 제시해줄 것을 요청함. 캐나다는 퍼스 사무소에 대한 IOC의 관심을 표명하기 위해서는 최소예산보다 많은 예산을 지원해야 함을 언급함. 호주는 결의안에 세부예산을 포함시켜 회원국에 제공하기로 함.
- 의제 5.5.2와 관련하여 의장은 전지구해양과학보고서가 새롭게 시작하는 활동이고, 노르웨이의 재정지원으로 동 활동을 지원받기로 하였으나 다음회기의 예산이 확보되지 않았음을 언급함.
- 재정위원회에서는 5.5.2와 관련하여 아래와 같이 수정함.
 - Financial Implications에 “USD 130,000 per biennium for the Global Ocean Science Report under the fully funded Draft 37C/5(\$653 M Scenario)”을 추가
 - 결의안에 “11. Urges IOC Member States to provide support to this initiative, through contributing extra budgetary funds and/or secondment of experts.”를 추가

- 의장은 재무위원회가 1차인 것을 감안하여 앞으로 남은 회의에서 계속적으로 회원국의 의견을 받아 예산, 프로그램 등을 검토할 예정임을 언급함.

□ 결의안 초안 준비위원회(2013.6.27)

※ 배경 설명

- 회의에서 정한 바를 포괄적으로 결정(Decision)이라 한다면, 이 결정은 다시 권고(Recommendation)와 결의(Resolution)로 나눌 수 있으며, 결의는 회원국에 의무 사항으로 인식될 수 있는 가장 강한 결정임.
 - 모든 회의는 이 결의의 완성으로 종결되므로, 논의의 진행을 원활하게 하기 위해 중간 중간에 이 Resolution Committee를 운영하는 것임.
 - RC의 역할: Resolution Committee는 내용을 논의하기 보다는, 총회에서 정해진 내용의 범위에서, 그 내용이 상위 규정이나 기존 결정에 일치하는지, 서술이 간략하며 일관성을 유지하는지, 사용된 용어가 적절하며 정확한지, 필요한 근거 서류가 적절하게 제시되었는지 등을 검토함.

○ 토의내용

금일 회의에서는 IOC의 Julian Barbière 이 준비한 아래 3개의 문건에 대해 검토함

- Draft Resolution IOC-XXXVII/DR.(4.6)

Establishment of the Perth Regional Programme Office (PRPO)

- Draft Resolution IOC-XXXVII/DR.(5.5.2)

Global Ocean Science Report (GOSR)

- Agenda Item 5.3 Guidelines for Draft Resolution

○ 관찰, 향후 대응 및 소감

- 결의안(Draft Resolution) IOC-XXXVII/DR.(5.5.2), Global Ocean Science Report (GOSR)는 결의로 채택될 것이 확실하므로, 국내 준비가 필요할 것으로 판단되며, 준비에 큰 어려움은 없을 것으로 보임 (한국해양과학기술진흥원에서 관리하는 연구과제 등을 바탕으로 한국이 지난 10여년 간 투입한 예산, 주요 과제 등을 미리 정리해 둘 필요가 있다고 판단됨. 이미 잘 정리되어 있다고 판단됨)

○ 결의안 지침(Guidelines for Draft Resolution)이 이제야 논의되었다는 점은 다소 의아했음.

□ IOC의 미래 작업반 회의(2013.6.27)

○ IOC의 미래 작업반회의 의장으로 지명된 하비에르 전 IOC 의장이 개회를 선언하고 본 의제를 제안한 포르투갈 Dr. Ruivo 박사의 제안 설명을 청취 후 회원국의 의견을 요청하였음.

○ (러시아) 해양관측이 IOC 미래에 매우 중요한 요소이며, 해양과학기술의 발전과 기술이전을 강조함. 독일은 IOC의 임무와 목적을 분명히 하고 이에 따라 여러 사업들을 우선 순위에 따라 추진하는 것이 중요하다고 언급함. 미국은 자국의 IOC 국가위원회가 최근 설립되었음을 설명하고 회원국 간 협력 네트워크 구축이 중요함을 언급함. 이어 프랑스, 영국, 미국, 캐나다, 그라나다, 호주, 모나코, 일본 등이 주요 현안 사항과 문제점을 언급함.

○ (한국) 지난 2년간 한국이 주관하여 개최된 2개의 IOC 미래 포럼에서 IOC가 결코 UNESCO로부터 독립될 수 없을 것이라는 의견이 많았음을 언급하고, 한

번에 모든 문제를 해결하려 할 것이 아니라, 중요 현안을 매년 IOC 핵심의제로 선정하여 작업반에서 심도있게 논의하여 해결해 가자고 제안함. 포르투갈은 상기 포럼이 주창한 운용해양학을 지향하는 IOC의 미래 비전을 강조하고 향후 지속적으로 논의를 계속하자는 한국의 제안을 환영하였음. 호주와 에콰도르도 한국의 의견에 동의하며 향후 논의를 계속하자고 제안하였음.

- 하비에르 작업반회의 의장은 각 회원국간 협력강화를 언급하며, 향후 IOC 총회 및 집행이사회에서 IOC 주요 문제를 다루기 위해 “IOC의 미래”를 핵심 의제로 다루도록 총회에 제안하기로 하고 폐회함.

□ 후보추천 위원회 결과보고(2013.6.27)

- 후보추천위원회 의장인 Javier Valladaras의 주재로 진행된 후보추천 위원회는 의장, 부의장 및 집행이사국들에 대한 추천서를 아래와 같이 검토함.
 - 그룹III의 콜롬비아와 페루에 대한 추천서 동의함.
 - 브리질이 부의장과 집행이사국에 동시에 신청하여 이에 대한 논의가 있었음.
 - 의장에는 미국과 중국의 추천을 받은 한국(변상경) 1인만 신청함.
 - 부의장 후보에는 그룹 IV(일본), 그룹 II(러시아), 그룹V(카메룬, 남아프리카공화국, 튀니지)에 대한 추가적인 추천을 모든 참석자가 동의함.
- 그룹 III와 그룹 V는 정원보다 후보가 많아 선거가 있을 예정임.
- 내일 (28일) 오전까지 추가 신청이 있을 경우 확인을 위해 내일 점심때 위원회를 다시 개최할 예정이며, 내일 후보 신청이 마감된 이후 잠깐 모임을 갖기로 함. 현재 그룹V는 투표를 해야 함.

□ GOOS: Progress and Plans(2013.6.27)

- IOC-WMO-UNEP-ICSU 전지구해양관측시스템 조정위원회(GOOS-SC)의 공동 의장인 John Gunn과 Albert Fisher가 지난 회기간 진행사항과 계획에 대해 설명함.
- 지난 IOC 제26차 총회에서 GOOS 거버넌스 개정에 대한 결의안 XXVI-8를 통해 GOOS-SC(조정위원회)가 “격년 작업계획(Work Plan)을 만들고 이를 총회에서 승인을 받는다”는 것을 결정하였음.
- 현재 EuroGOOS, NEAR-GOOS, SEA-GOOS 등 전세계 대부분의 해양에 대한 지역연합(Regional Alliances, RA)이 조직되어 있고, 주로 기후와 날씨에 대한 이슈에 초점을 맞추어 프로젝트를 추진하고 있음.
- 그리고, 향후에는 기후와 날씨 외에도, 수산업, 실시간 모니터링 서비스, 지역 우선사항, 생태계 서비스의 평가 및 관리 등 더 많은 이슈에 대해 대응하기 위해, 관측시스템과 네트워크를 확장하여 “생물학과 생태계”와 “생지화학”에 대한 시스템도 구축할 계획을 갖고 있음.
- 이런 필요성으로부터 2012년 1월에 GOOS-SC를 구성하여, 2차레 회의를 갖고, 새로운 생물학과 생지화학 패널에 대한 위임사항 및 2년간의 작업계획을 작성하였음.
- 그러나, GOOS IOC Core(RP) 예산은 2012년부터 급격히 감소하여 약 \$450k에서 약 \$50k로 감소 (나머지 \$200k는 Emergency Fund)임. 또한, 다음 회기간에 2년동안 \$961k가 필요하지만 현재 확인된 자금은 \$431k(UNESCO 자금)과 \$70k(GEOWOW로부터 제공되는 외부예산)으로 현재 \$460k가 부족한 상황이고, IOC 인력지원도 부족함.

- GOOS 지원사무소 설립, 파견을 통한 인력지원, 현금 및 현물지원 등 회원국들의 지원이 절실히 필요한 상황임.
- 그룹V 부의장인 토고의 Prof. Adote Blim Blivi가 아프리카의 인프라 부족에 대해 설명하고, 우리나라의 AFRICA에 대한 관심과 지원을 언급하며 감사를 표명하며, GOOS 이행을 위한 회원국들의 지원이 필요함을 설명.

□ 재정위원회 결과보고(2013.6.28)

- 재정위원회 의장은 현재까지 재정위원회 회의를 거쳐 수정된 2014-2021년 IOC 중기전략(안)의 수정 경과보고 및 수정된 중기전략(안)을 검토함.

1. Introduction

- 멕시코, 브라질, 칠레, 파키스탄 등 G77 회원국은 “Oceans Compact”는 구속력이 없으며, 회원국 정부의 동의를 얻기 전까지는 IOC의 중기전략에서 삭제하는 것이 옳다고 주장함.
- 한국은 멕시코에게 Oceans Compact를 삭제하고자 하는 이유의 설명을 요청했고, 멕시코는 회원국들의 의견수렴의 절차를 받지 않은 것이므로 중기전략에 포함될 수 없다고 답변함.
- IOC 의장은 2012여수세계박람회에서 발표된 Oceans Compact는 해양과학에 관한 상당한 부분이 설명되어 있어 IOC에 꼭 필요한 내용이라고 생각하나 논쟁을 피하기 위해서는 삭제되어도 된다고 언급함.

3. Proposed IOC Vision and High Level Objectives for 2014-2021

- 멕시코는 Ocean Service는 해양과학 연구 부분이 포함되고 각 정부가 승인하지 않은 부분이 있을 수도 있으므로 해양서비스의 종류를 명확히 언급해야 함을 주장하였으나, 한국은 중장기 전략이므로 포괄적인 의미의 해양서비스를 포함하는 것이 좋을 것이라는 의견을 피력함.

5. The IOC Medium-Term Strategy

- 멕시코는 연구를 ocean science로 한정하여 표기할 것을 요청한 반면, 한국은 해양에 대한 연구에 대한 언급이므로 중복적인 어휘는 생략하는 것이 좋다고 제안함.

□ 결의안 초안 위원회 결과보고(2013.6.28)

- 6월 27일 1차 회의에서 검토한 호주 퍼스지역사무소의 설치에 관한 결의문 초안을 검토하고 종료함. 동 결의문은 총회에서 검토되었고, 7월 4일 의제 7. 요약보고서 및 결의안 채택에서 최종 확정할 예정임.

□ GOOS-SC지명을 위한 그룹 4 회의 결과보고(2013.6.28)

- IOC 부의장인 Prof. Yutaka Michida가 회의를 진행하였음.
- 지난 IOC 제26차 총회의 GOOS 거버넌스 개정에 대한 결의안 XXVI-8에 의거 GOOS-SC(조정위원회)는 15명까지 SC를 구성할 수 있고, 이중에서 5명은 지역 회원으로서 각 선거그룹별 1명씩 전문가를 임명하게 됨. SC 회원의 임기는 2년간이고, 연속으로 2번까지 가능함.
- SC 지역회원 후보신청 기한은 2013년 3월말까지였고, 그룹IV에서는 3명이 지원 하였음(중국 Prof. Shaohua Lin, 인도 Dr. R. Venkatesan, 일본 D/r. Sanae Chiba).
- 우선은 합의를 통해 그룹IV의 지역회원 1명을 선출하도록 노력하고, 합의가 안되면 투표를 통해 선출하기로 하였음.
- 3명의 지원자에 대한 이력서를 검토하였고, 일본과 인도가 지난 회기간의 SC 지역회원인 Prof. Shaohua Lin의 임기연장에 동의함으로써 투표없이 합의를 통해 다음 회기간(2013-2015)의 GOOS-SC 그룹IV 지역회원을 중국 Prof. Shaohua Lin으로 결정하였음.

□ OBIS funding meeting 결과보고(2013.6.28)

- 2013년 6월 28일 13:00~15:00에 우리나라, 미국, 중국, 캐나다, 벨기에, 프랑스, 나이지리아 등 16명이 참석하여, OBIS 재정과 관련한 회의를 개최하였음.
- OBIS는 세계 80여개국의 과학자들이 참여하여 2000년부터 2010년까지 10년동안 해양생물의 서식장소와 개체수 현황에 대해 조사한 CoML(해양생물 조사 프로그램)의 정보저장 및 배포 시스템으로 설립되었음.
- 2009년 IOC 제25차 총회의 결의로 IODE의 프로그램으로 받아들이기로 결정하여, Rutgers 대학으로부터 이관을 받아 운영하고 있으나, 현재 2014년 이후의 재정이 확보 되지 않아 프로젝트 자체가 무산될 위기에 처해있음.
- 현재 OBIS는 약 12만종 3천5백만개 이상의 해양생물지리정보를 확보하였고, 지속적으로 자료수 및 이용자수가 증가하고 있음.
- 미국 Duke 대학의 Prof. P. N. Halpin이 해양연구 및 관리를 위한 OBIS의 가치에 대한 발표를 하였고, OBIS 프로젝트 매니저인 Dr. Ward Appeltans가 IODE 프로젝트로서의 OBIS 현황 및 IOC에 대한 기여현황에 대해 설명하였음.
- 회의의 핵심 논의사항인 OBIS 재정확보와 관련하여, OBIS를 위한 IOC 특별 계좌에 기부, 신탁기금, 현물공여, 인력파견, 프로젝트 파트너십, 워크숍 및 회의 개최를 통한 지원 등 다양한 지원방안에 대해 설명하고, OBIS를 지속할 것인지, 회원국들은 어떤 기여를 할 수 있는지 등에 대해 회의 참석자들의 의견을 구함.
- 모든 참가자들은 OBIS가 IODE의 프로젝트로서 지속되어야 한다는 것에 동의 하였으나, 재정확보에 방안에 대해서는 지속가능한 재정지원 방안은 도출되지 않았고, 외부예산에 의지하기 보다는 IOC가 직접 재정 지원을 해야 한다는 지적이 있었음.

□ 후보추천 위원회 결과보고(2013.6.28)

- 오늘 (28일) 18:00로 후보 신청이 마감됨. 그룹 II 우크라이나가 신청하고, 그룹 III는 에콰도르가 기권함. 의장, 부의장, 그룹 I, II, III, IV는 투표가 필요없으나, V 그룹은 7월 1일 월요일 13시에 위원회를 열고 투표 준비를 할 계획임.

□ Future of IOC W/G(2013.7.1)

- 포르투갈의 제안으로 설립 운영된 동 위원회는 23개국이 참가하여 IOC의 현안 문제들을 논의하였는바, 금번 제기됐던 IOC 사무총장의 두가지 직책(IOC ES, UNESCO ADG) 보유문제와 재무위원회에서 언급된 중기 전략과 단기계획은 논의하지 않기로 함.
- 위원장인 하비에르 전의장이 보고서를 발표하고 IOC 국가 위원회 및 타 유엔기구와의 협력, IOC 위상 제고, 전세계 해양관련사업에 참여 등 주요내용 등이 논의되었으며, 향후 2014, 2015년 IOC회의에서도 계속 동 위원회를 운영하여 IOC 주요 현안사안들을 논의하기로 함.
- 한국은 발언을 통해 동 위원회에서 논의 사안 중 IOC 국가위원회 간의 협력이 중요하며 아직도 국가위원회를 설립하지 않은 회원국들에게도 이를 촉구할 수 있는 계기가 되기를 바란다고 언급함.

□ 재정위원회 III 결과보고(2013.7.1)

- 재정위원회에서는 의제 3.2 2012-2013 프로그램/예산 및 2008-2013 중기 전략에 대한 사무총장 보고, 6.1 2014년-2021년 IOC 중기전략(안), 의제 4.2/6.2 2014년-2017년 IOC 프로그램 및 예산(안) 결의안을 검토함.
- 의제 6.1 2014-2021년 IOC 중기전략(안)과 관련하여 재정확보에 중요한 역할을 하고 있는 유네스코 총회에서 회원국들의 지지와 발언을 촉구함. 캐나다는

하부기구들이 예산외 재정지원 확보를 위한 프로젝트 개발을 제안할 수 있는 내용의 추가 및 IOC의 미래 활동과 중기전략을 잇는 문구를 추가할 것을 요청함.

○ 의제 6.2 2014-2017년 IOC 프로그램 및 예산(안)에 대해 캐나다는 재정난으로 인해 추후 계획이 조정될 수 있다는 내용이 포함될 것을 언급하였으며 호주는 유네스코 사무총장이 지급한 예산 외 재정인 긴급예산과 회원국 기부금은 다른 개념이라는 것을 강조하였고 정확한 금액을 표시할 것을 요청함.

○ 재정위원회에서는 6.2와 관련하여 결의안위원회에 Financial resolution을 다음과 같이 수정함.

- “Decides to reconstitute the open-ended Intersessional Financial Advisory Group(IFAG) under the leadership of a Vice-Chair to guide the Commission in the elaboration of workplans 2014-2015 (and budget implementation), following the approval of the 37 C/5 by the General Conference of UNESCO at its 37th session in November 2013, in accordance with the Terms of Reference contained in Annex III to this resolution and maintaining close consultation with the intersessional working group on the Future of the IOC.

□ 재정위원회 IV 결과보고(2013.7.1)

○ 의제 4.2와 6.2인 3.2 2012-2013 프로그램/예산 및 2008-2013 중기 전략에 대한 사무총장 보고 중 2014-2015 예산 부족과 관련, 프로그램의 우선순위를 정할 필요가 있음.

※ 미국이 분담금을 내지 않은 22%만큼의 부족분이 발생, 이에 관련한 예산삭감이 필요함.

○ 우선순위를 정함에 있어서, 회원국들은 상위단계에서의 우선순위를 먼저 논할 것을 제의하였고, 의장은 이러한 논의가 시간관계상 어렵다는 의견을 피력함.

- 중남미 회원국들은 예산외의 재원과 관련하여 지원예정안에 있는 Oceans Compact의 예산삭제를 요청함.
- 이탈리아는 재정위에서 프로그램의 우선순위를 정함에도 불구하고, 회원국들의 earmarked fund의 비중이 크므로, 우선순위를 정하는 것이 얼마나 실효성이 있을지에 대해 질의함.
- 매년 8%의 인건비 인상은 현재의 상태를 더욱 악화시킬 것이므로 이를 하향 조정해야한다는 지적과, IOC사무국의 운영비와 인건비의 비중이 비정상적이라는 지적이 2년전에도 있었으나 해결되지 않은채 논의가 반복되고 있음.
- 칠레는 ER7 (해양재해저감)에 대한 강력한 우선순위를 주장했으며, 이탈리아는 ER6(해양에 대한 과학적 이해) 없이 ER7가 있을 수 없어, 유기적인 관계가 중요함을 강조하였고, 회원국들은 이에 동의하였음.
- 이에 미국은 각 회원국들이 다음 재정위 (다음날 오전 8시)까지 최하순위 프로그램 5가지를 선정하여 올 것을 제안하였고 이것이 받아들여짐.

□ 후보추천 위원회 결과보고(2013.7.1)

- 후보 신청 결과를 공유함.
- 그룹 II 우크라이나의 신청서와 그룹 III 에콰도르의 기권 문서를 확인함. 오후에 V 그룹의 회의가 예정되어 있으나 현재까지는 V 그룹의 집행이사국 선정에 대한 투표를 해야함. 내일(2일) 오전 총회가 마친 후인 13:15에 위원회를 열고 모레(3일)에 있을 투표 준비를 할 계획임.

□ 재정위원회 VI 결과보고(2013.7.2)

- IOC 사무총장인 웬디와 회원국간 IOC의 비정상적인 운영비와 인건비에 관련하여 질의응답의 시간을 가짐.

- 사무총장은 IOC의 예산이 유네스코의 전체 예산의 1.7%임을 밝혔고, 미국은 수많은 인명을 살릴 수 있는 쓰나미 연구 등을 고려할 때 IOC의 예산 자체가 증가되어야 함을 유네스코 본부에 주장할 것을 요구함.
- 지난 7월 1일 재정위원회 V에서 각 회원국들이 최하순위 프로그램 5가지를 다음 재정위원회까지 선정해 오기로 하였으나, 선정하는 레벨에 대한 논의가 다시 이어지고, 멕시코와 칠레는 ER(expected result) 이하의 레벨에서의 논의는 불가함을 피력, ER 수준에서 우선순위를 결정하기로 회원국들이 합의함.
- 유네스코에서는 High (100%), High (100%), Low (65%)로 우선순위를 제안하고 있으나, IOC에서는 High (90%), High (90%), Medium (80%)로 제안하기로 합의함.

※ 우선순위 결과

ER (기대결과)	우선순위
ER 6 (해양에 대한 과학적 이해)	High priority (90%)
ER 7 (해양재해저감)	High priority (90%)
ER 8 (회원국의 제도적 역량 강화)	Medium priority (80%)

□ 결의안 초안 위원회 결과보고(2013.7.2)

- Draft Resolution IOC-XXVII/DR.(3.2, 6.1, 6.2) 을 검토 완료하고, Annex I (IOC 중기 전략 2014-2021) 및 Annex III(IOC 회기간 재정 자문그룹 위임사항 수정)에 대해 검토하였음.
- 지난 회의에서 검토하였던 Draft Resolution 가이드라인(EC-XLV/Dec.5.3)을 재검토하였음.

□ 재정위원회 VII 결과보고(2013.7.3)

○ 2014-15년 예산 (단위: 백만달러)

기대결과 (Expected Result)	Regular Budget				확보된 Extra budget
	Operational	인건비	가중치	합 ¹⁾	
ER 6(관측)	1,280,400	2,303,900	90%	3,584,300	885,500
ER 7(재난)	979,300	2,638,300	90%	3,617,600	1,437,200
ER 8(능력배양)	1,595,500	3,228,800	80%	4,824,300	1,277,500
TOTAL	3,855,200	8,171,000	86%	12,026,200	3,600,200
					15,626,400²⁾

- (미국) IOC의 전체 예산이 UNESCO의 1.7%에 불과한 것에 비해 쓰나미 등의 연구는 수많은 인명을 구하고 있다는 중대함을 고려, IOC의 전체 예산을 증액할 것을 요구.
- 구체적인 프로그램보다는 일반적인 논의가 필요: 예를 들어 쓰나미 경보시스템 보다는 조기경보시스템으로 다를 것.
- 적어도 25%는 Operation을 위해 할당할 것

□ 새로운 능력배양개발전략 작업반 결과보고(2013.7.3)

- Intersessional working group을 결성하여 진행하기로 함.
- 해양과학 전문가를 배양하기 위한 프로그램 개발

□ Resolution Committee 회의 결과보고(2013.7.4)

○ Resolution Committee에서 수정된 사항은 다음과 같음.

1. 문단3 “related to all aspects related to the proposed GOSR”

1) Regular Budget은 UNESCO으로부터 받는 예산으로 운영비 + 인건비 X 가중치가 2014-2015예산의 합이 됨.
 2) Regular Budget의 합 + 확보된 Extra budget = TOTAL 14/15예산

→ “on relevant aspects of the GOSR”로 변경

; 문장의 간소화 및 의미 전달 향상을 위해 수정됨.

2. GOSR 회기 중 세션의 의장과 새로운 능력배양 개발전략 세션 의장은 지속적인 연락을 통해 정보 공유의 노력이 필요함.

; “Requests the Chair of the intersessional Working Group maintains close consultation with the Chairs of other relevant intersessional IOC Working Groups.”

3. 5문단 “next” → “the 47th session of”

○ 본 결정안에 대한 업데이트된 정보가 circular letter를 통해 오면 KIOST와 해양수산부가 협의하여 대응하는 것이 중요하다고 판단됨.

□ ODINWESTPAC에 대한 WESTPAC 회의 결과보고(2013.7.4)

○ 중국 NMDIS의 Prof. Lin Shaohua가 IOC/WESTPAC-IODE 워크숍 개최를 제안하여, 2013년 7월 4일 08:30~09:30에 회의를 하였고, IODE 프로젝트 사무소장인 Mr. Peter Pissierssens, IOC/WESTPAC 사무국장 Mr. Wenxi Zhu와 한국을 비롯하여 중국, 일본, 호주, 인도네시아, 말레이시아, 태국, 베트남 대표단이 참석함.

○ 제안된 워크숍의 주된 목적은 다음과 같음.

1. WESTPAC 회원국들의 역량 개발 필요사항 정의, 협력강화, 이행 플랜 마련

- 각국의 역량 개발 활동 상황 보고 및 필요 사항 보고

2. 해양 자료 및 정보 관리를 위한 역량개발 필요사항 계획, 역량 개발 프레임 워크 개발, 조정 및 가이드스 제공

- 해양자료 수집 및 처리, 자료품질관리, 해양 자료 및 정보 생산물, 과학 관리 및 서비스, ODIN(Ocean Data and Information Networks)-WESTPAC 미래 필요사항, 다음 회기간(2013-2015) 워크플랜 준비

- 워크숍과 병행하여 ODIN-WESTPAC 제2차 워킹그룹 회의를 갖기로 함.
- 논의를 통해 워크숍의 주된 내용을 역량 개발에 한정하기로 하고, 각 나라별로 어떤 역량개발 사항이 필요한지 확인하기 위해, 사전에 각국의 기관별 해양자료 수집 및 관리 구조와 현황에 대한 국가보고서를 제출하고, 워크숍에서 발표를 하기로 함.
- 워크숍 개최시기는 2013년 후반기의 바쁜 일정 때문에, 2014년 1월말에서 2월 중순사이로 정하였고, 자세한 의제 결정과 날짜 확인은 이메일을 통해 진행하기로 함.

VI 제27차 IOC 총회 관찰 및 평가

1. 한국은 금번 개최된 제 27차 IOC 총회에 이상진 주 유네스코 대표부 대사를 수석대표로 총 16명의 대표단이 순환 참석하였음. 회의 기간 중 의장 보고, 사무총장 보고, 유네스코 사무총장 연설 등에서 한국의 활동과 지원이 언급되었으며, 각종 의제에서도 한국이 적극적으로 발언하는 활발한 활동을 하였다고 판단함.
2. 이번 총회에서 한국은 변상경 박사가 IOC 의장에 재 선출됨으로서 1993년 이후 11회 연속 집행이사국으로 진출하게 되었으며, 향후 2년간 다시 의장국으로서 IOC를 선도하는 회원국으로 자리매김하게 되었음. 또한 국제사회에서 한국의 해양외교의 질적 향상은 물론 향후 해양과학 프로그램을 능동적으로 선도하고 국제사회의 관심과 협력을 촉진하는 교두보 역할을 담당할 수 있게 되었음. 이에 그동안 IOC에서 쌓아온 주도권과 리더십을 계속 유지 발전시켜 나갈 수 있도록 세부 전략을 수립 추진하여야 할 것으로 여겨짐. (의장의 연임 내용은 국내 언론에 주요기사로 보도되었음.)
3. 이번 총회는 2011년 가을 팔레스타인의 유네스코 가입에 반발한 미국 등의 분담금 지원 중단으로 야기된 재정상의 어려움에도 불구하고, IOC의 주요 현안 사항들을 집중 논의할 수 있도록 유네스코가 특별 예산을 지원하여 예정보다 단축된 총 10일간(집행이사회 및 회기내 Working Group 회의 등을 포함)에 걸쳐 다양한 의제를 다루었음.
4. 동 회의에서는 IOC 중기발전 전략과 예산 계획, IOC 4개 우선순위 목표(HLO) 설정, 신규 지역협력 센터 설립, 능력배양 전략, Global Ocean Science Report 등 주요 의제를 심도 있게 논의하였으며, 한국은 총 11개의 의제에 대해 발언하였으며 동 내용은 요약보고서에 수록되었고 추후 공식보고서로 발간될 계획임.

5. 특히 금번 총회 기간 중 개최된 유네스코 사업 우선순위를 정하는 유네스코 특별 집행이사회에서 이상진 대사가 유네스코 내에서 해양과학의 중요성을 강조한 것에 대해 IOC 사무총장과 회원국은 특별한 감사의 뜻을 전해왔음. 동 내용은 IOC 의장단과 전 직원에게도 회람되었음.
6. 한국은 2013년 신정부가 들어서면서 통합 해양정책 추진을 위해 해양수산부를 부활했으며, KORDI가 기후변화 등 국제협력을 통한 전지구적 해양연구 추진을 위해 교육기능까지 부여한 해양과학기술원(KIOST)으로 재편되었음을 회원국에 공지하였음.
7. 한국은 지난 2011년 의장피선 후 IOC 미래와 운용해양학 구축을 위한 대륙별 포럼을 개최하여 왔는바, 금번 총회에서 지난 2012년 한 동구권 포럼(불가리아)에 이어 2013년 3월 브라질 리우 데 자네이로에서 개최된 한 중남미 포럼 결과가 발표되었으며, 브라질, 콜롬비아, 남아공, 러시아, 태국 등 많은 회원국들이 발언을 통해 한국의 지역별 협력 네트워크 구축노력에 감사와 지지 의사를 표명하였음. 이와 관련 동 지역 IOC 부의장, WESTPAC 의장 및 사무국장 등이 참여한 가운데, 금년 11월 아시아 지역(Group IV)을 대상으로 한 포럼 개최 계획을 협의하였음.
8. 이번 변상경 박사의 의장 지원서에 미국과 중국이 추천을 하였는바, 주 유네스코 대사가 이들 대표를 초청한 오찬을 통해 감사의 뜻을 표하였으며, 이들 국가 대표는 변상경 박사의 지도력에 경의를 표하고 향후 긴밀한 협조체제를 통해 IOC 주요 사안들을 공동 대처해 나가기로 하였음.
9. 금번 회의기간 중 교체수석 대표인 문해남 해양수산부 해양정책실장은 미국, 중국, 남아공 대표단과 별도 회합을 갖고 양자간 공동협력 방안을 위한 의견을 교환하였음.

- 중국(중국 국가해양국 국제협력 담당국장 Dr. Zhanhai Zhang)은 지난 6월 말 한·중 양국 정상회담 시 해양과학 협력이 주요 의제로 다루어진 것을 계기로 향후 별도의 실무 회의를 통해 태평양 및 인도양 탐사 및 극지연구 등 세부 협력 계획을 확대 발전시켜 나갈 것을 제안하였음.
 - 미국(미국 NOAA 부청장보 Dr. Craig Maclain)은 유네스코에 대한 분담금 지원 유보 방침에 따라 IOC 내에서의 활동과 지원에 제약이 있어 자국이 추진하고 있는 IOC 관련 사업을 확충하여 지원할 방침임을 언급하고, 145개 회원국이 참여하는 IOC 내에서의 협력에 한계가 있으므로 향후 한국, 중국, 일본 등 아시아 선도 국가와 해양과학은 물론 해양정책, 해양경제 등 분야를 망라하는 공동 포럼을 개최하는 방안을 제안하여 온 바, 추후 별도 협의를 통해 추진키로 하였음.
 - 남아공(환경부 해양국장 Dr. Monde Mayekiso/ IOCAFRICA 의장)은 한국의 해양과학 역량을 높이 인정하고 향후 해양 및 극지분야의 공동협력을 위한 양해각서 체결을 제안하였으며, 한국의 해양 연구 현황 파악을 위해 금년 10월 4명으로 구성된 연구대표단을 한국에 파견할 것을 제안하여 온 바, 한국이 적극 협력키로 하였음.
10. IOC 그룹 II 부의장인 Dr. Atanas Palazov는 불가리아 해양연구소 50주년 기념 공동심포지움 개최(2013년 9월/불가리아 바르나) 시 한국의 참여를 제안하여온 바, 금번 회기 중 별도 협의를 통해 3명의 한국 과학자가 참여하고 흑해 주변국 과학자들 참가 경비를 한국의 EAST I 사업에서 부담하는 조건으로 흑해 동해 비교연구 세션을 갖기로 하였음. 동 세션은 지난 2012년 3월 불가리아에서 개최된 한 동구권 포럼 후속 조치의 일환으로 추진된 것임.

11. 한국은 IOC 지원 계획의 일환으로 탄소배출 저감 방안 연구사업(IOCCP)을 신탁기금(\$245,000)으로 지원하고 있는바, 금번 회기 중 별도 일정으로 유네스코 사업 담당자인 Dr. Luis Valdes와 실무 협의함. 동 사업의 효율적인 추진을 위해 2012년 8월부터 해양수산부 임현택 과장이 IOC 사무국에 파견 중이며, 한국은 지금까지의 사업 추진 실적과 1차 보고서 내용에 만족의 뜻을 표하고 미 제출된 재정보고서와 남은 사업 내용도 원래 계획대로 추진 해 좋은 성과를 달성할 것을 당부함.

12. 금번 총회에서 이란은 UNESCO Category II 서아시아 지역 해양과학 훈련센터 설립을 제안하여 설립 목적을 설명하고 회원국의 의견을 수렴하였는바, 당초 미국, 이스라엘 등 국가의 반발로 논란이 있을 것으로 예상되었으나 많은 회원국들이 IOC의 재정난을 고려하여 볼 때 타 지역에도 좋은 선례가 될 것이라며 적극적 지지하여 제시된 안이 채택됨. 동 내용은 한국이 검토 중인 Category II 해양예보센터 설립 추진에 좋은 모델이 될 수 있을 것임.

13. 우리나라는 2011년 말 여수사업으로 IOCAFRICA 설립 및 유해적조(HAB) 사업을 지원한 바 있음(총 사업비 \$330,000).
 - 2012년 5월에 창립총회를 개최한 IOCAFRICA의 경우 1차 및 2차 총회개최, IOCAFRICA 전략 수립 등을 적극 지원하였음. 남아공, 코트디부아르, 콩고, 케냐 등 아프리카 회원국들은 금번 회의기간 중 발언과 개별 접촉 등을 통해 감사의 뜻을 포하고 향후 협력을 제안하였으며, 동 의제 결정문에도 한국의 지원 활동이 명기되었음. 아프리카에 대한 지원을 우선 순위(high priority)로 두고 있는 한국으로서는 새로운 해양과학 거버넌스가 논의되고 있는 아프리카 지역에서 한국이 리더십을 구축하고 역할을 확대해 나가는 전략을 수립 추진할 필요가 있다고 판단됨. 특히 한국의 적극적인 아프리카 지원에 자극을 받은 중국 등이 신규 사업 등을 제안하고 있음은 주목할 만함.

- 유해적조 사업은 그동안 보고자료 제출 미비, 한국 과학자의 참여 미비 등을 문제점으로 지적하였으나 사업 주관 기관인 KOICA 측의 감독 부실로 금번 총회에서 한국의 지원이 언급조차 되지 않았음. 동 문제점은 차후 한국의 IOC 등 국제기구 지원 시 참고하여 유사 사례가 발생되지 않도록 해야 할 것임.
14. 총회 하루 전 개최된 제 46차 집행이사회에서는 2015년 1월까지 임기가 연장된 IOC 사무총장의 선출 일정과 절차가 발표되었음. 일부회원국들은 투명한 절차에 의해 자격 있는 유능한 후임자가 선출되어야 함을 강조하였음. (금년 11월 신임 사무총장 선출안내가 공고될 예정임.)
 15. 금번 회의에서 G77 국가들이, 반기문 UN 사무총장이 주도하고 한국의 여수 EXPO 폐막식에서 언급된 바 있는 "Oceans Compact"에 대해, 집단적으로 거부하여, 금번 회의의 보고서와 결정 사항 등에서 이 용어의 사용을 일체 금지하기로 한 바, 향후 국제적인 initiative를 제안 할 경우, G77 등 잠재적인 이해 당사국들과 충분한 사전 정지작업이 필요함을 인식하게 함.
 16. 전세계 해양과학 현황보고서(Global Ocean Science Report) 작성을 위한 사업이 IOC 사무국에 의해 제안되었으나, G77 국가들의 의도적인 기피로, 차기 회기까지 open ended Working Group을 구성하여 준비하기로 한 바, 한국도 사전에 이 보고서 작성과 관련한 입장을 확실하게 정비해야 할 것임.
 17. 금번 총회에서 포르투칼(Dr. Mario Ruivo)은 IOC 사무총장이 이중 직책(IOC 사무총장 및 UNESCO 부사무총장)을 보유하고 있어 IOC 업무에 집중하지 못하고 있다는 문제를 제기함에 따라 'Future of IOC Working Group'을 구성 논의하기로 하였으나, 제한된 일정 속에서 소모적인 논쟁을 피하자는 IOC 사무국의 제안에 따라 동 문제는 거론하지 않기로 함. 대신 IOC 국가 위원회

및 타 UN 기구와의 협력, IOC 위상제고, 전세계 해양관련 사업에 참여 등을 논의하였고, 2014, 2015년에도 동 W/G을 구성하여 IOC 주요 현안문제들을 계속 논의하기로 하였음.

18. 금번 회기 중에는 재정부족으로 인해 휴식시간에 제공하는 커피조차 준비하지 못하였는 바, 회원국의 자발적인 지원으로 이를 해결함. 한국도 의장 선거일 오후 주 유네스코 대표부의 지원을 받아 1회 휴식시간에 음료 및 간식(떡, 한과 등)을 제공하여 많은 회원국의 호평을 받았음. IOC 사무국은 IOC 총회 및 집행이사회도 회원국의 유치 의사가 있을시 개최지를 바꿀 용의가 있음을 밝혔음. 한국은 의장국으로서 향후 IOC 지원 내용을 사전에 충분히 검토할 필요가 있음.
19. 금번 대표단은 주관 기관인 KIOST를 비롯하여 국립수산과학원, 국립해양조사원, 기상청 등 국내 관련 기관이 각 분야별로 의제 분석 및 발언자료 준비 등에 참여하여 소기의 성과를 거둔 것으로 판단됨. 그러나 향후에는 대표단 구성과 훈령 등을 보다 일찍 준비하여 (최소 회의 개최 3개월 전) 회의에 임해야 할 것으로 여겨짐. 또한 대표단 구성 시 관련 전문가들이 지속적으로 참가하여 전문성과 일관성을 유지하는 한편 차세대 전문가 양성을 위해 후진들의 참여폭을 넓히는 방안도 강구해야 할 것임.



VII. 첨부자료

1. 의제목록 및 시간표





INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

Twenty-seventh Session of the Assembly
UNESCO, Paris, 26 June–5 July 2012

PROVISIONAL AGENDA

1. OPENING

2. ORGANIZATION OF THE SESSION

- 2.1 ADOPTION OF THE AGENDA
[Rule of Procedure 8]
- 2.2 DESIGNATION OF THE RAPPORTEUR
[Rule of Procedure 25.4]
- 2.3 ESTABLISHMENT OF INTRASESSIONAL COMMITTEES AND WORKING GROUPS
[Rule of Procedure 12]
- 2.4 INTRODUCTION OF DOCUMENTATION AND TIMETABLE
[Rule of Procedure 11]
- 2.5 A. BRUUN AND N.K. PANIKKAR MEMORIAL LECTURES
[Res. VI-19 & IOC-XVIII, item 12, para. 380]

3. STATUTORY REPORTS

- 3.1 STATEMENT OF THE CHAIRMAN ON THE STATE OF IOC
[Rule of Procedure 8.1(a)]
- 3.2 REPORT BY THE EXECUTIVE SECRETARY ON PROGRAMME AND BUDGET (2012–2013) AND MEDIUM TERM STRATEGY (2008–2013) IMPLEMENTATION
[Rule of Procedure 8.1(b) and (c); Rule of Procedure 49.1]
- 3.3 REPORTS BY THE CHAIRS OF THE IOC SUB-COMMISSIONS
[Rule of Procedure 48.3]
 - 3.3.1 IOC Sub-Commission for Africa and the Adjacent Island States (IOCAFRICA)**
 - 3.3.2 IOC Sub-Commission for the Western Pacific (WESTPAC)**
 - 3.3.3 IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE)**
- 3.4 REPORT OF THE IOC (2012–2013) TO THE THIRTY-SEVENTH GENERAL CONFERENCE OF UNESCO
[Statutes Art. 3.2; Rule of Procedure 49.2]

4. INTRODUCTION TO THE DRAFT PROGRAMME AND BUDGET FOR 2014–2017 AND IOC MEDIUM-TERM STRATEGY FOR 2014–2021

[Statutes Art. 1.2; Res. EC-XLIII.9]

- 4.1 INTRODUCTION TO IOC DRAFT MEDIUM-TERM STRATEGY FOR 2014–2021

4.2 INTRODUCTION TO IOC DRAFT PROGRAMME AND BUDGET FOR 2014–2017

5. STRATEGIC DEVELOPMENTS

5.1 GOVERNANCE

[36 C/5, MLA 4]

5.1.1 UN Consultations and Coordination

5.1.2 Other Partnerships

[Res. XXVI-1; EC-XLV/Dec.5.4 ; IOC-XXVI/Dec.9.4(iii)]

5.1.2.1 *Proposal for a Category-2 UNESCO Regional Educational and Research Centre on Oceanography for Western Asia, in Iran (Islamic Republic of)*
[Rule of Procedure 8.1e,g]

5.1.2.2 *Establishment of an International Training Centre in Oceanography in Hyderabad, India*
[Rule of Procedure 8.1g]

5.1.2.3 *Establishment of a Partnership Centre for Ocean Data Portal in Obninsk, Russian Federation*
[Rule of Procedure 8.1g]

5.1.2.4 *Endorsement of the IHO-IOC/GEBCO Sub-committee for Regional Undersea Mapping (SCRUM)*
[Rule of Procedure 8.1g, h]

5.1.3 Role of IOC Subsidiary Bodies and Decentralized Offices

[Res. XXVI-1]

5.1.3.1 *Perth Regional Programme Office*
[Rule of Procedure 8.1g]

5.1.3.2 *Review of the IOCARIBE Secretariat*
[Rule of Procedure 8.1g]

5.2 OCEAN-RELATED HAZARDS

[36 C/5, MLA 4 & 7]

5.2.1 Regional Tsunami Warning Systems

[Rule of Procedure 48.3]

5.2.1.1 *Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System*

5.2.1.2 *Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System*

5.2.1.3 *Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions*

5.2.1.4 *Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas*

5.2.2 Global Coordination of Warning and Mitigation Systems for Ocean Hazards (TOWS-WG)

[Rule of Procedure 48.3; EC-XLV/Dec.3.2 (III)]

5.3 OBSERVING SYSTEMS, DATA MANAGEMENT

[36 C/5, MLA 4]

5.3.1 Follow-up to Recommendations and Discussion on the “Future of IOC” with Emphasis on Capacity Development Activities

[Res. EC-XLI.1, EC-XLIII.7, IOC-XXVI/Dec.4.7, EC-XLV/Dec.4.2]

5.3.2 Global Ocean Observing System

[Rule of Procedure 48.3; Res. XXVI.8]

5.3.3 Joint IOC-WMO Technical Commission (JCOMM) for Oceanography and Marine Meteorology

[Rule of Procedure 48.3 ; Res. XX-12; XXVI-8]

5.3.4 IOC Committee on International Oceanographic Data and Information Exchange (IODE)

[Res. I-9; Res. XXVI-10]

5.3.4.1 Ocean Biogeographic Information System (OBIS)

[Res. XXVI-10]

5.3.5 WMO-ICSU-IOC-UNEP Global Climate Observing System (GCOS)

[Res. XVI-8]

5.4 OCEAN SCIENCE AND RESEARCH**5.4.1 WMO-IOC-ICSU World Climate Research Programme (WCRP)**

[IOC-XXVI, item 6.3, para. 173]

5.4.2 Intergovernmental Panel on Harmful Algal Blooms (IPHAB)

[Res. XVI-4; Res. XXVI-11; Rule of Procedure 48.3]

5.4.3 Nutrient Pollution

[Res. XXV-9; IOC-XXVI, item 7.5, para. 224]

5.4.4 Integrated Coastal Area Management (ICAM)

[IOC-XXVI/Dec.8.2]

5.4.5 A Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socio-economic Aspects (UN Regular Process) — World Ocean Assessment

[EC-XLIII/Dec. 8.1; IOC-XXVI, Dec. 4.6; UN Res. 66/231, para. 213]

5.5 CAPACITY DEVELOPMENT**5.5.1 Development of a New Capacity Development Strategy**

[Rule of Procedure 8-1(g)]

5.5.2 Rationale for an IOC Global Ocean Science Report

[Rule of Procedure 8-1(g)]

6. ADMINISTRATION AND MANAGEMENT

6.1 REPORT BY THE CHAIRPERSON OF THE FINANCIAL COMMITTEE ON THE IOC DRAFT MEDIUM-TERM STRATEGY FOR 2014–2021
[EC-XLV/Dec. 5.2]

6.2 REPORT BY THE CHAIRPERSON OF THE FINANCIAL COMMITTEE ON THE IOC DRAFT PROGRAMME AND BUDGET FOR 2014–2017 (DRAFT 37 C/5)
[Statutes Art. 1.2; Res. EC-XLIII.9]

6.3 ELECTIONS OF THE OFFICERS OF THE COMMISSION AND MEMBERS OF THE EXECUTIVE COUNCIL
[Statutes Art. 6.B.5 and 7; Annex I to the Rules of Procedure]

6.3.1 Election of the Chairperson of the Commission**6.3.2 Election of the Vice-Chairpersons of the Commission****6.3.3 Election of the Members of the Executive Council**

- 6.4 **ADOPTION OF THE REVISED GUIDELINES
DEALING WITH DRAFT RESOLUTIONS**
[IOC-XXV, item 7, para. 585; Statutes, Art. 8; Rules of Procedure 12;
IOC/EC-XXXIX/2 Annex 5, EC-XLV/Dec.5.3]
- 6.5 **DATES AND PLACES OF THE 28TH ASSEMBLY
AND THE 47TH AND 48TH SESSIONS OF THE EXECUTIVE COUNCIL**
[Statutes, Art. C.7; Rule of procedure 19.2]
- 6.6 **THEMES OF THE A. BRUUN AND N.K. PANIKKAR MEMORIAL LECTURES
AT THE 28TH IOC ASSEMBLY**
[Res. VI-19 & IOC-XVIII, item 12, para. 380]

7. ADOPTION OF THE SUMMARY REPORT AND RESOLUTIONS

8. CLOSURE



INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION

(of UNESCO)

Twenty-seventh Session of the Assembly

Paris, 25 June–5 July 2013

PROVISIONAL TIMETABLE

IOC-XXVII/1 Add. Prov. Draft
Paris, 22 February 2013
English only

(Deadline for DRS)

hour	Monday 24 June	Tuesday 25 June	Wednesday 26 June	Thursday 27 June	Friday 28 June	Monday 1 July	Tuesday 2 July	Wednesday 3 July	Thursday 4 July	Friday 5 July
08.00	Meeting of IOC Officers	46th Executive Council	1. Opening 2. Organization of the session (2.1–2.2) 3. Organization of IOC-27 (3.1)	Resolution Committee (I)	Financial Committee (II)		Financial Committee (V)	Financial Committee (VI, Optional)	7. DR and Report	7. DR and Report (Cont'd)
10.00 - 11.30				3.3 Sub-Commissions reports 3.3.1 IOCAFRICA 3.3.2 WESTPAC 3.3.3 IOCARIBE	Financial Committee (III)	5.2 Ocean-related Hazards 5.2.1 Regional TWS 5.2.1.1 PTWS 5.2.1.2 OTWS 5.2.1.3 CARIBE/ETWS 5.2.1.4 NEAM/TWS	5.4 Cont'd 5.4.2 IPHAB 5.4.3 Nutrient Pollution 5.4.4 ICAM 5.4.5 UN Regular Process	2.5 Memorial lectures Brunn/Panikkar	7. DR and Report	
11.30 - 11.45										
11.45 - 13.00	Meeting of IOC Officers	3.2 Request for Suppl. items 3.3 Sessional WG 3.4 Timetable	3. Statutory Reports 3.1 Chair's Statement 3.2 Ex. Sec.'s Report on MTS 2008-13 & P&B 2012-13	3.4 Cont'd Report to GC-37	2.5 Memorial lectures Brunn/Panikkar	5.2.2 Global Coordination 5.3 Obs. System, Data Managt 5.3.1 Follow-up to recommendations on the 'Future of IOC'	5.5 Capacity Development 5.5.1 CD Strategy 5.5.2 Global Ocean Science Report	6. Administration and management 6.3 Elections	7. Cont'd	7. Cont'd 8. Closure
13.00 - 15.00	Meeting of IOC RSBs	5. Executive Secretary Appointment	Financial Committee (I) (DRs review)	4. Introduction to MTS and C/5 4.1 Intro to Draft MTS 2014-2021 4.2 P&B 2014-17		Financial Committee (III)				
15.00 - 16.30	Meeting of IOC RSBs	6. Adoption of the Report	Budget Governance RSB HLO 1 HLO 2 HLO 3 HLO 4	4. Strategic Div/pt 5.1 Governance 5.1.1 UN Consultation & Coordination 5.1.2 Other Partnerships (Overview) 5.1.2.1 Cat-2 Institute		5.3 Cont'd 5.3.2 GOOS 5.3.3 JCOMM 5.3.4 IODE 5.3.4.1 OBIS	6. Administration and Management 6.1 Report of the Financial Committee on the Draft MTS	6.3 Report - Nom. Cttee - Elections (results)	7. Cont'd	
16.30 - 16.45	Meeting of IOC RSBs	7. Closure		4. Cont'd						
16.45 - 18.00	Meeting of IOC RSBs	6. Cont'd	3.2 Cont'd			5.3.5 GCOS 5.4 Science 5.4.1 WCRP	6.2 Report of the Financial Committee on the Draft 37 C/5	6.4 DRS Guidelines 6.5 Next Assembly/EC 6.6 Next IOC Memorial Lectures	7. Cont'd	
After 18.00			IOC Reception	Film Planète Océan (tentative)	Closing date for the nominations for elections (18h00)	Financial Committee (IV)				

Paris, 20 February 2013

Original: English



INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

Forty-sixth Session of the Executive Council
UNESCO, Paris, 25 June 2013

PROVISIONAL AGENDA

- 1. OPENING**
- 2. ORGANIZATION OF THE SESSION**
 - 2.1 ADOPTION OF THE AGENDA
 - 2.2 DESIGNATION OF THE RAPPORTEUR
- 3. ARRANGEMENTS FOR THE 27TH SESSION OF THE ASSEMBLY**
[Rule of Procedure 12.2]
 - 3.1 DESIGNATION OF STATUTORY COMMITTEES
 - 3.2 CONSIDERATION OF REQUESTS FOR SUPPLEMENTARY ITEMS
 - 3.3 SESSIONAL WORKING GROUPS
 - 3.4 TIMETABLE
- 4. DATES AND PLACE OF THE 47th SESSION OF THE EXECUTIVE COUNCIL AND PROPOSAL FOR DATES AND PLACE OF THE 28th SESSION OF THE ASSEMBLY**
[Rules of Procedure 4 and 19.2]
- 5. REVISED SCHEDULE FOR THE RECRUITMENT OF THE IOC EXECUTIVE SECRETARY**
[Article 8.2]
- 6. ADOPTION OF THE SUMMARY REPORT**
- 7. CLOSURE**

2. 회의록(IOC 공식 요약보고서)



Paris, 24 June 2013
Original: English



INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

Forty-sixth Session of the Executive Council
UNESCO, Paris, 25 June 2013

SUMMARY REPORT

1. OPENING

1 The Chair, Mr Sang-Kyung Byun, opened the 46th Session of the Executive Council at 10.20 h in Room IV on Tuesday 25 June 2013. He welcomed the participants and briefly referred to the documentation prepared for this session of the IOC Executive Council, which can be found on the IOC web site (<http://ioc-unesco.org/ec-46>). He informed the Council that, in accordance with Rule of Procedure No. 12(2), the Council was acting as the Steering Committee for the 27th Session of the Assembly.

2. ORGANIZATION OF THE SESSION

2.1 ADOPTION OF THE AGENDA

2 **The Executive Council considered** the Draft Provisional Agenda of the present session (doc. IOC/EC-XLVI/1 prov.) **and adopted** the Agenda of its 46th Session (Annex I to the present summary report).

EC-XLVI, Dec. 2.1

Agenda

The Executive Council adopts the agenda as set out in document IOC/EC-XLV/1 Prov.

2.2 DESIGNATION OF THE RAPPORTEUR

3 The Executive Council was invited to designate the Rapporteur for the present session.

4 Tanzania proposed, and India seconded, Dr Terry Schaefer (United States of America) as Rapporteur for the present session. Dr Schaefer accepted this invitation.

EC-XLVI, Dec. 2.2

Rapporteur

The Executive Council designates Dr Terry Schaefer (United States of America) Rapporteur for

its present session to assist the Chair and the Executive Secretary in the preparation of the summary report of the Session. Thomas Gross will be the editor of the report for the Secretariat.

3. ARRANGEMENTS FOR THE 27TH SESSION OF THE ASSEMBLY

3.1 DESIGNATION OF STATUTORY COMMITTEES

5 The Chair reminded the Executive Council that, in the designation of the three Statutory Committees for the Assembly (Nominations, Resolutions and Financial Committees), it may submit proposals on their composition, but that the ultimate decision as to that composition, including the Chairship of each Statutory Committee, remains entirely with the Assembly. He then invited Member States to declare their wish to participate in the Statutory Committees bearing in mind the need to ensure an appropriate linguistic and geographic balance within each Committee.

EC-XLVI, Dec. 3.1

Sessional Committees

Pursuant to Rule of Procedure No. 12(2) the Executive Council, acting as the Steering Committee of the Assembly, recommends to the Assembly the Chairpersons and an initial list of Member States having declared their interest in participating in each of the following committees:

Financial Committee: under the chairship of Peter Haugan (Norway) with the following Member States declaring their wish to participate: Germany, Canada, China, Mexico, Kenya, Portugal, Republic of Korea, South Africa, Brazil, Argentina, Australia, U.S.A., France, Grenada, Russian Federation, India, Thailand, Egypt, Kuwait, Japan. Ms Ksenia Yvinec will provide the Secretariat support to the Financial Committee.

Resolutions Committee: under the chairship of Peter Dexter, (Australia) with the following Member States declaring their wish to participate: Cameroon, Chile, Canada, Mexico, Norway, Republic of Korea, Argentina, France, U.S.A., Spain, Iran (Islamic Rep. of), Japan, India, Russian Federation, Turkey, Thailand, Nigeria, China. Julian Barbière will provide the Secretariat support to the Resolutions Committee.

Nominations Committee: under the chairship of Javier Valladares, ex-IOC Chair, with the following Member States declaring their wish to participate: Brazil, Mexico, Japan, Republic of Korea, U.K., U.S.A, France, China, Germany. Thorkild Aarup will provide the Secretariat support to the Nominations Committee.

3.2 CONSIDERATION OF REQUESTS FOR SUPPLEMENTARY ITEMS

6 The Chair informed the Executive Council that, under Rules of Procedure 8, 9 and 11.2, dealing with the preparation of the agenda for the Assembly, no request for a supplementary item was received at the Secretariat by 26 April 2013 (two months before the date of the opening of the 27th Session.)

7 Portugal made a request to the Chair of IOC that an agenda item on the Future of IOC would be inserted in the agenda of the Executive Council for further inclusion in the provisional agenda of the 27th Session of the Assembly (See the letter in annex to the report). There was consensus that the Assembly should address the proposed items.

EC-XLVI, Dec.3.2

The Executive Council,

Recommends to the 27th Assembly to form a sessional open ended working group to discuss the issues raised by Portugal on the Future of IOC and subsequently report to the Assembly.

3.3 SESSIONAL WORKING GROUPS**EC-XLVI, Dec. 3.3****Sessional Working Groups**

The Executive Council,

Having examined the revised provisional agenda for the 27th session of the Assembly,

With a concern to ensure a smooth running of the Assembly, and

With no prejudice to decision of the Assembly and its chair on establishing a sessional working group as needed during the discussion of any agenda item,

Recommends to the Assembly the establishment of the following working group(s) at the beginning of its session under agenda item 2.3:

A sessional working group on the “Development of a New Capacity Development Strategy” (item 5.5.1) under the chairship of Adote Blivi (Togo) with the following Member States declaring their wish to participate: Cameroon, Egypt, Mexico, Republic of Korea, Tanzania, Kenya, Malaysia, Nigeria, Portugal, Ecuador, Brazil, U.S.A., Spain, Australia, France, Russian Federation, India, Thailand, U.K., South Africa, Canada, Norway, Indonesia, Japan, Cuba, China, Peru, Belgium, Chile. Mitrasen Bhikajee will provide the Secretariat support to the group.

A sessional working group on the “Future of IOC” under the chairship of Javier Valladares, ex-IOC Chair, with the following Member States declaring their wish to participate: Germany, Canada, Mexico, Malaysia, Republic of Korea, Norway, China, Tanzania, Portugal, Bulgaria, Argentina, Australia, Belgium, Brazil, Ecuador, U.S.A., Russian Federation, France, Grenada, India, Turkey, Indonesia, Japan, Iran (Islamic Rep. of), Thailand, U.K., South Africa, Cuba, Togo. Bernardo Aliaga will provide Secretariat support to the group.

3.4 TIMETABLE**EC-XLVI, Dec. 3.4****Timetable for the 27th session of the Assembly**

The Executive Council,

Taking into consideration the comments made by the Officers, the reporting of sessional working groups and statutory committees in plenary and scheduled invitation of speakers,

Accepts the provisional timetable for the 27th session of the Assembly as set out in document IOC/EC-XLV/1 Prov.Add.Rev. with modifications.

4. DATES AND PLACE OF THE 47th SESSION OF THE EXECUTIVE COUNCIL AND PROPOSAL FOR DATES AND PLACE OF THE 28th SESSION OF THE ASSEMBLY

EC-XLVI, Dec. 4.

Dates and places of next sessions of the Executive Council and Assembly

The Executive Council,

Recalling the recommendation made by the Executive Council at its 45th session in 2012 to the Assembly (EC-XLV/Dec.5.6) to reconsider the dates of the 47th session of the Executive Council, provisionally scheduled to start on Tuesday 24 June 2014 at UNESCO Headquarters, Paris,

Taking into account both the level of funding provided for the organization of the IOC governing body sessions in the next C/5, and the new programming cycle of UNESCO,

Considering the experience gained at the 45th session of the Executive Council scheduled over three days (26–28 June 2012) under cost-saving measures,

Recommends to the Assembly to carefully consider the items to be on the agenda of the 47th session of the Executive Council during its work so that it fits in a session of a duration not longer than 3.5 consecutive working days;

Recommends also to the Assembly to identify any potential calendar conflicts with important meetings over the proposed period for the 47th session of the Executive Council of 30 June–3 July 2014, for 3.5 days, in UNESCO Headquarters, Paris and a period to be decided in June 2015 for the 28th session of the Assembly to be preceded by a one-day meeting of the Executive Council (48th session);

8 The Chair invited Member States to propose Roger Revelle Memorial lectures for 47th Executive Council meeting in 2014. He also asked Member States to propose both female and male lecturers.

9 The U.S.A. proposed Dr Richard Feely to lecture on Ocean Chemistry and Ocean Acidification.

10 Colombia proposed Dr Sandra Bessudo to lecture on the subject of Protected Marine Areas-Malpelo, one of UNESCO's World Heritage marine sites.

11 The Chair recalled the interest of Venezuela (Bolivarian Republic of) to propose a lecture on the subject of the Cariaco Time Series.

12 The Chair invited Member States to propose themes for the IOC Bruun lectures at the 28th session of the Assembly.

13 Canada proposed Dr Robie MacDonald to lecture on Sea Ice.

14 The Chair invited Member States to propose themes for the IOC Panikkar lectures at the 28th session of the Assembly.

15 Canada proposed Dr Eddy Carmack to lecture on Canadian Ranger Ocean Watch.

16 The U.S.A. suggested a subject to consider be the impact of IOC on capacity building for
Tsunami Warning System within a region.

17 The U.S.A. proposed Dr Scott Glenn, University of Rutgers, to lecture on the Challenger
Glider Mission.

18 Portugal noting the announcement of the commemoration of the 50th anniversary of the
International Indian Ocean Expedition, suggested that a lecture on the International Indian
Ocean Expedition, referring to what was done and what is new, could be considered.

5. REVISED SCHEDULE FOR THE RECRUITMENT OF THE IOC EXECUTIVE SECRETARY

19 By IOC Circular letter 2474 dated 25 February 2013, the Executive Secretary informed
the Member States of the extension of her appointment as Assistant Director-General and
Executive Secretary of the IOC until 11 January 2015. This implies the preparation of a new
timeline for the recruitment process so that Member States have enough time to evaluate
candidates before they express their opinion at an in camera session of the 47th session of the
Executive Council in June 2014, as established in the procedure (see document IOC/EC-
XXXIX/2 Annex 5).

20 The Executive Council discussed the proposed schedule for the recruitment of the IOC
Executive Secretary. Some Member States also requested clarification on the recruitment
process and Portugal submitted a summary of its intervention (see annex). The Executive
Secretary committed to communicating and involving the Member States in the process as
appropriate. The Decision and the annexed timeline were amended and accepted.

EC-XLVI, Dec. 5.

Revised schedule for the recruitment of the IOC Executive Secretary

The Executive Council,

Having examined document IOC/EC-XXXIX/2 Annex 5,

Recalling Decision 3.2V of the 45th Session of the Executive Council (EC-XLV/Dec.3.2V),

Agrees with the amended timeline in annex to this decision;

Requests the Secretariat in close consultation with the officers to:

- (i) review and update the post announcement for Executive Secretary of IOC in what concerns its functions and the agreed post grade of ADG, common to the United System, acting at the service of the Commission;
- (ii) include this as an agenda item for the 47th Session of the Executive Council and prepare the necessary documents.

Annex to EC-XLVI, Dec.5.

15 November 2013	External announcement of the post (60 days).
31 January 2014	Deadline for applications (midnight Paris time).

1 February – 24 March 2014	Pre-selection in agreement with IOC/EC-XXXIX/2 Annex 5: Technical screening by HRM/IOC Secretariat. Selection of a list of highly qualified applicants by a panel consisting of IOC Officers, Past Chairman, Executive Secretaries ex-officio.
24 March 2014	Communication of Dossiers to all Member States of IOC three months prior to the 48th Session of the Executive Council in June (<i>tentative date</i>).
24 June 2014 (<i>tentative</i>)	The Executive Council at its 47th Session meets in camera to finalize the list of candidates to be sent to the Director General.
17 June – 30 November 2014	The Director-General decides and appoints the Executive Secretary following consultation with the Executive Council of the Commission.
12 January 2015	Newly designated Executive Secretary assumes his/her duties in Paris.

6. ADOPTION OF THE SUMMARY REPORT

EC-XLVI, Dec. 6.

Report

The Executive Council,

Having considered the draft summary report of the session (IOC/EC-XLVI/3s prov.) presented to it in plenary session at 17:00 on 25 June 2013,

Adopts the summary report of its 46th session as the Executive Council recommendations to the Assembly at its 27th session.

7. CLOSURE

21 The Chairman closed the 46th session of the Executive Council at 18:05 on 25 June 2013.

Annex A (English only)

From: Prof. Mario Ruivo
Chairman of the Portuguese Committee for IOC

To: Dr. Sang-Kyung Byun
Chairman of the Intergovernmental Oceanographic Commission

Lisboa, 21/06/2013

Subject: Proposal for inclusion of an item on the Future of IOC in the Provisional Agenda of the 46th Executive Council of IOC

Mr. Chairperson

As you are aware by some of our exchanges of views and by the positions expressed by Portugal at the sessions of the Governing Bodies of the commission, we are deeply concerned with the future of IOC which, in our judgment, requires urgent corrective measures.

We noted with dismay that guidelines and decisions to this effect have not succeeded. This applies namely to the recognized need to clarify the present relationship of IOC with UNESCO which is affecting the work and special status of the commission as a “body with functional autonomy”.

The same applies to the progressive sliding of the designation of the IOC Executive Secretary (specifically defined in the post announcement of 2008, under *Terms and conditions*, “at grade of Assistant Director General, common to the United Nations System”, into Assistant Director General for IOC-UNESCO and Assistant Director-General, UNESCO.

The inappropriate use of this double-title is affecting the channels of command, image, as well as the working procedures of the Commission and its role as a “joint specialized mechanism” at the service of its Member States and of the United Nations System.

We are therefore proposing that the Governing Bodies of the Commission consider undertaking an in-depth assessment of the situation with a view to identify consensual measures to overcome the present difficulties.

Accordingly, we propose that a specific sub-item on the Future of IOC be included under item 3.2 “Consideration of requests for supplementary items” of the Provisional Agenda of the 46th Executive Council, for further inclusion in the Provisional Agenda of the 27th session of the Assembly.

Yours sincerely, Mario Ruivo, Chairman, Portuguese Committee for IOC

c/o: Members of the Bureau of IOC
Prof. Adote Blim Blivi
Direct. Peter Haugan
Prof. Yutaka Michida

Direct. Atanas Palazov
GOOS Rio. Frederico A. Saraiva Nogueira
–Executive Secretary of IOC
Dra. Wendy Watson-Wright

Annex B: Item 5 – Revised scheduled for the recruitment of the IOC Executive Secretary
(English only)

**Item 5- Revised Schedule for the recruitment of the
IOC Executive Secretary**

1. The Executive Secretary was recruited during 2009, in order to start her functions beginning 2010. The post announcement was for the recruitment of the Executive Secretary of the IOC, under post SC-079.
2. The 45th Executive Council (2012) approved decision 3.2 (V), which includes the following points:
 - a) *The timeline of the process for the recruitment of the IOC Secretariat;*
 - b) *Noted the need to review and update the post announcement for the Executive Secretariat of IOC in what concerns its functions and the agreed post grade of ADG, common to the United Nation System, acting at the service of the Commission.*
 - c) *Agreed the suggested timeline and requested the Secretariat to include this as an agenda item for the 46th session of the Executive Council, and prepare the necessary documents.*
3. IOC Circular letter n° 2474, of 25/02/2013 (Invitation to the 27th Session of the IOC Assembly and 46th Session of the IOC Executive Council) states:

“Before concluding, I wish to inform you that the DG has decided to extend my appointment as Assistant Director General of UNESCO and Executive Secretary of IOC from November 2013 until 11 January 2015. As this decision has an impact on the recruitment process of the new IOC Executive Secretary, a new timeline for the process and complete documentation on the matter will be examined by the Executive Council at this session under item 5 of the provisional agenda”.
4. Document IOC/EC-XLVI/2/PROV (Annotated Provisional Agenda) - item 5- the information on the extension of the mandate of the present Executive Secretary recalls the information mentioned above, and includes a draft decision on this matter, which basically follows the content of the decision already approved by the 45th Executive Council.

Confronted with these informations, which in our assessment of the situation are contradictory with the guidelines provided by the decision adopted at the 45th session of the Executive Council, we would appreciate clarification on the decision making process that was followed and the rationale supporting it.

3. 최종 결의안

※ 참가자 명단 및 약어표 첨부



Intergovernmental Oceanographic Commission
Reports of Governing and Major Subsidiary Bodies



**Twenty-seventh Session
of the Assembly**

Paris, 26 June–5 July 2013

UNESCO

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PART I

RESOLUTIONS AND DECISIONS APPROVED

Resolution XXVII-1**Formalization of the Perth Programme Office (PPO)**

The Intergovernmental Oceanographic Commission,

Noting the request from the Global Ocean Observing System (GOOS) Steering Committee at its second meeting to consider formalizing the Perth Regional Programme Office (PRPO) to supplement the human resources available at the IOC Secretariat (GOOS-199),

Recalling the Guidelines for the Establishment of Decentralized Offices (IOC/INF-1193),

Recognizing the contribution since 1998 of the PRPO in support of the IOC to the implementation of its programmes in the region, and in particular to the development of GOOS and related services and knowledge transfer,

Decides to formalize the PRPO as an IOC Programme Office;

Notes that the IOC financial contribution to the activities of the PRPO is defined in IOC Resolution XXVII-2 as a part of the overall IOC Programme and Budget for 2014–2017;

Requests the IOC Executive Secretary to conclude the tripartite agreement with the Western Australian State Government and the Commonwealth Government of Australia, represented by the Bureau of Meteorology, to implement this decision by the end of October 2013,

Agrees that:

- (i) the future title of the Office should be the Perth Programme Office (PPO);
- (ii) subject to agreement by the other parties to the above- mentioned tripartite agreement, the terms of reference for the Office should be as given in the Annex to this Resolution;

Annex to Resolution XXVII-1**Terms of Reference for the PPO 2014–2018**

Under the direction of the IOC Executive Secretary, the PPO will coordinate, facilitate, develop and implement programmes supporting the IOC's mission, focussing on Indian Ocean/Australian regions and the Global Ocean Observing System (GOOS) for ocean observations, related services, and complementary ocean sciences, capacity building and marine/coastal hazards. In particular the PPO operates in accordance with the following terms of reference:

- (i) Develop, facilitate and implement links and cooperative activities among IOC regional/international activities and relevant Western Australian State Government and Australian Commonwealth Government agencies, programmes and industry,
- (ii) Develop regional and global cooperative working partnerships with IOC stakeholders, including the regional research community and provincial and national oceanic and climate related agencies and organisations, in particular to provide support for applied research and operations,

- (iii) Facilitate and support the GOOS Regional Alliances and associated supporting secretariats and networks under the Office's purview (Indian Ocean GOOS, Pacific Islands GOOS and Western Australian GOOS), and facilitate and support related capacity building initiatives,
- (iv) Develop cooperation and partnership with regional ocean observing systems, policy networks, programmes and initiatives that are geographically and thematically complementary to the GOOS Regional Alliances under the Office's purview, as well as with relevant UNESCO and IOC entities, including UNESCO Regional offices, IOC Regional Subsidiary Bodies and Decentralised Project/Programme/Regional Offices,
- (v) Develop and implement proposals to enhance the resource base in support of the Office's mission,
- (vi) Organise conferences, workshops and other capacity building and communication/awareness raising activities relevant to the overall mission of the Office.

Resolution XXVII-2

Financial Matters of the Commission

The Intergovernmental Oceanographic Commission,

- A -

Budget Execution (2012) and Anticipated Funding for 2013

Having examined document IOC-XXVII/2 Annex 2,

Expresses great concern for the impact of the financial difficulties of UNESCO on the delivery of the IOC programmes, with the reduction of the IOC budget from US\$ 10,405,400 to US\$ 7,531,799 with the consequent reduction to the workplans for 2012–2013;

Recognizes the efforts of the IOC Executive Secretary to maintain programme continuity under these difficult circumstances and to contribute to implement UNESCO's 'roadmap';

Confirms that the IOC budget for 2012 has been executed in accordance with the approved Programme and Budget 2012–2013 and the guidance on the funding priorities provided by the IOC Executive Council at its 45th session through EC-XLV/Dec.5.1, including the endorsement of the Priority Funding Plan for 2012–2013 (EC-XLV/Dec.5.2 Annex B);

Expresses its appreciation to the Director-General of UNESCO for the allocation of US\$ 1,106,000 to the IOC from the UNESCO Emergency Fund to enable programme implementation at essential level;

Expresses its thanks to the Member States and other donors who have already contributed to the UNESCO Emergency Fund and in addition provided US\$ 5,271,061 as 2012 voluntary contributions to the IOC following the cash-flow and budgetary crises of end of 2011 and of the present biennium;

Urges all Member States to provide voluntary contributions for the financing of the Priority Funding Plan for 2012–2013, preferably to the IOC Special Account;

- B -

IOC Medium-Term Strategy for 2014–2021

Having examined document IOC-XXVII/2 Annex 3,

Takes note of the Draft IOC Medium-Term Strategy for 2014–2021 presented at the session, following its review by the open ended Intersessional Financial Advisory Group (IFAG) under the leadership of Vice-Chairman Prof. Peter M. Haugan (Norway);

Re-affirms the importance of the IOC as an intergovernmental commission with functional autonomy within UNESCO;

Recognizes the draft takes into account:

- (i) The debate at the 45th Session of the Executive Council and its decision EC-XLV/Dec.5.2,
- (ii) The report of the Ad hoc Advisory Group for the IOC Ocean Sciences Section (IOC/INF-1294),
- (iii) Inputs from IOC Subsidiary Bodies and other relevant organizations and processes, in particular the follow-up to United Nations Conference on Sustainable Development (Rio+20),
- (iv) The development of the UNESCO Medium-term Strategy for 2014–2021 (37 C/4),
- (v) The report of the Chair of the Sessional Working Group on the Future of the IOC (IOC-XXVII/2 Prov. Rev. Add.),
- (vi) Comments and inputs from the IFAG;

Adopts, according to Article 6.B.4 of the Statutes of the Commission, the Medium-Term Strategy for 2014–2021 as presented in Annex 1 to this resolution;

Urges Member States to take into account the IOC Medium-Term Strategy in developing their national plans and programmes for ocean sciences, observations and services, as well as in planning their contribution to and participation in the programmes of the Commission;

Further urges Member States to convey and support the IOC Medium-Term Strategy during the discussions on the UNESCO Medium Term Strategy for 2014-2021 at the 192nd session of the UNESCO Executive Board and the 37th session of the General Conference;

Requests Sub-Commissions, Regional and Technical Committees and all Subsidiary Bodies of the IOC to set priorities, organize their activities and develop project proposals for extrabudgetary funding so as to coherently pursue the IOC High-Level Objectives contained in the IOC Medium Term Strategy;

Recommends that the IOC Medium-Term Strategy be taken into account by the intersessional working group on the Future of IOC;

Requests the IOC Executive Secretary to transmit the IOC Medium-Term Strategy for 2014–2021 to the Director-General of UNESCO, to widely disseminate it, including to the relevant national, regional and international organizations in order to build collaboration and cooperation in implementing the Commission's Medium Term Strategy.

- C -

IOC Programme and Budget for 2014–2017

Having examined documents IOC-XXVII/2 Annex 4 and Add.,

Notes with great concern that the financial difficulties of UNESCO may continue into the 2014–2015 biennium and that the necessity may arise to limit the cash flow to 78% of the proposed zero nominal growth budget of US\$ 653 M;

Takes positive note of the high priority given to the IOC in the priority ranking exercise conducted by the UNESCO Executive Board Working Group (June 2013) in line with the Commission's status as a body with functional autonomy within UNESCO;

Expresses its appreciation to the IOC Executive Secretary for the comprehensive document on the proposed Draft Programme and Budget for 2014–2017, including clear links to: the Draft Medium-Term Strategy and its high level objectives; the implementation strategy through a conceptual framework of functions; the well-defined expected results and draft Complementary Additional Programme for Extrabudgetary Resources;

Takes note of the information contained in the document IOC-XXVII/2 Annex 4 on the expected cash flow for 2014–2015, its potential impact on IOC programme delivery, and the Secretariat's analysis of the situation, aimed at seeking Member States' guidance on the spending priorities in case of a cash flow shortfall;

Adopts the guiding principles to be used by the Secretariat in further improving the proposed framework of expected results, performance indicators and benchmarks, and in defining the spending priorities for 2014–2015 in case of a budgetary reduction due to a cash flow shortfall, as contained in Annex 2 to this resolution;

Urges Member States to support, through their delegations to the 192nd session of the Executive Board and to the 37th General Conference of UNESCO, the allocation to the IOC of the budgetary envelope of US\$ 12,026,200 proposed in the Draft 37 C/5 US\$ 653 M scenario, consistent with its status as UNESCO's flagship and the high priority nature of its expected results;

Decides to reconstitute the open-ended Intersessional Financial Advisory Group (IFAG) under the leadership of a Vice-Chairperson, in accordance with the Terms of Reference contained in Annex 3 to this resolution, maintaining close consultation with the intersessional working group on the Future of the IOC.

Annex 1 to Resolution XXVII-2

IOC Medium-Term Strategy for 2014–2021

1. INTRODUCTION

The last decade demonstrated an increased understanding of the importance of the oceans as a source of life, and the realization that building regional know-how is essential for facilitating solving regional economic and social problems.

The IOC has a recognized and unique role in the UN system in relation to ocean science and the science base for ocean management. Its status as a body with functional autonomy within UNESCO has been carefully designed to provide an efficient platform for coordination, information and sharing of knowledge to contribute to sustainable and peaceful development.

When designing a medium-term strategy, it is crucially important to have a realistic appreciation of the possibilities and limitations within available budgets. Continued emphasis on coordination, exchange, initiation of activities and strengthening of key functions is required, while implementation to a large degree has to be done in collaboration with other organizations and entities. This is challenging and demanding and will require key inputs from Member States in collaboration with the IOC Secretariat.

In line with the IOC mission statement, a vision for the period 2014–2021 is formulated below based on perceived societal needs, emerging issues, and requirements for intergovernmental coordination. The Rio+20 Conference¹ has provided very useful and timely context for the role of IOC as expressed in this strategy and its high-level objectives. The strategy will cover 8 years to be consistent with the new UNESCO medium term planning context which includes four-year programme cycles, and will be implemented in a manner consistent with the outcome of the “Future of IOC” deliberations.

“We recognize that oceans, seas and coastal areas form an integrated and essential component of the Earth’s ecosystem and are critical to sustaining it...”

The future we want – Outcome of the UN Conference on Sustainable Development - Rio +20

2. MISSION STATEMENT

The present statutes of the IOC, which came into force through adoption by the General Conference of UNESCO of 30 C/Resolution 22 of 16 November 1999, give the mission of the Commission as follows:

Article 2 – Purpose

The purpose of the Commission is to promote international cooperation and to coordinate programmes in research, services and capacity-building, in order to learn more about the nature and resources of the ocean and coastal areas and to apply that knowledge for the improvement of management, sustainable development, the protection of the marine environment, and the decision-making processes of its Member States.

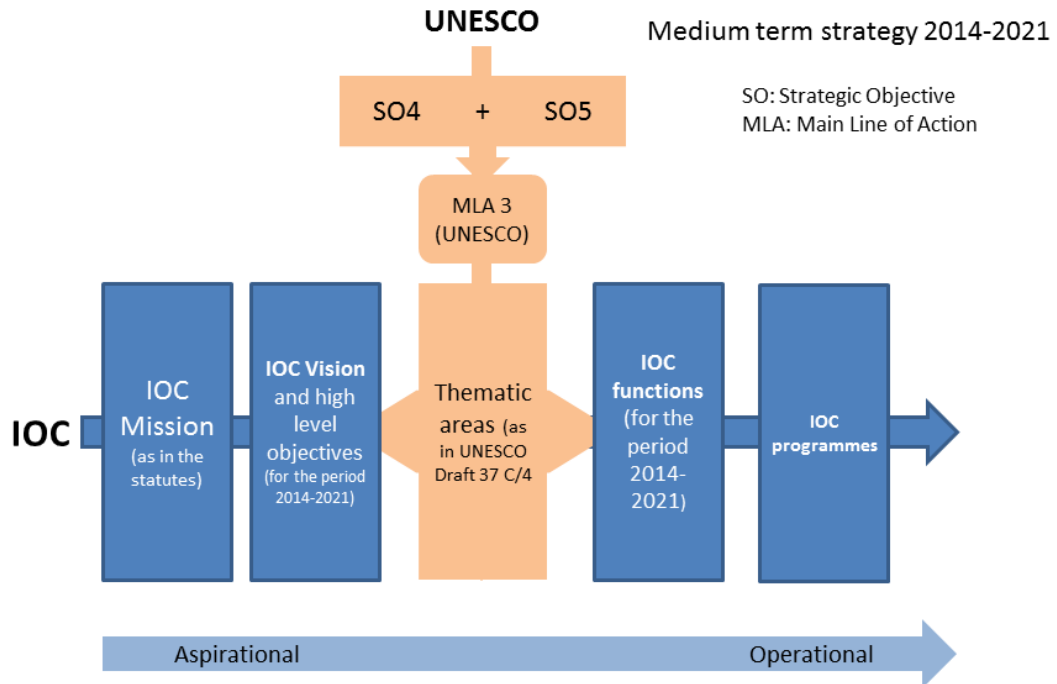
The Commission will collaborate with international organizations concerned with the work of the Commission, and especially with those organizations of the United Nations system which are willing and prepared to contribute to the purpose and functions of the Commission and/or to seek advice and cooperation in the field of ocean and coastal area scientific research, related services and capacity-building.

The IOC, established in 1960 as a body with functional autonomy within UNESCO, is the only competent organization for marine science within the UN System. In addition, IOC is recognized through the United Nations Convention on the Law of the Sea (UNCLOS) as the competent international organization in the fields of Marine Scientific Research (Part XIII) and Transfer of Marine Technology (Part XIV).

Consistent with the mission statement above, the IOC Medium-Term Strategy (MTS) 2014–2021 is derived from a vision guiding the high-level objectives, programmes, and also actions and activities to be detailed in each subsequent biennial programme and budget. The strategy including its objectives will also fulfil IOC's role as a main line of action (MLA) of UNESCO and contribute to the relevant UNESCO Thematic areas of expected results, as given in the Draft UNESCO Medium-Term Strategy (37 C/4²) (see figure below):

¹ <http://sustainabledevelopment.un.org/futurewewant.html>

² Draft UNESCO Medium Term Strategy (37 C/4 document) is available at <http://unesdoc.unesco.org/images/0022/002200/2200031e.pdf>



3. IOC VISION AND HIGH-LEVEL OBJECTIVES FOR 2014–2021

Vision:

Strong scientific understanding and systematic observations of the changing world ocean climate and ecosystems shall underpin sustainable development and global governance for a healthy ocean, and global, regional and national management of risks and opportunities from the ocean.

More specifically, through international cooperation, IOC aspires to help its Member States to collectively achieve the following high-level objectives (HLOs), with particular attention to ensuring that all Member States have the capacity to meet them:

1. Healthy ocean ecosystems and sustained ecosystem services
2. Effective early warning systems and preparedness for tsunamis and other ocean-related hazards
3. Increased resiliency to climate change and variability and enhanced safety, efficiency and effectiveness of all ocean-based activities through scientifically-founded services, adaptation and mitigation strategies
4. Enhanced knowledge of emerging ocean science issues.

Objective 1: Developing indicators of ocean status, and locating their tipping points³ relative to marine ecosystem functioning, are important in the prediction or early detection of changes in ecosystem states, and in the evaluation of ecosystem resilience. Such knowledge and analytical tools will be very valuable in ocean management in general, and in placing management of

³ A tipping point is understood as the point when a system changes from one stable state to another stable state. After a tipping point has been passed, a transition to a new state occurs. The tipping event may be irreversible.

single sectors into an ecosystem-based approach. The local and regional capacities, in terms of knowledge and tools, are also central for understanding how much an ecosystem can be stressed before it moves to other states from which recovery may be difficult. Current research on these topics is still piecemeal and needs coordination.

Objective 2: The ultimate objective of this HLO is to reduce risk, by encouraging communities to implement effective mitigating measures and become aware of the hazards they face. As coastal development continues at a rapid pace, society is becoming increasingly vulnerable to coastal flooding and other extreme sea-level events such as tsunamis. Ensuring that nations have access to the necessary information for coastal adaptation planning and safe and secure operations in the marine environment, is dependent on continued progress in the implementation of tsunami and ocean observing systems, improvements of models of the climate systems and ocean services and the development of local decision support tools.

Objective 3: Climate variability and change impact many elements on which human well-being depends, modifying patterns of rainfall and drought, sea-level and coastal erosion, and through temperature changes and ocean acidification, adding stress to ecosystems and impacting on the goods and services they provide. Thus, human development goals including food security, access to water resources, and preparedness and resilience to disasters are threatened. It is known that the ocean plays a key role in climate; IOC will therefore assist its Member States in developing capacity so as to enable them to develop and improve climate impact mitigation and adaptation strategies that are based on growing scientific knowledge.

Objective 4: A broad range of emerging environmental issues such as new contaminants, invasive species, marine renewable energies, the expansion and intensification of uses of marine resources, cumulative effects of human maritime activities, etc., jeopardize the conservation and sustainable use of marine spaces and ecosystems. It is important to improve our understanding of the opportunities and of the changes that are occurring within the Ocean, including the deep sea. The IOC's role is to encourage scientific research, technical analyses and syntheses of scientific information needed to effectively address these emerging issues, inform policy, and advance solutions in a timely and transparent manner.

4. RELATION TO UNESCO'S 37 C/4

As explained above, the IOC Medium-Term Strategy shall also respond to Strategic Objectives 4 and 5 of the Draft UNESCO Medium-Term Strategy for 2014–2021:

UNESCO Draft 37 C/4 Strategic Objective 4: Promoting the interface between science, policy and society and ethical and inclusive policies for sustainable development.

as well as

UNESCO Draft 37 C/4 Strategic Objective 5: Strengthening international science cooperation for peace, sustainability and social inclusion,

and contribute primarily to the following Expected Outcomes:

- UNESCO leadership and contributions in the field of science for sustainability recognized in the post-2015 UN Development Agenda
- Effective partnerships operational for freshwater, terrestrial ecosystems, biodiversity and the ocean to underpin the post-2015 development agenda
- Policy-makers and relevant stakeholders enabled to take policy decisions drawing on interdisciplinary scientific knowledge base for sustainable development

- Ocean science and global, regional and national capacities for the management of ocean-related risks improved
- Disaster risk reduction strategies developed and implemented by Member States in all regions based on scientific and social factors.

IOC programmes will **also** contribute to the achievement of UNESCO's Global Priorities: Africa and Gender.

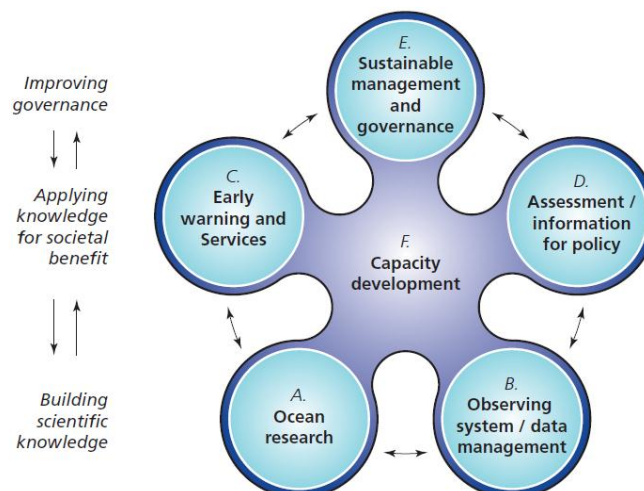
UNESCO Global Priority Africa: Africa is an overarching priority and IOC will ensure that it is mainstreamed in all its programmes and that it is reflected in the performance indicators. The importance given to Africa is reflected in the recent creation of the IOC Sub-Commission for Africa and Adjacent Island States (IOCAFRICA) and the appointment of a full-time Secretary to the sub-commission. Since its launch in 2012, the sub-commission has held two meetings and developed a strategic plan. IOCAFRICA has received both cash and in-kind support from Member States which will be further mobilised to ensure the success of IOCAFRICA. In addition, programmes will be further decentralised to ensure proximity to Member States.

UNESCO Global Priority Gender: UNESCO's approach for Global Priority Gender Equality is built on two main axes: gender-specific programming, focusing on women's and men's social, political, and economic empowerment, and mainstreaming gender equality considerations in the Organization's policies, programmes, and initiatives. The IOC contribution to Global Priority Gender Equality will focus in particular on one of the foreseen actions, which is to ensure that international science cooperation for peace and sustainability allows for representation and voice for women and men, and that conditions for both women and men to be agents of mitigation, adaptation, resilience and sustainability are provided. IOC is committed to promoting the equal presence of men and women in the marine sciences community, as well as to encouraging activities to include women in marine sciences through effective measures and policies and promoting role models for young women.

5. IMPLEMENTING THE IOC MEDIUM-TERM STRATEGY

When working towards the high-level objectives, IOC will focus on the broad areas of:

- strengthening scientific knowledge of the ocean and human impact on it,
- applying that knowledge for societal benefit, and
- building institutional capacities for sound management and governance



The strategy is organized in a conceptual framework of *functions* required to advance towards the IOC Vision:

- A. Foster ocean research to strengthen knowledge of ocean and coastal processes and human impacts upon them [*Ocean research*]
- B. Maintain, strengthen and integrate global ocean observing, data and information systems [*Observing system / data management*]
- C. Develop early warning systems and preparedness to mitigate the risks of tsunamis and ocean-related hazards [*Early warning and services*]
- D. Support assessment and information to improve the science-policy interface [*Assessment and Information for policy*]
- E. Enhance ocean governance through a shared knowledge base and improved regional cooperation [*Sustainable management and governance*]
- F. Develop the institutional capacity in all of the functions above, as a cross-cutting function [*Capacity Development*]

These functions correspond broadly to existing and on-going IOC programmes, components of programmes and mechanisms of cooperation, such as the Global Ocean Observing System (GOOS), the Joint Technical Commission for Oceanography and Marine Meteorology (JCOMM) and the International Oceanographic Data and Information Exchange (IODE), the Ocean Biogeographic Information System (OBIS), the Tsunami Intergovernmental Coordination Groups (ICGs), World Climate Research Programme (WCRP) and the Ocean Sciences programme, Integrated Coastal Area Management (ICAM), Harmful Algal Blooms (HAB), and Capacity Development (CD).

All of these *functions* contribute in varying measures to the high-level objectives of the IOC Vision, a relationship that can be described in a matrix and in paras 21-24 showing the contribution of each function to the objectives:

Functions	A. Ocean research	B. Observing system / data management	C. Early warning and services	D. Assessment and Information for policy	E. Sustainable management and governance	F. Capacity Development
HLOs						
1. Healthy ocean ecosystems						
2. Early warning for ocean hazards						
3. Resiliency to climate change and variability						
4. Enhanced knowledge of emerging issues						

	contribution
	strong contribution

Functions contributing to objective 1: In order to generate the knowledge relative to marine ecosystem functioning at the appropriate time scale and resolution, it is essential to build capacity and a globally managed and quality controlled knowledge base. The strategy will therefore include: coordination of essential research on ocean ecosystem health; extension of the Global Ocean Observing System to biology and ecosystem variables; a focus on strengthening the existing IODE global network of data (and information) centres including the Ocean Biogeographic Information System (OBIS), with an emphasis on data/information product/service development contributing to continuous monitoring of the identified indicators; support to the World Ocean Assessment and other related processes; and development of capacity to ensure strong science-policy interfaces in ocean management.

Functions contributing to objective 2: In terms of early warning systems and preparedness for tsunamis and ocean-related hazards, the strategy will focus on four areas: (i) support for the intergovernmental coordination of regionally harmonized tsunami warning systems; (ii) strengthening the work of regional Tsunami Information Centres that provide a clearinghouse for the development of educational and preparedness materials; (iii) targeted capacity development and technical assistance to enhance Member States own ability to develop preparedness and awareness in a multi-hazard framework; and (iv) support for enabling research and policy development that lead to improved tsunami and ocean-related warning systems and preparedness.

Functions contributing to objective 3: IOC will address the objective of increased resiliency to climate change and variability through scientifically-founded services, adaptation and mitigation strategies with an end-to-end effort that:

- begins with an ocean observing system sustainably monitoring the major global scales of climate (both physics and ocean carbon), building readiness and capacity in providing local information required in adaptation at the coast and to address the impact of climate change and ocean acidification on marine and coastal ecosystems, and linked to a data management system built on global standards and best practices,
- coordinates ocean climate research that improves understanding of the climate system and prediction of its variability and change and builds a knowledge base on linked ocean ecosystem changes and adaptation strategies,
- partners in the Global Framework for Climate Services and informs IOC and other assessment processes, and
- applies the scientific knowledge base to improve regional management and governance of climate adaptation and mitigation strategies, building capacity through demonstration projects and shared tools.

Functions contributing to objective 4: In order to identify and monitor emerging ocean science issues it will be essential to coordinate scientific research and call out these issues in a way that can be communicated to policy. Strengthened and expanded ocean observation and associated global data/information management systems will support the research in emerging ocean science issues. To properly address the numerous uses of the maritime domain and to use the results of the research effectively requires improved international ocean science collaboration.

6. IOC WITHIN THE UN SYSTEM

IOC is part of the UN system and collaborates with other intergovernmental and international entities. While it will lead in the coordination and execution of a number of programmes that contribute to its *functions*, it will also work in existing and new partnerships across the UN system. This will be particularly true where ocean science and services are only one piece of a larger whole.

IOC is recognized for its major contribution to a fundamental blueprint of the global development agenda: *The Future We Want*, which is the outcome document of the Rio+20 Conference. IOC contributes also to the programmes of work of the United Nations Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD). IOC was instrumental in establishing the United Nations World Ocean Assessment (WOA) (Regular Process for Global Reporting and Assessment of the State of the Marine Environment Including socioeconomic Aspects) through the preliminary Assessment phase, and as such was invited by the UNGA to provide scientific and technical support to the WOA (UNGA Resolution A/RES/66/231). It will provide technical assistance on the communication and outreach aspects of the WOA, and will lead on the implementation of regional capacity development activities in order to engage the scientific community in the preparation of regional assessments.

The IOC continues to work in close cooperation with the UN Office of Legal Affairs/Division for Ocean Affairs and the Law of the Sea (UN/OLA/DOALOS) for the development of guidelines for the implementation of Law of the Sea provisions on transfer of marine technology and marine scientific research, and its achievements are regularly acknowledged by the UN General Assembly. The IOC Secretariat has a wide programme network and a Roster of Experts to provide guidance and advice to the IOC Member States that request it, on the development of legislation and practice regarding marine scientific research and transfer of marine technology. Following Articles 239 and 266 of UNCLOS, this action facilitates and promotes the development and conduct of marine scientific research and transfer of marine technology, especially in developing countries, in accordance with UNCLOS.

The Global Ocean Observing System (GOOS) is a system for sustained observations of the ocean comprising the oceanographic component of the Global Earth Observing System of Systems (GEOSS). GOOS is led by IOC and co-sponsored by UNEP, WMO and ICSU, and is implemented by Member States via their government agencies, navies and oceanographic research institutions working together in a wide range of thematic panels and regional alliances. The IOC/WMO JCOMM is a key element in implementation and services. In addition IOC's International Oceanographic Data and Information Exchange (IODE) programme the Ocean Biogeographic Information System (OBIS), adopted by IOC as part of IODE (IOC Resolution XXV-4) contribute to at least two of the 20 UN biodiversity targets. As called upon by the 193 parties of the Convention on Biological Diversity (COP-X-29), OBIS data is used for the identification of Ecologically or Biologically Significant marine Areas and is also used by the UN Food and Agriculture Organization for the identification of Vulnerable Marine Ecosystem. In addition, OBIS provides key information on biological diversity for the World Ocean Assessment.

IOC has since 1965 provided intergovernmental coordination for the Pacific Tsunami Warning System. Since 2005 IOC has also provided intergovernmental coordination for the development of Tsunami Warning Systems in the (i) Indian Ocean, (ii) the Caribbean and (iii) the NE Atlantic, Mediterranean and connected seas. The IOC's role in this area has been recognized in several UNGA resolutions.

7. PARTNERSHIPS

The Intergovernmental Oceanographic Commission of UNESCO partners with various agencies and participates in joint programmes:

ECOSYSTEM HEALTH AND BIODIVERSITY: IOC works in close collaboration with the London Convention and the London Protocol (LC/LP) and is a founding member of the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) along with IMO, FAO and presently including IAEA, UN, UNEP, UNIDO and UNDP; it partners with SCOR for the research programme on the Global Ecology and Oceanography of Harmful Algal Blooms (GEOHAB). IOC/UNESCO is an active participant in matters relating to the

Convention on Biodiversity (CBD) and in particular in the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), in which it plays an important role together with UNEP, FAO and UNDP. Through the Ocean Biogeographic Information System (OBIS), IOC/UNESCO is active in the Global Biodiversity Information Facility (GBIF) and in the Group on Earth Observations Biodiversity Observation Network (GEO BON).

DISASTER RISK REDUCTION: IOC/UNESCO works closely with WMO, the United Nations Office for Disaster Risk Reduction (UNISDR), the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) for access to its global seismograph network, the United Nations Development Programme (UNDP), the International Maritime Organization (IMO), the International Hydrographic Organization (IHO) and the European Union (EU).

CLIMATE: IOC participates in the World Climate Research Programme (WCRP) and the International Ocean Carbon Coordination Project (IOCCP) thus contributing to increasing the understanding of the ocean's role in climate change and variability. GCOS (Global Climate Observing System) is a joint undertaking of IOC/UNESCO, the World Meteorological Organization (WMO), the United Nations Environment Programme (UNEP) and the International Council for Science (ICSU). IOC/UNESCO is a partner with WMO in the Global Framework for Climate Services (GFCS). IOC teams up with the Scientific Committee on Oceanic Research (SCOR) in a number of programmes. The Blue Carbon Initiative is the first integrated programme focused on mitigating climate change by conserving and restoring coastal marine ecosystems globally. The initiative is led by Conservation International (CI), the International Union for Conservation of Nature (IUCN).

GOVERNANCE: IOC/UNESCO's partners are the International Council for the Exploration of the Sea (ICES), North Pacific Marine Science Organization (PICES), the Permanent Commission for the South Pacific (CPPS, in Spanish), the various Large Marine Ecosystem programmes, the International Council for Science (ICSU), the Scientific Committee on Oceanic Research (SCOR) and the European Commission.

8. MOBILIZATION OF EXTRABUDGETARY RESOURCES

Extrabudgetary funding strongly affects the extent to which IOC programmes are implemented and high-level objectives achieved, especially in periods of financial constraints. Existing resource mobilization approaches for Members States, institutional and private sector partners, tightly linked to the priorities approved by IOC Governing Bodies and its capacities to deliver will be intensified, as will be public-private partnerships and information and visibility efforts.

To ensure the sustainability of effort, it is essential that all extrabudgetary funds complement regular programme priorities. To this end, Complementary Additional Programme (CAP) proposals will be developed for each biennium.

Annex 2 to Resolution XXVII-2

Draft Programme and Budget 2014–2017 including guiding principles for the IOC budgetary allocation for 2014–2015

The fully funded Draft 37 C/5 (\$ 653 M scenario) for UNESCO includes \$ 12 M for IOC. Recognizing the importance of ocean issues within multiple Strategic Objectives of UNESCO, and the level of significance and achievements of IOC activities in saving lives and contributing to the health and safety of Member States, an increase of the IOC allocation of the UNESCO budget from 1.8% (\$ 12 M/\$ 653 M) as in the fully funded Draft 37 C/5 to 2% is recommended.

Provisional budgetary allocations are displayed in the table below. The left column displays the Regular Programme (RP) distribution in the fully funded Draft 37 C/5.

	Regular Programme (RP) – Total – 37 C/5 - \$ 653 M			XB secured*	– XB – Complementary Additional Programme (XB-CAP)	– RP – IOC Assembly Priority Ranking Scenario	
	Operational	Staff	Total			\$	\$
ER 6	1 280 400	2 303 900	3 584 300	885 500	5 200 000	3 225 870	90
ER 7	979 300	2 638 300	3 617 600	1 437 200	15 200 000	3 255 840	90
ER 8	1 595 500	3 228 800	4 824 300	1 277 500	6 500 000	3 859 440	80
TOTAL	3 855 200	8 171 000	12 026 200	3 600 200	26 900 000	10 341 150	86

* Extrabudgetary funds in hand or committed in writing as at 31 May 2013

The rightmost column illustrates the preferred distribution of the regular budget to Expected Results (ERs) in a scenario with an allocation of 86% of the total budgetary allocation to the IOC proposed in the fully-funded Draft 37 C/5 (\$ 653 M scenario). This preferred distribution among ERs is based upon consideration of the functions and activities contributing to each ER, their interrelation as well as the need to fulfil statutory requirements and agreements.

Regular budget, including key staff resources, is also seen as seed money, necessary to generate extrabudgetary funding in support of programme implementation. The Complementary Additional Programme (IOC-XXVII/2 Annex 4 Add.), referred to in the above table as XB-CAP provides detailed information on the extrabudgetary funding that, in the estimate of the Secretariat, is required for the most optimal implementation of programme objectives, while the historical trend analysis shows that the actual level of extrabudgetary funding received corresponds to approximately 40% of that amount (\$ 11 M to be received vs \$ 26 M estimated).

The final distribution of the regular budget should be achieved following a flexible approach allowing the Commission to allocate resources and implement the programme, including performance indicators and benchmarks, taking into account the following set of Guiding Principles for budget allocation:

- Provide focused leadership on those themes where IOC has clear leadership/ownership in the programme theme;
- Fulfill IOC's intergovernmental mandate: incompressible costs related to governing and subsidiary bodies' meetings, statutory requirements and commitments vis-à-vis partners and other UN agencies, including their implications in terms of staff time;
- Support governments in national activities and strengthen Regional Subsidiary Bodies of the Commission;
- Incorporate the scope of Member States participation (inclusiveness);
- Maximize synergies with other IOC programmes and interlinked functions: e.g. Ocean observations-based early warning systems;
- Preserve/sustain core programmes, while raising extrabudgetary funds for capacity development actions;
- Provide some seed money for new high potential impact programmes and emerging issues (likely to attract extrabudgetary funding);
- Balance IOC's strong engagement with the ocean science community and its strong focus on applications and services;
- Reduce funding for programmes, if necessary, with strong partners that could carry them (also reducing IOC's stake), if they concur;

- Identify 'Member States willing to establish funded and staffed offices to take on an entire IOC programme based on existing good practices;
- Identify activities that can be sustained with extrabudgetary funding;
- Allow some seed money for new high potential impact programmes and emerging ocean science issues (likely to attract extrabudgetary funding); and
- Ensure that at least 25% of resources are allocated to operations under each ER.

In allocating the funds, the Executive Secretary shall ensure that the decisions made and resolutions adopted by the Assembly are reflected in the budget allocations within the resources available.

Annex 3 to Resolution XXVII-2

Revised Terms of Reference of IOC Intersessional Financial Advisory Group

Purpose

To provide advice from IOC Member States to the Chairperson of IOC and to the Assembly and the Executive Council in a transparent and objective fashion on:

- (a) The affordability, sustainability and implementation of the results-based management;
- (b) Financial matters of the Commission;

Term

The Financial Advisory Group will be constituted at each Session of the IOC Governing Body and operate for the following intersessional period.

Functions

- (a) To advise on the adequacy of the linkage between the results-based management and the IOC Medium-Term Strategy and the IOC Programme and Budget;
- (b) To advise on preliminary proposals from the Director-General of UNESCO for strategy and draft budgets provided by UNESCO;
- (c) To advise on the adequacy of regular and extrabudgetary resource allocations against expected results; and
- (d) To advise on the overall IOC budget level, taking into account issues of affordability and sustainability.

Composition

- (a) An Officer of the Commission serves as chairperson;
- (b) Open to all IOC Member States; however, the Executive Council and Assembly, as appropriate, may request the participation of Member States as part of the core membership.

Working arrangements

- (a) The Financial Advisory Group will conduct the majority of its business by electronic means;
- (b) If appropriate, the Chairperson may convene a meeting in time, and for a long enough period, to prepare a report prior to the commencement of a session of the Assembly or the Executive Council;

- (c) The Financial Advisory Group will provide a report on all its activities to subsequent sessions of the Assembly and Executive Council, as appropriate;
- (d) Relevant documents should be made available before the Financial Advisory Group meeting, in due time; and
- (e) The Financial Advisory Group should follow procedures for IOC Subsidiary Bodies, seeking to formulate its conclusions and recommendations through consensus.

DECISIONS

IOC-XXVII/Dec.2

The Assembly,

Having considered the recommendations (EC-XLVI, Dec.2.1, 2.2, 3.1, 3.3) made by the Executive Council at its 46th session (Paris, 25 June 2013), acting as the steering committee for the present session,

I. Agenda

Adopted the agenda and the timetable of work as set out in document IOC-XXVII/1 Prov. Rev. and Add. Rev.

II. Rapporteur

On a proposal of Nigeria, seconded by Colombia,

Designates Dr Terry Schaeffer of USA Rapporteur for its present session to assist the Chairperson and the Executive Secretary in the preparation of the draft provisional report of the Session;

III. Sessional Committees and Working Groups

Establishes the following sessional open-ended committees and one working group and referred to them the following agenda items and responsibilities:

Financial Committee (to examine the financial implications of draft decisions/resolutions, workplans of subsidiary bodies the draft Medium-Term Strategy -item 6.1- and draft Programme and Budget -item 6.2- and propose a comprehensive draft resolution under items 6.1 and 6.2): under the chairmanship of Professor Peter M. Haugan (Norway) with the following Member States and organizations declaring their wish to participate: Angola; Argentina; Australia; Belgium; Brazil, Canada, Chile, China, Egypt, France, Germany, Greece, Grenada, India, Japan, Mexico, Monaco, Norway, Pakistan, Portugal, Republic of Korea, Russian Federation, Thailand, USA and WCRP. Ms Ksenia Yvinec provides the Secretariat support to the Financial Committee.

Resolutions Committee (to report on all draft resolutions duly presented for consideration at the session –item 7– and make a recommendation to the Assembly regarding the adoption of the Guidelines for Draft Resolutions (EC-XLV/Dec.5.3) that were used during the present session on an experimental basis –item 6.4): under the chairmanship of Peter Dexter (Australia) with the following Member States declaring their wish to participate: Cameroon, Chile, Canada, Mexico, Norway, Republic of Korea, Argentina, France, U.S.A., Spain, Iran (Islamic Rep. of), Japan, India, Russian Federation, Turkey, Thailand, Nigeria, China. Julian Barbière provides the Secretariat support to the Resolutions Committee.

Nominations Committee (to examine all proposals of candidates for the elections to the chair, vice-chairs and to the Executive Council at the present session, and to report on them (item 6.3):

under the chairmanship of Javier Valladares, past chair of IOC, with the following Member States declaring their wish to participate: Brazil, France, Germany, Japan, Republic of Korea, UK, USA, and Venezuela (Bolivarian Rep. of). Thorkild Aarup provides the Secretariat support to the Nominations Committee;

Establishes also:

On a proposal of the Executive Council acting as the steering committee for the present session, a sessional working group on the “Development of a New Capacity Development Strategy” (item 5.5.1) under the chairmanship of Prof. Adoté Blim Blivi (Togo) with the following Member States declaring their wish to participate: Argentina, Australia, Brazil, Canada, China, Ecuador, Indonesia, Japan, Malaysia, Peru, Spain, Thailand, Togo, Tunisia, UK, USA, and IMAREST (Observer). Mitrasen Bhikajee will provide the Secretariat support to the group.

On a proposal of the Executive Council acting as the steering committee for the present session, a sessional working group on the “Future of IOC” (under item 5.1). The group will be chaired by Javier Valladares, past chair of IOC with the following Member States declaring their wish to participate: Argentina, Australia, Brazil, Canada, China, Ecuador, France, Germany, Grenada, India, Indonesia, Japan, Malaysia, Monaco, Norway, Portugal, Republic of Korea, Russian Federation, Sweden, Thailand, Turkey, UK, and USA. Bernardo Aliaga and Tom Gross will provide the Secretariat support to the group.

IOC-XXVII/Dec.3.2

Report of the Executive Secretary

The Assembly,

Having examined documents IOC-XXVII/2 Annex 1 and Add.,

Takes note of the report of the Executive Secretary on programme implementation (2012–2013) and Medium-Term Strategy (2008–2013).

IOC-XXVII/Dec.3.3

Reports of the IOC Sub-Commissions

The Assembly,

I. IOCAFRICA-II

Having considered the executive summary report of the 2nd Session of the IOC Sub-Commission for Africa and the Adjacent Island States, Cape Town, South Africa, 3–4 April 2013 (IOCAFRICA-II/3s),

Noting the progress that has been made since the establishment of the Sub-Commission, in particular the appointment of the IOC Coordinator in Africa, the setting-up of the secretariat for the Sub-Commission at the UNESCO Office in Nairobi, the organization of two sessions of the Sub-Commission, and the implementation of a range of projects and activities,

Welcomes the support provided by various Member States for the development and implementation of the programmes of the Sub-Commission, including Flanders (Belgium), Kenya, Republic of Korea, Spain, and South Africa;

Acknowledges the challenges faced in implementation of programmes of the Sub Commission, including limitation of resources and personnel;

Accepts the report of IOCAFRICA-II and the recommendations therein, including the Strategic Plan of the Sub-Commission;

Agrees that the regular budget for these activities will be identified as part of the overall IOC Programme and Budget resolution XXVII/DR.(6.1, 6.2);

Urges Member States and other organizations and programmes to support the implementation of the Strategic Plan and the Work programme of the Sub Commission.

II. WESTPAC

Having considered the summary report of Main Progress and Achievements of WESTPAC (2008–2012) (IOC/INF-1300),

Recalling the decision 3.2 of the 45th session of the Executive Council on the WESTPAC report and recommendations (WESTPAC-IX/3s),

Endorses the strategic directions recommended by WESTPAC in the document IOC/INF-1300;

Agrees that the regular budget for these activities will be considered as part of the overall IOC Programme and Budget resolution XXVII/DR.(6.1, 6.2);

Urges Member States and other organizations and programmes to support the implementation of the work programme of the Sub-Commission, noting the methods the Sub-Commission has used to guarantee its success.

III. IOCARIBE-XII

Having considered the executive summary report of the 12th Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions, Panama City, Panama, 9–12 April 2013, (IOC/SC-IOCARIBE-XII/3s),

Takes note of the report of IOCARIBE-XII and the recommendations therein;

Urges Member States and other organizations and programmes to support the implementation of the work programme of the Sub-Commission;

Having examined the report of the Internal Oversight Office of UNESCO on the Review of the IOCARIBE Office (IOC-XXVII/2 Annex 12 Add.),

Taking note of the IOCARIBE recommendation SC-IOCARIBE-XII.1 to restore the current IOCARIBE Secretary's position as a full time, permanent post for the IOCARIBE Secretary in Colombia as a matter of priority, funded by the UNESCO staff allocation,

Recognizing that the current financial situation of IOC does not allow the appointment of a full time IOCARIBE Secretary,

Requests the Director-General of UNESCO to consider restoring the current IOCARIBE Secretary's position as a full time, permanent post for the IOCARIBE Secretary in Colombia as a matter of priority, funded by the UNESCO regular budget;

Invites the Director-General to mobilize funds to support IOCARIBE;

Requests Member States to consider supporting IOCARIBE by:

- (i) making a firm commitment for extra-budgetary contributions for an agreed period for the full time employment of the IOCARIBE Secretary and for activities;
- (ii) seconding staff to the IOCARIBE Secretariat;

Agrees that the regular budget for these activities will be considered as part of the overall IOC Programme and Budget resolution XXVII/DR.(6.1, 6.2);

Requests the Executive Secretary to convey the above decision to Member States and in particular in the Caribbean region in order to mobilize support and funds.

IOC-XXVII/Dec.3.4

Report of the IOC (2012–2013) to the Thirty-seventh General Conference of UNESCO

The Assembly,

Recalling Article 3.2 of the Statutes and Rule of Procedure 49.2,

Having examined document IOC-XXVII/6,

Requests the Executive Secretary to submit the report on IOC activities (2012–2013) to the 37th General Conference of UNESCO (37 C/REP.8).

IOC-XXVII/Dec.4

Waiver of the Submission Deadline for the Draft Resolution on Financial Matters

The Assembly,

Recognizing the importance of the in depth discussion during the Assembly on the financial matters,

Decides to waive on an exceptional basis the submission deadline for draft resolutions, specifically for the Draft Resolution on financial matters (items 3.2, 6.1 & 6.2).

IOC-XXVII/Dec.5.1

The Future of IOC

The Assembly,

Having considered the report from the chair of Sessional Working Group on “The Future of IOC” established during the 27th session Assembly;

Recalling documents IOC-XXII/2 Annex 8 “Financing and Ownership of IOC Programmes: We have a Problem”, IOC/Future-I/3 “IOC Working Group on the Future of IOC, First Session, UNESCO Headquarters, Paris, France, 19–20 February 2008”, and IOC-XXVI/2 Annex 6

“Report of the Executive Secretary on the Implementation of the Recommendations of the Working Group on the Future of IOC”;

Acknowledges the need for continued discussion on “The Future of IOC”;

Decides that one of the IOC Officers should be assigned to follow and coordinate the development, in consultation with Member States during the intersessional period, through email, a short background document to be presented to the 47th session of the IOC Executive Council, as a preparation to the 28th Assembly;

Suggests that the areas of deliberation covered by the above indicated documents should focus on sharpening IOC’s identity, as well as on rationalized cooperation and communication between IOC and other organizations, and enhanced flexibility and adaptability of IOC governance;

Decides to add “The Future of IOC” to the agenda of the IOC Executive Council at its 47th Session in 2014 and to the agenda of the IOC Assembly at its 28th Session in 2015;

Calls governments of the IOC Member States to support the IOC activities at the forthcoming UNESCO General Conference, emphasizing that IOC has a recognized and unique role in the UN system in relation to ocean science and the scientific base for ocean management thus contributing to the Member States economic growth and prosperity and to consider a possibility to enlarge the IOC functional autonomy within UNESCO and to assign a larger and fixed IOC share in the UNESCO regular budget.

IOC-XXVII/Dec.5.1.1

UN Consultation and Coordination

The Assembly,

Having considered document IOC/INF-1302,

Takes note of the on-going active role played by the Commission in UN-Oceans, GESAMP, collaboration in following up to the Rio+20 conference, and elaboration of Sustainable Development Goals;

Agrees that:

- (i) the Commission has a role to play in the Global Framework for Climate Services (GFCS), both as an enabler and potential user of climate services, and
- (ii) the IOC Executive Secretary continue to assist UNESCO in leading coordination of inputs into the GFCS including participation in an Inter-agency Coordination Group;

Welcomes the establishment by the ITU, IOC, and WMO of an informal Joint Task Force to develop a roadmap that could lead to enabling the availability of submarine repeaters equipped with scientific sensors for disaster warning system (tsunamis), and the monitoring of some GCOS Essential Climate Variables (IOC/INF-1303);

Notes that the financial and human resource implications of the Commission’s engagement in these processes are generally being absorbed by programme budgets identified as part of the overall IOC Programme and Budget resolution XXVII/DR.(6.1, 6.2); and

Invites IOC Member States to support IOC’s role and contributions in these processes.

IOC-XXVII/Dec.5.1.2

International Indian Ocean Expedition 50th Anniversary Initiative

The Assembly,

Having considered document IOC/INF-1310,

Noting with interest that a Reference Group had been formed, under the initial auspices of SCOR, Indian Ocean GOOS and the IOC through its supporting Perth Regional Programme Office, to explore the possibilities for a second such international expedition, IIOE-2, to coincide with the 50th anniversary of IIOE, and especially to further significantly advance the understanding of the Indian Ocean in its own right and in its influence and tele-connections to the oceanic and climatic systems of the globe generally,

Recalling the IOC High Level Objectives and vision for the next Medium-term Strategy 2014–2021,

Decides that it is appropriate for the IOC in collaboration with SCOR and IOGOOS, to further develop a proposal for the second international Indian Ocean Expedition in commemoration of the 50th anniversary of the IIOE-1;

Decides to add the International Indian Ocean Expedition 50th Anniversary Initiative to the agenda of the IOC Executive Council at its 47th Session in 2014 in order to formalize, through a Draft Resolution, IOC's involvement in an IIOE-2, implemented for the period 2015–2020;

Requests the IIOE-2 Reference Group and the IOC Executive Secretary to prepare the relevant documentation, timeline, organizational and financial implications for the IOC;

Urges interested Member States to support this planning effort to the best of their capacities.

IOC-XXVII/Dec.5.1.2.1

Proposal for a Category-2 UNESCO Regional Educational and Research Centre on Oceanography for Western Asia, in Iran (Islamic Republic of)

The Assembly,

Having examined Document IOC-XXVII/2 Annex 6 and Addendum,

Noting that the creation of the centre aims not only to bring technical capacity to the region but also to support regional cooperation in ocean and coastal research, management and capacity development and correspond to the IOC regional policy,

Noting also that the proposal and fact-finding mission report on the feasibility study undertaken fully correspond to the principles and guidelines for the establishment of Category 2 Regional Centres of UNESCO (Document 35 C/22 and corr.);

Endorses the proposal of the Islamic Republic of Iran to establish under the auspices of UNESCO a category 2 regional educational and research centre on oceanography for Western Asia;

Requests the IOC Executive Secretary to forward this decision to the Director-General of UNESCO.

IOC-XXVII/Dec.5.1.2.2

Endorsement of the IHO-IOC/GEBCO Sub-committee for Regional Undersea Mapping (SCRUM)

The Assembly,

Having examined document IOC-XXVII/2 Annex 7,

Urges Member States to contribute to improve global bathymetric data sets and data products of GEBCO on a voluntary basis through participation in regional ocean mapping efforts, where appropriate;

Decides to endorse the Terms of Reference and Rules of Procedure for GEBCO Sub-Committee on Regional Undersea Mapping (SCRUM) and to create SCRUM as a formal Sub-Committee of GEBCO.

IOC-XXVII/Dec.5.2.2

Tsunami and Other Coastal Hazards Warning Systems

The Assembly,

Having considered the executive summary reports of the recent sessions of the Intergovernmental Coordination Groups for: the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS-IX); the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE EWS-VIII), the North-Eastern Atlantic, the Mediterranean and Connected Seas Tsunami Warning and Mitigation System (ICG/NEAMTWS-IX), and the report of the Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (TOWS-WG-VI),

Accepts the reports and the decisions and recommendations contained therein;

Agrees that the regular budget for ICG activities will be considered as part of the overall IOC Programme and Budget resolution XXVII/DR.(6.1, 6.2).

I.

Pacific Tsunami Warning and Mitigation System (PTWS)

Notes the experimental introduction of the Pacific Tsunami Warning Centre (PTWC) Enhanced Products for tsunami threat assessment based on tsunami forecast models and pre-defined coastal zones;

Also notes the proposal of establishment of a Sub-Regional Tsunami Warning and Mitigation System for the South China Sea Region and that progress has been made towards this goal.

II.

Indian Ocean Tsunami Warning and Mitigation System (IOTWS)

Notes that the Regional Tsunami Service Providers (RTSP) of Australia, India and Indonesia have assumed full operational responsibility for the provision of RTSP Service Level 2 tsunami advisories for the Indian Ocean Area of Responsibility from 31 March 2013;

Expresses its deep appreciation to the Governments of Japan and the United States of America for the provision of the Interim Tsunami Advisory Service for the Indian Ocean region by the

Japan Meteorological Agency (JMA) and Pacific Tsunami Warning Centre (PTWC) from April 2005 to 31 March 2013.

**III.
Tsunami and Other Coastal Hazards Warning System
for the Caribbean and Adjacent Regions (CARIBE-EWS)**

Notes that the Caribbean Tsunami Information Centre has been established, hosted by the Government of Barbados;

Also notes that the ICG/CARIBE EWS has decided to organize annual CARIBE WAVE exercises as from 2014.

**IV.
North-Eastern Atlantic, the Mediterranean and Connected Seas
Tsunami Warning and Mitigation System (NEAMTWS)**

Welcomes that the Candidate Tsunami Watch Providers (CTWP) of France, Greece and Turkey as of 1st August 2012 offer to provide tsunami watch services to ICG/NEAMTWS Member States upon request via the IOC;

Notes the steady progress of Italy and Portugal in developing their National Tsunami Warning Centres and their intent to also act as Candidate Tsunami Watch Providers and thereby contributing to tsunami monitoring coverage for all geographic areas of NEAMTWS;

Expresses appreciation to the European Commission for having contributed to the creation of the Tsunami Information Centre for the North-eastern Atlantic, Mediterranean and connected seas (NEAMTIC);

Expresses the urgent need for Member States to secure continued technical secretariat support to the NEAMTWS via extrabudgetary resources or secondments;

**V.
Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning
and Mitigation Systems (TOWS-WG)**

Decides to continue the TOWS-WG for the next intersessional period with the existing terms of reference and membership.

IOC-XXVII/Dec.5.3.1

**The Future Needs for Intergovernmental Coordination and Governance
for Sustained Ocean Observations and Services**

The Assembly,

Recalling Decision 4.7 of the IOC Assembly at its 26th session and Decision 4.2 of the IOC Executive Council at its 45th session,

Having examined documents IOC/IOC-XXVII/2 Annex 9 & Add. and IOC Workshop Report, 254,

Takes note of their findings and recommendations as well as discussion and input provided during the session;

Re-emphasizes the role of GOOS, IODE and JCOMM in coordinating sustained ocean observations and services; and

Requests GOOS, IODE and JCOMM to consider the findings of this consultation and its possible updates in the future development of their work plans;

Encourages Member States to engage in the development of national sustained ocean observational systems and support services and to streamline procedures for their implementation, thereby contributing to the objectives and work plans of GOOS, IODE and JCOMM.

IOC-XXVII/Dec.5.3.2

Global Ocean Observing System

The Assembly,

I. Global Ocean Observing System Work Plan

Having examined the executive summary report of the Second Meeting of the Global Ocean Observing System Steering Committee (March 2013, IOC/GOOS-SC-II/3s, GOOS-199),

Agrees to the GOOS Work Plan for 2014–2015 (GOOS-199 Annex 1);

Notes the financial and human resource implications of the work plan and the shortfall against the draft IOC Programme and Budget allocation for GOOS (GOOS-199 Annex 2), exacerbated by the financial situation of the IOC;

Further notes the priority decided by the GOOS SC, to shelve plans for the GOOS Biogeochemistry and GOOS Biology and Ecosystems panels and observing system components until such time as adequate resources are identified;

Agrees to consider the GOOS programme and budget as part of the overall IOC Programme and Budget resolution XXVII/DR.(6.1, 6.2), and

Urges Member States to support the GOOS Work Plan through cash contributions to the IOC Special Account for GOOS, secondments of staff members to the GOOS Project Office, in kind support such as hosting meetings or workshops with participant funding, the establishment of GOOS support offices, the funding of GOOS Projects, or other means as agreed by the GOOS SC.

II. GOOS Regional Policy

Noting the inconsistency between the GOOS Regional Policy (2006) and the reform of GOOS structures in 2011, and having additionally examined the proposed GOOS Regional Policy 2013 (IOC/INF-1308),

Recalling Resolution XXVI-1 on Strengthening IOC regional Subsidiary and the IOC Regional Strategy for Organizational Improvement,

Adopts the GOOS Regional Policy 2013 (IOC/INF-1308); and

Recognizes the Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS) as a GOOS Regional Alliance, as a merger of the former Mediterranean GOOS Regional Alliance and the EuroGOOS Mediterranean Operational Oceanography Network.

III. GOOS SC Regional Membership

Recalling the GOOS SC regional membership appointment defined in IOC Resolution XXVI-8, and further recalling [IOC Circular Letter, 2476](#) requesting nominations of experts for appointment by Member State Electoral Groups,

Notes the appointment by each of the Member State Electoral Groups of a regional expert member of the GOOS SC for 2014–2015:

- Margarita GREGG, United States of America (Group I)
- Alexander POSTNOV, Russian Federation (Group II)
- Miriam Azucena LUCERO MUÑOZ, Ecuador (Group III)
- LIN Shaohua, China (Group IV)
- Ashley JOHNSON, South Africa (Group V).

IOC-XXVII/Dec.5.3.3

Joint IOC-WMO Technical Commission (JCOMM) for Oceanography and Marine Meteorology Operating Plan (2013–2016)

The Assembly,

Having examined JCOMM and the IOC Medium-Term Strategy 2014–2021: a synthesis of common objectives (IOC/INF-1307),

Provides guidance on JCOMM's activities as follows:

- Continue important work in coordination of services, data management, and observation programmes,
- Maintain strong cooperation with IODE, in particular on the development of the Marine Climate Data System,
- Consider deepening cooperation with GOOS Regional Alliances in coastal observations and for regional seas,
- Consider expanding present Capacity Development activities, clearly linked to societal needs;

Notes the financial implications of the JCOMM Operating Plan for IOC and WMO, and

Agrees to consider an overall JCOMM programme and budget as a part of the IOC Programme and Budget resolution IOC-XXVII/DR.(3.2, 6.1, 6.2).

IOC-XXVII/Dec.5.3.4

IOC Committee on International Oceanographic Data and Information Exchange (IODE)

The Assembly,

Having examined the Executive Summary and Report of the 22nd Session of the IOC Committee on International Oceanographic Data and Information Exchange (IODE-XXII) (11–15 March 2013, Ensenada, Mexico), the recommendations and the decision contained therein (IOC/IODE-XXII/3s);

Decides to take action in accordance with the Recommendations adopted by IODE-XXII;

Endorses the IOC Strategic Plan for Oceanographic Data and Information Management 2013-2016 as given in annex to the report of IODE-XXII (IOC/IODE-XXII/3s);

Agrees that the Plan should be:

- (i) published and distributed widely and used as a basic data strategy throughout the Programmes and Projects of the IOC; and
- (ii) regularly reviewed and revised by the IODE Committee, in close consultation with all IOC programmes;

Notes the financial and human resource implications of the work plan and the shortfall against the draft IOC Programme and Budget allocation for IODE, especially for regional activities and OBIS, exacerbated by the financial situation of the IOC;

Agrees to the IODE Work Plan for 2013–2015 (Recommendation IODE-XXII.20) and to consider it in the overall IOC Programme and Budget Resolution XXVII/DR.(6.1,6.2);

Expresses its deep appreciation to the Government of Flanders (Belgium) for hosting and supporting the IOC Project Office for IODE and for its continuing and increasing financial support to IODE, the Russian Federation for its support through the hosting of the Partnership Centre for the IODE Ocean Data Portal in Obninsk, as well as to other donors and Member States who are providing financial and in-kind support for IODE;

Expresses its appreciation for the in-kind support for the IODE Programme provided by Member States through establishing and maintaining IODE Data Centres, provision of experts, through the provision of valuable ocean data and information products and services, and through financial and in-kind contributions to IOC;

Urges Member States to support the IODE Work Plan through cash contributions to the IOC Special Accounts for IODE and OBIS, secondments of staff members to the IODE Project Office, in-kind support such as hosting meetings or workshops with participant funding, the establishment of IODE partnership centres or OceanTeacher Regional Training Centres, or the funding of IODE or OBIS Projects or the establishment of NODCs.

IOC-XXVII/Dec.5.3.4.1

Ocean Biogeographic Information System (OBIS)

The Assembly,

Recalling its decision to accept the Ocean Biogeographic Information System (OBIS) within the IODE Programme, through Resolution XXV-4,

Recognizing OBIS plays a key role to address the increasing need for more, and accurate, time-series data on marine biodiversity to monitor the state of the marine environment and to better understand the ecosystem processes and potential impacts of climate change, in order to more effectively manage our marine living resources,

Recalling that the 193 Parties to the Convention on Biological Diversity (Decision COP10/29,10&35) requested Member States to further enhance globally networked scientific efforts, such as OBIS, to continue to update a comprehensive and accessible global database of all forms of life in the sea, and further assess and map the distribution and abundance of species in the sea, and called upon IOC/OBIS to facilitate availability and inter-operability of the best available marine and coastal biodiversity data sets and information across global, regional and national scales,

Having considered the report of OBIS (IOC/INF-1312) and the contribution of OBIS to all three Expected Results 6, 7 and 8 in the IOC Draft Programme and Budget for 2014–2017 (IOC-XXVII/2 Annex 4),

Recalls Resolution XXV-4, requesting the Executive Secretary of IOC to request to the Director General of UNESCO to create a full time post for OBIS;

Expresses its appreciation to Belgium, USA, India, and Bolivarian Republic of Venezuela for their in-kind support to technical developments of OBIS;

Agrees that the regular budget for these activities will be considered as part of the overall IOC Programme and Budget resolution XXVII/DR.(6.1, 6.2);

Agrees further that without direct funding from UNESCO's regular programme, Member States will need to take up responsibility to enable the IOC to fulfil the commitment it made to the continuation and further development of OBIS;

Urges Member States to provide cash contributions to the IOC Special Account for OBIS, to continue the two OBIS professional staff positions at the IODE Project Office, secondments to the IODE Project Office earmarked for OBIS, in-kind support such as hosting meetings or workshops with participant funding, or other means as agreed by the SG-OBIS.

IOC-XXVII/Dec.5.3.5

WMO-ICSU-IOC-UNEP Global Climate Observing System (GCOS)

The Assembly,

Recalling the 1998 Memorandum of Understanding between WMO, IOC, UNEP and ICSU on the Global Climate Observing System,

Having considered the Information Document on GCOS planning and implementation (IOC/INF-1309),

Taking note of the transfer of the secretariat of the GCOS-GOOS-WCRP Ocean Observations Panel for Climate from the GOOS Project Office at IOC to the GCOS Secretariat at WMO, and of the on-going role of the Ocean Observations Panel for Climate (OOPC) in support of the GOOS Steering Committee and the GOOS Work Plan for 2014–2015,

Provides guidance on the work programme of GCOS as follows:

- (i) Welcomes the growing focus of GCOS on all timescales of required climate observations,
- (ii) Proposes strategic focus on all observation coordination mechanisms including JCOMM and WIGOS,
- (iii) Proposes looking at observing requirements from the IPCC 5th Assessment Report being published in 2013 and 2014, and
- (iv) Encourages broadening of the contact list for the GCOS review questionnaire to all bodies of the IOC including IODE;

Urges Member States to support the execution of this plan by making financial contributions to the IOC Special Account in support of GCOS.

IOC-XXVII/Dec.5.4.1

WMO-IOC-ICSU-UNEP World Climate Research Programme (WCRP)

The Assembly,

Recalling that IOC joined WMO and ICSU as sponsors of the WCRP in 1993,

Recalling further that the Assembly and Executive Council, since 2005, have reaffirmed continued co-sponsorship at a level of US\$ 125,000 per annum on its regular Budget and support to the WCRP, identified as a high priority by the Assembly at its 26th session,

Provides guidance on the work programme of the WCRP as follows:

- (i) Welcomes work on global and regional sea level, including impact on extremes, the intersection with human vulnerability and adaptation, and the WCRP contribution to IOC High Level Objectives,
- (ii) Welcomes focus on engaging early career scientists, particularly in developing countries, and other Capacity Building activities as recommended in the WCRP Implementation Plan (2009),
- (iii) Welcomes contribution to IPCC Working Group 1 report, including CMIP archive of climate projections,
- (iv) Requests maintenance of WCRP's strong cooperation with IOC, in particular on the development of the Global Framework for Climate Services,
- (v) Requests additional emphasis on regional climate information,

Agrees that the regular budget for these activities will be considered as part of the overall IOC Programme and Budget resolution XXVII/DR.(6.1, 6.2);

Urges Member States to support the execution of this plan through the participation of their scientists as well as financial contributions to the IOC Special Trust-Fund for the WCRP.

IOC-XXVII/Dec.5.4.2

Intergovernmental panel on Harmful Algal Blooms (IPHAB)

The Assembly,

Recalling IOC Resolution XVI-4, which established the Intergovernmental Panel on Harmful Algal Blooms,

Having considered the Executive Summary Report of the 11th Session of the IOC Intergovernmental Panel on Harmful Algal Blooms (IPHAB), its seven Decisions and four Recommendations and the Work Plan for 2014–2015 adopted at the Session (IOC/IPHAB-XI/3s),

Taking into consideration the preoccupying impact of HAB on public health, food security, the development of tourism and a substantial proportion of economic activities in the world,

Recognizing that regional, national, and institutional requirements for management of HAB impacts, along with the IOC High Level Objectives, that drive IOC HAB Programme research and capacity development activities, have proven highly valuable to Member States over almost two decades; that the IOC fulfils a unique role in coordinating and implementing international

and regional cooperation on HAB research, management and capacity development; and that the need for this continued coordination and regional cooperation can be expected to remain at the same level or increase,

Noting with satisfaction that IPHAB has continued to provide a strong and efficient mechanism to respond to new HAB-related problems experienced by Member States and to leverage resources from diverse sources to focus on priority needs,

Takes note of the Executive Summary Report of IPHAB-XI and the recommendations contained therein (IOC/IPHAB-XI/3s);

Notes that the IOC will help protect human health, economic interests and natural resources through its expanded focus on Ciguatera in cooperation with the WHO and FAO and by coordinating research needed by Member States through the Global HAB Programme;

Notes further that the development of a Global HAB Status Report is complementary to the World Ocean Assessment to provide for the first time a picture of the global distribution of HABs, their threats and relationships to nutrient enrichment and other causes;

Requests the IOC Executive Secretary to convene the 12th Session of the Panel prior to the 28th Session of the Assembly;

Invites SCOR to co-sponsor the Scientific Steering Committee for Global HAB and encourages active joint participation in the development and implementation of the science agenda;

Agrees that the regular budget for these activities will be considered as part of the overall IOC Programme and Budget resolution XXVII/DR.(6.1, 6.2);

Expresses its appreciation to the Government of Denmark for hosting and supporting the IOC Science and Communication Centre on Harmful Algae, as well as to other donors and Member States who are providing financial and in-kind support for the HAB Programme;

Urges funding agencies and institutions in IOC Member States to assist in the mobilization of funding that will ensure the implementation of the IPHAB Work Plan.

IOC-XXVII/Dec.5.4.3

Nutrient Pollution

The Assembly,

Recalling Resolution XXV-9 and Assembly decision IOC-XXVI, Dec.7.5,

Recognizing the successful funding by the Global Environment Facility (GEF), and the on-going implementation, of the Project "Global foundations for reducing nutrient enrichment and oxygen depletion from land based pollution, in support of Global Nutrient Cycle",

Notes that the Nutrients and Coastal Impacts Research Programme (N-CIRP) plan to a large degree is being implemented via the GEF Global Foundations project and that N-CIRP provides the programmatic framework for the GEF Global Foundations project despite that the budget situation has not allowed to establish and operate the N-CIRP Steering Committee as foreseen,

Endorses the revised programme outline as an integrating activity of the IOC Ocean Sciences programmes;

Taking note of the current financial difficulties of UNESCO during the biennium 2012–2013 and the fact that the proposed level of IOC contribution of US\$ 90,000 for 2014–2015 under the fully-funded Draft 37 C/5 (US\$ 653M scenario) to cover committed co-funding of GEF Global Foundations project will not be possible should there be a reduction in the overall IOC allocation;

Decides to maintain the N-CIRP programme as a focus and framework for the GEF Global Foundations project with the understanding that its full implementation will be conditional on the IOC's ability to secure the necessary co-financing level;

Invites and encourages IOC Member States to assist in the identification of funding that will ensure the availability of the IOC co-funding of the GEF Global Foundations Project and the activation of N-CIRP Steering Committee.

IOC-XXVII/Dec.5.4.4

Integrated Coastal Area Management (ICAM)

The Assembly,

I.

Implementation of IOC Integrated Coastal Area Management Strategy

Recalling IOC-XXVI/Decision 8.2,

Having considered document IOC/INF-1311,

Takes note of the progress in implementing the IOC Integrated Coastal Area Management (ICAM) Strategy;

Expresses its deep appreciation to the Government of Belgium (Flanders) for the secondment of an expert to the ICAM Programme (SPINCAM Project);

II.

Strengthening Global Governance of Large Marine Ecosystems (LME) and their Coasts

Having examined document IOC-XXVII/2 Annex 5 and Add.,

Welcomes the proposal to develop and implement a new GEF project on Strengthening Global Governance of Large Marine Ecosystems (LME) and their Coasts;

Supports the role of the Commission in leading the implementation of the project and in hosting a Project Coordination Unit at its headquarters;

Agrees that the regular budget for these activities will be considered as part of the overall IOC Programme and Budget resolution XXVII/DR.(6.1, 6.2);

Requests the Executive Secretary to mobilise extra-budgetary resources to support the position of project coordinator as well as the operations of the Project Coordination Unit;

Invites Member States and donor agencies to support through extra-budgetary resources, as well as in-kind contributions, the project coordination and other relevant project activities.

IOC-XXVII/Dec.5.4.5

A Regular Process for Global reporting and assessment of the state of the Marine Environment, including Socio-economic Aspects (UN Regular Process) – World Ocean Assessment

The Assembly,

Having considered document IOC/INF-1301,

Requests the Executive Secretary to continue:

- (i) to provide technical and scientific support to the Regular Process in accordance with UNGA resolution 67/78,
- (ii) to dialogue with the Bureau of the Ad Hoc Working Group, the secretariat of the Regular Process (DOALOS) and other competent United Nations programmes and specialized agencies regarding the provision of technical and scientific support to the Regular Process;

Agrees that the regular budget for these activities will be considered as part of the overall IOC Programme and Budget resolution XXVII/DR.(6.1, 6.2);

Invites IOC Member States to support IOC's role and contributions in this respect.

IOC-XXVII/Dec.5.5.1

Development of a New Capacity Development Strategy

The Assembly,

Taking note of the outcome document of the United Nations Conference on Sustainable Development Rio+20 whereby the UNSD recognizes the importance of building the capacity of developing countries to be able to benefit from the conservation and sustainable use of the oceans and seas and their resources,

Having examined document IOC-XXVII/2 Annex 10,

Decides to set up an Intersessional Working Group for Developing a Draft Strategic Plan for Capacity Development with the annexed Terms of Reference;

Agrees that the regular budget for these activities will be considered as part of the overall IOC Programme and Budget resolution XXVII/DR.(6.1, 6.2);

Requests:

- (i) the Executive Secretary to include the Strategic Plan for Capacity Development as an item on the Agenda of the Executive Council at its 47th session in 2014; and
- (ii) Member States to consider funding and supporting the activities leading to the formulation and adoption of the Strategic Plan for Capacity Development.

Annex to IOC-XXVII,Dec.5.5.1

**Draft Terms of Reference for the Intersessional Working Group
for the Development of IOC Capacity Development Strategic Plan**

PURPOSE

The Intersessional Working Group will develop a Capacity Development (CD) Strategic Plan for IOC. This plan will then be implemented through partnership with Member States, donors, UN Agencies, global financial institutions and the private sector.

TERM

The Intersessional CD Strategy Group will be constituted at the 27th IOC Assembly and will operate until the 47th IOC Executive Council in 2014.

FUNCTIONS

(a) Review documents given below to identify the relevant components that should be considered in an IOC CD strategy along with an outline of the strategy document

- IOC-XXVII/2 Annex 3 – Draft IOC Medium-Term Strategy for 2014–2021 (2013);
- IOC-XXVII/2 Annex 10 – Development of a New Capacity Development Strategy (2013);
- IOC-XXVII/2 Annex 10 Add. – Development of a new Capacity Development Strategy - Addendum (2013);
- IOC/INF-1313 – Baseline Study for an Assessment of National Capacities and Needs in Marine Research, Observation and Data/Information Management (2013);
- IOC/INF-1211 – IOC Principles and Strategy for Capacity Building (2005);
- IOC/INF-1276 – Empowering Developing Countries to Sustainably Use Their Coastal Resources (Self Driven Capacity Building) Closure Report of the SIDA Funded Project (2010);
- IOC/INF-1203 – IOC Criteria and Guidelines on the Transfer of Marine Technology – IOC Advisory Body of Experts on the Law of the Sea (2005);
- IOC/ABE-LOS VIII/8 – Practices of States in the Fields of Marine Scientific Research and Transfer of Marine Technology: an update of the 2005 analysis of Member State responses to Questionnaire No 3 (2008);
- IOC/INF-612 – UNESCO/IOC Comprehensive Plan for a Major Assistance Programme to Enhance the Marine Science Capabilities of Developing Countries (1985);
- Documents produced by IOC subsidiary bodies and sister organisations;
- Other documents relevant to this exercise.

(b) Incorporate elements arising from the following considerations

- Recent UN Conference outcome documents, especially Rio +20's Outcome document "The Future we Want" and resolutions requesting actions in capacity development;
- The present High Level Objectives of IOC and its mandate as well as existing IOC programmes;
- Lessons learned from previous CD plans of IOC (Success stories and implementation problems);
- Gaps identified through prior assessments and surveys of capacities and needs requirements;
- Regional priorities as identified through the different IOC sub-commissions and relevant bodies and other IOC regional subsidiary bodies;

- Existing capacity development initiatives of Member States, other UN agencies and competent international organisations, for example, POGO and SCOR, with a view to developing partnerships, create synergies and avoid duplication;
- The problem faced by developing countries in not being able to retain qualified staff because of inadequate research infrastructure;
- Gender Equality, Priority Africa, SIDS and LDCs;
- The regional requirement for capacity as priorities may not be global.

(c) Identify

- IOC's existing CD strengths and IOC's unique intergovernmental CD niche
- The essential elements/pillars of IOC's CD draft strategy (IOC-XXVII/2 Annex 10), consistent with IOC's Medium Term Strategy, that will complement international CD partner development contributions;
- The need for a consistent level of extra-budgetary funding;
- Priorities for actions in relation to available resources focussing on specific geographical areas and specific science areas for effective and efficient capacity development, and informed by IOC's regional bodies;

(d) Prepare a report for consideration of the 47th IOC Executive Council in 2014

COMPOSITION

- The Vice-Chairperson of the IOC for Group V, Prof. Adoté Blim Blivi will serve as Chairperson and the Deputy Executive Secretary of the Commission, Dr Mitrasen Bhikajee will be the Technical Secretary of the Intersessional Working Group;
- The Working Group will be open to all IOC Member States;

WORKING ARRANGEMENTS

- The Working Group will conduct the majority of its business by electronic means;
- If appropriate, the Chairperson may convene a meeting in time, and for a long enough period, to prepare a report prior to the commencement of a session of the Executive Council;
- The Group will provide a report on all its activities to the 47th session of the Executive Council;
- Relevant documents would be made available before the Group meeting, in due time; and
- The Group will follow procedures for IOC Subsidiary Bodies, seeking to formulate its conclusions and recommendations through consensus.

IOC-XXVII/Dec.5.5.2

Rationale for an IOC Global Ocean Science Report

The Assembly,

Having considered the proposal for establishing a Global Ocean Science Report (GOSR) contained in document IOC-XXVII/2 Annex 11,

Decides to establish an open-ended intersessional Working Group, under the chairmanship of the IOC Vice-Chair, Dr Atanas Palazov, to further review and improve the GOSR proposal based on the comments made by Member States;

Requests:

- (i) the IOC Executive Secretary to convene open-ended regular consultations with the Member States on relevant aspects of the GOSR;
- (ii) the Chair of the intersessional Working Group to maintain close consultation with the chairs of other relevant intersessional IOC working groups;
- (iii) the Chair of the intersessional Working Group to present the conclusions reached by the Group at the 47th session of the IOC Executive Council; and

Agrees that the regular budget for these activities will be considered as part of the overall IOC Programme and Budget resolution XXVII/DR.(6.1, 6.2).

IOC-XXVII/Dec.6.4

Guidelines for Draft Resolutions

The Assembly,

Recalling Decision EC-XLV/Dec.5.3,

Taking note of the report presented by the Chair of the Resolutions Committee on the use of the Seventh Draft Revised Guidelines for the Preparation and Consideration of Draft Resolutions on an experimental basis during the 27th session of the Assembly,

Adopts the Guidelines for the Preparation and Consideration of Draft Resolutions as in the annex to this decision, which are complementary to the IOC Manual.

Annex to IOC-XXVII/Dec.6.4

**Eight Draft Revised Guidelines for the Preparation
and Consideration of Draft Resolutions**

Preamble

Regulations relating to draft resolutions were not included in the IOC Statutes adopted by the Assembly in 1999 but in the IOC Rules of Procedure which were amended in 2001 to render them compatible with the new Statutes of the Commission.

The IOC Rules of Procedure refer to draft resolutions in the introduction and in Rule 42.

The current Rules of Procedure were adopted by the IOC Assembly at its 21st Session on 11 July 2001 by way of Resolution XXI-4 with the exception of the relevant procedure of adopting resolutions, for which the Assembly noted that "a further revision is under way."

Rule 42 of the IOC Rules of Procedure contains a footnote in similar terms: "While approving the new Rules of Procedure, the 21st session of the Assembly also requested the further revision of Rule 42, process that is under way."

Although the IOC Assembly at its 21st session provided inputs to be taken into account when considering amendments to Rule 42 of the IOC Rules of Procedure, the IOC Executive Council

at its 35th session agreed to retain the wording of Article 42 as it appears in the published Rules of Procedure (IOC/INF-1166).

As a consequence, the IOC Executive Secretary recommended that the updating of the procedure for the preparation and consideration of Draft Resolutions should be done *through written guidelines*, in replacement of the guidelines contained in the IOC Manual and its updated reprint IOC/INF-734 rev.

The task of revising the initial *Guidelines for the Preparation and Consideration of Draft Resolutions* that were included in the IOC Manual of March 1989 (IOC/INF-785, section 9.1) has been a slow and arduous process since 2001.

The preparation, submission, revision and approval of Draft Resolutions are key mechanisms for smooth and efficient running of the Commission.

Since the Rules of Procedure address briefly the mechanism for the preparation and consideration of Draft resolutions, the present Guidelines have been developed on the basis of all relevant documents, including the reports of former chairs of the Resolutions Committee, and on the practice of the Resolutions Committee. This document has been prepared by an open-ended intersessional working group established by the Assembly Decision 9.3.1 at its 26th session.

Guidelines for the Preparation and Consideration of Draft Resolutions

I. Definitions

1. Resolution: Formal expression of a mandate or opinion or a statement of a decision to act made by a Governing Body within the scope of Article II below.
2. Draft Resolution: A proposed text of a Resolution submitted by the relevant source to a Governing Body with a view to its adoption by the Governing Body concerned during the session to which the draft resolution is presented for consideration under the adopted agenda.
3. Decision: Formal expression of a mandate or opinion or a declaration of a decision to act made by a Governing Body, or a Subsidiary Body when appropriate, not covered by a Resolution. It will be placed within the body of the corresponding Governing Body's session report.
4. Recommendation: Formal expression of an opinion, advice or recommendation by an IOC Subsidiary Body to the IOC Executive Secretary and the body that created it.

II. Scope of a Draft Resolution

5. Draft Resolutions should be prepared only when necessary to fulfil at least one of the following criterion:
 - (i) reflect major policy, programmatic, external relations, financial and institutional decisions;
 - (ii) approve or modify the Commission's programme and budget;
 - (iii) take action on formal Recommendations made to the Commission by any recognized entities concerned with the oceans.

6. Respecting the division of authority and responsibility established in the UNESCO Constitution, Draft Resolutions will not deal with internal matters of the IOC Secretariat nor the mandate of the IOC Executive Secretary or the Director-General of UNESCO.

7. Draft Resolutions should be presented together with their related agenda item. Draft Resolutions should deal only with matters **on the agenda** of the corresponding session of the Governing Body. The approved Resolution should accurately reflect the conclusions of the plenary discussions thereon.

III. Source of a Draft Resolution

8. Draft Resolutions may be submitted by one or more Member States;

9. The Executive Secretary will, at the closing of the relevant agenda item, identify the source(s) for submitting the Draft Resolutions as agreed by the Governing Body.

10. No governing body shall adopt a Resolution involving expenditure unless it has before it a report by the chair of the Financial Committee containing an indication of the financial impact of each Draft Resolution.

IV. Submission

11. Whenever possible, proposed text of Draft Resolutions should be submitted in writing to the Executive Secretary one month in advance and no later than 24 hours before the opening of the session of a Governing Body_during which it will be considered for adoption.

12. The Executive Secretary shall circulate the proposed text of Draft Resolutions as soon as practicable to the IOC Member States for information before their formal review by the Resolutions Committee.

13. Upon completion of a formal review by the Resolutions Committee, formatting, editorial changes, and translation of Draft Resolutions into the working languages of the Commission shall be completed by the IOC Secretariat and then be made available to the delegation members of the Governing Body.

14. A Draft Resolution shall mention whether it replaces, partly or wholly, a past Resolution, stating that the latter is no longer in force.

15. If a Draft Resolution is made available in the working languages of the Commission to all delegations less than 72 hours prior to the opening session of a Governing Body during which it may be considered for adoption, the Governing Body can decide not to consider it.

16. As an exception to Article 15, it is recognized that the Draft Resolution on Programme and Budget will be submitted during the session of the Governing Body concerned.

17. During the session, amendments to Draft Resolutions may be submitted in writing or orally during the discussion of the relevant agenda item in plenary.

V. Structure

18. A Resolution should be published as a self-standing text that contains all the annexes mentioned.

19. The wording of a Draft Resolution should meet the criterion of being *necessary and sufficient* and should avoid extraneous and duplicative material. In particular, a Draft Resolution should not replicate or duplicate a decision already in the body of the corresponding summary report.

20. Draft Resolutions should comprise an initial preambular section, which should be kept to a minimum and should address the question “Why is a Resolution needed?”

21. This should be followed by an operative section, which should define the action called for by the Resolution and how the action is to be carried out. If possible, a Draft Resolution should consist of one preambular section followed by the corresponding operative section. If more than one operative section is envisaged, the Draft Resolution should be subdivided, with each subdivision comprising one preambular section and one operative section for each action.

22. Draft Resolutions shall include a statement on the financial implications stating:

- (i) whether these refer to identified resources in the Regular Programme and Budget (C/5) with an associated work plan;
- (ii) financial implications in terms of:
 - extra-budgetary resources for which there is a formal commitment by one or more Member States or other bodies,
 - extra-budgetary contributions to be sought,
- (iii) when funds would be needed, and for what period, and
- (iv) IOC Secretariat resources over and above the allocation.

In all cases, Draft Resolutions should clearly specify the activities for which extrabudgetary resources are sought. This additional information will inform the discussion of each Draft Resolution by the Financial Committee (see para. 27 below). Once a Draft Resolution is adopted, the financial information mentioned above is removed.

VI. Resolutions Committee

23. A Resolutions Committee should be established at the beginning of each Assembly session or each Executive Council session to consider Draft Resolutions as they are presented to ensure that the text of the Resolution is clear and explicit.

24. The Chairperson of the Resolutions Committee should be agreed upon, among the present delegates, by the Governing Body at the beginning of each Governing Body session.

25. The Resolutions Committee is responsible for determining whether Draft Resolutions placed before it conform to the scope mentioned in Article 5 above. If the Resolutions Committee considers it necessary, in terms of brevity, clarity and accuracy, to propose changes in a draft resolution, it should ensure that these are strictly of an editorial nature so that the substance of the original draft is maintained.

26. The Resolutions Committee has no responsibility for the substance of Draft Resolutions. Should a substantive change be considered necessary for any reason, the Draft Resolution should be referred back to the IOC Executive Secretary, with an explanatory note. To facilitate any eventual redrafting of a Draft Resolution, the originator(s) or his/her/their representative can be invited to the meeting of the Resolutions Committee at which the Draft Resolution in question is discussed.

27. The Resolutions Committee should submit, via the IOC Executive Secretary, any Draft Resolution to the Financial Committee before the Draft Resolution is considered in plenary. The Financial Committee's role is to assess the financial implications, be they explicit or implicit, of Draft Resolutions and thus their practicality. In particular the assessment should clearly identify the funds that are not committed in the current approved budget.

28. The Resolutions Committee should review Draft Resolutions in English. Following Section IV, here above, official translation should be provided if the Draft Resolution is presented in another official language of the Commission.

29. The Chairperson of the Resolutions Committee should submit a report to the Governing Body by the end of the session about the proposed Draft Resolutions and the work of the Resolutions Committee.

VII. Subsidiary Bodies

30. In general, Subsidiary Bodies should follow similar procedures to those proposed above for the Governing Bodies when adopting Decisions and Recommendations.

31. In determining whether to formulate Decisions or Recommendations, Subsidiary Bodies should conform to the following general principles:

- (i) Decisions may be formulated if they are within the mandate of the Subsidiary Body, contain actions which involve only the Subsidiary Body and/or its members, and do not have direct implications for IOC, its agreed budget and programme, and membership as a whole;
- (ii) Any actions, within the mandate of a Subsidiary Body, which have budgetary implications for IOC beyond the agreed budget and programme, require actions by the Governing Bodies, or require specific action by an IOC Governing Body (e.g. changes to title or Terms of Reference) and/or require additional actions by the Secretariat beyond those already mandated under the budget and programme, shall be formulated as Recommendations to an IOC Governing Body.

32. Subsidiary Bodies should review all relevant Governing Body Resolutions still in force that refer to the Subsidiary Body at the date of their session, as well as their own Recommendations, and make recommendations for action, as required/appropriate.

33. Subsidiary bodies should not adopt decisions and recommendations that are not consistent with Resolutions of the Commission in force.

VIII. Publication

34. All resolutions will be published in the official languages of the Intergovernmental Oceanographic Commission.

IX. Coding and citation of Resolutions

35. Assembly Resolutions – [Number of Assembly in roman numerals]-[1,2...number of the particular Resolution]; e.g., IOC Resolution **XXIII-3** (third Resolution adopted by the IOC Assembly at its 23rd Session)

36. Executive Council Resolutions – **EC**-[Number of Executive Council in roman numerals].[1,2...number of the particular Resolution]; e.g., IOC **EC-XXXIX.2** (second Resolution adopted by the IOC Executive Council at its 39th Session)

37. Primary IOC Subsidiary Body Decisions and Recommendations – [Acronym of the Subsidiary Body]-[Number of the session in roman numerals].[1,2...number of the particular Decision]; e.g., **IODE-XVIII.1** (first Decision adopted by the IOC Committee on International Oceanographic Data and Information Exchange (IODE) at its 18th Session).

38. A standardized format for Draft Resolutions is presented in Appendix I of these guidelines.

IOC-XXVII/Dec.6.5

**Preparation of the 47th and 48th Sessions of the Executive Council (2014, 2015)
and 28th Session of the Assembly (2015)**

The Assembly,

Recalling the recommendations of the Executive Council at its 46th session (EC-XLVI, Dec.4.),

Decides to hold:

- (i) The 47th session of the Executive Council for 3.5 days in UNESCO Headquarters, Paris over the period 30 June–3 July 2014,
- (ii) The 28th session of the Assembly for a duration to be decided over the period to be decided in June 2015 preceded by a one-day session of the Executive Council acting as the steering committee of the Assembly;

Calls on the Member States to consider the possibility of providing voluntary extrabudgetary contribution;

Decides of the inclusion of the following items on the agenda of the 47th session of the Executive Council:

- The Future of the IOC
- International Indian Ocean Expedition 50th Anniversary Initiative (IIOE-2)
- Strategic Plan for Capacity Development
- Global Ocean Science Report.

IOC-XXVII/Dec.6.6

Proposals for Future IOC Memorial Lectures

The Assembly,

Proposes the following themes for each of the IOC memorial lectures:

- (i) IOC Roger Revelle Lecture, 2014: CARIACO (Carbon Retention in a Coloured Ocean) Project Times Series, or
 - Ocean Chemistry and Ocean Acidification (Dr Richard Feely),
 - Protected Marine Areas-Malpelo, one of the UNESCO's World Heritage marine sites (Dr Sandra Bessudo),
- (ii) IOC Anton Bruun Memorial Lecture, 2015:
 - Arctic Sea Ice (Dr Robie MacDonald)
- (iii) IOC N.K. Panikkar Memorial Lecture, 2015:
 - Canadian Rangers Ocean Watch (Dr Eddy Carmack),
 - Impact of IOC Capacity Building for Tsunami Warning System within a region,
 - Capacity development on Harmful Algal Blooms (Prof. FUKUYO Yasuwo)
 - Challenger Glider Mission (Dr Scott Glenn, University of Rutgers),

- 50th anniversary of the Indian Ocean Expedition, past and present and future, and

Invites the IOC officers with the assistance of Secretariat to seek further suggestions for lectures and to finalize the invitations;

Invites also the IOC Executive Secretary to further enhance visibility thereof.

IOC-XXVII/Dec.7

Adoption of the Session Summary Report

The Assembly,

Welcoming both the formal strengthening of decisions as the core output of IOC governing body sessions and resolutions with the scope and definition of resolutions adopted by decision IOC-XXVII,Dec.6.4,

Requests the Executive Secretary to identify areas of improvement for governing body sessions and report on the results of the evaluation questionnaire in order to pursue the reflection on this issue;

Adopts the Draft Summary Report for the present session;

Requests the Executive Secretary to circulate the Summary Report to Member States within one month after the closure of the session.

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1. OPENING

1. The Chair, Mr Sang-Kyung Byun, opened the 27th Session of the IOC Assembly at 10:00 on Wednesday 26 June 2013 in Room II at UNESCO Headquarters. He announced one new IOC Member State since the last Executive Council in 2012: Saint Vincent and the Grenadines. He welcomed the new officers recently elected in the subsidiary bodies of the Commission.
2. The Chair asked participants to stand for a minute of silence to honour distinguished individuals who had participated in the work of the Commission and have passed away during the past year: Phil Busby (1947–2013, New Zealand), Carlo Heip (1945–2013, Belgium), Alexander Metalnikov (1931–2013, Russian Federation), Klaus Wyrski (1925–2013, USA), and Charles S. Yentsch (1927–2012, USA). Later during the session a tribute to Ariel W. González (Argentina), was organized on the occasion of the publication of his thesis partly based on his study of IOC: “(Re)Encontrar EL MAR: Argentina y el conocimiento científico de los océanos – Hacia una jurisdicción eficaz en nuestros espacios marítimos” ((Re)-encountering the Sea: Argentina and scientific knowledge of the oceans. Towards an effective jurisdiction of our maritime spaces).
3. The Chair reminded the Assembly that a full session of the Assembly was made possible, in a period of financial difficulty for the organization, only with the allocation of emergency funds given to the IOC by the Director-General who recognized the importance of the decisions to be made at the present session for the next programming and budgeting cycles. The Director-General addressed the IOC Assembly at 11:30 the same day ([Annex III.A](#) of the Summary Report).
4. The Chair invited participants to visit the exhibition on “The IOC Partnership with the Civil Society” from 24 June to 3rd July inclusive in the Foyer, as well as the IOC–Tara Expeditions’ exhibition, Salle des Pas perdus (24–28 June inclusive), the Formal opening ceremony for which was held on Thursday 27 June at 18:30 hrs. He thanked, on behalf of the Assembly, the Marine Technology Society (USA) for hosting the reception at the end of the opening day and several partners for sponsoring coffee/tea services and events during the session: the Fundació Navegació Oceànica Barcelona / Barcelona World Race (Spain), the Society for Underwater Technology (SUT) and the Institute of Marine Engineering, Science & Technology, IMarEST (UK), the Permanent Delegations to UNESCO of Canada, China, Nigeria, the delegations of Japan, Republic of Korea, and Thailand on behalf of WESTPAC; World Ocean Network–Nausicaa, the Permanent Delegations of Argentina and Germany.
5. The representative of one Member State took the floor.

2. ORGANIZATION OF THE SESSION

2.1 ADOPTION OF THE AGENDA

6. The Chair referred to the recommendations made by the Executive Council at its 46th session, acting as the steering committee for the Assembly, for the following organizational items (2.1, 2.2, 2.3, 2.4). He reminded that the agenda was designed to address reporting on the current biennium and Medium-Term Strategy during the first two days (item 3.) with the remainder of the session focusing on decisions in the context of the next programme and budget and medium-term strategy period.
7. During the 46th Executive Council Session, Portugal requested the inclusion of an additional agenda item on the Future of IOC. While this request was submitted after the deadline established in the Rules of Procedure (Art. 9), the Executive Council agreed to recommend to the Assembly to form a sessional open-ended working group to discuss the

issues raised by Portugal on the Future of IOC and subsequently report to the Assembly under Agenda Item 5.1.

8. No Member State representative took the floor. ([Decision IOC-XXVII/Dec.2.i](#))

2.2 DESIGNATION OF THE RAPPORTEUR

([Decision IOC-XXVII/Dec.2.ii](#))

2.3 ESTABLISHMENT OF INTRASESSIONAL COMMITTEES AND WORKING GROUPS

9. Referring to the recommendations made by the Executive Council (EC-XLV/Dec.3.1 & 3.2) on this item, acting as the steering committee for the present session, the Chairman reminded the Assembly of the mandate of the three sessional committees, the open-ended composition thereof, and the working arrangements made for their meetings. He then invited proposals for sessional working groups. ([Decision IOC-XXVII/Dec.2.iii](#))

2.4 INTRODUCTION OF DOCUMENTATION AND TIMETABLE

10. The Executive Secretary introduced this item. She reviewed briefly the list of working documents and reminded the Assembly that the report would be focused on decisions. In this view the drafting of formal draft decisions in the pre-session documentation was initiated at the 45th session of the Executive Council in 2012 and was extended to the present session. Referring to IOC-XXVII/Inf.1, the Executive Secretary reminded the Assembly that draft decisions would be agreed to during the discussion of each agenda item. The Action Paper was intentionally drafted as a pre-report in order to streamline the reporting process during the session. Taking into account the feedback from Member States at the Executive Council in 2012, a summary of the discussion that led to the decision under each agenda item was to be drafted during the session and was to be submitted to Member States under item 7. Member States that wished to have specific, particularly important, plenary interventions recorded, were invited to provide written records thereof in one of the four working languages of the Commission, to be annexed to the report, in their original language as an informational annex to this report. A template and a dedicated e-mail address (iocgovbody@unesco.org) was set up to this end. The Assembly was reminded that interventions would be limited to 5 minutes for Member States and 3 minutes for observers.

11. With reference to the timetable for the session, the Executive Secretary informed about the interpretation arrangements during the session and the possibility to hold extended evening sessions on Friday 28 June and Wednesday 3 July, if needed. Meetings of the Financial Committee were held with English and French interpretation. A calendar of side meetings during the session was updated in real time on the webpage of the Assembly. Participants were informed of several signings of agreements during the session.

12. No Member State representative took the floor.

3. STATUTORY REPORTS

3.1 STATEMENT OF THE CHAIRMAN ON THE STATE OF IOC

13. The Chair asked Frederico Saraiva Nogueira to read a statement on behalf of the IOC Officers ([Annex III.B](#)). Noting the financial crisis facing the IOC and the valuable platform it provided for collective Member State work, the Officers called on the Member States to consider making a minimum voluntary contribution to the operation of Commission programmes in line with the UN standard scale of assessments, to make up for an expected shortfall of about \$ 5 million for 2014–2015.

14. In accordance with rule of procedure 8.1(a), the Chair delivered an oral statement on recent developments in the work of the Commission and perspectives for the coming years ([Annex III.C](#)).
15. The representatives of 10 Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [India](#), [Japan](#), [Malaysia](#), [Republic of Korea](#) and [South Africa](#).
16. The Assembly congratulated the Chair for his report and agreed that future success of IOC will be dependent on Member State engagement in the work of the Commission.

3.2 REPORT BY THE EXECUTIVE SECRETARY ON PROGRAMME AND BUDGET (2012–2013) AND MEDIUM TERM STRATEGY (2008–2013) IMPLEMENTATION

17. In accordance with Rule of Procedure 8 (b) and 49, the Executive Secretary reported on the implementation of the Commission's Medium-Term Strategy (2008–2013) and on its programme implementation for the period 2012–2013 since the 45th Session of the Executive Council in 2012. For High-Level Objective (HLO) 1, she highlighted the establishment of new tsunami warning centres, training in standard operating procedures and progress made on the provision of real-time sea-level data for contributing to the four regional tsunami warning systems. In relation to HLO 2, she elaborated on activities related to climate change, on the ocean's role in climate variability, coastal change adaptation in Africa and on IOC's outreach activities for sensitising policy makers. For HLO 3, she gave an overview of activities carried out for the safeguarding of the health of the ocean, namely the Harmful Algal Bloom (HAB) programme, Marine Spatial Planning and the Ocean Biogeographic Information System. Regarding HLO 4, she reported on the role played by the IOC in the Rio+20 Conference and in the development of the UN *Oceans Compact*. She gave a historical review of the "Regular Process", now called the World Ocean Assessment, and highlighted the activities in Capacity Development and the setting up of the IOC Sub-Commission for Africa and Adjacent Island States.
18. In her report on the programme implementation for the period 2012–2013, under HLO 1, the Executive Secretary described the progress made in the provision of tsunami services in the four tsunami regions. Under HLO 2 she reported on the activities of the Global Ocean Observing System (GOOS), the Joint WMO-IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM) and highlighted the work plan of the new GOOS Steering Committee, collaboration with IOCCP and the Adaptation to Climate Change in Coastal zones of West Africa (ACCC). Under HLO 3, the Executive Secretary reported on the Harmful Algal Blooms programme, on the Ocean Biogeographic Information System (OBIS), the Marine Spatial Planning initiative and on the renewal of the agreement with Flanders for hosting the IODE Office. Under HLO 4, she elaborated on the World Ocean Assessment, Microplastics and the Global Environment Facility-funded Transboundary Waters Assessment Programme.
19. The Executive Secretary referred the Assembly to the Progress Report on Budget Execution (2012) and anticipated funding for 2013 (document IOC-XXVII/2 Annex 2) which provides a general overview with regard to the implementation of the 2012 budget as of 31 December 2012, including an overview of the IOC staffing situation. It follows the guidance on funding priorities provided by the IOC Executive Council in its decision EC-XLV/Dec.5.1 at its 45th session in June 2012.
20. The Progress report on budget execution (2012) and anticipated funding 2013 (document IOC-XXVII/2 Annex 2) was further examined by the Financial Committee for compliance with the guidance on budgetary allocations and priority funding provided by the IOC Governing Bodies. Validation of the IOC Programme and Budget for 2012–2013 was covered by the resolution submitted by the Financial Committee under items 6.1 and 6.2.

21. The Executive Secretary responded to interventions by the Member States and thanked the Member States for their very positive and encouraging comments concerning IOC's activities. She noted the remarks of several Member States about the fact that IOC has performed as well as in the previous biennium in spite of the budget cut. She pointed out that when she reported on the last Medium Term Strategy, much progress had already been made before the budget cut. Furthermore, in the last year IOC benefitted from the Emergency Funds from UNESCO from which funding for certain programmes was partially restored. However, the Emergency Funds will not be available in the coming years and unless extra-budgetary resources are found, it will not be possible to meet all demands. IOC is already losing its leadership in some areas. The impact is not visible immediately, but with limited funding for certain programmes, the situation will gradually deteriorate until the actions of IOC could become meaningless. This is the real danger of the decrease in funding.
22. The Executive Secretary commented on a remark about GOOS/GCOS/JCOMM benchmark of the one millionth Argo profile and mentioned that several Member States acknowledged the importance of the tsunami programme, Marine Spatial Planning, climate change and HAB. She expressed her sincere appreciation for the very positive comments made by the Member States.
23. The representatives of 21 Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Belgium](#), [Canada](#), [India](#), [Norway](#), [Republic of Korea](#), [South Africa](#) and [United States of America](#). ([Decision IOC-XXVII/Dec.3.2](#))

3.3 REPORTS BY THE CHAIRS OF THE IOC SUB-COMMISSIONS

3.3.1 IOC Sub-Commission for Africa and the Adjacent Island States (IOCAFRICA)

24. Dr Monde Mayekiso, Chair of the IOC Sub-Commission for Africa and the Adjacent Island States (IOCAFRICA) reported on the major outcomes of the 2nd Session of the Sub-Commission (Cape Town, South Africa, 3–4 April 2013). He highlighted progress on the development and the adoption of the Strategic Plan for IOCAFRICA, the development of capacity-development activities in the region and the strengthening of the sub-commission.
25. In a more prospective approach, Dr Mayekiso identified the challenges faced in the implementation of activities of the sub-commission and made proposals to address some of them.
26. China noted the progress made in the development of the Strategic Plan for the Sub-Commission and expressed its desire to strengthen collaboration with IOCAFRICA, especially in capacity development.
27. The Republic of Korea congratulated IOCAFRICA and expressed their willingness to continue support for the implementation of the Strategic Plan and Work Plan of the Sub Commission.
28. The Assembly expressed its gratitude to the Member States that have contributed resources for the implementation of the activities of the Sub-Commission, including the Belgium (Government of Flanders), Kenya, Republic of Korea and South Africa.
29. The representatives of four Member States took the floor. The following Member State chose to provide a record of its plenary intervention on this agenda item for the informational annex to the meeting report: [Republic of Korea](#). ([Decision IOC-XXVII/Dec.3.3i](#))

3.3.2 IOC Sub-Commission for the Western Pacific (WESTPAC)

30. The Chair of the IOC Sub-Commission for the Western Pacific (WESTPAC), Dr Somkiat Khokiattiwong, introduced this agenda item. He reported on the achievements made since a difficult revitalization process was initiated in 2008 by the WESTPAC Office with great support of all Member States. WESTPAC has established a systematic framework and collaborative process for coordinating the efforts of Member States in the development, establishment, and implementation of regionally-specific programmes/projects. He highlighted that, with those strategic planning and collaborative processes, a number of regionally-specific projects/programmes have been developed, coordinated and implemented in alignment with IOC High-Level Objectives. WESTPAC has been playing a pivotal role in the development and implementation of two Global Ocean Observing System Regional Alliances, nine region-specific scientific programmes, and one self-driven IOC Regional Network of Training and Research Centres on Marine Sciences. The WESTPAC International Scientific Symposia have been evolving as some of the largest gatherings among marine scientific communities. Meanwhile, the extrabudgetary support, both in cash and in kind, from Member States for WESTPAC Biennial Programme has been dramatically increased with a total value of more than US\$ 3 M.
31. In a more prospective approach many efforts still need to be made in strengthening the systematic and multidisciplinary approach to WESTPAC programme development, and enhancing the presence of IOC and its WESTPAC at country level with a view to addressing the requirements of relevant conventions, and international initiatives. To this end, Dr Khokiattiwong further invited the Assembly to endorse these strategic directions towards which WESTPAC will intensify its efforts, over the next ten years and beyond, including the development of country-specific programmes within the well-established regional collaborative framework; the establishment of partnerships/cooperation with relevant conventions, international programmes; the engagement of capable international experts into WESTPAC programmes; and the reinforcing of its WESTPAC Office based in Bangkok, Thailand in order to keep the present momentum and have greater achievements of WESTPAC in near future. In concluding, he invited Member States to join the celebration of the 25th Anniversary of WESTPAC starting in July 2013, Paris and ending in April 2015, Phuket Thailand, particularly the WESTPAC 9th International Scientific Symposium, 22–25 April 2014, Nha Trang, Vietnam.
32. The Assembly appreciated the significant achievements made by WESTPAC over 2008–2013 with joint efforts of all WESTPAC Member States and WESTPAC Office. The successful revitalization of WESTPAC has generated very positive outcomes and impacts as demonstrated by the ever-increasing commitments from Member States in the implementation of WESTPAC's rapidly growing programmes and activities, which also provides useful experience to be shared with other regions, and to help guide discussion on the future of IOC.
33. The Assembly expressed its gratitude with the Member States for their contributions made in support of WESTPAC, and welcomed offers from: China, Japan and Republic of Korea to continuously provide financial support and/or secondment to WESTPAC Office; Indonesia to launch the Widya Nusantara Expedition (E-Win) 2013; Malaysia to organize the World Ocean Week 2013; and Vietnam to host the WESTPAC 9th International Scientific Symposium 2015 in celebration of the 25th Anniversary of WESTPAC.
34. The representatives of 11 Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [China](#), [Indonesia](#), [Japan](#), [Malaysia](#), [Republic of Korea](#), [Thailand](#), [United States of America](#) and [Viet Nam](#). ([Decision IOC-XXVII/Dec.3.3ii](#))

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

35. The Vice-chairman of the IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE), Mr Francisco Brizuela-Venegas, introduced this item on behalf of IOCARIBE

Chairperson Dr Bonnie Ponwith. He reviewed developments in IOCARIBE focal programmes for 2012–2013: the Caribbean Large Marine Ecosystem (CLME); the IOCARIBE Global Ocean Observing System Regional Alliance (IOCARIBE-GOOS); the Harmful Algal Blooms in the Caribbean and Adjacent Regions (HAB-ANCA) programme; the Integrated Coastal Area Management (ICAM) programme; the Caribbean Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (CARIBE-EWS); the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico (IBCCA); the International Oceanographic Data and Information Exchange (IODE) and related Ocean Data and Information Network for the IOCARIBE and South America Regions (ODINCARSA); and the Caribbean Marine Atlas and Capacity Development.

36. Mr Brizuela-Venegas reported on the 12th Session of IOCARIBE including decisions related to: (i) the “Review of the IOCARIBE Secretariat”; (ii) a series of measures to strengthen the IOCARIBE Secretariat; (iii) the completion of the “Sustainable Management of the Shared Living Marine Resources of the Caribbean Large Marine Ecosystem and Adjacent Regions” CLME and the preparation of the CLME Strategic Action Programme; (iv) the work of the HAB-ANCA group; (v) the IOCARIBE-GOOS restructuring and re-organizing; (vi) the Programme and project implementation; and (vii) the IOCARIBE Programme and Budget for 2014–2015.
37. The IOCARIBE Vice-Chairman reported on activities completed after the IOCARIBE-XII Session in April 2013, including the completion of the CLME project and the technical approval by the CLME Steering Committee of its CLME Strategic Action Programme (SAP). The CLME is a US\$ 58 million project, including US\$ 8,6 million GEF support. By June 2013 the SAP had been endorsed by ministers of 18 countries. The “Project Identification Form” is in development and will be submitted in July 2013 to the Global Environmental Facility Council for their financial support.
38. Mr Brizuela also reported on the activities implemented within the framework of the World Ocean Assessment in the Region and the “Wider Caribbean Region Workshop”. He stressed the importance of actively participating in the Pool of Experts that includes nearly 60 representatives from the Caribbean as of April 2013.
39. He reported on the progress of the CARIBE-EWS. The second regional tsunami exercise, CARIBE Wave LANTEX was conducted on March 20, 2013 with the participation of over 25 countries. The Caribbean Tsunami Information Center (CTIC) was established in Barbados in 2013.
40. The IOCARIBE Vice-Chairman informed the Assembly about the Caribbean Marine Atlas. Five prototype national marine atlases are being implemented and an initiative completed with the CLME IMS/REMP creating a metadata inventory of data sources related to integrated coastal area management.
41. Mr Brizuela also referred to the “Review of the IOCARIBE Secretariat” of July 2012, conducted by UNESCO Internal Oversight Services (IOS) noting recommendations concerning the trial period for the office and the disposition of the IOCARIBE Secretary’s position.
42. Colombia made a formal offer to second a professional for supporting the work of the IOCARIBE Secretariat, and confirmed their commitment to continue hosting the Secretariat in Cartagena.
43. Belgium expressed their commitment to continuing to financially support IOCARIBE activities, and stressed the strategic importance of having a strong, well-staffed Secretariat.
44. The UNEP representative noted the strong co-operation with IOCARIBE, in particular, in: the work carried out within the CLME towards the sustainable use of fisheries and marine biodiversity; activities for the UN Regular Process – World Ocean Assessment, and the Global

Ocean Partnership with the World Bank; and with the GEF financed IWeco project, where the IOCARIBE Project "Demonstrate Approaches for Nutrient and Sediment Reduction at Selected Pilot Study Areas in the Wider Caribbean," is one of the key components.

45. Intervening Member States expressed their support for strengthening the IOCARIBE Secretariat by encouraging the restoration of the current IOCARIBE Secretary's position as a full time, permanent post located in Colombia.
46. The Assembly thanked the Government of Panama for having hosted IOCARIBE-XII, and expressed its deepest appreciation to the Government of Colombia for their continuous support to the IOCARIBE Secretariat over the years.
47. The representatives of 13 Member States and UNEP took the floor. The following Member States and one organization chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Belgium](#), [United Kingdom](#), [Venezuela \(Bolivarian Republic of\)](#) and [UNEP](#). ([Decision IOC-XXVII/Dec.3.3iii](#))

3.4 REPORT OF THE IOC (2012–2013) TO THE THIRTY-SEVENTH GENERAL CONFERENCE OF UNESCO

48. The Executive Secretary introduced this item. According to Art. 3.2 of the Statutes and Rule of Procedure 49.2, the IOC prepares regular reports on its activities, which shall be submitted to the General Conference of UNESCO. The IOC's report to the 37th General Conference of UNESCO (Paris, 5–20 November 2013) covered the period since the 36th General Conference (Paris, 25 October–11 November 2011) and focused on the main achievements in the implementation of the UNESCO Medium-term Strategy 2008–2013 (34 C/4) with respect to Strategic Programme Objective 3, "Leveraging scientific knowledge for the benefit of the environment and the management of natural resources", and Strategic Programme Objective 5, "Contributing to disaster preparedness and mitigation".
49. No Member State representative took the floor. ([Decision IOC-XXVII/Dec.3.4](#))

4. INTRODUCTION TO THE DRAFT PROGRAMME AND BUDGET FOR 2014-2017 AND IOC MEDIUM-TERM STRATEGY FOR 2014-2021

4.1 INTRODUCTION TO IOC DRAFT MEDIUM-TERM STRATEGY FOR 2014–2021

50. The Draft Medium-Term Strategy for 2014–2021 covers the period of eight years to be consistent with the new UNESCO medium-term planning context which also includes four-year programme cycles. In line with the IOC mission statement, a vision for the period 2014–2021 was formulated based on perceived societal needs, emerging ocean science issues and requirements for intergovernmental coordination. The Rio+20 conference has provided very useful and timely context for the role of IOC as expressed in the Draft Medium-Term Strategy, its high-level objectives and conceptual framework of functions. In addition to explaining the links to UNESCO Strategic Objectives, Expected Outcomes and Global Priorities, the Medium-term Strategy provides an analysis of the IOC's place and role in the UN system, as well as an overview of key partnerships and joint programmes.
51. The representatives of 14 Member States took the floor. They thanked Vice-Chairman Prof. Peter M. Haugan for his role in guiding the work of the Intersessional Financial Advisory Group. They stressed the importance of focusing the work of the Commission's programmes that have the strongest impact in terms of societal benefits, safety, protection of the marine environment and technological innovations. In this regard, the highest priority should be given to ocean observations, data assessment and exchange and early warning systems. Many Member States expressed the opinion that given the on-going discussions of the UN Secretary General's

Oceans Compact initiative and the diverging opinions on this subject, it would be premature to refer to it in the IOC Medium Term Strategy. (See decision under 6.2).

52. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Germany](#), [India](#), [Japan](#) and [United Kingdom](#).

4.2 INTRODUCTION TO IOC DRAFT PROGRAMME AND BUDGET FOR 2014–2017

53. The Draft Programme and Budget for 2014–2017 translates the strategic objectives defined in the Medium-Term Strategy into programme focus area with clear results expected at the end of the four-year period. While the programmes are defined for the quadrennial period 2014–2017, the budget allocation to them is proposed for the biennial period 2014–2015, in line with the UNESCO General Conference resolution (36 C/Res. 105) to maintain the biennial cycle for the appropriation of the budget and to move towards a result-based budgeting approach.

54. The current financial situation is difficult for UNESCO and its IOC. When designing this quadrennial programme, it will be crucially important to have a realistic appreciation of the possibilities and limitations within available budgets. While the proposed budgetary allocation for 2014–2015 is based on the funding attributed to the IOC under the UNESCO Zero Nominal Growth scenario of US\$ 653 M, the Secretariat requested the Assembly's guidance on the approach to adopt in case of a potential cash shortfall.

55. The representatives of 14 Member States took the floor. They stressed the importance of identifying programmatic priorities focusing on issues of global consensus, building on IOC core programmes and regional initiatives, as well as the need to find innovative ways of mobilizing extrabudgetary funding. In his concluding remarks, the Chair of the Financial Committee ensured that all the points made in the plenary debate were well noted and that they would be subject to further in-depth consideration by the sessional Financial Committee. (See decision under 6.2.)

56. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Germany](#), [India](#), [Japan](#) and [United Kingdom](#). ([Decision IOC-XXVII/Dec.4](#))

5. STRATEGY DEVELOPMENTS

5.1 GOVERNANCE

57. The Chairman reminded that the Sessional Working Group on the Future of IOC, established by EC-XLVI/Dec.2(III), was requested to report under this agenda item and offered the floor to the Chairman of the Group, Mr Javier Valladares, past Chairman of IOC.

58. Mr Valladares reported that the Working Group met only one time, on Thursday, 27 June. A letter submitted by Portugal to the Chairman of IOC was distributed to the participants at the beginning of the meeting (Annex to IOC/EC-XLVI/3s). Portugal introduced its letter indicating that the main issue is what Member States can do to prepare for the evolution of IOC as a major component of international cooperation on oceans.

59. Mr Valladares reported that the Group reached consensus that the IOC Governing Bodies should maintain in their agendas an item and mechanism to enable Member States to reflect and exchange ideas on the Future of IOC. It also consensually decided not to address the subject of the duality of the function/post of IOC's Executive Secretary and Assistant Director-General, and not to discuss the short-term planning and the Medium-Term Strategy that are addressed by the Financial Committee. The Group had a very substantive and positive dialogue, with more than 16 interventions by the Member States.

60. The Group suggested three areas where the IOC could improve. First the Group noted the need to rationalize cooperation and communication between IOC and other Organizations, internally through cooperation among Member States and dialogue among Member States' National Oceanographic Committees, and externally between IOC and other UN Organizations, including by identifying overlaps with a view to optimize research/cooperation within their respective mandates. Second, the Group recognized that by sharpening and clarifying IOC's identity, it would be viewed with higher pertinence by policy makers and the public in general. This could be achieved by recognizing the variety of global and regional needs and identifying the IOC with a small number of priority ocean service programmes supported by science within each High Level Objective (HLO), and by raising the visibility of IOC through clear branding associated with these successful key activities. Third, while recognizing that the success of IOC sustained ocean observations and services lies in a combination of intergovernmental procedures and more flexible arrangements, the Group identified that by enhancing flexibility and adaptability of IOC's governance it might increase the engagement of the ocean research community with IOC.
61. The report of Mr Valladares received general support from Member States and all thanked Portugal for having taken the initiative that triggered the discussion. Some Member States emphasized the regional aspect of IOC's work while many focused their interventions on the relevance of science as core to the work of IOC.
62. The representatives of 12 Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Canada](#), [India](#), [Republic of Korea](#), [United Kingdom](#), [United States of America](#) and [Venezuela \(Bolivarian Republic of\)](#). ([Decision IOC-XXVII/Dec.5.1](#))

5.1.1 UN Consultation and Coordination

63. The Head of the Ocean Sciences Section of IOC, Dr Luis Valdés, introduced the IOC contribution to various ocean-related UN inter-agency activities. As the focal point within the UN system for ocean sciences, observations, services, data and information exchange and transfer of marine technology IOC contributes to a number of UN processes, responds to the needs expressed by the UN General Assembly, and plays an active role in UN inter-agency mechanisms and activities. Dr Valdés highlighted several recent developments on UN-Oceans, GESAMP, activities on Rio+20 follow-up and Sustainable Development Goal process, the UN Secretary-General's Oceans Compact, the World Bank's Global Partnership for Oceans, the Global Framework for Climate Services, and the ITU-IOC-WMO Joint Task Force on submarine cables.
64. Nicaragua, on behalf of the Group of 77 plus China took the floor to express the concerns of the G-77 Member States and other Member States on the UN SG Oceans Compact and the need for further consultation with UN Member States on this matter. Following the statement, the Assembly requested the removal of the reference to the Oceans Compact and the initiative of the World Bank Global Partnership for Oceans in the proposed decision as well as in the resolution on financial matters.
65. The Assembly noted the need to take into account within the discussion on the Future of IOC, the role and mandate of IOC in UN inter-agency ocean-related initiatives.
66. The representatives of 14 Member States and Group of 77 plus China took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Canada](#), [Republic of Korea](#) and [United States of America](#). ([Decision IOC-XXVII/Dec.5.1.1](#))

5.1.2 Other Partnerships

67. The Deputy Executive Secretary and Head of the IOC Capacity-development section, Dr Mitrasen Bhikajee, presented the international initiative of a voluntary community of practice formed to convert into reality a concept to celebrate the 50th anniversary of the International Indian Ocean Expedition (IIOE) of the early 1960s (IOC/INF-1310). IIOE was one of the greatest early international inter-disciplinary oceanographic research efforts, bringing to bear the facilities of over 45 research vessels, under fourteen different flags, to explore through pioneering voyages of discovery the ecological mysteries of the Indian Ocean. He further recalled that the IOC had played a major role, along with SCOR, in coordinating and facilitating the IIOE, which had, in turn, contributed to the recognition of the IOC as a major force in international oceanography. The elaboration of the IIOE-2 concept started in 2011 under the auspices of the Scientific Committee on Ocean Research (SCOR), the Indian Ocean Global Ocean Observing System (IOGOOS) Regional Alliance, and the IOC represented by its Perth Regional Programme Office (PRPO). A Reference Group was created and met for the first time as the "IIOE-2 Reference Group", in India, 14–15 May 2013 hosted by the IOGOOS Secretariat based at INCOIS, Ministry of Earth Sciences, India; with the support of IOC and IMBER. The group, whilst being highly engaged and agreed in spirit for the concept and willing to continue, now requires broadening and secretariat-type support to cover the required spectrum of representation and planning to achieve the aspirations of an IIOE-2.
68. The representatives of five Member States and one observer (SCOR) took the floor and expressed support for IIOE-2 and identified it as an important activity. They further requested that the IOC play an important role in the promotion of IIOE-2 as this initiative would substantially raise the profile of the Commission. One Member State mentioned that it was unable to commit itself as discussions at the local level were still ongoing.
69. [United Kingdom](#), [IOI](#) and [SCOR](#) chose to provide records of their respective plenary interventions on this agenda item for the informational annex to the meeting report. ([Decision IOC-XXVII/Dec.5.1.2](#))
- 5.1.2.1 *Proposal for a Category-2 UNESCO Regional Educational and Research Centre on Oceanography for Western Asia, in Iran (Islamic Republic of)*
70. The Executive Secretary introduced this item by informing the Assembly of the proposal submitted by the Islamic Republic of Iran for the establishment in the country under the auspices of UNESCO of a Category 2 Regional Educational and Research Centre on Oceanography for Western Asia. She summarized the objectives of the Centre and introduced the UNESCO guidelines for the establishment and operations of the Centre and the results of the feasibility study of the proposal. The Executive Secretary also pointed out that the IOC would have no liability or financial responsibility for the Centre.
71. The representatives of 22 Member States took the floor and expressed their recognition of the capacity in oceanography of research institutions in the Islamic Republic of Iran, and further expressed their overwhelming support for the establishment in the country under the auspices of UNESCO of a Category 2 Regional Educational and Research Centre on Oceanography for Western Asia.
72. The Islamic Republic of Iran expressed its appreciation of the strong support expressed by the Assembly and reiterated its strong commitment to the establishment of the Centre.
73. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Iran \(Islamic Republic of\)](#), [Japan](#), [Malaysia](#), [Thailand](#), [United Kingdom](#) and [Venezuela \(Bolivarian Republic of\)](#). ([Decision IOC-XXVII/Dec.5.1.2.1](#))

5.1.2.2 *Endorsement of the IHO-IOC/GEBCO Sub-committee for Regional Undersea Mapping (SCRUM)*

74. The Permanent Secretary of the General Bathymetric Chart of the Oceans (GEBCO), Mr David Clark, introduced this item. Mr Clark reported briefly on the activities of the GEBCO Guiding Committee (IOC/INF-1305) and highlighted some of the objectives of the GEBCO programme over the next IOC Medium-Term Strategy (2014–2021). In accordance with the Terms of Reference of the GEBCO Guiding Committee, the Sub-committee for Regional Undersea Mapping (SCRUM) requires endorsement by both sponsors.
75. Member States recognized the importance of cooperation between IOC and the International Hydrographic Organization (IHO). Member States also supported the objectives and activities of GEBCO during the period of the next IOC Medium-Term Strategy, in particular those that coordinate, encourage, and provide an interface with the various regional bathymetric mapping efforts, including those carried out in Indian, Arctic and Southern Oceans.
76. The representatives of 9 Member States and IHO took the floor. The following Member States and one organization chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Chile](#), [India](#), [Japan](#), [United States of America](#) and [IHO](#). ([Decision IOC-XXVII/Dec.5.1.2.2](#))

5.1.3 **Role of IOC Subsidiary Bodies and Decentralized Offices**

77. The IOC Vice-chairman, Prof. Adoté Blim Blivi, introduced this item. He highlighted measures that had been taken in order to reinforce the Secretariats of IOC's Regional Subsidiary Bodies (RSB) despite financial difficulties, financial and in-kind support of Member States to Sub-Commissions, various secondments, and the review of IOCARIBE in order to optimise the presence of IOC in the regions. Prof. Blivi also reported on the work of the Meeting of the Regional Subsidiary Bodies that took place on Monday 24 June 2013 in conjunction with the Assembly under his chairmanship and reiterated the need to: (i) optimise financing mechanisms in the region; (ii) develop a strategic plan for the Regional Liaison Officer to work more efficiently with field offices; (iii) request Member States to contribute personnel to RSBs; and (iv) encourage Member States to assist in the development of activities in their region.
78. The Assembly reaffirmed the important role of the IOC Regional Subsidiary Bodies, notably the Sub-Commissions. The Assembly noted the successful revitalization of WESTPAC and commended Member States of WESTPAC for their support. Cooperation among the Sub-Commissions and with international and regional partners is important to build synergy and avoid duplication. In this regard, the Assembly welcomed with appreciation the cooperation between PICES and WESTPAC with the participation of UNDP in the field of capacity building including variability studies of living marine resources in North Pacific. The Assembly took note of the review of IOCARIBE and welcomed the establishment of IOCAFRICA which has a role to play both in the Mediterranean and Africa. Available resources should be used commensurate to the defined priorities, notably Africa. The future of IOC depends on the capacity of the regions to address their own issues at the regional level which in turn will contribute to the global programmes. The Assembly expressed concerns with the insufficient funding of activities and inadequate staffing of the Sub-Commissions with only one UNESCO Secretariat staff in each office. Subsequently, the Assembly called upon Member States and the Sub-Commissions to promote and support national and regional priorities. The Commission should reinforce the activities and staffing of the Sub-Commissions towards its own overall reinforcement.
79. The representatives of four Member States took the floor.
80. The Chair called upon Dr Mitrassen Bhikajee, Deputy IOC Executive Secretary, to introduce the Draft Resolution IOC-XXVII/DR.(5.1.3) Rev., "Establishment of the Perth Programme Office (PPO)". The Perth Programme Office (PPO) in support of the IOC of

UNESCO was established in 1998 with the support of the Director-General of UNESCO and the Executive Secretary of the IOC, but was never formally recognized by an IOC governing body. The PPO has supported the development of GOOS Regional Alliances and, in conjunction with other IOC programmes in the region, plays a related role in progressing the IOC's mission in general. A new draft tripartite agreement for the PPO between the Western Australian State Government, the Commonwealth Government of Australia (represented by the Bureau of Meteorology), and IOC-UNESCO is being negotiated.

81. Consistent with IOC Guidelines for the Establishment of Decentralized Offices (IOC/INF-1193), the GOOS Steering Committee (GOOS SC) was asked at its Second Meeting (25–27 March 2013, Qingdao, China) to consider the benefit of the PPO in implementing the GOOS Work Plan. The GOOS SC requested the IOC Executive Secretary to bring a draft resolution on the PPO as an IOC decentralized office to the IOC Assembly for its consideration.
82. Australia reiterated their support for the Perth Programme Office, proposed a change in its name to “Perth Programme Office” (PPO) from “Perth Regional Programme Office”, and noted that several positive independent reviews of the work of the Office had been conducted in the last 15 years, most recently in 2011.
83. The Assembly expressed its appreciation to the Australian Government for its support to the PPO and support for the proposal. In response to an Assembly request for clarification of the decision-making mechanism for the activities of the PPO, the Executive Secretary noted that the head of the PPO would be under her ultimate direction.
84. The representatives of eight Member States took the floor. The following Member States and one organization chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Australia](#), [Japan](#), [Thailand](#), [United Kingdom](#), [United States of America](#) and [PICES](#). ([Resolution XXVII-1](#))

5.2 OCEAN-RELATED HAZARDS

5.2.1 Regional Tsunami warning Systems

5.2.1.1 *Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System*

85. Mr Ken Gledhill (New Zealand), Chairman of the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System (ICG/PTWS), introduced this item. He reported on the developments of the ICG/PTWS, including the New Enhanced PTWC products for PTWS (IOC/2013/TS/105) and the on-going establishment of a Tsunami Warning System in the South China Sea Region, since the 24th Session of the ICG/PTWS (Beijing, China, 24–27 May 2011).
86. In a more prospective approach, Mr Gledhill identified the challenges facing PTWS development, in particular, on securing enough funding to enable ongoing operational training, particularly as the Enhanced Products are introduced, and while maintaining the current high levels of public tsunami awareness over the long term.
87. Canada stated that the ocean data from seafloor pressure sensors along the length of the Canadian Pacific cabled observatory of Ocean Networks Canada are available for use by the Pacific Tsunami group.
88. Member States expressed overall support to the activities of the ICG/PTWS and welcomed the progress made on Enhanced PTWC Products for PTWS. Ken Gledhill invited Member States to participate at the 25th Session of the Intergovernmental Coordination Group for the Pacific Ocean Tsunami Warning and Mitigation System (ICG/PTWS-XXV), 9–11

September 2013, Vladivostok, Russian Federation, to contribute to improving the current experimental Enhanced PTWC Products.

89. The representatives of eight Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Chile](#), [Japan](#) and [Russian Federation](#). ([Decision IOC-XXVII/Dec.5.2.2i](#))

*5.2.1.2 Intergovernmental Coordination Group for the Indian Ocean
Tsunami Warning and Mitigation System*

90. On behalf of Mr Rick Bailey (Australia), Chairman of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS), Dr Satheesh Shenoi, Chairperson of the ICG/IOTWS Working Group 2 on Tsunami Detection, Warning and Dissemination introduced this item. He highlighted developments since the 9th session of ICG/IOTWS including the transfer from the Interim Advisory Service (IAS) established in 2005 and operated by the United States of America and Japan to the IOTWS Regional Tsunami Service Providers (RTSPs) of Australia, India and Indonesia, which assumed full operational responsibility for provision of tsunami advisories for the Indian Ocean region on 31 March 2013.

91. In a more prospective approach, Dr Shenoi identified the challenges facing IOTWS development, in particular noting that the IOTWS is meeting the needs of its Member States, including sustaining the detection network, providing regular training programmes to maintain national capacity as systems and RTSP products are enhanced, and organizing biannual IOTWS Communications Tests and biennial Indian Ocean Wave exercises.

92. The Assembly expressed its support for the Regional Tsunami Service Providers for the IOTWS —Australia, India and Indonesia— and expressed its gratitude to Japan and the United States of America for having provided the interim tsunami advisory service for the Indian Ocean region since April 2005 via the Japan Meteorological Agency and the Pacific Tsunami Warning Center. Australia reported that it had recently signed an agreement with the IOC to fund the Secretariat for the ICG/IOTWS in Perth, Western Australia, for an additional two years. India confirmed that it would host a workshop on Standard Operating Procedures and training for National Tsunami Warning Centres in Hyderabad in 2014.

93. Dr Satheesh Shenoi acknowledged the Assembly's appreciation of the progress made in the IOTWS. He thanked Australia for its continuing support for the ICG/IOTWS Secretariat in Perth, Western Australia.

94. The representatives of four Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [India](#) and [Iran \(Islamic Republic of\)](#). ([Decision IOC-XXVII/Dec.5.2.2ii](#))

*5.2.1.3 Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards
Warning System for the Caribbean and Adjacent Regions*

95. Ms Christa von Hillebrandt Andrade, Chairperson of the Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE-EWS), introduced this item. She highlighted the efforts that are being made to strengthen the detection system for CARIBE-EWS, the decision to hold annual tsunami wave exercises and the establishment of the Caribbean Tsunami Information Center.

96. In a more prospective approach, Ms von Hillebrandt Andrade outlined the elements that still need to be implemented before CARIBE-EWS can be considered established and

operational. These elements are further strengthening of the geophysical and oceanographic monitoring, establishment of a Tsunami Warning Centre in the region, Member States strengthening their warning capabilities including completing hazard assessments, and strengthening public awareness and education. Implementing these elements will require financial resources and multi-disciplinary and multi sectoral collaboration.

97. USA reminded the Member States of its commitment to the Caribbean for its phased approach to the establishment of a tsunami warning centre in the region. All Member States indicated support to the activities of the ICG/CARIBE-EWS. Some recalled that there is still a need to complete the sea level observational network for the Caribbean.
98. Ms von Hillebrandt Andrade appreciated and acknowledged the support from Member States to the ICG/CARIBE-EWS and noted that as is the case of other regions of the world, the Caribbean is also affected by other coastal hazards and is building its observational system with a multi-hazard approach.
99. The representatives of five Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Dominican Republic](#), [Saint Vincent and the Grenadines](#) and [Venezuela \(Bolivarian Republic of\)](#). ([Decision IOC-XXVII/Dec.5.2.2iii](#))

5.2.1.4 Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas

100. Mr François Schindelé, Chairman of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS), introduced this item. He reported on the developments of the ICG/NEAMTWS, notably the start of the operational activities of three national tsunami warning centres and candidate tsunami watch providers (CENALT–France; NOA–Greece; KOERI–Turkey), the adoption of the criteria and procedures for the accreditation process of the candidate tsunami watch providers (CTWP), the organization of the NEAMWave12 exercise on 27–28 November 2012, and the completion of the first phase of the NEAM Tsunami Information Center (NEAMTIC).
101. In a more prospective approach, Mr Schindelé highlighted the challenges for NEAMTWS. There is still very low awareness of the public and the authorities on the tsunami risk. The vulnerability of the Mediterranean coast is high, due to numerous infrastructures along the coast line (harbours, marinas and hotel resorts). During the summer, more than one million people use the beaches, several of which are located in seismic zones where tsunami waves can reach the shoreline in less than 15 minutes. In that respect, information on a potential tsunami needs to be disseminated very rapidly. At national and international levels, the success of the system depends on the close cooperation between the national tsunami warning centres and the civil protection agencies. The success of the NEAMTWS also depends on the participation of all countries bordering the Mediterranean Sea and North-eastern Atlantic Ocean, and there are still countries that have not nominated tsunami national contact and tsunami warning focal points. Mr Schindelé emphasized that the detection networks need to be sustained by national and international funding and stressed that NEAMTWS has to be tested through periodic exercises. Finally, Mr Schindelé raised the issue of awareness of the public at large but also of the tsunami scientific community of the work done by UNESCO-IOC in the field of tsunami warning systems. Mr Schindelé suggested that an awareness raising campaign should be organized with the support of UNESCO.
102. Member states congratulated the ICG/NEAMTWS and the Technical Secretariat for the achievements of the last biennium, including the establishment by several nations of their National Tsunami Warning Systems acting as Tsunami Watch Providers. The Assembly noted

the value of sharing other ICGs experience and expertise for forecasting modelling and simulation and risk assessment methodologies.

103. Turkey announced that it will host the 26th Symposium of the IUGG Tsunami Commission from 25 to 28 September 2013 (Fethiye-Göcek, Turkey). The organization committee of the symposium is led by Prof. Yalciner, the Vice-chair of the ICG/NEAMTWS.
104. Portugal announced the creation of a National Tsunami Warning Centre which will be officially set up by the end of 2013.
105. The representatives of four Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Algeria](#) and [Turkey](#). ([Decision IOC-XXVII/Dec.5.2.2iv](#))

5.2.2 Global Coordination of Warnings and Mitigation Systems for Ocean Hazards (TOWS-WG)

106. Mr Yutaka Michida, Chairman of the Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (TOWS-WG) introduced this item. He reported on the decisions and recommendations of the 6th meeting of TOWS-WG. In closing he stressed the need for continued inter-ICG cooperation and harmonisation, encouraged Member States to provide extrabudgetary support to the ICGs and underlined the particular importance of the transition of the IOTWS and NEAMTWS to an operational level of functioning.
107. Member states expressed support for continued inter-ICG coordination through TOWS.
108. The representatives of 18 Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [China](#), [Ecuador](#) and [United States of America](#). ([Decision IOC-XXVII/Dec.5.2.2v](#))

5.3 OBSERVING SYSTEMS, DATA MANAGEMENT

5.3.1 The Future Needs for Intergovernmental Coordination and Governance for Sustained Ocean Observations and Services

109. The IOC Vice-Chairman for Group III, Captain (Ret.) Frederico Antonio Saraiva Nogueira, introduced this item. He recalled that addressing some ocean-related hazards and societal challenges required long-term observations and services including forecasts. The IOC Executive Council at its 45th session (2012) decided to establish an inter-sessional consultation to identify scientific and technical issues within the IOC mission and mandate, in order to improve IOC's activities in the area of sustained ocean observations and services. This consultation was done by questionnaire, with 29 Member State responses received by the secretariat. Additionally, an expert workshop on "The Present Status of Sustained Ocean Observations and Services in Caribbean and Latin America Countries (Group III)" (Rio de Janeiro, Brazil, 6–8 March 2013), supported by the Republic of Korea and Brazil, provided additional input.
110. The capacities of Member States in sustained ocean observations and services vary widely. Many Member States engage in such activities, largely with a national focus on national users, in many cases government agencies. A common impediment to implementation was a lack of national governmental awareness and understanding of the potential benefits of ocean-related services to respond to national societal and development challenges. Given the established mandates of GOOS, JCOMM and IODE in the global coordination and development of sustained ocean observations and services, Mr Nogueira invited the Assembly to call on these IOC programmes to review the results of the consultation and incorporate actions to address these findings in their respective work plans.

111. The Assembly thanked Mr Nogueira for his report, and emphasized the importance of sustained ocean observations, services, and the transformation of ocean data into actionable information in achieving Member State objectives. The Assembly proposed that the consultation could be updated with further Member State responses, and that its extended findings would be an important input to the "Future of IOC" working group (see Agenda Item 5.1). The Assembly noted that all sustained ocean observations and services activities of the IOC should fall under the framework of the UN Convention on the Law of the Sea.
112. The representatives of 13 Member States and IODE took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Brazil](#), [Canada](#), [Japan](#), [Republic of Korea](#), [South Africa](#), [Thailand](#) and [United Kingdom](#). ([Decision IOC-XXVII/Dec.5.3.1](#))

5.3.2 Global Ocean Observing System

113. The co-chair of the IOC-WMO-UNEP-ICSU Global Ocean Observing System Steering Committee (GOOS-SC), Mr John Gunn, introduced this item. Through Resolution XXVI-8, the Assembly decided that the GOOS-SC "will produce a biennial Work plan for consideration and adoption by the Assembly." It further decided that amongst the membership of the GOOS SC "five experts will be appointed by Member State 'Electoral Groups' during the IOC Assembly, one from each group."
114. Mr Gunn reported on the status of GOOS, its engagement with partners and the scientific community, and the activities of the GOOS Steering Committee and its panels. He recalled that the 26th Assembly in 2011 had decided to orient GOOS around the Framework for Ocean Observing (IOC-XXVI/Dec.4.7, IOC/INF-1284 rev.), including an expansion of GOOS to monitor ocean biology and biogeochemistry in addition to physical variables, and serving new scientific and societal challenges. The GOOS SC had met twice since the last Assembly. Mr Gunn expressed gratitude to China for hosting the 2nd GOOS SC Meeting (25–27 March 2013, Qingdao), and outlined its outcomes, including the proposed GOOS Work Plan for 2014–2015 (GOOS-199 Annex 1). The GOOS SC expressed particular concern at the human and financial resources available to support the GOOS Work Plan. IOC funding can, in a best case scenario, only supports about 50% of the proposed costed Work Plan. The GOOS SC gave priority to sustaining the activities in global climate observations through the Physics Panel, and decided that biogeochemical and biology/ecosystems activities will not progress until the required funding is secured. Fundraising is an important goal of the GOOS SC.
115. Mr Gunn additionally reported on the outcomes of the Sixth GOOS Regional Forum (14–16 May 2013, Hawaii, USA) and proposed a revision of the GOOS Regional Policy to reflect the revised GOOS structures. The revised Policy ensures that the GOOS Regional Alliances (GRAs) become a key implementation arm of GOOS, along with national observing systems. The GRAs have assessed their strengths, weaknesses, opportunities, and threats. GOOS and the IOC should prioritize capacity development for ocean observations in order to achieve their objectives. GOOS has worked closely with IODE and JCOMM in accomplishing its objectives.
116. The Assembly thanked Mr Gunn for his presentation of the progress of the GOOS SC. It identified GOOS as a key IOC programme, and welcomed its expansion into biogeochemical and biological/ecosystems observations.
117. China stated that it would positively consider the possibility of setting up an IOC/GOOS Support Office, hosted by the State Oceanic Administration (SOA), to strengthen co-ordination of GOOS and JCOMM in the future.
118. Responding to a statement from Turkey, the Secretariat urged all Member States deploying Argo profiling floats to comply with relevant IOC resolutions for notification of coastal Member States.

119. The representatives of 15 Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Belgium](#), [Canada](#), [China](#), [India](#), [Japan](#), [Turkey](#) and [United States of America](#). ([Decisions IOC-XXVII/Dec.5.3.2i-iii](#))

5.3.3 Joint IOC-WMO Technical Commission for Oceanography and Marine Meteorology (JCOMM)

120. The Co-President of the Joint IOC-WMO Technical Commission for Oceanography and Marine Meteorology (JCOMM), Dr Nadia Pinardi, introduced this item. JCOMM is a Primary Subsidiary Body of the IOC Assembly and reports under IOC Rule of Procedure 48.3.
121. Dr Pinardi introduced elements of the JCOMM Strategy 2012–2016, whose Executive Summary was approved at JCOMM-4 (28–31 May 2012, Yeosu, Republic of Korea), and is under review and revision by the JCOMM Co-Presidents and Management Committee; as well a synthesis of the JCOMM Operating Plan 2013–2016 developed by the Management Committee and Secretariats. The Operating Plan is aligned with the adopted JCOMM 2012–2016 work plan, the Programme and Budget of IOC and the Operating Plan of WMO, and notably details activities and their required and identified financial resources. Dr Pinardi also introduced the common objectives between the JCOMM Strategy and the draft IOC Medium-Term Strategy for 2014–2021.
122. The Assembly appreciated the report of Dr Pinardi and provided guidance to the work of JCOMM.
123. The representatives of eight Member States and the WMO took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [China](#), [Germany](#), [Iran \(Islamic Republic of\)](#), [Japan](#) and [South Africa](#). ([Decision IOC-XXVII/Dec.5.3.3](#))

5.3.4 IOC Committee on International Oceanographic Data and Information Exchange (IODE)

124. The IODE Co-Chairman, Mr Ariel Troisi, introduced this item. IODE is the oldest Primary Subsidiary Body of the IOC Assembly and reports under IOC Rule of Procedure 48.3.
125. Mr Troisi provided a brief overview of the outcome of the 22nd Session of the IOC Committee on International Oceanographic Data and Information Exchange (IODE) held in Ensenada, Mexico on 11–15 March 2013. The Session adopted 20 recommendations that provided a clear path to IODE's restructuring and re-organization. The key recommendations established a joint IAMS LIC-IODE group of experts on marine information management, an ocean data standards and best practices project and associated clearing house for data/information management practices, the IODE Associate Data Unit and IODE Global Data Assembly Centres as new structural elements, the IODE Quality Management Framework, and also revised the IODE objectives. The Committee adopted a work plan and budget that, taking into account the UNESCO financial crisis, would be based mainly on income from extra-budgetary sources. Mr Troisi also recalled discussions at IODE-XXII on the continued need for IODE and invited the Assembly to consider the same question.
126. Mr Troisi reported on the decision of the Committee to adopt a revised IOC Strategic Plan for Oceanographic Data and Information Exchange (2013–2016) and to submit it to the Assembly for endorsement.
127. The Chair, Mr Sang-Kyung Byun, presented an IOC Certificate of Appreciation to Sydney Levitus (represented by Mr Craig McLean, Head of Delegation of the United States of

America) for his outstanding contribution to the scientific and ocean data management communities.

128. Belgium (Government of Flanders) informed the Assembly that the agreement for the hosting of the IOC Project Office for IODE had been renewed until 31 December 2016. Additional funding would be made available to IOC and its IODE through the Flanders-UNESCO Trust Fund for Science (FUST).
129. The Russian Federation announced that the Partnership for the IODE Ocean Data Portal (Obninsk) would be officially inaugurated on 10 September 2013. Canada added that Mr Tobias Spears had been designated as Ocean Data Portal Project Manager as an in-kind contribution to IODE as from May 2013.
130. India informed the Assembly that the ITCOOcean facility in Hyderabad would work closely with the OceanTeacher Academy in organizing training activities, recalling the successful testing of video-conferencing based multi-site teaching in March 2012.
131. The Assembly re-iterated the importance of IODE as a key programme of the Commission which cuts across and provides services and products to all IOC programmes.
132. The Assembly expressed its appreciation to the Government of Flanders (Belgium), India, Russian Federation, Mexico and Canada for their direct support to IODE, and to all IOC Member States for their in-kind support through their National Oceanographic Data Centres (NODCs) and through sponsoring national experts in IODE meetings and activities.
133. The Assembly, while recognizing the current financial crisis, urged the continuation or revitalization of the Ocean Data and Information Networks (ODINs) in all regions, referring to the success of the well-funded ODINAFRICA.
134. The Assembly expressed great appreciation for the important decisions taken at IODE-XXII and in particular on the restructuring of IODE and the adoption of a Quality Management Framework. The Assembly further welcomed the considerable increase in cooperation between IODE and other organizations such as ICSU/WDS, SCOR, JCOMM, etc. The Assembly further stressed the importance of the OceanTeacher project that ensured that all Member States could acquire the necessary skills in not only ocean data and information management, but increasingly also in other areas of IOC's mandate.
135. The representatives of 23 Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Belgium](#), [Canada](#), [India](#), [Iran \(Islamic Republic of\)](#), [Japan](#), [Mozambique](#), [Republic of Korea](#), [South Africa](#), [Turkey](#), [United Kingdom](#) and [United Republic of Tanzania](#). ([Decision IOC-XXVII/Dec.5.3.4](#))

5.3.4.1 *Ocean Biogeographic Information System (OBIS)*

136. The Executive Secretary, introduced this item. She informed the Assembly on the importance of OBIS in IOC, the visibility OBIS gives to IOC and the important scientific and international recognition of OBIS.
137. The adoption of OBIS into IODE (IOC Resolution XXV-4) brought stewardship responsibilities to IOC Member States for the world's only global, standardized marine biogeographic data system. However, IOC has not yet been able to find a sustainable funding situation for OBIS beyond 2014, and it now risks losing its world leading position in coordinating the network of marine biodiversity science projects, programmes and institutions. IOC and its IODE risk losing credibility with the scientific community. Losing OBIS will have an immediate impact on IOC, the OBIS network and the Member States, but the long-term effects will be much larger.

138. The Assembly expressed its appreciation to the OBIS Secretariat for the significant achievements so far and stressed the importance of OBIS as a priority and flagship project of the Commission, serving all IOC programmes. The Assembly recognized that OBIS is the world's largest database on marine biodiversity and is needed for global reporting on the state of our ocean, such as the UN World Ocean Assessment, and is key for setting standards and best practices in marine biodiversity data management and data exchange. The Assembly recognized that it cannot afford to lose one of its most important activities and urged all Member States to support OBIS. The Assembly also noted the need for a regular programme position for OBIS as currently proposed under IOC's draft budget.
139. Belgium, USA, Brazil, Canada, Ukraine, Bolivarian Republic of Venezuela, France and United Kingdom expressed their willingness to assist in finding a solution to ensure the continuation of OBIS under IOC
140. China offered to host a mirror of the OBIS infrastructure of the OBIS data and information service. Canada offered to further investigate possibilities for direct funding for OBIS.
141. India is hosting a national OBIS node, a mirror site of the OBIS database and contributes indirectly by providing man power. India wishes to contribute further in providing support for developing dissemination and visualization tools.
142. The Assembly expressed its appreciation to the Government of Flanders (Belgium) for hosting the OBIS Secretariat, as well as to India, the United States and the Bolivarian Republic of Venezuela for their in-kind support to core activities of OBIS, and to all Member States who continued supporting their national and regional OBIS nodes.
143. The representatives of 13 Member States and the Joint Programming Initiative for Healthy and Productive Seas and Oceans (JPI-Oceans) took the floor. The following Member States and one organization chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Belgium](#), [Canada](#), [India](#), [United Kingdom](#), [United Republic of Tanzania](#), [United States of America](#), [Venezuela \(Bolivarian Republic of\)](#) and JPI-Oceans. ([Decision IOC-XXVII/Dec.5.3.4.1](#))

5.3.5 WMO-ICSU-IOC-UNEP Global Climate Observing System (GCOS)

144. The Director of the Global Climate Observing System (GCOS) Secretariat, Dr Carolin Richter, introduced this item. GCOS was established in 1992 and is sponsored by the WMO, IOC, UNEP and ICSU. GCOS is an internationally-coordinated network of observing systems, for atmosphere, ocean (led by the joint GCOS-GOOS-WCRP Ocean Observations Panel for Climate, OOPC) and terrestrial domains and a programme of activities that support and improve the networks. The OOPC secretariat is now hosted by GCOS in Geneva at the WMO. Dr Richter emphasised that for a strong Global Climate Observing System, GCOS needs a strong Global Ocean Observing System.
145. Dr Richter presented the GCOS Work Plan 2013–2016, including the next steps of the GCOS improvement and assessment cycle. The outcomes of a programmatic and observing system review and assessment of GCOS will be reported at the next IOC Assembly.
146. Dr Richter highlighted the link to the Global Framework for Climate Services and hence the need for GOOS to deliver into this mechanism, which will be delivered through the Ocean Observations Panel for Climate (OOPC).
147. The Assembly appreciated the flexibility of the GCOS secretariat to support the on-going activities of IOC.
148. The representatives of two Member States took the floor. ([Decision IOC-XXVII/Dec.5.3.5](#))

5.4 OCEAN SCIENCE AND RESEARCH

5.4.1 WMO-IOC-ICSU-UNEP World Climate Research Programme (WCRP)

149. Dr Vladimir Ryabinin, on behalf of the Director of the World Climate Research Programme, Dr Ghassem Asrar, reported recent progress achieved by the WCRP to improve knowledge and understanding of global and regional climate variability and change, and to develop improved numerical models and climate projections, with particular emphasis on the priorities of IOC Member States. WCRP priorities are based on guidance by Sponsors, taking ocean research priorities as conveyed by IOC. WCRP defined its strategy in 2005, reviewed it in 2008, and in 2009 initiated an implementation plan for the period 2010–2015.
150. WCRP's on-going work coordinating research and climate projections will have increased focus on the decadal and regional scale., Analysis, assessment and prediction of sea-level variability and change, especially at the regional level, are a key focus for WCRP and an area of active programmes with IOC.
151. Among other achievements since 2011, WCRP has been developing implementation plans for the Grand Science Challenges by involving a broad and yet expanding oceanographic research community that has facilitated strong capacity development, education and outreach activities.
152. WCRP action contributes to the IOC High-level Objectives, to the UNESCO Intersectoral Platform on Climate Change, and to the individual national objectives of IOC Member States as they develop climate research, mitigation, and adaptation strategies. WCRP reaffirmed its unconditional commitment to actively and ably support IOC and UNESCO fulfilling their missions with respect to climate, while expressing concern about the proposed reduction in IOC's financial contribution to WCRP.
153. The Assembly noted that activities undertaken by the WCRP are very important for the IOC and the UNESCO work agenda, especially WCRP's recent emphasis on regional scientific activities in developing countries, and science to protect lives and property.
154. Brazil confirmed their commitment to host the 3rd International Symposium on "Effects of climate change on the world's oceans" in Santos, in the spring of 2015, organized by the University of São Paulo along with IOC, PICES and ICES.
155. Dr Ryabinin reiterated that WCRP is committed to serve IOC Member Countries, as a science supporting organization with an increasing emphasis on regional scale climate information and modelling. Within this framework he noted the WCRP Coordinated Regional Climate Downscaling Experiment (CORDEX) which will focus on regional systems, including Africa, and the development of a new generation of prediction systems.
156. The representatives of six Member States, PICES and WMO took the floor. The following Member States and one organization chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [China](#), [United States of America](#) and [PICES](#). ([Decision IOC-XXVII/Dec.5.4.1](#))

5.4.2 Intergovernmental panel on Harmful Algal Blooms (IPHAB)

157. The Chair of the IOC Intergovernmental Panel on Harmful Algal Blooms (IPHAB), Dr Robert E. Magnien (USA), introduced this item, including providing an overview of the impact of harmful algal blooms (HAB), and presented the report, work plan, decisions and recommendations of the Eleventh Session of the IOC Intergovernmental Panel on Harmful Algal Blooms Paris, 28–30 April 2013.

158. The IPHAB Chairman emphasized the decisions and recommendations made regarding an international strategy for international cooperative research on HABs in a changing world: A New Global Approach to HAB Research to Meet Societal Needs; the development of a Global HAB Status Report; capacity building; a focussed effort to address Ciguatera, and the regional development of the Programme.
159. The IPHAB Chairman requested the assistance of the Assembly in ensuring participation in IPHAB of the Member States not already members and recognition in the appropriate national agencies and institutions of IPHAB.
160. The IPHAB Chairman urged the IOC Member States to carefully match the HAB Programme Work Plan with national priorities and potential funding in order to actively interact with and support its implementation.
161. The Assembly reiterated the widespread and permanent impacts of HAB events on fisheries, aquaculture, human health, and tourism. The Assembly confirmed the importance of shared efforts and cooperation in both HAB research and management practises. The Assembly underlined the importance of coordination between global and regional IOC HAB Programme activities to avoid duplication, enhance synergies and economise resources. The Assembly welcomed the development of a regular Global HAB Status Report and saw it as complimentary to the World Ocean Assessment. Furthermore, the development of GEOHAB into a research agenda for the coming decade entitled GlobalHAB was welcomed including a strong focus on Ciguatera jointly with WHO and FAO. The Assembly noted the long-term capacity building efforts of the IOC HAB Programme, particularly those for African Member States. The initiative on HABs and desalination was commended.
162. The Assembly expressed its appreciation to Denmark for its longstanding commitment to hosting the IOC Science and Communication Centre on Harmful Algae, to Japan for its longstanding support to WESTPAC-HAB and to Republic of Korea and Spain for their important cash and in-kind support. Denmark confirmed its commitment to do all it can to continue to host the Centre.
163. The representatives of 15 Member States and PICES took the floor. The following Member States and one organization chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Chile](#), [Iran \(Islamic Republic of\)](#), [Monaco](#), [Republic of Korea](#), [Thailand](#), [United States of America](#) and [PICES](#). ([Decision IOC-XXVII/Dec.5.4.2](#))

5.4.3 Nutrient Pollution

164. IOC Programme Specialist, Mr Henrik Enevoldsen, introduced the IOC contribution to Nutrients and Coastal Impacts Research Programme (N-CIRP), as an integrative programme linking IOC and other international programmes. The N-CIRP Plan includes not only coastal marine ecosystem effects, but also other issues such as climate interactions with coastal nutrient loading and effects, consequences of ecosystem changes for tourism, and elements such as institutions and governance, and cross-cutting issues such as climate change impacts. Mr Enevoldsen informed also about the joint UNEP-IOC GEF Project "Global foundations for reducing nutrient enrichment and oxygen depletion from land-based pollution, in support of Global Nutrient Cycle" which was launched late 2011 and has a science component designed to support the N-CIRP work plan, with a focus on global relationships between nutrient loading of coastal marine ecosystems.
165. Due to interpretation time constraints the IOC Chair invited the Member States to go immediately to consider the decision. ([Decision IOC-XXVII/Dec.5.4.3](#))

5.4.4 Integrated Coastal Area Management (ICAM)

166. In accordance with IOC-XXVI/Decision 8.2, the ICAM Coordinator, Mr Julian Barbière, introduced this item and provided a progress report on the implementation of the ICAM Strategy, covering activities that are being developed in the field of Marine Spatial Planning (MSP), coastal hazards mitigation, and decision-support tools for coastal and ocean management. In this context, the development plans and objectives of a new GEF Project entitled “Strengthening Global Governance of Large Marine Ecosystems (LME) and their Coasts” to be implemented through IOC, was presented.
167. The Assembly welcomed the report on the implementation of ICAM Programme Strategy and highlighted the relevance of the three Programme Strategic Objectives and supporting activities on ecosystem based management, marine spatial planning, coastal adaptation and hazard mitigation.
168. A number of Member States expressed support to the SPINCAM project (South-East Pacific Data and Information Network in support to Integrated Coastal Area Management), which is aimed at supporting national ICAM policies in the South East Pacific region, recognizing the effective coordination role of IOC and CPPS in this context, and thanked the Government of Flanders (Belgium) for agreeing to fund a second phase of the project.
169. The Assembly welcomed the anticipated IOC role in the coordination of the new GEF LME Project, and agreed that it provides an essential platform for translating IOC science programmes in support of GEF interventions, and therefore of Member States’ efforts in implementing ecosystem based management. The Assembly also noted the leading role of IOC in the FP7 Project PEGASO (People for Ecosystem Based Governance in Assessing Sustainable Development of Ocean and Coast), which is supporting the development of national Coastal Information System and National ICZM Programmes in the Mediterranean and Black Sea regions.
170. Member States proposed that the ICAM Programme consider organising a Marine Spatial Planning workshop and extending the experience of the ACCC project (Adaptation to Climate Change - Responding to Coastline Change in its Human Dimensions in West Africa through Integrated Coastal Area Management) to the Central Western African region.
171. The representatives of 12 Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Belgium](#), [India](#), [Iran \(Islamic Republic of\)](#) and [United States of America](#). ([Decision IOC-XXVII/Dec.5.4.4](#))

5.4.5 A Regular Process for Global reporting and assessment of the state of the Marine Environment, including Socio-economic Aspects (UN Regular Process) – World Ocean Assessment

172. The Coordinator of the UN Group of Experts of the Regular Process, Mr Alan Simcock, provided an overview on the of the main developments that have taken place in the implementation of the Regular Process, including the organization of a cycle of Regional Workshops, progress in the establishment of the Regular Process Pool of Experts that will support the preparation of the World Ocean Assessment (WOA). He invited IOC Member States to support the work of the Group of Experts, specifically by: (i) identifying additional experts to be nominated to the Pool of Experts; (ii) providing resources for the organisation of meetings of the Group of Experts and Contributors; (iii) providing information and data through IOC programmes as well as technical comments on the chapters to be developed. Mr J. Barbière, IOC Secretariat, also provided information on IOC’s contribution to the work of the Group of Experts (GoE) as described in IOC/INF-1301. He highlighted the involvement of IOC in all UN regional workshops that were organised from 2011 to 2013, as well as the Commission

participation at the Group of Experts and Ad Hoc Working Group meetings in 2012 and 2013. A list of resources (such as assessment and data products, marine indicators) that can be made available in support of the WOA, including through the GEF Transboundary Waters Assessment Programme, have been identified by IOC. Numerous proposals on Capacity development were also put forward by IOC at the recent Ad Hoc Working Group Meeting (April 2013).

173. The Assembly expressed wide support for the role played by the Commission in providing scientific and technical support to the UN Regular Process. The Assembly stressed the need for Member States to continue nominating national experts to the Pool of Experts in order to reach an appropriate level of engagement from the scientific community in support of the WOA activities.
174. The Assembly emphasized the essential need to strengthen the capacity of nations in conducting integrated marine assessments, and stressed that IOC, including through its regional subsidiary bodies, was in a prime position to lead WOA capacity development activities, in cooperation with other relevant UN agencies and scientific bodies.
175. The Chairperson of WESTPAC informed the Assembly that a 1st Regional WOA Capacity Building Workshop was organised together with UNEP and APN in Bangkok, Thailand on 17–19 September 2012. WESTPAC will continue to build its Member States capacity by mobilizing funding in support of regional expert workshops and the development of integrated marine assessment tools with other relevant regional partners.
176. China stated its intention to support capacity development activities, through the IOC, in support of the WOA, including through the potential establishment of a dedicated training centre.
177. Brazil and India informed the Assembly of their intention to organise UN Regular Process regional workshops, respectively for the South Atlantic, and Northern Indian Ocean regions (December 2013, Chennai, India).
178. Some Member States recognised the relevance of the TWA Programme, in terms of providing baseline indicators to the WOA process, and stressed the need for the WOA to build on existing global and regional assessments such as the IPCC and the assessments conducted in the framework of the Arctic Council.
179. The representatives of 15 Member States took the floor as well as the representatives of WESTPAC and PICES. The following Member States and one organization chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Canada](#), [India](#), [Thailand](#) and [United Kingdom](#) and [PICES](#). ([Decision IOC-XXVII/Dec.5.4.5](#)).

5.5 CAPACITY DEVELOPMENT

5.5.1 Development of a New Capacity Development Strategy

180. The Deputy Executive Secretary and Head of the IOC Capacity-development section, Dr Mitrasen Bhikajee, explained the rationale of developing a new Capacity Development Strategy, taking into consideration recent decisions of the Rio+20 Conference.
181. Dr Venugopalan Ittekkot, IOC Consultant, presented the results of a survey on Capacity Development needs carried out in a sample of 20 Member States and the additional information gathered during a joint meeting of IOC with the Office of the UN High representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (OHRLLS) and the Division for Ocean Affairs and the Law of the Sea (DOALOS) in May 2013.

182. The Deputy Executive Secretary reported on the work of the sessional working group on the “Development of a New Capacity Development Strategy” (IOC-XXVII/Dec.2(III)).
183. Taking into consideration new developments and the recommendations of recent UN meetings, the Assembly supported the establishment of the proposed open ended Intersessional Working Group of Member States to develop the proposed Capacity Development Strategic Plan for implementation. Some Member States put a particular emphasis on the fact that the whole concept of capacity building should be reviewed. Experiences have shown that short training programmes and courses have not met the expectations of Member States in developing countries. The Assembly was of the opinion that the proposed second International Indian Ocean Expedition (IIOE-2) would be an additional opportunity to develop specific international capacity building programmes.
184. The representatives of 17 Members States and one observer intervened and conveyed their support to the initiative of developing a new Capacity Development Strategic Plan. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Canada](#), [India](#), [Japan](#), [Malaysia](#), [Republic of Korea](#) and [United Kingdom](#). ([Decision IOC-XXVII/Dec.5.5.1](#))

5.5.2 Rationale for an IOC Global Ocean Science Report

185. The Executive Secretary introduced this item. She informed on the rationale and motivation for IOC to lead the Global Ocean Sciences Report (GOSR) and reminded the Assembly that the report would provide an excellent opportunity for IOC to raise its visibility through an initiative which falls squarely within its mandate, and that it would be focused on science and not on political matters. The Head of the Ocean Sciences Section of IOC, Dr Luis Valdés, continued the presentation with a special focus on the added value for the IOC, and examples of expected results, timeline and budget. In summary, the IOC secretariat launched the process of the GOSR as part of its voluntary commitment at Rio+20 and it is envisaged to provide an overview on nations (i) investments, (ii) resources, and (iii) productivity in ocean science. It would provide a tool for mapping and evaluating the human and institutional capacity of Member States in terms of marine research, observations and data/information management, as well as a global overview of the main fields of interest, developments and trends in ocean science.
186. The discussion was rich with several rounds of interventions and ample participation of the Member States.
187. In the first round a total of 19 Member States took the floor. Some Member States expressed their concerns in terms of mandate, possible duplication with other on-going processes such as the World Ocean Assessment (WOA) and the procedure followed in the presentation of the draft resolution. Some Member State interventions expressed support, welcoming the logic that inspired the report, with others offering possible funding and/or other modalities of participation (China, France, Portugal and United Kingdom). Some expressed caveats about the tight timeline, involvement of resources, and the possibility of only a limited number of responses to the questionnaire.
188. The IOC Executive Secretary and the Head of the Ocean Sciences Section explained that the GOSR concept note was discussed at the Officers’ meeting in January 2013 and received enthusiastic support, that this report would neither duplicate other existing on-going processes nor conflict with competencies of other UN bodies, and that the secretariat recognizes that although this is a challenge, it could be a feasible and highly valuable product for IOC.
189. In a second round of interventions several Member States intervened to express their concerns on the procedure followed in the presentation of the draft resolution. These concerns

were related to the allowable origin of draft resolutions. The Secretariat offered to withdraw the draft resolution and to present it as a draft decision. In a third round of interventions the Assembly agreed to form an intersessional Working Group to review and improve the proposal and discuss it further at the 47th Session of the Executive Council in 2014.

190. An ad hoc open-ended meeting attended by 12 Member States prepared the draft decision.

191. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Argentina](#), [Belgium](#), [Canada](#), [Japan](#), [Norway](#), [Republic of Korea](#) and [United Kingdom](#). ([Decision IOC-XXVII/Dec.5.5.2](#))

6. ADMINISTRATION AND MANAGEMENT

6.1 REPORT BY THE CHAIRPERSON OF THE FINANCIAL COMMITTEE ON THE IOC DRAFT MEDIUM-TERM STRATEGY FOR 2014–2021

[reported under 6.2]

6.2 REPORT BY THE CHAIRPERSON OF THE FINANCIAL COMMITTEE ON THE DRAFT PROGRAMME AND BUDGET FOR 2014-2017 (DRAFT 37 C/5)

192. The Chair of the Financial Committee reported to the Assembly on the results of the Committee's review of the Progress Report on Budget Execution (2012) and Anticipated Funding for 2013, the Draft Medium-Term Strategy for 2014–2021 and the Draft Programme and Budget for 2014–2017 in accordance with rule of procedure 8.1(c). He informed the Assembly that the Financial Committee had six very productive meetings and thanked the Member States that participated in its consensual in-depth discussions in the spirit of constructive collaboration. He then made a detailed presentation of the draft resolution prepared by the Financial Committee for consideration by the Assembly, explaining the approach adopted by the Committee in proposing the changes to the Draft Medium Term Strategy and the guiding principles for budgetary allocations.

193. The Assembly was unanimous in congratulating the Chairman of the Financial Committee for the exceptional quality of his leadership and the considerable work accomplished in a short period of time.

194. Some Member States requested confirmation that regular budget funds will only be allocated to activities for which there was a consensus. The Secretariat confirmed that in the course of workplans preparation the table of allocation of funds (IOC-XXVII/2 Annex 4) will be revised to reflect the recommendations of the Financial Committee and the discussions in plenary.

195. The Assembly considered and adopted [Resolution XXVII-2](#) drafted by the Financial Committee in accordance with [Decision IOC-XXVII/Dec.\(4.\)](#)

6.3 ELECTIONS OF THE OFFICERS OF THE COMMISSION AND MEMBERS OF THE EXECUTIVE COUNCIL

196. The Chair of the Nominations Committee, Mr Javier Valladares, introduced this item. He informed the Assembly that all the nomination forms received as of Friday 28 June 2013 at 18.00 hrs by the Committee were valid and had therefore been forwarded to the Assembly as document IOC-XXVII/NOM/WP2.

197. Mr Valladares reported two recommendations from the Nominations Committee concerning future submissions of nomination forms. Firstly, that it be specified more precisely in

IOC documents soliciting nominations (e.g. invitation letters, Assembly web-page and the Rules of Procedures) who is authorized to sign the nominations. Secondly, that nomination forms be stamped by the submitting authority.

198. The Assembly noted that: (i) Montenegro (Electoral Group II), Honduras, Saint Kitts and Nevis, Saint Vincent and the Grenadines (Electoral Group III), and Kiribati (Electoral Group IV) had joined IOC since the Twenty-sixth Session of the Assembly; (ii) the number of seats on the Executive Council had not changed since the 25th Session of the Assembly; and (iii) following the adoption of Resolution XXV-15 concerning the expansion of the quota of seats of Group II, the allocation of seats for Groups I and II, starting after the 25th Session of the Assembly, would be 10 seats for Group I and 3 seats for Group II; (iv) the quotas of seats for Groups III, IV and V remain unchanged.

6.3.1 Election of the Chair of the Commission

199. The Assembly noted that there was only one candidate for the position of Chair. Dr Sang-Kyung Byun (Republic of Korea) was therefore elected by acclamation.

6.3.2 Election of the Vice-Chairs of the Commission

200. The Assembly noted that there was only one candidate for each of Electoral Groups I, II, III, IV and V for the positions of Vice-Chair. The following were therefore elected by acclamation:
- Dr Peter Haugan (Norway) (Group I)
Dr Atanas Palazov (Bulgaria) (Group II)
Captain Frederico Antonio Saraiva Nogueira (Brazil) (Group III)
Dr Yutaka Michida (Japan) (Group IV)
Prof. Adoté Blim Blivi (Togo) (Group V)

6.3.3 Election of the Members of the Executive Council

201. The Assembly noted that there were 9 candidates for the remaining Member State seats on the Executive Council for Electoral Group I, and that the number of those remaining seats was 9. The candidate Member States were therefore declared elected.
202. The Assembly noted that there were 2 candidates for the remaining Member State seat on the Executive Council for Electoral Group II, whereas the maximum number of those seats was 2. The candidate Member States were therefore declared elected.
203. The Assembly noted that there were 8 candidates for the remaining Member State seats on the Executive Council for Electoral Group III, which was the maximum number of those seats. The candidate Member States were therefore declared elected.
204. The Assembly noted that there were 7 candidates for the remaining Member State seats on the Executive Council for Electoral Group IV, which was the maximum number of those seats. The candidate Member States were therefore declared elected.
205. The Assembly noted that there were 9 candidates for the remaining Member State seats on the Executive Council for Electoral Group V, whereas the number of those remaining seats was eight. After a ballot to elect the representatives to the Executive Council from Electoral Groups V, the Assembly elected Algeria, Egypt, Kenya, Nigeria, Senegal, South Africa, Tanzania, Tunisia, to the Executive Council for Group V.
206. The membership of the Executive Council for the next intersessional period and the 28th Session of the Assembly is given in [Annex VII](#) to the present Summary Report.

6.4 ADOPTION OF THE REVISED GUIDELINES DEALING WITH DRAFT RESOLUTIONS

207. Mr Peter Dexter, Chairman of the Resolutions Committee introduced this item by referring to the decision of the Executive Council at its 45th session to use the Seventh Draft Revised Guidelines for the Preparation and Consideration of Draft Resolutions on an experimental basis, with a view to adopt them at this present Assembly. The Chair of the sessional Resolutions Committee reported on its conclusions on the Eighth Draft Revised Guidelines for the Preparation and Consideration of Resolutions. He stressed that that these guidelines are intended as just that – guidelines. While they of course should conform with relevant parts of the Rules of Procedure and Statutes, they do not, in themselves, constitute rules or regulations, but provide guidelines to the Member States, subsidiary bodies and the Executive Secretary in the preparation and presentation of draft resolutions, recommendations and decisions to governing and subsidiary bodies of the IOC.
208. He stated that the draft guidelines have worked well from the perspective of the Resolutions Committee, in simplifying and facilitating its work. A number of small, essentially editorial changes have been suggested, to improve consistency and also clarify the text in places. At the same time, the Committee did express some concern over two of the articles in the guidelines. The first concerns Article 8, where some delegations felt that, since the current version of the Rules of Procedure do not explicitly give the right to the Executive Secretary to submit DRs to Governing Bodies, these Guidelines should also explicitly not contain such a right. Consequently, it was agreed to omit the reference to the Executive Secretary as a source of draft resolutions from the previous draft of article 8. One Member State proposed that the Executive Council, at its 47th session in 2014, could be requested to address this issue, with a view to possibly proposing to the next Assembly in 2015 an amendment to the Rules of Procedure to accommodate such a pathway for submission. The second substantive amendment that was agreed related to Article 15, where delegations proposed to extend the advance time required for the submission of DRs to the Governing Bodies from 24 hours to 72 hours. In addition, the Committee felt it appropriate to further clarify the situation regarding the draft resolution on Programme and Budget, and facilitate the future work of Governing Bodies. To this end, it was proposed to include a separate Article on this issue, which is explicit regarding the submission of the Programme and Budget draft resolution during sessions, rather than in advance.
209. With these comments and additional editorial changes, the Resolutions Committee recommended to the Assembly to adopt the Guidelines for Draft Resolutions, as revised.
210. The Assembly stated that the decision to examine a possible amendment to the Rules of Procedures should not be taken at this session. See the report of the Chairman of the Resolutions Committee in [Annex IV](#) to the present report. No Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report. ([Decision IOC-XXVII/Dec.6.4](#))

6.5 DATES AND PLACES OF THE 28TH ASSEMBLY AND THE 47TH AND 48TH SESSIONS OF THE EXECUTIVE COUNCIL

211. The Executive Secretary introduced this item. She highlighted the fact that the present session had been scheduled over a period of 7,5 working days compared to 10 working days in 2011 and 8,5 days in 2009. With reference to funding she reminded the Assembly that the present session had been funded by emergency funds given by the Director-General of UNESCO and that the level of funding for the next sessions of the governing bodies is uncertain to date. The reduction in funding may imply that the duration and number of meetings may either need to be reduced, or funded by specifically earmarked voluntary contributions from Member States. Member States may also consider hosting and funding one of the sessions, so

as to relieve the pressure on the Commission's regular budget and allow more adequate resource allocation to programme areas.

212. She reminded the Assembly of the recommendations of the Executive Council, acting as the Steering Committee for this Assembly, on the dates of the 47th session of the Council in 2014 taking into account scheduled or anticipated dates of major international commitments of the oceanographic communities and IOC's partners in June 2014.

213. References in the draft decision to the hosting by Member States of the session of the Executive Council or the Assembly were deleted.

214. The representatives of two Member States took the floor. ([Decision IOC-XXVII/Dec.6.5](#))

6.6 THEMES OF THE A. BRUUN AND N.K. PANIKKAR MEMORIAL LECTURES AT THE 28TH IOC ASSEMBLY

215. The Executive Secretary briefly recalled the proposals already submitted by the Executive Council, acting as the Steering Committee for this Assembly, and by Member States in past sessions, in particular the CARIACO Project, on "Carbon Retention in a Coloured Ocean", which has been carried out along the Caribbean coast of Venezuela for more than 20 years and had been proposed several times.

216. Japan, supported by Vietnam and Thailand, proposed Professor FUKUYO Yasuwo, from the University of Tokyo, for an IOC N. K. Panikkar Memorial Lecture on Capacity development related to Harmful Algal Blooms.

217. The representatives of four Member States took the floor. The following Member States chose to provide records of their plenary intervention on this agenda item for the informational annex to the meeting report: [Japan](#) and [Thailand](#). ([Decision IOC-XXVII/Dec.6.6](#))

7. ADOPTION OF THE SUMMARY REPORT AND RESOLUTIONS

218. The Chairman of the Resolutions Committee reported to the Assembly on the work of the Resolutions Committee during the session ([Annex IV](#) to the present report).

219. The IOC Chairman then invited the Assembly to adopt, in plenary, the draft resolutions that were still pending after discussion in plenary:

- Resolution IOC-XXVII/Res.5.1.3 "Formalization of the Perth Programme Office",
- Resolution IOC-XXVII/Res.3.2.6.1,6.2 "Financial Matters of the Commission".

220. The Deputy Executive Secretary reminded the Assembly that new working arrangements were initiated during the 45th Executive Council under the pressure of severe constraints and partly extended to the present session of the Assembly. The Executive Council regrettably did not have time during its 45th session to formally express opinion on those arrangements except through an evaluation questionnaire. Recognizing this is a stimulating learning process for the secretariat, the Deputy Executive Secretary welcomed opinion from the floor and reminded that the responses to the evaluation questionnaire are welcome stimulators for improvement.

221. The Assembly sought further clarification on what options were available for optimizing session working arrangements, as reflected in the adopted decision.

222. The representatives of four Member States took the floor. No Member States chose to provide records of their plenary intervention on this agenda item. ([Decision IOC-XXVII/Dec.7](#))

8. CLOSURE

223. The Assembly met in plenary session during 7,5 days from 26 June to 5 July 2013, considered 44 items on its agenda and three Draft Resolutions. The Assembly approved 39 decisions and two resolutions. The plenary meeting was supported by some 19 preparatory meetings (Committees and working groups) and 18 information side meetings during the session. Two hundred and ninety-six delegates participated in this session and made some 380 interventions in plenary. The Chairman of the Commission thanked delegates, partners, individuals who chaired sessional committees and groups, the Rapporteur for the session and UNESCO staff and IOC Secretariat before closing the 27th Session of the Assembly at 11:25 on Friday 5 July 2013.

ANNEX I

AGENDA

1. OPENING

2. ORGANIZATION OF THE SESSION

- 2.1 ADOPTION OF THE AGENDA
[Rule of Procedure 8]
- 2.2 DESIGNATION OF THE RAPPORTEUR
[Rule of Procedure 25.4]
- 2.3 ESTABLISHMENT OF INTRASESSIONAL COMMITTEES AND WORKING GROUPS
[Rule of Procedure 12]
- 2.4 INTRODUCTION OF DOCUMENTATION AND TIMETABLE
[Rule of Procedure 11]
- 2.5 A. BRUUN AND N.K. PANIKKAR MEMORIAL LECTURES
[Res. VI-19 & IOC-XVIII, item 12, para. 380]

3. STATUTORY REPORTS

- 3.1 STATEMENT OF THE CHAIRMAN ON THE STATE OF IOC
[Rule of Procedure 8.1(a)]
- 3.2 REPORT BY THE EXECUTIVE SECRETARY ON PROGRAMME AND BUDGET (2012–2013) AND MEDIUM TERM STRATEGY (2008–2013) IMPLEMENTATION
[Rule of Procedure 8.1(b) and (c); Rule of Procedure 49.1]
- 3.3 REPORTS BY THE CHAIRS OF THE IOC SUB-COMMISSIONS
[Rule of Procedure 48.3]
 - 3.3.1 IOC Sub-Commission for Africa and the Adjacent Island States (IOCAFRICA)**
 - 3.3.2 IOC Sub-Commission for the Western Pacific (WESTPAC)**
 - 3.3.3 IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE)**
- 3.4 REPORT OF THE IOC (2012–2013) TO THE THIRTY-SEVENTH GENERAL CONFERENCE OF UNESCO
[Statutes Art. 3.2; Rule of Procedure 49.2]

4. INTRODUCTION TO THE DRAFT PROGRAMME AND BUDGET FOR 2014–2017 AND IOC MEDIUM-TERM STRATEGY FOR 2014–2021
[Statutes Art. 1.2; Res. EC-XLIII.9]

- 4.1 INTRODUCTION TO IOC DRAFT MEDIUM-TERM STRATEGY FOR 2014–2021
- 4.2 INTRODUCTION TO IOC DRAFT PROGRAMME AND BUDGET FOR 2014–2017

5. STRATEGIC DEVELOPMENTS

- 5.1 GOVERNANCE
[36 C/5, MLA 4]
 - 5.1.1 UN Consultations and Coordination**

5.1.2 Other Partnerships

[Res. XXVI-1; EC-XLV/Dec.5.4 ; IOC-XXVI/Dec.9.4(iii)]

5.1.2.1 *Proposal for a Category-2 UNESCO Regional Educational and Research Centre on Oceanography for Western Asia, in Iran (Islamic Republic of)*
[Rule of Procedure 8.1e,g]

5.1.2.2 *Endorsement of the IHO-IOC/GEBCO Sub-committee for Regional Undersea Mapping (SCRUM)*
[Rule of Procedure 8.1g, h]

5.1.3 Role of IOC Subsidiary Bodies and Decentralized Offices

[Res. XXVI-1]

5.2 OCEAN-RELATED HAZARDS

[36 C/5, MLA 4 & 7]

5.2.1 Regional Tsunami Warning Systems

[Rule of Procedure 48.3]

5.2.1.1 *Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System*

5.2.1.2 *Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System*

5.2.1.3 *Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions*

5.2.1.4 *Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas*

5.2.2 Global Coordination of Warning and Mitigation Systems for Ocean Hazards (TOWS-WG)

[Rule of Procedure 48.3; EC-XLV/Dec.3.2 (III)]

5.3 OBSERVING SYSTEMS, DATA MANAGEMENT

[36 C/5, MLA 4]

5.3.1 The Future Needs for Intergovernmental Coordination and Governance for Sustained Ocean Observations and Services

[Res. EC-XLI.1, EC-XLIII.7, IOC-XXVI/Dec.4.7, EC-XLV/Dec.4.2]

5.3.2 Global Ocean Observing System

[Rule of Procedure 48.3; Res. XXVI.8]

5.3.3 Joint IOC-WMO Technical Commission (JCOMM) for Oceanography and Marine Meteorology

[Rule of Procedure 48.3 ; Res. XX-12; XXVI-8]

5.3.4 IOC Committee on International Oceanographic Data and Information Exchange (IODE)

[Res. I-9; Res. XXVI-10]

5.3.4.1 *Ocean Biogeographic Information System (OBIS)*
[Res. XXVI-10]

5.3.5 WMO-ICSU-IOC-UNEP Global Climate Observing System (GCOS)

[Res. XVI-8]

5.4 OCEAN SCIENCE AND RESEARCH

- 5.4.1 WMO-IOC-ICSU World Climate Research Programme (WCRP)**
[IOC-XXVI, item 6.3, para. 173]
- 5.4.2 Intergovernmental Panel on Harmful Algal Blooms (IPHAB)**
[Res. XVI-4; Res. XXVI-11; Rule of Procedure 48.3]
- 5.4.3 Nutrient Pollution**
[Res. XXV-9; IOC-XXVI, item 7.5, para. 224]
- 5.4.4 Integrated Coastal Area Management (ICAM)**
[IOC-XXVI/Dec.8.2]
- 5.4.5 A Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socio-economic Aspects (UN Regular Process) — World Ocean Assessment**
[EC-XLIII/Dec. 8.1; IOC-XXVI, Dec. 4.6; UN Res. 66/231, para. 213]

5.5 CAPACITY DEVELOPMENT

- 5.5.1 Development of a New Capacity Development Strategy**
[Rule of Procedure 8-1(g)]
- 5.5.2 Rationale for an IOC Global Ocean Science Report**
[Rule of Procedure 8-1(g)]

6. ADMINISTRATION AND MANAGEMENT

- 6.1 REPORT BY THE CHAIRPERSON OF THE FINANCIAL COMMITTEE ON THE IOC DRAFT MEDIUM-TERM STRATEGY FOR 2014–2021
[EC-XLV/Dec. 5.2]
- 6.2 REPORT BY THE CHAIRPERSON OF THE FINANCIAL COMMITTEE ON THE IOC DRAFT PROGRAMME AND BUDGET FOR 2014–2017 (DRAFT 37 C/5)
[Statutes Art. 1.2; Res. EC-XLIII.9]
- 6.3 ELECTIONS OF THE OFFICERS OF THE COMMISSION AND MEMBERS OF THE EXECUTIVE COUNCIL
[Statutes Art. 6.B.5 and 7; Annex I to the Rules of Procedure]
 - 6.3.1 Election of the Chairperson of the Commission**
 - 6.3.2 Election of the Vice-Chairpersons of the Commission**
 - 6.3.3 Election of the Members of the Executive Council**
- 6.4 ADOPTION OF THE REVISED GUIDELINES DEALING WITH DRAFT RESOLUTIONS
[IOC-XXV, item 7, para. 585; Statutes, Art. 8; Rules of Procedure 12; IOC/EC-XXXIX/2 Annex 5, EC-XLV/Dec.5.3]
- 6.5 DATES AND PLACES OF THE 28TH ASSEMBLY AND THE 47TH AND 48TH SESSIONS OF THE EXECUTIVE COUNCIL
[Statutes, Art. C.7; Rule of procedure 19.2]
- 6.6 THEMES OF THE A. BRUUN AND N.K. PANIKKAR MEMORIAL LECTURES AT THE 28TH IOC ASSEMBLY
[Res. VI-19 & IOC-XVIII, item 12, para. 380]

7. ADOPTION OF THE SUMMARY REPORT AND RESOLUTIONS

8. CLOSURE

ANNEX II

**REPORT OF THE FORTY-SIXTH SESSION OF THE IOC EXECUTIVE COUNCIL
ACTING AS THE STEERING COMMITTEE OF THE ASSEMBLY**

UNESCO, Paris, 25 June 2013
(IOC/EC-XLVI/3)

1. OPENING

- 1 The Chair, Mr Sang-Kyung Byun, opened the 46th Session of the Executive Council at 10.20 h in Room IV on Tuesday 25 June 2013. He welcomed the participants and briefly referred to the documentation prepared for this session of the IOC Executive Council, which can be found on the IOC web site (<http://ioc-unesco.org/ec-46>). He informed the Council that, in accordance with Rule of Procedure No. 12(2), the Council was acting as the Steering Committee for the 27th Session of the Assembly.

2. ORGANIZATION OF THE SESSION

2.1 ADOPTION OF THE AGENDA

- 2 **The Executive Council considered** the Draft Provisional Agenda of the present session (doc. IOC/EC-XLVI/1 prov.) **and adopted** the Agenda of its 46th Session ([Annex A](#) to the present summary report).

EC-XLVI, Dec. 2.1

Agenda

The Executive Council adopts the agenda as set out in document IOC/EC-XLVI/1 Prov.

2.2 DESIGNATION OF THE RAPPORTEUR

- 3 The Executive Council was invited to designate the Rapporteur for the present session.
- 4 Tanzania proposed, and India seconded, Dr Terry Schaefer (United States of America) as Rapporteur for the present session. Dr Schaefer accepted this invitation.

EC-XLVI, Dec. 2.2

Rapporteur

The Executive Council designates Dr Terry Schaefer (United States of America) Rapporteur for its present session to assist the Chair and the Executive Secretary in the preparation of the summary report of the Session. Thomas Gross will be the editor of the report for the Secretariat.

3. ARRANGEMENTS FOR THE 27TH SESSION OF THE ASSEMBLY

3.1 DESIGNATION OF STATUTORY COMMITTEES

- 5 The Chair reminded the Executive Council that, in the designation of the three Statutory Committees for the Assembly (Nominations, Resolutions and Financial Committees), it may submit proposals on their composition, but that the ultimate decision as to that composition, including the Chairship of each Statutory Committee, remains entirely with the Assembly. He then invited Member States to declare their wish to participate in the Statutory Committees bearing in mind the need to ensure an appropriate linguistic and geographic balance within each Committee.

EC-XLVI, Dec. 3.1

Sessional Committees

Pursuant to Rule of Procedure No. 12(2) the Executive Council, acting as the Steering Committee of the Assembly, recommends to the Assembly the Chairpersons and an initial list of Member States having declared their interest in participating in each of the following committees:

Financial Committee: under the chairship of Peter Haugan (Norway) with the following Member States declaring their wish to participate: Germany, Canada, China, Mexico, Kenya, Portugal, Republic of Korea, South Africa, Brazil, Argentina, Australia, U.S.A., France, Grenada, Russian Federation, India, Thailand, Egypt, Kuwait, Japan. Ms Ksenia Yvinec will provide the Secretariat support to the Financial Committee.

Resolutions Committee: under the chairship of Peter Dexter, (Australia) with the following Member States declaring their wish to participate: Cameroon, Chile, Canada, Mexico, Norway, Republic of Korea, Argentina, France, U.S.A., Spain, Iran (Islamic Rep. of), Japan, India, Russian Federation, Turkey, Thailand, Nigeria, China. Julian Barbière will provide the Secretariat support to the Resolutions Committee.

Nominations Committee: under the chairship of Javier Valladares, ex-IOC Chair, with the following Member States declaring their wish to participate: Brazil, Mexico, Japan, Republic of Korea, U.K., U.S.A, France, China, Germany. Thorkild Aarup will provide the Secretariat support to the Nominations Committee.

3.2 CONSIDERATION OF REQUESTS FOR SUPPLEMENTARY ITEMS

- 6 The Chair informed the Executive Council that, under Rules of Procedure 8, 9 and 11.2, dealing with the preparation of the agenda for the Assembly, no request for a supplementary item was received at the Secretariat by 26 April 2013 (two months before the date of the opening of the 27th Session.)
- 7 Portugal made a request to the Chair of IOC that an agenda item on the Future of IOC would be inserted in the agenda of the Executive Council for further inclusion in the provisional agenda of the 27th Session of the Assembly (See the letter in [Annex B](#) to the report). There was consensus that the Assembly should address the proposed items.

EC-XLVI, Dec.3.2

The Executive Council,

Recommends to the 27th Assembly to form a sessional open ended working group to discuss the issues raised by Portugal on the Future of IOC and subsequently report to the Assembly.

3.3 SESSIONAL WORKING GROUPS

EC-XLVI, Dec. 3.3

Sessional Working Groups

The Executive Council,

Having examined the revised provisional agenda for the 27th session of the Assembly,

With a concern to ensure a smooth running of the Assembly, and

With no prejudice to decision of the Assembly and its chair on establishing a sessional working group as needed during the discussion of any agenda item,

Recommends to the Assembly the establishment of the following working group(s) at the beginning of its session under agenda item 2.3:

A sessional working group on the “Development of a New Capacity Development Strategy” (item 5.5.1) under the chairship of Adote Blivi (Togo) with the following Member States declaring their wish to participate: Cameroon, Egypt, Mexico, Republic of Korea, Tanzania, Kenya, Malaysia, Nigeria, Portugal, Ecuador, Brazil, U.S.A., Spain, Australia, France, Russian Federation, India, Thailand, U.K., South Africa, Canada, Norway, Indonesia, Japan, Cuba, China, Peru, Belgium, Chile. Mitrasen Bhikajee will provide the Secretariat support to the group.

A sessional working group on the “Future of IOC” under the chairship of Javier Valladares, ex-IOC Chair, with the following Member States declaring their wish to participate: Germany, Canada, Mexico, Malaysia, Republic of Korea, Norway, China, Tanzania, Portugal, Bulgaria, Argentina, Australia, Belgium, Brazil, Ecuador, U.S.A., Russian Federation, France, Grenada, India, Turkey, Indonesia, Japan, Iran (Islamic Rep. of), Thailand, U.K., South Africa, Cuba, Togo. Bernardo Aliaga will provide Secretariat support to the group.

3.4 TIMETABLE

EC-XLVI, Dec. 3.4

Timetable for the 27th session of the Assembly

The Executive Council,

Taking into consideration the comments made by the Officers, the reporting of sessional working groups and statutory committees in plenary and scheduled invitation of speakers,

Accepts the provisional timetable for the 27th session of the Assembly as set out in document IOC/EC-XLV/1 Prov.Add.Rev. with modifications.

4. DATES AND PLACE OF THE 47th SESSION OF THE EXECUTIVE COUNCIL AND PROPOSAL FOR DATES AND PLACE OF THE 28th SESSION OF THE ASSEMBLY

EC-XLVI, Dec. 4.

Dates and places of next sessions of the Executive Council and Assembly

The Executive Council,

Recalling the recommendation made by the Executive Council at its 45th session in 2012 to the Assembly (EC-XLV/Dec.5.6) to reconsider the dates of the 47th session of the Executive Council, provisionally scheduled to start on Tuesday 24 June 2014 at UNESCO Headquarters, Paris,

Taking into account both the level of funding provided for the organization of the IOC governing body sessions in the next C/5, and the new programming cycle of UNESCO,

Considering the experience gained at the 45th session of the Executive Council scheduled over three days (26–28 June 2012) under cost-saving measures,

Recommends to the Assembly to carefully consider the items to be on the agenda of the 47th session of the Executive Council during its work so that it fits in a session of a duration not longer than 3.5 consecutive working days;

Recommends also to the Assembly to identify any potential calendar conflicts with important meetings over the proposed period for the 47th session of the Executive Council of 30 June–3 July 2014, for 3.5 days, in UNESCO Headquarters, Paris and a period to be decided in June 2015 for the 28th session of the Assembly to be preceded by a one-day meeting of the Executive Council (48th session);

8 The Chair invited Member States to propose Roger Revelle Memorial lectures for 47th Executive Council meeting in 2014. He also asked Member States to propose both female and male lecturers.

9 The U.S.A. proposed Dr Richard Feely to lecture on Ocean Chemistry and Ocean Acidification.

10 Colombia proposed Dr Sandra Bessudo to lecture on the subject of Protected Marine Areas-Malpelo, one of UNESCO's World Heritage marine sites.

11 The Chair recalled the interest of Venezuela (Bolivarian Republic of) to propose a lecture on the subject of the Cariaco Time Series.

12 The Chair invited Member States to propose themes for the IOC Bruun lectures at the 28th session of the Assembly.

13 Canada proposed Dr Robie MacDonald to lecture on Sea Ice.

14 The Chair invited Member States to propose themes for the IOC Panikkar lectures at the 28th session of the Assembly.

15 Canada proposed Dr Eddy Carmack to lecture on Canadian Ranger Ocean Watch.

16 The U.S.A. suggested a subject to consider be the impact of IOC on capacity building for Tsunami Warning System within a region.

17 The U.S.A. proposed Dr Scott Glenn, University of Rutgers, to lecture on the Challenger Glider Mission.

18 Portugal noting the announcement of the commemoration of the 50th anniversary of the International Indian Ocean Expedition, suggested that a lecture on the International Indian Ocean Expedition, referring to what was done and what is new, could be considered.

5. REVISED SCHEDULE FOR THE RECRUITMENT OF THE IOC EXECUTIVE SECRETARY

19 By IOC Circular letter 2474 dated 25 February 2013, the Executive Secretary informed the Member States of the extension of her appointment as Assistant Director-General and Executive Secretary of the IOC until 11 January 2015. This implies the preparation of a new timeline for the recruitment process so that Member States have enough time to evaluate candidates before they express their opinion at an in camera session of the 47th session of the Executive Council in June 2014, as established in the procedure (see document IOC/EC-XXXIX/2 Annex 5).

20 The Executive Council discussed the proposed schedule for the recruitment of the IOC Executive Secretary. Some Member States also requested clarification on the recruitment process and Portugal submitted a summary of its intervention (see [Annex C](#)). The Executive Secretary committed to communicating and involving the Member States in the process as appropriate. The Decision and the annexed timeline were amended and accepted.

EC-XLVI, Dec. 5.

Revised schedule for the recruitment of the IOC Executive Secretary

The Executive Council,

Having examined document IOC/EC-XXXIX/2 Annex 5,

Recalling Decision 3.2V of the 45th Session of the Executive Council (EC-XLV/Dec.3.2V),

Agrees with the amended timeline in annex to this decision;

Requests the Secretariat in close consultation with the officers to:

- (i) review and update the post announcement for Executive Secretary of IOC in what concerns its functions and the agreed post grade of ADG, common to the United System, acting at the service of the Commission;
- (ii) include this as an agenda item for the 47th Session of the Executive Council and prepare the necessary documents.

Annex to EC-XLVI, Dec.5.

15 November 2013	External announcement of the post (60 days).
31 January 2014	Deadline for applications (midnight Paris time).
1 February – 24 March 2014	Pre-selection in agreement with IOC/EC-XXXIX/2 Annex 5: Technical screening by HRM/IOC Secretariat. Selection of a list of highly qualified applicants by a panel consisting of IOC Officers, Past Chairman, Executive Secretaries ex-officio.
24 March 2014	Communication of Dossiers to all Member States of IOC three months prior to the 48th Session of the Executive Council in June (<i>tentative date</i>).
24 June 2014 (<i>tentative</i>)	The Executive Council at its 47th Session meets in camera to finalize the list of candidates to be sent to the Director General.
17 June – 30 November 2014	The Director-General decides and appoints the Executive Secretary following consultation with the Executive Council of the Commission.
12 January 2015	Newly designated Executive Secretary assumes his/her duties in Paris.

6. ADOPTION OF THE SUMMARY REPORT

EC-XLVI, Dec. 6.

Report

The Executive Council,

Having considered the draft summary report of the session (IOC/EC-XLVI/3s prov.) presented to it in plenary session at 17:00 on 25 June 2013,

Adopts the summary report of its 46th session as the Executive Council recommendations to the Assembly at its 27th session.

7. CLOSURE

The Chairman closed the 46th session of the Executive Council at 18:05 on 25 June 2013.

- 1. OPENING**
- 2. ORGANIZATION OF THE SESSION**
 - 2.1 ADOPTION OF THE AGENDA
 - 2.2 DESIGNATION OF THE RAPPORTEUR
- 3. ARRANGEMENTS FOR THE 27TH SESSION OF THE ASSEMBLY**
 - 3.1 DESIGNATION OF STATUTORY COMMITTEES
 - 3.2 CONSIDERATION OF REQUESTS FOR SUPPLEMENTARY ITEMS
 - 3.3 SESSIONAL WORKING GROUPS
 - 3.4 TIMETABLE
- 4. DATES AND PLACE OF THE 47th SESSION OF THE EXECUTIVE COUNCIL AND PROPOSAL FOR DATES AND PLACE OF THE 28th SESSION OF THE ASSEMBLY**
- 5. REVISED SCHEDULE FOR THE RECRUITMENT OF THE IOC EXECUTIVE SECRETARY**
- 6. ADOPTION OF THE SUMMARY REPORT**
- 7. CLOSURE**

Annex B (English only)

From: Prof. Mario Ruivo
Chairman of the Portuguese Committee for IOC

To: Dr. Sang-Kyung Byun
Chairman of the Intergovernmental Oceanographic Commission

Lisboa, 21/06/2013

Subject: Proposal for inclusion of an item on the Future of IOC in the Provisional Agenda of the 46th Executive Council of IOC

Mr. Chairperson

As you are aware by some of our exchanges of views and by the positions expressed by Portugal at the sessions of the Governing Bodies of the commission, we are deeply concerned with the future of IOC which, in our judgment, requires urgent corrective measures.

We noted with dismay that guidelines and decisions to this effect have not succeeded. This applies namely to the recognized need to clarify the present relationship of IOC with UNESCO which is affecting the work and special status of the commission as a “body with functional autonomy”.

The same applies to the progressive sliding of the designation of the IOC Executive Secretary (specifically defined in the post announcement of 2008, under *Terms and conditions*, “at grade of Assistant Director General, common to the United Nations System”, into Assistant Director General for IOC-UNESCO and Assistant Director-General, UNESCO.

The inappropriate use of this double-title is affecting the channels of command, image, as well as the working procedures of the Commission and its role as a “joint specialized mechanism” at the service of its Member States and of the United Nations System.

We are therefore proposing that the Governing Bodies of the Commission consider undertaking an in-depth assessment of the situation with a view to identify consensual measures to overcome the present difficulties.

Accordingly, we propose that a specific sub-item on the Future of IOC be included under item 3.2 “Consideration of requests for supplementary items” of the Provisional Agenda of the 46th Executive Council, for further inclusion in the Provisional Agenda of the 27th session of the Assembly.

Yours sincerely, Mario Ruivo, Chairman, Portuguese Committee for IOC

c/o: Members of the Bureau of IOC
Prof. Adote Blim Blivi
Direct. Peter Haugan
Prof. Yutaka Michida
Direct. Atanas Palazov
GOOS Rio. Frederico A. Saraiva Nogueira
–Executive Secretary of IOC
Dra. Wendy Watson-Wright

Annex C: Item 5 – Revised scheduled for the recruitment of the IOC Executive Secretary
(English only)

**Item 5- Revised Schedule for the recruitment of the
IOC Executive Secretary**

1. The Executive Secretary was recruited during 2009, in order to start her functions beginning 2010. The post announcement was for the recruitment of the Executive Secretary of the IOC, under post SC-079.
2.
 - The 45th Executive Council (2012) approved decision 3.2 (V), which includes the following points:
 - a) *The timeline of the process for the recruitment of the IOC Secretariat;*
 - b) *Noted the need to review and update the post announcement for the Executive Secretariat of IOC in what concerns its functions and the agreed post grade of ADG, common to the United Nation System, acting at the service of the Commission.*
 - c) *Agreed the suggested timeline and requested the Secretariat to include this as an agenda item for the 46th session of the Executive Council, and prepare the necessary documents.*
3. IOC Circular letter n° 2474, of 25/02/2013 (Invitation to the 27th Session of the IOC Assembly and 46th Session of the IOC Executive Council) states:

“Before concluding, I wish to inform you that the DG has decided to extend my appointment as Assistant Director General of UNESCO and Executive Secretary of IOC from November 2013 until 11 January 2015. As this decision has an impact on the recruitment process of the new IOC Executive Secretary, a new timeline for the process and complete documentation on the matter will be examined by the Executive Council at this session under item 5 of the provisional agenda”.
4. Document IOC/EC-XLVI/2/PROV (Annotated Provisional Agenda) - item 5- the information on the extension of the mandate of the present Executive Secretary recalls the information mentioned above, and includes a draft decision on this matter, which basically follows the content of the decision already approved by the 45th Executive Council.

Confronted with these informations, which in our assessment of the situation are contradictory with the guidelines provided by the decision adopted at the 45th session of the Executive Council, we would appreciate clarification on the decision making process that was followed and the rationale supporting it.

ANNEX III

ADDRESSES AND STATEMENTS

–A–

**Ms Irina Bokova, Director-General
of the United Nations Educational, Scientific and Cultural Organization (UNESCO)
On the occasion of the Opening of the 27th Session of the Intergovernmental
Oceanographic Commission (IOC) Assembly**

UNESCO, 26 June 2013

Dr Sang-Kyung Byun, Chair of the Intergovernmental Oceanographic Commission,
Excellencies, Ladies and Gentlemen,

I am very pleased to be here with you.

This is an important meeting, and I wish to pay tribute to every member of the
Intergovernmental Oceanographic Commission.

Over the past year, you have shown undisputable leadership on issues that are critical to
UNESCO, and your efforts have played an important role in advancing UNESCO's values and
priorities.

I should mention here the United Nations Conference on Sustainable Development held in
Rio last year – in preparation for which, the Intergovernmental Oceanographic Commission
led the development of the inter-agency report, entitled "A Blueprint for Ocean and Coastal
Sustainability," that highlighted the essential role of the ocean for sustainability.

This is a model of inter-agency cooperation.

It is also a model of innovative and creative thinking.

These efforts paid off, and several of the recommendations of the Blueprint are reflected in
the Rio+20 Outcome Document, The Future We Want.

This is just one example of the commitment and effectiveness you have all shown in
advancing cooperation on vital global goods.

Over the last six years, six national tsunami warning centres have been established – three in
the Indian Ocean and three in the North East Atlantic and Mediterranean region.

In the United Nations System, the Intergovernmental Oceanographic Commission continues
to provide scientific and technical support to the UN Regular Process, now called the World
Ocean Assessment.

The International Ocean Carbon Coordination Project has considerably improved analysis
and understanding of ocean carbon data.

Late last year, the Argo Profiling Float Network collected its one millionth profile of vertical
temperature and salinity -- twice the number collected by all research vessels in the 20th
century.

In the last six years, the number of sea-level stations that contribute real time data to the
Global Sea Level Observing System Data Centres has increased from 80 to 670.

The Ocean Bio-geographic Information System has become the largest, global online open-
access database on the diversity, distribution and abundance of all marine life.

I reminded of all this work, because it illustrates the power of knowledge and scientific
cooperation to save lives, to bring people and States together, to tackle challenges no one
can tackle alone.

This is UNESCO's core mandate, and I wish to recognize all of this and to thank you all once again.

The launch of the new Sub-Commission for Africa and Adjacent Island States, based at the United Nations Office in Nairobi, is another major step forward.

This has been possible thanks to the support of Member States – namely, Kenya, which has seconded a professional staff member, and the Republic of Korea, which has funded the first two meetings of the Sub-Commission. This is yet another example of the leadership of the Chair, Dr. Sang-Kyung Byun.

Mesdames et Messieurs,

La Commission Océanographique intergouvernementale représente un enjeu stratégique pour l'UNESCO, et c'est pourquoi j'ai voulu protéger au maximum les financements dédiés à son travail, en puisant dans le fonds d'urgence autant qu'il était possible pour soutenir ses projets.

Les financements de programmes essentiels comme les systèmes d'alerte aux Tsunami et le Système mondial d'observation de l'océan ont été partiellement restaurés.

Compte tenu de l'importance de cette vingt-septième session, et des décisions que vous devez prendre, j'ai décidé d'affecter des fonds supplémentaires pour faciliter son fonctionnement.

C'est dire aussi la difficulté de la situation où nous sommes.

L'ensemble des équipes de l'UNESCO déploie une énergie considérable pour chercher tous les moyens de mettre en œuvre les programmes de la Commission, en dépit du départ d'un certain nombre de collègues et des coupes budgétaires.

A ce jour, il n'a pas été possible de mettre en œuvre l'intégralité des programmes.

Cette situation n'est pas tenable sur le long terme, et risque d'affecter le potentiel de la Commission, au moment même où elle s'impose au niveau global.

C'est pourquoi je vous demande de continuer à soutenir la Commission, et j'ajouterais que toutes les initiatives sont bonnes à prendre : que ce soit par financement extrabudgétaire, détachements de personnel, ou d'autres moyens encore.

Plus que jamais, cette Commission est la vôtre et son succès dépend de votre soutien, du renforcement de vos initiatives, de vos engagements et de vos contributions.

L'UNESCO mettra tout en œuvre pour assurer l'avenir de la COI, où nous voyons une part de notre avenir.

Mesdames et Messieurs,

Avant de terminer, permettez-moi de saluer la mémoire d'Ariel Gonzales, de la délégation de l'Argentine, disparu en 2011, et qui a joué le rôle que l'on sait dans les travaux et les recherches scientifiques de la Commission.

Son livre intitulé : « Vers une juridiction véritable de notre espace maritime » pointe un sujet crucial pour l'avenir de l'océan, où la COI peut également se distinguer, et vous sera présenté par son Excellence M. l'Ambassadeur Estrella lors de cette session.

Merci à tous de votre attention, merci M. le Président, Dr Sang-Kyung Byun, merci à votre équipe de cinq vice-présidents et à votre prédécesseur, merci à tous.

-B-

Statement from IOC Officers for the opening of 27th Assembly

Prof. Adoté Blivi, Dr Sang-Kyung Byun, Prof. Peter Haugan, Prof. Yutaka Michida,
Dr Atanas Palazov, Capt Frederico Antonio Saraiva Nogueira

UNESCO, 26 June 2013

Our Intergovernmental Oceanographic Commission is in a moment of financial crisis.

We, the IOC Officers, believe that the Commission provides the Member States with a valuable platform for international cooperation and coordination of programmes in research, observations, data exchange, services and capacity-building. The IOC allows us to learn more about the nature and resources of the ocean and coastal areas, and to apply that knowledge for the improvement of management, sustainable development, the protection of the marine environment, and in our decision-making processes.

We consider it very unlikely that UNESCO's full cash flow and budget will be restored in the next two years. So although you are asked to review and adopt a draft budget for 2014-2015 for the Commission that requests about \$12 million of regular programme contribution from UNESCO, we believe it very unlikely that the Member States of the Commission will have all of these resources available to implement their programme.

We recall that the 2012-2013 regular programme budget for the Commission received from UNESCO was only about \$7 million.

This means that there is likely to be an approximately \$5 million shortfall in the next two years in order for our Commission to function properly in support of our goals.

The viability of IOC in these next two years depends entirely on whether Member States and/or regional groups of Member States are prepared to put additional funds towards the operation of Commission programmes.

We have 145 Member States. We propose that Member States make a minimum voluntary contribution to the IOC in line with the UN standard scale of assessments to make up for this shortfall.

This would amount to a few tens of USD for some Member States and up to of the order of 100 000 USD for those which are expected to be able to contribute the most. We run a very serious risk, if nothing happens, to lose the leadership in ocean sciences, observation systems and ocean services, and to be unable to properly run the administrative structure of the Secretariat.

We call on you to make this your minimum voluntary contribution to the work of the IOC, to contribute to the success of our Commission. We cannot evaluate how each Member State can contribute, but we count on the willingness of each of us to think seriously about an urgent solution for this issue, each one within its own capabilities and constraints.

-C-

Chairman's Statement of the State of the IOC, Dr Sang-Kyung Byun

UNESCO, 26 June 2013

Your Excellencies,
Distinguished guests and colleagues,
Ladies and Gentlemen,

It is a pleasure and honour for me to report on the state of the Intergovernmental Oceanographic Commission (IOC) to its Twenty-seventh session of Assembly on behalf of the IOC Officers.

As this is the first meeting of IOC Assembly since my election, I would like to express my sincere appreciation to the member states for allowing me to work together as a Chair and I hereby pledge to discharge my responsibilities to the best of my ability. Your support is a source of constant inspiration to me during my term of office. Taking this opportunity, I would like to pay tribute, on behalf of the Assembly, to Capt. Javier Armando Valladares, former chairman of IOC, who has a strong passion for oceanography and a good sense of humour, for his cooperative advices and sharing his vast experience in the field.

During the past two years we have faced various challenges arising from the change of external and internal circumstances. Among them has been the financial situation of UNESCO and IOC that drew our keen attention. As indicated in the two IOC Circular Letters No. 2416 of 20 December 2011 entitled "URGENT: financial situation of UNESCO and the IOC and Programme and budget for 2012–2013 (36 C/6)" and No. 2426 of 15 March 2012 "Update on the Status of the IOC Programme and Budget for 2012–2013 (36 C/5)", the United States of America and Israel have both withheld their assessed contribution after UNESCO admitted Palestine as a Member State through voting. This resulted in a 76% cut to resources for activities and 8% cut for staff in the IOC budget. The allocation of the Emergency Fund from UNESCO, however, increased the total available funding for programme activities from 24% to 58% of the approved 36 C/5 level, with a large increase in High Level Objective 1. The present budget reduction has never before been experienced, but the IOC secretariat staff immediately showed their readiness and willingness to respond to it. During this session, active discussion on this issue is expected among the member states.

As regards the decision of the Director-General of UNESCO to extend the contract of the Executive Secretary from 14 November 2013 to 11 January 2015, the IOC Officers, during the courtesy call to her office on 28 June 2012, inquired to the DG about the possibility of extension to ensure the continuity of work, and we received her positive reaction. Replying to a formal letter on 15 November 2012 as a follow-up, Ms Irina Bokova subsequently informed the Chair that she decided to extend Ms Wendy Watson-Wright's contract for a fourteen-month period beyond the previous contract. Therefore, we should reconsider the administrative process going forward from now.

Ladies and gentlemen,

The 2012 IOC officers' meeting was held on 1–2 February 2012 at IOC headquarters to discuss the overall matters including the financial situation of UNESCO and IOC, and to prepare the provisional agenda and timetable for the 45th IOC Executive Council. The officers took note of IOC budget reductions and they agreed to adopt new methods of working such as shortening the meeting period of the Executive Council to three days and refining the meeting procedure.

The 2013 IOC Officers' Meeting was convened on 14–15 January 2013, again at IOC headquarters. The Officers discussed the pending questions and issues, especially on the organizing of the 46th Session of the Executive Council and the 27th Session of the Assembly, the financial situation of IOC and UNESCO, the Medium-Term Strategy for 2014-2021, the proposal for a Category-2 Centre from the Government of the Islamic Republic of Iran, and a new global mechanism entitled "Global Ocean Science Report" for assessing and reporting the level of capacity in ocean science.

After the last IOC Assembly, the Chair and the Officers had an exchange of letters with the Director-General, Ms Irina Bokova, regarding the budgetary allocation for IOC in the revised programme and budget for 2012-2013 that was adopted by the 36th General Conference (36 C/5 Addendum). The Director-General was responsive to our request and IOC was benefited with a lesser budgetary reduction than average, that is, minus 3.4% instead of a minus 4.5%.

Through two letters of 2 February 2012 and 30 January 2013, after the IOC officers' meetings in February 2012 and January 2013 respectively, we explained the current situation of IOC and expressed appreciation for the support of Director General in spite of the present

UNESCO financial difficulties. I believe that IOC keeps good relations with the Director-General for maintaining functional autonomy and operational flexibility within UNESCO.

I had an opportunity to report the main activities of the IOC 50th anniversary at the UNESCO 36th General Conference on 31st October 2011, focusing on creating awareness of IOC and promoting a better image of UNESCO and its IOC, and obtaining the governments' commitment to the ocean. UNESCO in the ocean side event on 1st November 2011 launched the report "A blueprint for Ocean and Coastal Sustainability and its summary for decision-makers" which was published by IOC in collaboration with UNDP, IMO, and FAO. I know that this report was translated into a few languages and was used as an important background reference for Rio+20 to drive sustainable use of the ocean. Another important General Conference side event on "The official presentation of the IOC Sub-Commission for Africa and Adjacent Island States" was organized on 29th October 2011 jointly by IOC and African Group. Representatives of Africa Members States including Ministers and Secretary General of National Commissions for UNESCO and Africa Regional Committees attended the event.

Ladies and gentlemen,

I am very pleased to report to you on regional activities.

The IOC Sub-commission for Africa and Adjacent Island States, IOCAFRICA, was established and its first Intergovernmental Session was held in United Nations Offices in Nairobi, Kenya, during 2-3 May 2012. The session was chaired by IOC Vice-Chair for Group V, Prof Adoté Blim Blivi. The IOC Regional Committee for the Eastern Atlantic (IOCEA) and the IOC Regional Committee for the Western Indian Ocean (IOCWIO) were dissolved in line with Resolution XXVI-3 of the IOC Assembly. The Sub-Commission elected one Chair from South Africa and three Vice-Chairs from Egypt, Cameroon and Mauritania for the next intersession and adopted 4 recommendations including IOCAFRICA Strategic Plan and programmes of work for 2012–2013.

I am honoured to report to IOC Assembly of my participation in "The Second Session of the IOC Sub-Commission for Africa and Adjacent Island States (IOCAFRICA-II)" held during 3-4 April 2013, in Cape Town, South Africa, with the support of the South Africa's Department of Environmental Affairs. During the Session, there were comprehensive discussions and constructive suggestions for the future development of IOCAFRICA, with the full participation of Member States, on the strategic plan, programme of work for 2014-2017 and cooperation with other organizations. I am sure there will be a detailed report on this during this Assembly.

The 9th Intergovernmental Session of the IOC Sub-Commission for the Western Pacific, IOC/WESTPAC, was held in Busan, Republic of Korea on 9–12 May 2012. During the Session, the WESTPAC ocean research priority plan, and regional programmes, projects and working groups were reviewed and approved by the member states. IOC Vice-Chair for Group V, Prof Adoté Blim Blivi was invited to attend the Session with the support from the Republic of Korea for mutual cooperation between IOC/WESTPAC and IOCAFRICA.

The Twelfth Session of the IOC/UNESCO Sub-Commission for the Caribbean and Adjacent Regions (SC-IOCARIBE-XII) was held in Panama City, Panama from 9 to 12 April 2013 with the support of the Panama Maritime Authority. The Session was attended by 37 participants from twelve countries of the Caribbean Region, UN Agencies and regional organizations. The Session reviewed progress made during the intersessional period 2011–2013, and adopted three recommendations concerning: (i) Review of the IOCARIBE Secretariat; (ii) Caribbean Large Marine Ecosystem (CLME); and, (iii) IOCARIBE-GOOS. The IOC Executive Secretary attended the meeting, offering three presentations and interacting with delegates. Again, there will be a report on this at this Assembly.

It is also worth mentioning two workshops held in the WESTPAC area.

One was a workshop on "The Status of Marine Renewable Energy Technology Development in the Western Pacific" held in Malacca, Malaysia, 16–18 February 2012. This workshop was organized by the Malaysian government in collaboration with IOC/WESTPAC and the Republic of Korea in order to exchange information on the current status and future potential

of marine renewable energy in the Western Pacific countries. Extensive interests were expressed from the technological as well as economical points of view to the development of future marine renewable energies using tide, current, wave, wind, and ocean temperature, etc.

The other was the UNESCO/UNU Symposium on “The Great East Japan Tsunami on 11 March 2011 and Tsunami Warning Systems: Policy Perspectives” held during 16-17 February 2012 at United Nations University, Tokyo, Japan with an attendance of about 300 participants. Welcoming remarks were provided by His Imperial Highness Crown Prince Naruhito. This symposium was officially opened by the Director General of UNESCO, Ms Irina Bokova, and the Rector of the United Nations University, Dr Konrad Osterwalder. Former Director General of UNESCO, Mr Koichiro Matsuura provided closing remarks.

Furthermore, I have to mention three regional workshops held in Group II, Group III and Group V respectively.

The first meeting was held in Varna, Bulgaria during 19–22 March 2012 by the Institute of Oceanology, Bulgarian Academy of Science with the support of the Korean government. Two fora were organized consecutively during the meeting, namely, one forum on "The future of IOC toward next 10 years" for the purpose of exchanging views among IOC ex-chairs, and another forum on "The Operational Oceanography of IOC for Group II" to share information on the current status of ocean observation system in the region of Eastern Europe.

Following decision 4.2 of the 45th Session of IOC Executive Council to improve IOC's activities in the area of sustained ocean observations and services, the second workshop was held 5-8 March 2013, in Rio de Janeiro, Brazil, with the participation of 36 experts from 15 Member States of Group III and Korea, under the auspices of the Brazilian Navy and the government of Republic of Korea. This workshop was intended to broaden the discussion initiated at the Group II Forum held in Varna, Bulgaria, in 2012, and was organized in two consecutive fora—“The Future of Sustained Ocean Observations and Services in Group III” and “The Present Status of Sustained Ocean Observations and Services in Caribbean and Latin America Countries.” I am expecting such workshops to be continued in other regional groups as well.

The first African-Korea Forum on Ocean Sciences, Technology and Innovation was held in Cotonou, Republic of Benin, from 8 to 10 August 2012, with the support from the governments of Benin and Korea and also IOC. The Forum aimed to bring together the experts and policy makers working in marine science in order to identify gaps in ocean observation systems and to develop human capacity. There were about 100 participants from Benin, other African countries and Korea. The Forum received an unprecedented political support from the Government of Benin, by the attendance of His Excellency, The Minister of Environment, Housing and Urban Development of Benin, Mr Blaise Onisephore Ahanhanzo, and especially by a courtesy visit to His Excellency, the President of the Republic of Benin who was also the president of the African Union with 54 African countries, Dr Boni Yayi.

In May 2012, two IOC-related meetings were held in the Republic of Korea in conjunction with the “EXPO 2012 Yeosu Korea” which aimed in projecting a vision for green growth from the sea under the theme of "The Living Ocean and Coast". Namely they were:

- "The 2nd International Symposium on Effects of Climate Change on the World's Ocean", held in Yeosu, Korea from 13–20 May 2012 as a collaboration between IOC, ICES and PICES, and
- "The 4th Session of the Joint IOC-WMO Technical Commission for Oceanography and Marine Meteorology" in Yeosu, Korea during 23–31 May 2012 by IOC and WMO. The Session elected Mr Johan Stander (South Africa) and Dr Nadia Pinardi (Italy) as meteorology and oceanography co-presidents, respectively.

On the final day of 12 August 2012, UN Secretary-General Ban, Ki-Moon launched a new initiative called “The Oceans Compact” to protect the ocean and the people whose livelihoods

depend on it, and called on countries to work together to achieve more sustainable management of this precious resource and address the threats it is currently facing.

The “Expo 2012 Yeosu Korea” concluded with the Yeosu declaration whose main goal is to enlighten the world's civil society to have greater stewardship over the protection of marine environment and simultaneously to seek sustainable use of the ocean for future generations. Through a series of ocean related events, I believe the awareness for the importance of the ocean in the national or international societies will be enhanced significantly.

On behalf of IOC, I had an opportunity to participate as a panelist at the International Ocean Forum 2012 held during World Ocean Week, 2-8 November, in Xiamen, China, with the theme of “Blue Economy, Green Growth - Science-Led Development of Marine Economy”. The World Ocean Week of Xiamen provided a platform for promoting sustainable development of the ocean, particularly for regional cooperation and enhancing the interaction between the marine natural science and social science.

I would like to remind you of the letter addressed on 15 April 2013. From this we, IOC Officers, requested to the Member States that each government should be informed of the present financial situation of IOC so as to explore the ways to contribute to its extra-budgetary funds. We also stressed that all delegates participate fully in the discussion on the new Medium Term Strategy for 2014-2021 during this session.

Ladies and gentlemen,

We celebrated 50th anniversary of IOC three years ago. As stated explicitly in the Statutes, IOC has been working on promoting international cooperation and coordinating programmes in research, services and capacity-building, in order to learn more about the nature and resources of the ocean and coastal areas and to apply that knowledge for the improvement of management, sustainable development, the protection of the marine environment, and the decision-making processes of its Member States. In this regard, Africa as well as Small Island Developing States, as priority for UNESCO and for IOC, need more help for their capacity development in ocean activities.

In order to strengthen the role of IOC as the competent body and focal point for ocean science matters in the UN system with a functional autonomy within UNESCO, IOC should voluntarily demonstrate its capability by actively participating in regional and international activities such as the UN Conference on Sustainable Development (Rio+20) in Rio, Brazil and UN's “The Oceans Compact”. In this connection, IOC should be always ready to demonstrate the importance of the ocean for human life through focusing on the sustainable use of the ocean and the blue green economy.

The ocean plays a key role in the sustainability of our planet, which promises IOC's future with the blue and green ocean. Since its establishment in 1960, IOC's activities seem to be more focused on science rather than services. This brings IOC in facing continuous challenges from other international and domestic organizations during the last decade in terms of its leadership in the UN system. In order to meet the pending issues of member states, IOC should develop the function in ocean forecasting for predicting ocean-related disasters and climate change over the global ocean and coastal seas and, furthermore, find proper mechanisms, in consensus, such as operational oceanography for sustainable observation and service as well as scientific research and knowledge.

It is true that today we have many hardships caused by recent budgetary reductions and also by urgent ocean related issues as stated in the current four High Level Objectives of the IOC. However, I am sure that the future of IOC will be promising and prosperous if we strive forward hand in hand with our member states. Let's go together!

Thank you for your attention.

–D–

Statement from the President of the International Ocean Institute, Dr Awni Behnam

UNESCO, 28 June 2013

Dr Wendy Watson-Wright, Executive Secretary of the Intergovernmental Oceanographic Commission and Assistant Director-General of UNESCO,

Mr President,

Distinguished delegates

On behalf of the International Ocean Institute I wish to express deep appreciation and honour for the long and fruitful years of cooperation and collaboration with the IOC.

We truly value this partnership which has contributed so much to the achievement of the mission and goals of the IOI. Our current MOU updates the one previously signed in 1993 but our cooperation dates back even earlier, particularly so since the majority of the Executive Directors of IOI came to IOI after successful earlier careers with IOC.

The MOU we signed jointly in November 2010 reflects and further refines the complementary nature of IOC/UNESCO and IOI in strengthening marine related institutions in developing countries through capacity development, through sharing and dissemination of information and through the establishment of partnerships.

We have committed to cooperate to:

- support research, training programmes, scientific exchanges, fellowships, the organization of joint meetings and joint publications;
- strengthen programmes of coral reef protection, eco-villages and eco-tourism projects, women, youth and the sea initiatives;
- improve the quality of education in the marine sciences and to speed up the effort to find solutions to the problems of sustainable development;
- keep each other informed of relevant ongoing and planned programmes, projects and activities;
- share information and outreach material such as newsletters, yearbooks, conference and workshop proceedings and reports and other publications;
- support professionals of developing countries to participate in conferences, workshops and other meetings and training activities through funding or cost-sharing opportunities
- promote linkages between and among regional and national networks and/or centres with regards to training, research, creating awareness, information sharing and other capacity building activities.

The above actions are part of an ambitious programme, but one that is of direct relevance to assisting developing countries and economies in transition in managing their role in ocean governance. It is a programme to which the IOI and its global network of Operational Centres and Focal Points dedicates much of its best effort and time with the ambition of achieving the stated goals, as does the IOC of UNESCO. Nevertheless, despite not having met all goals to the desired level of achievement so that our work remains current, our modest joint achievements remain worthy of the renewal of the MOU for another three years.

Here I wish to mention that some of the most valuable contributions of the IOC have been in the area of intellectual and technical support to the IOI's global and regional training and education programmes in which we have incorporated in the work of IOC as in the workshops offered on marine spatial planning and natural marine hazards. In the new MOU we wish to retain the focus of our cooperation on capacity building through education and training.

The IOI also continues to invest time and capacity into the creation of new training and capacity building opportunities for the ocean community worldwide, through the expansion of the training programmes being organised through IOI-OceanLearn: the IOI's system-wide programme for the *coordination, delivery, quality assurance and development* of global partnerships of the International Ocean Institute's *capacity building* activities

Therefore in this respect, and with due acknowledgement to the partners who have made this possible, I am pleased to announce that, along with the University of Malta we are launching - a first of its kind – the postgraduate Master Degree in Ocean Governance.

This Master's degree programme on Ocean Governance is unique in its approach; it aims to forge a knowledge base that is essentially legal but which also delves into the natural and social sciences to determine how an effective governance framework should operate within a multidisciplinary perspective. In this era of globalization and sectoral integration, capacity building in the regulation of ocean governance plays a pivotal role in ensuring safe and healthy oceans for the benefit of humankind and the planet.

I also draw your kind attention and extend an invitation to you to our flagship conference in Thailand on 3 to 7 September this year which will address the theme: Sustainable Governance of the Ocean: Impacts of Climate Change & Ocean Related Hazards and, specifically, to the Leadership Seminar to be organised within it, entitled: Science on Tsunami for Today's Society and its Input to Society Security and Sustainability

Thank you.

–E–

Presentation by Prof. Adoté Blim Blivi, Vice-chairman Group V and Chairman of the Regional Subsidiary Body meeting, 2013 (IOC-XXVII/RSB/3)

UNESCO, 28 June 2013

Monsieur le Président,
Madame la Secrétaire Exécutive,
Chers Collègues IOC Vice Chair
Chairpersons and Technical secretaries of Sub-Commissions and decentralized offices
Mesdames et Messieurs les Délégués des Etats Membres

1-La lettre circulaire de la COI n° 2474 du 25 février 2013 annonçait des réunions en marge de la présente session, entre autres la réunion des organes subsidiaires régionaux de la COI sous ma responsabilité ; ce qui me permet de vous rendre compte, à titre informatif et d'orientation des mesures à prendre, si nécessaire, en vue de la croissance de la performance des organes subsidiaires, structures fondamentales, soubassements incontournables de la COI dans ces grandes géographies de la mer sous les appellations bien connues WESTPAC, IOCARIBE et IOCAFRICA.

2 - Cette réunion a eu lieu le 24 juin 2013 dans le Room VI de 15 heures à 18 heures ; trois heures pour activer tous les moteurs d'analyse des questions transversales des Regional Subsidiary Bodies auxquelles se sont ajoutés, dans la dernière révision de l'agenda de la réunion, les sujets aussi importants des bureaux décentralisés, notamment PERTH Regional Programme Office, Black Sea Regional Committee and IOC Regional Committee for the Indian Ocean.

3 - Cette réunion est sous l'effet de la Résolution XXVI-1, Strengthening IOC Regional Subsidiary Bodies qui entre autres, *Urges Member states to actively participate in regional Subsidiary Bodies and provide financial and in-kind support for the implementation of activities in the regions, including the secondment of staff.*

4-L'annexe de cette Résolution XXVI-1 intitulé Regional Strategy for Organizational Improvement fait appréhender le cadrage de cette résolution indiquant des caractéristiques, notamment, *Secretariat support and dedicated staff who are able to provide liaison between*

the Member States, organizations and institutions in the regions, willingness of Member States in these regions to contribute both in-kind and cash toward the implementation of activities, identifier les actions primaires de la COI, entre autres, define and implement focused regional priorities that provide leadership roles for Member States and ensure their engagement in the programmes et précisant l'intérêt d'intégrer ces actions primaires capitales in the next IOC Medium-Term Strategy 2014-2019.

5- Dans la mise en œuvre des résolutions et dispositions consolidant les Regional Subsidiary Bodies particulièrement, il est admis l'ouverture du poste IOC Regional Liaison Officer ; ce qui fut réalisé entre Août 2011 et Janvier 2012 avec la mise en service de la fonction au Secrétariat de la COI sous la responsabilité du Secrétaire Exécutif Adjoint. Cette dimension structurelle assez justifiée renvoie à une veille d'informations sur les Regional Subsidiary Bodies pour le Secrétariat de la COI afin d'élucider très rapidement toutes demandes relatives à la vie de ces trois organes subsidiaires.

6 – Le compte rendu de la réunion du 24 juin que je rapporte sous le item 5.1.3 - Role des organes subsidiaires régionaux et des bureaux décentralisés, je le reconsidère étant "Regards Croisés sur les performances des organes subsidiaires régionaux et des bureaux décentralisés", la notion de performance comporte plusieurs étages : la référence (l'état des lieux), les mesures et les ambitions et visions.

7 – L'agenda de la réunion comportait 8 points de discussion tournant autour de l'annexe de la Résolution XXVI-1, de la participation et contribution des Etats membres au développement des organes, de l'observation des défis communs et majeurs transversaux et visant la mise en exergue de propositions d'orientations (*au titre de recommandations*) pour relever les programmes de la COI dans les différents organes subsidiaires régionaux.

8- J'ai donné la parole à Mme la Secrétaire Exécutive pour cibler l'importance de cette pratique de la COI d'organiser une concertation entre les Officiers et les Secrétaires techniques des trois organes, élargie aux experts de ces géographies de la mer. Avec sa subtilité tactique d'engager les réunions, elle a optimisé l'attention des Délégués des 23 Etats membres, des délégués variablement dans leurs rôles et fonctions, sur l'importance des organes régionaux, porteurs clés de la COI dans les Etats membres régionaux. Elle a dirigé les discutants vers des voix, des mécanismes innovants à trouver pour de meilleures appropriations des défis dans un contexte financier qui bouscule notre organisation, la COI, dont elle a encore la charge.

9 – Le IOC Regional Liaison Officer a situé le cadre de la réunion par un contenu technique fondé sur le document IOC/INF 1299 qui rapporte le cadrage structurel de la COI et ses organes et bureaux décentralisés (administration, budgets etc ;). J'ai regretté que nous ne disposions pas de document de synthèse sur les performances des trois organes subsidiaires.

10 – La méthode interactive engagée a favorisé une somme d'informations produite par les organes, par les bureaux et par les comités. L'Assemblée a bénéficié des présentations soignées faites par les Présidents des Sous-Commissions appuyés par leurs Secrétaires techniques ; des présentations bouclées par des décisions qui retracent les questions discutées au cours la réunion. Il faut signaler également une somme importante de contributions croisées. Cette grande somme (informations et contributions) est finalisée en différents grands points suivants :

- **L'insuffisance de personnel** en service dans les secrétariats des organes ; les expériences partagées montrent les engagements des Etats membres à cet effet (IOCAFRICA/Kenya) ; la mise en action des approches de décentralisation des points focaux agissant pour le compte de secrétariat (Region WESTPAC).
- **La communication des activités des organes** ; l'expérience de WESTPAC est école, y puiser des ressources d'application serait à l'avantage des autres organes. IOCAFRICA bénéficie d'une attention particulière des Officiers de la COI qui ont saisi la DG/UNESCO sur la visibilité de la Sous-Commission auprès de la Commission de

l'Union Africaine ; ce qui constitue un moteur pour mieux intégrer les Etats membres aux forces scientifiques techniques qui figurent dans le plan stratégique adopté.

- **L'importance des organes subsidiaires** a été relevée au plan de la signification de leurs visibilités dans la région et dans chaque Etat membre par des ressources stables, croissantes. La recherche de ces moyens réside plus dans les volontés individuelles et collectives (l'exemple de WESTPAC est à considérer).
- **Le renforcement des capacités** a été souligné avec une nouvelle version intégrant les formations diplomantes Mater et PhD. L'exemple de WESTPAC disposant d'un Centre de Catégorie II a été très porteur et doit être copié pour appuyer les équipes de chercheurs bien avancées dans des domaines précis.
- **La mobilisation des ressources** a été aussi discutée et améliorée par de nouveaux types de partenariats productifs sur la base de projets réalistes, concrets relatifs aux grands sujets de recherche d'application : la sécurité humaine dans les zones côtières, l'économie des mers et la sécurité maritime sont des questions qui sensibilisent les Etats membres (surtout dans la zone IOCAFRICA)

11 - S'agissant des Comités, les participants ont noté le retour aux bonnes pratiques pour relever la portée de ces comités. Depuis plusieurs années (+ de 10 ans) des réunions, des workshops n'ont plus été organisées. Le futur de ces comités peut être engagé. Il faut trouver un meilleur mécanisme à cet effet.

12 - Au regard des enjeux partagés, au-delà de la crise financière bien comprise par tous depuis deux ans, les discussions ont dégagé :

- The inadequate level of the regular budget allocations,
- Insufficient and discontinued extra-budgetary resources,
- Only one staff for each secretariat (understaffing),
- The sustainability of the IOC global and regional programmes.

13 - En définitive, quelques orientations fixent l'essentiel discuté et partagé lors de la réunion :

- Optimiser les mécanismes de financements dans la région et dans les Etats membres,
- Développer un mécanisme de meilleur rendement entre les structures de la COI, les RSBs et les bureaux et un plan stratégique de suivi,
- Demander aux Etats membres de prendre en compte la nécessité de personnel additionnel aux secrétariats des RSBs,
- Encourager les Etats membres à un développement de volonté pragmatique pour appuyer la mise en œuvre des activités à la fois locales et régionales.

14 – En note générale

- IOC Regional Liaison Office ne dispose pas de rapport sur les RSBs. Ce manque d'indicateurs doit être corrigé pour répondre aux attentes de ce bureau mis en service en janvier 2012,
- Il faut un cahier de charge des titres, attributions, rôles de IOC Regional Liaison Office (à soumettre aux Officiers de la COI lors de leur session annuelle (janvier ou février 2014),
- Les secrétaires techniques des RSBs, des bureaux décentralisés et les Officiers des Trois Sous-Commissions doivent avoir une session biannuelle d'une journée à la veille du Conseil Exécutif et de l'Assemblée.
- Les discussions ont apporté des éléments répondant au futur de la COI dans les RSBs.

–F–

**Tribute to Mr Ariel W. Gonzalez (Argentina) by Mr Elie Jarmache,
Chairman of the IOC Advisory Body of Experts on the Law of the Sea**

UNESCO, 1st July 2013

**Hommage de M. Elie Jarmache (France), président de l'Organe consultatif d'experts
sur le droit de la mer (IOC/ABE-LOS), à la mémoire de M. Ariel W. Gonzalez (Argentine)**

Monsieur le Président, Madame la Secrétaire exécutive, Mesdames, Messieurs,

Rendre hommage à Ariel Gonzalez est bien la dernière chose que je souhaitais faire ce matin. Son destin tragique en a décidé autrement. Et je le fais avec le sentiment qu'il s'agit non pas d'une obligation protocolaire mais avec le sentiment qu'il s'agit d'un devoir qui est dû à la mémoire d'un collègue, qui au fil des années est devenu un ami auquel me liaient de fortes convergences intellectuelles.

Au sein de la COI, de notre COI, de sa COI, dont la communauté est légitimement composée de scientifiques et de gestionnaires de l'océanographie, Ariel Gonzalez a introduit dès son arrivée la nécessité de penser nos activités dans le cadre d'un nouvel ordre juridique qui est celui qui est né avec la Convention des Nations unies sur le Droit de la mer. Et le groupe consultatif d'experts sur le Droit de la mer que l'on connaît dans cette assemblée comme s'appelant ABE-LOS, créé par cette assemblée, est né précisément de la rencontre entre un programme ou des programmes de la COI et des règles de la Convention sur le Droit de la mer. Ayant présidé ce groupe, quasiment sur la durée d'une décennie, je peux témoigner de son rôle et de son apport aux travaux d'ABE-LOS. On doit à sa détermination, j'allais dire à son entêtement, on lui doit l'adoption d'un guide sur le transfert des techniques marines qui est aujourd'hui une référence. Ce guide est régulièrement cité dans les résolutions de l'Assemblée générale des Nations unies. Ariel a développé des idées originales de mise en œuvre de la partie XIV de la Convention, partie XIV qui était laissée pour compte par de nombreux scientifiques, gestionnaires, juristes et diplomates. Ariel a, dans cette assemblée, ramené cette question au centre de nos débats. Au-delà de cet exemple, je peux aussi témoigner de deux autres traits éminents de la personnalité d'Ariel Gonzalez. Ariel avait l'intelligence du droit et la passion de l'Argentine.

L'intelligence du droit d'abord. Elle s'est manifestée de plusieurs manières. Bien entendu le droit n'est pas univoque. Et Ariel a su exprimer les différentes nuances de la façon dont on pensait le droit. Il a souvent dit que la rigueur n'excluait pas l'adaptation aux exigences des situations et il en a fait la preuve dans nos travaux. Par exemple, Ariel défendait l'intégrité du régime juridique de la partie XIII qui régit la recherche scientifique en mer. Il était un gardien du temple ! Mais lorsqu'en face de lui, pour des raisons concrètes et pratique —et il y a dans la salle des gens qui doivent s'en souvenir— lorsqu'en face de lui il a trouvé les tenants de la communauté de l'océanographie opérationnelle en proie aux difficultés d'accepter cette rigueur juridique, lui le premier a dit : « Dites-nous quelles sont vos difficultés, quels problèmes vous rencontrez. Il y a toujours moyen de trouver une solution dans le respect de l'esprit de la règle. » Et ainsi fut fait. Intelligence du droit par sa capacité à proposer des possibilités de sortie de crise quand l'adoption d'un texte reposait sur la sacro-sainte règle du consensus.

Passion de l'Argentine ! Cher Ariel. Est-il besoin de dire que dans son éthique personnelle, le service passionné de son pays était une vertu permanente. Au-delà de la valeur, c'était d'abord une vertu de comportement. Le pays ne pouvait mal faire. Et ici la notion de pays est une notion atemporelle, c'est-à-dire qu'elle dépasse les régimes, les gouvernements, les élites. Donc son pays, de ce point de vue-là, ne pouvait mal faire. Il faut se souvenir, d'une manière non pas anecdotique, et je le dis sous le contrôle de Javier (Valladares), il faut se souvenir de l'ardeur qu'il a mise à faire élire un argentin à la tête de l'Assemblée. Il y a mis toute sa conviction. Il a été un agent électoral au meilleur sens du terme pour faire élire un argentin à la présidence de l'Assemblée. Il faut se rappeler également de sa fierté, de sa joie

qu'il a eu à accueillir le groupe d'experts (ABE-LOS) auquel il appartenait, à Buenos Aires, dans sa capitale. Une grande réunion (5^e session, Avril 2005). Il a été à la fois un hôte extraordinaire et un animateur. Il avait le sentiment que pour la renommée du pays, la session qui se tenait chez lui devait être une session absolument remarquable par ses résultats. Ce fût le cas : nous y avons adopté un certain nombre de décisions importantes. Ce fût pour moi —si vous permettez ce détour d'un souvenir personnel— ce fût pour moi, l'occasion, grâce à lui et sous sa conduite, de refaire avec lui l'itinéraire qui l'emmenait vers son collège. Il m'a fait visiter le collège. Et la joie qu'il avait à raconter ses années d'adolescence. Et c'était assez émouvant de voir chez ce garçon, chez cet homme d'apparence austère, une certaine joie liée à des souvenirs que l'éloignement de la capitale rendait encore plus beau.

L'ouvrage qu'il nous laisse est aujourd'hui un ouvrage qui est le meilleur de la synthèse entre ces deux traits que je viens d'évoquer. Son ouvrage est à la croisée des chemins.

Ainsi était donc Ariel. Mais il était plus que ce que je viens de dire, forcément. Il était plus attachant encore. Et il était comme nous tous qui pouvons l'être d'une certaine façon, encore beaucoup plus complexe. Il reste de lui dans cette salle et dans toutes celles où la COI se réunit, cette allure d'un jeune homme pressé. Toujours rentrant et sortant en coup de vent. Je dirais d'un éternel jeune homme pressé. Et malheureusement l'éternité nous l'a pris. Il est dans notre rôle de pouvoir, à tout moment, ralentir les effets de l'éternité.

C'est pourquoi, au moment de finir mon hommage très bref, j'ai l'honneur de proposer, c'est une idée qui m'est venue ce matin, j'ai l'honneur de soumettre à l'approbation de cette assemblée qui prendra le temps de la réflexion, que l'Assemblée de la COI retienne l'idée d'une séance commémorative tous les deux ans qui porterait le nom de Conférence Ariel Gonzalez. De la même façon que nous avons déjà sur nos emplois du temps les conférences A. Bruun et N.K Panikkar. Et nous aurions ainsi un triptyque qui fait que tous les deux ans, revenant en assemblée, nous savons que nous aurons des discussions scientifiques éminentes comme celle de vendredi dernier. Mais nous savons également que grâce à Ariel, grâce à son legs, nous serons à la hauteur de discussions, et d'aborder des questions émergentes qui sont celles aussi bien du droit que de la gouvernance. Quel plus bel hommage que lui rendre cela à l'occasion de ces séances commémoratives. Je vous remercie vraiment de votre attention.

ANNEX IV

REPORT OF THE CHAIRMAN OF THE RESOLUTIONS COMMITTEE

Peter Dexter (Australia)

Mr Chairman, colleagues, it is my pleasure to report to the 27th session of the Assembly as chairman of the Resolutions Committee. The Committee examined 3 draft resolutions, two of which were available to delegates in the Action Paper in advance of the session, the other, dealing with Programme and Budget matters and the Medium Term Strategy, became available during the session, as agreed earlier by the Assembly.

As a first comment, I would say that having fewer DRs to examine, made available well in advance of the session, with other actions required by the Assembly being included in Decisions to be embedded in the report of the session, has made the work of the Resolutions Committee considerably easier. This also clearly provided advantages for the delegations, in enabling them to formulate views and responses in advance. In addition, having the DRs prepared in advance, with support from the Secretariat, meant that they were much better formulated, concise, and generally better written than those in the past, prepared "in extremis" during Governing Body sessions. They generally conformed well with the draft guidelines which the Executive Council adopted last year on a trial basis, and this also considerably assisted the work of the Committee. In general, the Resolutions Committee made very few editorial and structural changes to these DRs.

On the other hand, Mr Chairman, colleagues, it appears from discussions during the Assembly on some of the agenda items, in particular those relating to the reports of various subsidiary bodies, that we may have gone a little too far in the other direction in converting what were previously formulated as DRs into simple decisions. My impression of the feeling of the Assembly, with which I agree, is that decisions on such reports, and in particular the recommendations contained in them, should in future be formulated as DRs, so that budgetary and other resource implications in their approval, for both the Organization and Member States, can be explicitly spelled out and evaluated prior to such approval.

It is therefore my recommendation to the Executive Secretary, subsidiary bodies and Member States that, when formulating decisions based on recommendations from such subsidiary bodies in the future, these be presented to the Governing Bodies in the form of DRs whenever they contain resource implications for the IOC and/or Member States. I do not believe that this recommendation requires any modification to the draft guidelines for DRs as formulated last year, which otherwise seem to have worked well, but is simply to inform the work to be undertaken in future in formulating decisions and/or DRs.

Mr Chairman, colleagues, the other task before the Resolutions Committee was to review the draft guidelines on DRs adopted by the EC in 2012 on a trial basis in preparing for the present Assembly, and to recommend to the Assembly any modifications, and eventually their formal adoption. Before proceeding, I would like to stress that these guidelines are intended as just that – guidelines. While they of course should conform with relevant parts of the Rules of Procedure and Statutes, they do not, in themselves, constitute rules or regulations, but provide guidelines to the Member States, subsidiary bodies and the Executive Secretary in the preparation and presentation of draft resolutions, recommendations and decisions to Governing and subsidiary bodies of the IOC.

As I noted earlier, with the small proviso I just mentioned, these draft guidelines have worked well from the perspective of the Resolutions Committee, in simplifying and facilitating our work. A number of small, essentially editorial changes are suggested, to improve consistency and also clarify the text in places. At the same time, the Committee did express some concern over two of the articles in the guidelines, which will be shown on the screen. The first concerns Article 8, where some delegations felt that, since the current version of the Rules of Procedure do not explicitly give

the right to the Executive Secretary to submit DRs to Governing Bodies, these Guidelines should also explicitly not contain such a right. Consequently, we have agreed to omit little roman 2 from the previous draft of article 8. At the same time, however, I believe, both personally and speaking for Australia, that the Executive Council, at its 47th session in 2014, should be requested to address this issue, with a view to possibly proposing to the next Assembly in 2015 a small amendment to the Rules of Procedure to accommodate such a pathway for submission. I know that this view is not necessarily shared by others on the Committee, so I would invite other Member States to give their views on this issue. In the event of a consensus to proceed, some modifications to the draft decision on this topic have been prepared to effect this.

The second issue of concern relates to Article 15, where delegations have proposed to extend the advance time required for the submission of DRs to the Governing Bodies from 24 hours to 72 hours. This seemed to the Committee to be very reasonable, so this change has been made to Article 15. In addition, the Committee felt it appropriate to further clarify the situation regarding the DR on Programme and Budget, and facilitate the future work of Governing Bodies. To this end, we are proposing a separate Article on this issue, which is explicit regarding the submission of the Programme and Budget DR during sessions, rather than in advance.

Finally, Mr Chairman, there are two other small changes which I bring explicitly to the attention of the Assembly: Firstly, with regard to Article 28, we propose to delete the last sentence. This seems to us to be beyond the competence and remit of the Resolutions Committee, and to be a function for the Secretariat to carry out. Secondly, and with advice from the Chairman of the Finance Committee, we propose to include some generic wording at the end of the Appendix to the Guidelines, relating to the presentation of financial implications when preparing DRs.

With these comments, Mr Chairman, the Resolutions Committee recommends to the Assembly to adopt the Guidelines for Draft Resolutions, as revised.

Before closing, I would like to offer my thanks to all members of the Resolutions Committee for their input and willingness to find solutions to the few problems which arose during our work. I also thank Julian Barbieri of the Secretariat for his great support and always helpful advice, which made our work much easier.

Thank you.

ANNEX V

INFORMATIONAL ANNEX

Record of Member States' interventions at the 27th Session of the IOC Assembly that were provided to the IOC Secretariat by the respective Member States. Interventions are reprinted without review or verification.

3.1 Statement of the Chairman on the State of IOC

India

The Indian delegation would like to compliment and thank the Chair and Executive Secretary for a comprehensive presentation on progress with the implementation of various programs particularly with programmes related to the HLOs of IOC. We are happy to note the progress on Ocean observations, establishment of tsunami early warning systems, GLOSS, OBIS, capacity building programmes, and other programmes.

Mr. Chairman, our government is conscious about the requirement of ocean observations and has agreed to spend USD 12 million per year to sustain and continue the existing observing systems in the Indian ocean and to increase their number as required. These include moored buoys, underwater moorings of ADCPS and current meters, Argo floats, surface drifters, XBT transects, HF radars, sea level gauges, etc. In addition to these observing systems, India is also supporting the RAMA moorings of NOAA, USA to promote data availability from the Indian Ocean region. As Australian delegation has mentioned, the scenario in ocean observations have changed drastically from what we had ten years back. As we know, the Argo floats have recently yielded the one millionth profile and will add several million profiles in the coming years. Mr. Chairman, our government is committed in promoting and supporting the programmes of IOC in ocean observations and committed to continue to do so in the coming years.

Mr. Chairman, we thank IOC/UNESCO for the reposing the faith in the ITOWS and recognising Indian Tsunami Early Warning Centre as one of the Regional Tsunami Warning Service Provider for the region.

Mr. Chairman, as committed earlier, we have already set up the geo-balancing mirror site to archive and distribute the OBIS data at a cost of USD 22000 and will continue to support such activities of IOC in the coming years.

Japan

Despite the present financial situation, the IOC has achieved a lot in its priority areas including tsunami, GOOS and other related activities. With regard to the financial crisis, my delegation would like to recall the Officers' statement Capt. Frederico Salaiva Nogueira just delivered to the Assembly to draw serious attention of the Member State to the current situation and to solve the problems we have been facing. Japan has provided a staff member support to the Secretariat since January 2013 as its additional contribution to the Commission.

Malaysia

As mentioned, Malaysia would like to take this opportunity to reiterate its heartfelt appreciation to the Government of the Republic of Korea in particular KORDI for co-organising the Marine Renewable Energy Technology Development Workshop for the Western Pacific which was held in Malacca from 16-18 February 2012. Following this workshop, a questionnaire was distributed to all WESPAC Member States and the outcome of this questionnaire has been drafted and will be published in due course for the IOC and IOC/WESPAC.

Republic of Korea

On the outset, the Republic of Korea would like to thank the IOC Chair for the clear and comprehensive report highlighting the various activities as well as for your strong leadership to engage Member States in collaborating more closely and establishing stronger networks among themselves.

As mentioned in the IOC chair report, the forums on the future of IOC as well as operational oceanography for IOC's Regional Group II and Group III were good initiatives for enhancing institutional capacities of IOC. In this regard, the Korean Government will continue to support the IOC Chair's intentions to establish further network for other regional groups within the IOC framework. Thank you.

South Africa

You have articulated the present situation very clearly with good foresight. The future success of the IOC is dependent on member states and the visibility of the commission within each member state and region.

However, we would like to highlight your personal efforts in gaining Korean support for the activities on the African continent including Cotonou research meeting and the first two sessions of the IOCAFRICA.

It was not only a pleasure for SA to welcome the chair and the exec sec but also other delegates from all over Africa as well as Korea to Cape Town for the second session of IOCAFRICA.

For SA it became clear that a genuine relationship can develop between the republic of Korea and Africa and would welcome further engagement to give rise to a mature and mutually beneficial relationship.

3.2 Report by the Executive Secretary on Programme and Budget (2012–2013) and Medium Term Strategy (2008–2013) Implementation

Belgium

My delegation thanks the executive secretary for the extensive report on the IOC's activities in cooperation with concrete financial member states. It is important that – if IOC has to maintain her status a flagship status within UNESCO's palmares – the member states need to take their responsibility in continue their support to keep IOC operating properly.

In this respect my delegation endorses the delegation of Canada to focus to the core business of IOC and use the framework that is proposed in draft Progr. & Budget documents, taking into account that several of these activities need to be worked out in a long term perspective (that means beyond 2017). This in particular thru for Capacity Building and ICAM related issues.

My delegation wants to commend the executive secretary for the very comprehensive overview of the activities that IOC have been performed in the last six years. It demonstrates that IOC has been instrumental in stimulating members states to participate jointly in the implementation of Global Programs like GLOSS, ARGO, GOOS, etc...

IOC and the secretariat is also to be commended for her role in giving guidance in Capacity Development at local, regional and global level. It is important that IOC can continue in providing science based knowledge transfer in a cooperative manner.

Canada

Canada would like to express its appreciation for the efforts of the Officers, the Executive Secretary and the IOC staff in promoting the objectives of IOC during these financially difficult times. Also, Canada would like to express its sincere thanks to all the member states who have contributed financially and otherwise to ensure the continuity of IOC programmes. These voluntary contributions have allowed the IOC to continue its important mission and Canada is deeply appreciative of the spirit of community shown by all. Nevertheless, it may fairly be asked whether the current path is sustainable over the mid- and longer term. The IOC might want to consider changes to adapt to changing circumstances and ensure its continued relevance to global issues. We agree with the Executive Secretary's statement that behind the current challenges lies opportunities for constructive change. Canada is willing to work with the Officers, the Executive Secretary, the subsidiary bodies, and member states to examine the mission of the IOC and possibly find new ways to work together and forge ahead. In that sense, we strongly support the definition of a framework as alluded to in the Programme and Budget that allows the IOC to establish its priorities for its internal activities and for its partnerships. Canada feels that it is important that the IOC increasingly refines its focus (where it makes unique contributions) and communicates that focus clearly to itself and to our partners so that it can continue and possibly increase its essential contributions in the international arena.

India

On the capacity development front, our government has already provided the financial support to establish the International Training Centre for Operational Oceanography at INCOIS, Hyderabad. The training centre

has already conducted one training course over telepresence in collaboration with IODE's Ocean Teacher programme. Now we are working with the technologists to make it possible for anyone to join such courses using their laptops from anywhere in the world.

Finally, our delegation would like to assure IOC that India will continue to cooperate and support the activities of IOC.

Norway

Norway would like to underline the many valuable contributions that have been made by the IOC to development of ocean science and ocean science policy during the last biennium and thank the Executive Secretary and Secretariat for their efforts in managing many tasks with limited resources. While other nations have been steady supporters and provided inkind and financial support to IOC for many years, in this biennium also Norway has been able to contribute to the IOC Special Account. In particular in the present situation with the reduced funding from UNESCO, we would like to emphasize the special need for IOC to receive such funds outside the UNESCO regular budget. Only then will the IOC governing bodies be able to make relevant priorities, to capitalize on IOC's competence and capabilities and initiate new and timely activities in addition to continuing existing activities. The oceanographic competence of the IOC puts it in a special role that complements other parts of the UN system dealing with wider issues of ocean policy. The IOC activities within ocean science have a unique role to play in underpinning these wider issues and the decisions to be made. We urge all member states to contribute both to widening of the funding base of the IOC programme activities and to the debate on future activities and priorities of IOC.

Republic of Korea

Thank you Mr. Chairperson. The Republic of Korea would like to thank Madam Executive Secretary for her efforts in preparing and presenting the report on the recent IOC activities and budgetary situation. My delegation highly appreciates her leadership despite the recent challenges over the last 2 years, in solving the problems that IOC was facing with.

Nevertheless, IOC's extra-budgetary funds have been significantly reduced compared to the last session, and therefore may affect the projects that call for a worldwide interest, such as the Tsunami Early Warning Systems and the follow-up projects for the Oceans Compact. In this regard, I would like to invite every Member States to show interest and support to jointly address this situation. Such a cooperative attention will create a synergetic effect to overcome this obstacle.

My delegation wishes to underline that IOC must move forward with its projects on ocean disasters including Global Tsunami Early Warning System, Africa and Small Island Developing States, and follow-up on the recent framework of the "The Ocean's Compact Initiative" announced by the UN Secretary-General, Ban Ki-moon. Moreover, IOC must proceed with its 4 High Level Objectives (HLOs) through collaborations without any interruption.

Taking this opportunity, I would also like to draw your attention to the fact that 2012 Yeosu Expo has been successfully hosted in Korea through the support and interest of IOC and its Member States, for which I would like to pay our sincere gratitude. Finally, my delegation wants to share the information with Member States that the Ministry of Oceans and Fisheries has been re-established in the Korean Government after the inauguration of the new President Park Geun-Hye. Thank you for your attention.

South Africa

South Africa would like to thank the Executive Secretary for the good presentation and the work done thus far, despite the difficult financial times. South Africa would like to congratulate the Secretariat for the achievements within, what we recognise, as exceptionally difficult times. As we proceed, we would urge the Secretariat to continue with their efforts in implementing these activities of the IOC and find ways in which to encourage member states and regions to continue in finding innovative ways to ensure that the valuable work proceeds. As an example, the SA delegation would also like to express its gratitude to the IOC and the government of India for funding the participation of two officials trained in the valuable field of the use of ocean observations for Coastal zone management held in India.

The South African delegation also wishes to thank the Government of Flanders for their continued and sustained support for the valuable work being done on the continent of Africa with respect to ocean data and information, through the ODINAFRICA programme. This partnership has matured and we fully support this continued engagement.

South Africa is grateful to the IOC for their efforts in prioritizing activities around Africa, taking into consideration the fact that Africa is a UNESCO priority. The presence of the IOC Executive Secretary, in

spirit, at the first Session of IOC-Africa and her physical presence at Second Session of IOC-Africa, together with the Chair of the IOC, was much appreciated and gives confidence in the IOC that the developing countries and island states remain on the radar.

South Africa, as the current chair of the Sub-Commission, would like to state that it is our intention to work together with member states of Africa and other member states of the IOC, to have a solid strategy to increase the prominence and usefulness of ocean science and services on the continent for the protection of our ecosystems and citizens.

The presence of both the Executive Secretary and the IOC Chair at the Second Session of IOC –Africa in Cape Town in April this year demonstrates the IOC’s commitment as well as other member states such as Republic of Korea.

We thank the Executive Secretary and her staff for their efforts in promoting the needs of all developing countries, small island states, and we hope that their efforts in our region will continue within the context expressed by the Executive Secretary....that now is the best time to re-evaluate our priorities and programmes to best address the challenges of citizens and ecosystems.

United States of America

The U.S. delegation wishes to compliment the President and the Executive Secretary in the preparation and presentation of their reports, and in their daily work. We recognize that the IOC continues to face difficult budgetary circumstances and acknowledge the efforts of the President, the Executive Secretary and the Secretariat staff to secure extra-budgetary funding to bridge gaps, to cover core functions and for IOC program activities. We express our gratitude to the many Member States that have risen to meet these budgetary challenges through general and directed contributions.

The United States places a high value on its participation in the IOC, the leading competent international organization for ocean sciences. Through the IOC we see global contributions through science to safety of life, economic development and prosperity, commerce, public health, and scientific discoveries to define and improve the health of our marine environment. These results complement the objectives of our own National Ocean Policy.

We fully understand the complications and difficult position of current IOC finances. We are committed to continue with our substantial investments in global ocean programs, at sea, and in organizational symposia, and to promote free exchange of data. Our presence in each of the High Level Objective’s is firm. As several speakers have alluded, the initiatives of Member States will ensure the future and success of this body, I assure you that the United States is committed to sustaining our investments in our shared programs . . .(these include TSUNAMI, GOOS, IODE, CLIMATE RESEARCH including OA and the World Climate Research Program, HABS, and others.)

The United States will also continue its support for the engagement of U.S. scientists and technical experts in the various IOC sessional and inter-sessional committees, working groups, and regional subsidiary bodies. Such support will enable the United States to continue to be responsive to IOC programs, circulars and contribute to the agenda of the IOC.

3.3.1 IOC Sub-Commission for Africa and the Adjacent Island States (IOCAFRICA)

Republic of Korea

The Korean delegation would like to congratulate the IOCAFRICA for its successful implementation for the opening of its regional office and designating coordinators, holding second sessions of its Assembly last April, and especially on the preparing a strategic plan including work program. However, we are still concerned whether the planned activities could receive the appropriate funding due to the recent IOC’s financial difficulties. Korea respects UN’s decision on putting high priority toward African countries and will continue to support IOCAFRICA’s development according to its strategic plan within IOC framework through Korea’s various ODA program.

3.3.2 IOC Sub-Commission for the Western Pacific (WESTPAC)

China

Chinese delegation would like to thank the excellent report presented by the Chair of IOC/WESTPAC. China much appreciates the effective works of the WESTPAC Secretariat and officers during the past years in promoting practical ways and innovative modes to reform and revitalize the Sub-Commission. And we are

quite satisfied to see that many programs under the framework of WESTPAC are now being successfully implemented with the comprehensive supports from the WESTPAC member states. China will continue enhance its support to the Sub-Commission, including financial contribution and staff secondment.

Mr. Chair, I don't need to say more about how important of the subsidiary bodies to IOC. China urges IOC to consider strengthen its support to WESTPAC, improve the WESTPAC office based in Bangkok, including promoting the level of the post of the WESTPAC secretariat and human resources.

Indonesia

Firstly, Indonesian delegate would like to express highly appreciation to the chair of IOC Sub-Commission for Western Pacific for the very clear and inspired presentation and the successfully efforts to realize the highly impact programs for the western pacific region.

Indonesian delegate considers that the regional systematic collaboration among member countries around Indian Ocean and Western Pacific is strongly needed to further develop intensively in the future. Therefore, this year Indonesia has launched Widya Nusantara Expedition (E-Win) 2013 in celebrating 25th anniversary of UNESCO IOC Sub-Commission for Western Pacific. In that cruise, Indonesia has invited Westpac member countries to participate in the cruise to Makasar Strait, where 2 researchers from Republic of Korea and 2 other researchers from China have been involved in the cruise. For the coming years, Indonesia is going to invite more researchers from the Westpac member countries to be involved in such cruise in the Indian and Western Pacific Waters.

In addition, we would like also to report that in line with the spirit to build ocean regional research collaboration among the related countries, Indonesia has conducted an international seminar with the title "Indian Ocean and Pacific Conference (IOPAC) 2013" that was held in Bali from 18 to 21 June 2013. In this opportunity, we would like to encourage the member countries to recognize such event as one of effective ways to increase intensity research collaboration among the countries, in order to get better understanding of our ocean and to solve ocean problems that always become more and more complicated. Thank you very much.

Japan

Japan congratulates that the re-vitalization of the WESTPAC activities has been achieved successfully in these days. Japan believes one of reasons is the WESTPAC applied a new mechanism which is the evaluation processes for on going and finalizing projects. The WESTPAC accomplishments have been displayed on the posters at the lobby. Japan appreciates to the tireless efforts of the Secretariat and the WESTPAC officers.

For the effective promotion of the IOC activities, it is very important that the sub-commission, regional subsidiary bodies (RSBs) should be functioned well. Although, there are severe budget constraints however, we would like to point out that it is possible to continuously conduct necessary support is also important.

Japan has a strong policy to support community activities by using the means available, such as contributing to the WESTPAC 25th anniversary celebration activity and contribution of the Government of Japan Trust Fund as well. Japan expresses our gratitude to the government of Thailand that is hosting the secretariat of the WESTPAC from the early stage.

Malaysia

First of all, Malaysia is pleased that WESTPAC had made substantial progress in the implementation of IOC programmes and activities in the region. We thank Dr Somkiat, Chair of IOC Sub-Commission for the Western Pacific for the comprehensive WESTPAC's summary report.

Malaysia has been giving and will continue to give its full support to IOC-UNESCO and IOC-WESTPAC programmes;

- By providing the coordinating mechanisms through our National Oceanography Directorate of the Ministry of Science, Technology and Innovation;
- By creating platforms for capacity building and participation in Oceanography and Marine Science related training through the Malaysia-UNESCO Cooperation Programme for Least Developed Countries, Small Island Developing States and Priority Africa; and
- By organizing events in conjunction with 25th anniversary of IOC-WESTPAC, World Oceans Day and Coral Triangle Day.

These we hope will somehow enhance the impact of WESTPAC at regional and national level.

In addition, we are pleased to inform that Malaysia celebrated World Oceans Week from 3rd to 11th June recently to highlight the 25th anniversary of IOC-WESTPAC, World Oceans Day which falls on the 8th of June and Coral Triangle Day on the 9th of June. This week-long celebration consists of eight major events targeting students, professionals, experts, policy makers and the public at large. In this regard, we wish to express our sincere gratitude to the French and the United States Governments for their generous support and cooperation in co-organising the Ocean Governance and Technologies Symposium and the Coral Triangle Initiative for Coral Reefs, Fisheries and Food Security Conference respectively, during this celebration.

As for upcoming event, Malaysia is privileged to host the IOC/WESTPAC Summer School on SEAGOOS Monsoon Onset Monitoring System and its Impact on Social and Environmental (MOMSEI) on 19 – 23 August 2013 at Universiti Malaysia Terengganu.

Finally, allow me to reiterate Malaysia's commitment and support of IOC's mission. We believe that IOC High Level Objectives can be achieved if Member States collectively engage actively and communicate with each other.

Republic of Korea

First of all, Korean Delegation would like to congratulate the 25th anniversary of WESTPAC in advance, and appreciates the chair person and the secretariat for their significant achievement in spite of the limited workforce and budget. With the enforcement of workforce as Dr. Somkiat just reported, Republic of Korea expects more active and influential activities in the region.

Supporting the future direction of WESTPAC, Republic of Korea would like to join the coral reef ecosystem research and capacity building programs as a member state.

Thailand

On behalf of Thai delegation, I would like to thank the chair of WESTPAC for his precise summary on the WESTPAC activities. I would also like to express our sincere gratitude to all WESTPAC Member States and IOC colleagues for keep supporting the WESTPAC, which resulted in numerous achievements during the past few years.

Thailand, as the host country of WESTPAC secretariat office, will keep exploring possibility to extend support as well as to encourage more government agencies, research institutions, and universities, to participate in WESTPAC activities.

Taking this opportunity, I reiterate our strong support to WESTPAC, both participation in the activities, and hosting the secretariat office.

United States of America

The United States commends the Chair of the Subcommittee of WESTPAC for his report and to the Member States participating. Recalling the remarks of other delegations regarding the successful revitalization of WESTPAC, this delegation suggests the relevancy of this experience with a newly emerged subject, The Future of the IOC. We suggest that the accomplishments of WESTPAC and the manner of its achievement may serve as a model to address the question of the future of IOC. Substantial contributions from Member States and imaginative methods of implementation have generated significant success and may serve as a model for IOC, in that nominal investments were required from the IOC budget in order to generate this success.

Viet Nam

As you may be aware Vietnam has long history as a member of IOC with nearly 30 years.

Seeing back the history, It is recognised the fact that IOC was invisible widely in Vietnam for many years in the past. As mentioned in the report of the sub-commission, WESTPAC activities have been enhanced much in recent years. As the result, IOC has been recognised widely by scientific & political communities in Vietnam, considering important roles in coordination & integration of marine science as well as capacity building and networking. It is clear that the enhancement of WESTPAC in recent years depends on increased contribution of member states and remarkably on efforts of the Secretariat.

Recently, Vietnam has been involved in almost IOC/WESTPAC activities/projects and considered an active member of the sub-commission. Having expectation to contribute more to IOC, Vietnam offered to be the host of the 9th IOC/WESTPAC International Scientific Symposium. This offer was selected by WESTPAC members and accepted by the IOC Executive Secretary, Mdm. Watson Wright.

It is informed that the 9th Symposium will be held in April 2014 in Nha Trang city, a well known coastal tourist centre of Vietnam. Vietnam Government supports strongly to this event, including financial support. Detailed information on the Symposium can be found in the poster outside the meeting room and in the Symposium website (<http://www.vnio.org.vn/9thwestpacsymp>).

On behalf of the International Scientific Steering Committee and Local Organising Committee, I am honourable to invite and welcome you all to this event.

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

Belgium

My delegation thanks prof. Brisola for giving an excellent overview of the activities that have been performed in the IOCARIBE region.

Our delegation supports several of these activities in the region and therefore endorse fully the main recommendation of the IOCARIBE review to establish a full IOCARIBE Secretariat post in Cartagena, Colombia. It is of strategic importance to have a full-time IOCARIBE Secretary in place, in order to facilitate implementing projects in the regions. It is event of strategic importance that the post will be instrumental to attract additional funding from international bodies such as e.g. European Commission, UNDP, GEF, etc... that will beneficial for the region.

United Kingdom

The UK delegation welcomes the report from IOCARIBE and recognises the significant contribution made by Colombia in supporting the Secretariat. We congratulate the participants for the wide range of activities they have carried out, indeed the UK delegate reported very favourably on the recent ICG for the Caribbean tsunami warning system. We will ensure that the report from IOCARIBE is brought to the attention of those UK ministries with responsibility for overseas development and capacity-building activities.

Venezuela (Bolivarian Republic of)

La República Bolivariana de Venezuela desea manifestar su apoyo a la solicitud de recursos ordinarios formulada a la Secretaria de la COI, pues está claro que la dicotomía entre Cartagena y Kinston se refleja en el trabajo eficiente del IOCARIBE, por otra parte la subcomisión misma tiene necesidad de apoyo internacional visto el trabajo que ha venido realizando, con altibajos, pero que en suma no dudamos en calificar de exitoso.

United Nations Environment Programme (UNEP)

Three very clear areas of cooperation take place between the Caribbean Regional Seas of UNEP and IOCARIBE:

1. Within the GEF full size project "SUSTAINABLE MANAGEMENT OF THE SHARED LIVING MARINE RESOURCES OF THE CARIBBEAN LARGE MARINE ECOSYSTEM" (CLME) and adjacent regions, UNEP-CAR/RCU has been responsible for the completion of the pilot project "MANAGEMENT AND CONSERVATION OF REEF BIODIVERSITY AND REEF FISHERIES". The objectives of the pilot project are:
 - i. contribute towards the sustainable use of reef fisheries and marine biodiversity through the application of the ecosystem based-approach and on the basis of the principles and values of good governance;
 - ii. strengthens the governance of reef fisheries and marine biodiversity management at the local, national, and regional levels through improved regulations and enforcement in large reef systems with demonstrable cross-cutting multi-sectoral linkages;
 - iii. enhances marine biodiversity conservation through the strengthening of existing marine protected areas to enable them to meet their conservation objectives;

This project has contributed to:

- A comprehensive Management Plan developed for Pedro Bank, Jamaica's main commercial and artisanal fishing grounds and serves as the primary harvesting area for the largest export of Queen Conch from the Caribbean region.

- Zoning and fisheries management & strategic plan, with a publicly accessible GIS completed for Montecristi National Park in the Dominican Republic (~420 km²), the third largest fishing community in the country with 73% of Dominican Republic's high sea fishing vessels.
 - Improved scientific data and research in target areas which collected critical baseline, trend and indicative data. South West Cay at Pedro Bank declared as Protected (Special Fish Conservation) Area.
 - Colombia Shark Fishing Regulation drafted and National Fishing Framework assessed.
 - Training of public officials on national policy framework analysis conducted.
 - First gap analysis of Haiti Legislation in relation to Marine Protected Areas.
2. We worked together in the organization and development of the Regular Process Meeting for the Wider Caribbean Region, where 120 scientists from the Caribbean Region and the rest of the world participated. It was a very successful meeting with a lot of very interesting results.
3. We are looking forward in the development of the GEF-IWECO project where we see a lot of participation of IOCARIBE as a partner.

We look forward for the implementation of the CLME Phase II Project, and we are hoping for continued collaboration and cooperation with a strengthened IOCARIBE Secretariat.

4.1 Introduction to IOC Draft Medium-Term Strategy for 2014–2021

Germany

Germany welcomes the activities provided by IOC. They are all important contributions to improve the knowledge about the oceans, to provide services and warning systems and to develop mechanisms for technical innovations as well as for sustainable use and protection of the sensitive marine environment.

We fully agree with the high level objectives exposed by the Executive Secretary for the years to come, they all describe areas, where actions and improvement of knowledge/capacity building are urgent.

Under the pressure of the new and possibly restricted budget, IOC should set the focus on those programmes which have the highest impact on safety, environment, economic growth and technical innovation. We should focus on implementation of services, the application of the results of research and those activities, which are necessary for their realisation like observation, measurement and data assessment and exchange.

That means for Germany that the highest priority should be given to those programmes, which contribute to observing systems and data exchange. Those are important for the understanding of the climate and ecosystem, of long term changes and the impacts of human activities and they contribute to services and ocean related hazards warning systems.

Another important activity is education and creation of awareness. So I was fascinated by the contribution of Colombia raising awareness and knowledge about oceans and the protection of the marine environment.

More Concretely, Germany sees the IOC's highest priority in programmes like GOOS, JCOMM- observations and services, IODE/OBIS, IPHAB, and Tsunami and other ocean related hazards warning systems. We felicitate the United States of America for their affirmed support for these programmes.

At last, we think, that an increased awareness and knowledge about IOC's work in the society and a greater presence in the minds of policy makers of what IOC does and wants would be beneficial for the future work. Therefore we think, we should continue to support a couple of programmes. But we must make sure – with regard to our limited budget - that those programmes are carefully chosen. In our view, it will be more beneficial to have a smaller number of programs or activities with a guaranteed budget for a longer period of time and visibility than a large number of programmes with insecure budgets.

We need a strong and visible IOC in the future.

India

Indian delegation compliments the work done by Secretariat in preparation of an excellent document on IOC program and Budget 2014-17 presented by vice-chair yesterday, highlighting the mid-term strategy 2014-21 and biennial priorities. The missions of IOC have been well defined to achieve the vision of IOC. While There has been increase in the responsibility of IOC particularly, to coordinate activities relating to WCRP programs, UN program of AoA of Marine Environment, Climate change, natural hazards, we note there is no

corresponding augmentation in budgetary support. We need to find innovative ways to utilise the resources effectively and prioritise the programs of IOC with limited number of programs.

India would continue to contribute indirectly for implementation of IOC programmes like GOOS, capacity building activities and IODE, India is willing to extend support capacity building activities such as International Training Centre for Operational Oceanography (ITCOo), ITWES including sustain voluntary contribution.

Japan

Japan appreciates the Secretariat's effort to make this draft Mid-term strategy with the condition of financial difficulties. And Japan also appreciates the efforts made by Mr. Peter Hogan, the chair of the financial committee.

Since the situation of IOC faced limitation of resources, both budgetary and human capacity, it is necessary to manage the resources effectively. In view of this, based on the scientific specialty of IOC, we need to consider about the predominant field of IOC among the international society, as well as the presence of IOC and UNESCO. And we need to focus our limited resources on those fields for the next MTS. In addition, it is recommended to take some review and evaluation of previous activities.

Moreover, having a selection and focus on the programme, we also need to discuss how to utilize or liaise the results comes from regional activities.

As we all know that 2/3 of our planet is covered by ocean, and there is much possibility for IOC to contribute to solving the global emerging issues with its activities and using the Sustainability Science approach, integrated approach of natural science and social and human science. In this view, Japan welcomes the current draft MTS, which contains the concept of sustainability science approach to further strengthen the IOC activities.

Japan also welcomes the further efforts of the secretariat to seek the extra-budgetary funds to implement the programmes.

United Kingdom

The UK supports the views expressed by the Head of the German delegation, appreciating that the IOC needs to reach a balanced consensus regarding the mix of observational programmes and capacity-building activities.

5.1 Governance

Canada

Canada would like to thank Portugal for its perseverance to ensure that IOC does not lose sight of the importance of science. This is particularly important when the focus on science in many countries and many science organizations is shifting from science to policy and funding for core science programs is being eroded. However, noting that the membership of IOC has been growing, a clear indication of the importance the maritime nations place on the IOC. IOC needs to take advantage of the increasing membership and respond to the current and emerging interests of the marine community.

IOC should have a clear vision and articulate its priorities and implementation strategy aligned with the current fiscal reality. Normally, these discussions take place during the Executive Council and Assembly meetings, unfortunately, these sessions can no longer accommodate them due to the reduced duration. Therefore, the continued deliberation of the 'Future of IOC' can only be achieved intersessionally.

Considering that the medium-term strategy is no longer medium-term given that it spans more than 5 years, clearly the Intersessional Financial Advisory Group does have a significant role to play in these discussions on the 'Future of IOC'.

Canada requests the secretariat to put together a list of contacts for the intersessional group on the Future of IOC and the MS to provide input and maintain dialogue so when we come to the next Executive Council we will have a solid document articulating MS's view on priorities for our discussions.

India

Our delegation thanks the past chair for presenting the views of the sessional working group on the future of IOC.

India would like to broadly support the proposal made by Portugal considering the challenges in the Ocean Science and Services in future and expectations from IOC.

It is important to continuously evolve the working aspects on the future of IOC, which requires wider discussions and planning in consultation with member states.

We are of the opinion that the central theme of future of IOC should continue to evolve and revolve around the theme of ocean science and services. Hence, we are of the opinion that an open ended intersessional working group could be set up to deliberate on the issues.

Republic of Korea

The Republic of Korea wishes to express its gratitude to Capt. Javier Valladares, the Chair for the Sessional Working Group on "The Future of IOC", for his excellent summary report through one single meeting. The Working Group had various substantive and positive dialogues on this agenda. One of the main issues was to establish an internal network within IOC among Member States' national committees and an external network between IOC and other UN organizations. This issue has been in the main agenda of the IOC, but has not been well implemented so far. We hope that this suggestion for networking, both internally and externally, encourages Member States to form national committee if not established yet. One other thing to be mentioned is that we fully support the decision of adding "The Future of IOC" sessional working group to the agenda of 2014 as well as that of 2015 IOC session. We hope this agenda to provide a platform for the discussion and considering various issues of IOC activities that Member States face and raise.

United Kingdom

The UK supports the intervention of the US delegation, agreeing that science must be the main driver and focus of IOC work. The IOC must remain the primary voice of ocean science within the UN system. Given the present restrictions on budget, we must focus our limited resources on a targeted range of high quality science that will bring a broad range of long-term benefits, and the UK would like to take these issues forward on an inter-sessional basis to help secure the future of the IOC.

United States of America

The United States Delegation wishes to express our appreciation for the work of the Delegation of Portugal for raising this issue, and to the distinguished past-Chair, Captain Javier Valladares for his leadership in formulating the elements of the discussion.

Recalling the purpose of the IOC, as documented in our Statutes, we stand to demonstrate great gains in ocean science in the future as we have in the past, perhaps by reminding ourselves of the successes of the past.

First, the achievements in global observing, tsunami science and services, OBIS, HABs, and other areas were delivered by several nations emerging as either regional or global leaders who choose to generate extra-budgetary investments to deliver the programs we know today. These efforts were fertilized by the coordination and cooperation among Member States, and enabled the outcomes we can celebrate today as the IOC performs according to, and achieves objectives consistent with our Statutes. Without intending to name all appropriate Member States, we may be reminded of the contributions of, Belgium and the Government of Flanders, of Denmark, Colombia, Australia, Korea, and China, among others, for their global and regional investments to ensure the success of IOC-led programs. Finding that emerging leader for a subject or sub-region is vital to the future of the IOC.

Second, the strength of the forum of the IOC, 145 Nations gathered to be led by science to serve our global community with scientific undertakings is a marvel to behold. The value of this forum is high. The ability of this forum is of course dependent upon the support of Member States through direct and indirect contributions. This Delegation is fully aware of the challenge and the genesis of that challenge to the IOC base budget. As a science driven organization, we can see the impact of political decisions outside of this body and their unintended consequences on science within this body, just as we can see the benefits of taking non-political decisions to serve all regions of our ocean world. Science should drive a science organization and our debates in the future of the IOC.

Third, I can note the marvelous collection of global scientific leaders who have filled the seats in this hall, and who retain positions in multiple delegations and at various levels of the IOC working bodies among the Member States. We should rely on the wisdom, vision, and technical competencies of this expertise to define focused, few, and the most valuable subjects for the future of the IOC and focus our discussions on such matters as these, and give direction to the IOC.

Fourth, as the IOC engages in collaboration with international organizations particularly those of the United Nations system, we should remind those organizations of the value of working with the IOC as the primary voice of ocean science, as defined by that very system of the United Nations and the UNCLOS. Consultation with the IOC before pronouncing scientific direction should be a consistent practice and included in the future of the IOC.

To conclude, Mr. Chairman, this delegation is committed to working in sessional and intersessional engagements to further these subjects.

Venezuela (Bolivarian Republic of)

La Delegación de la República Bolivariana de Venezuela, quisiera expresar su posición respecto a la iniciativa “Oceans Compact” del Secretariado General de las Naciones Unidas:

- 1- La iniciativa “Oceans Compact” tiene como objetivo examinar las cuestiones relativas a los océanos y mares. Sin embargo, es bueno destacar que esta iniciativa no refleja adecuadamente los intereses de los Estados Miembros ni el delicado equilibrio entre los derechos, obligaciones e intereses que aún no han sido considerados ni acordados en Naciones Unidas.
- 2- La iniciativa no puede, de ninguna manera, interpretarse como la plataforma del Plan de Acción para la puesta en marcha del documento final de Río +20, que es de exclusiva potestad de los Estados Miembros para su implementación. Para Venezuela este tema debe ser objeto de mayores consultas entre los Estados Miembros, habida cuenta de que la referida iniciativa se extralimita respecto a sus competencias y ámbito de acción.
- 3- Cabe mencionar, que ninguno de los cinco expertos designados por el Comité de Alto Nivel sobre los programas, que son los responsables de elaborar el primer proyecto de la iniciativa “Oceans Compact”, no representan en modo alguno a los países en desarrollo.
- 4- La iniciativa adolece de claridad, especialmente en lo relativo al mecanismo de información y consulta a los Estados Miembros.

5.1.1 UN Consultations and Coordination

Canada

Canada fully supports the ongoing contribution of IOC in the work of United Nations Inter-Agency activities. It is important that we bring our strengths to other UN program areas.

Canada supports the IOC’s contribution to various ocean–related UN inter-agency activities, in particular, Canada is pleased to see the acknowledgement of JCOMM (Joint Committee on Oceanography and Marine Meteorology) as a major vehicle for providing ocean services.

We are pleased to see that involvement of Canada (via Dr. Chris Barnes) as the Chair of the Joint ITU-IOC-WMO Task Force on ocean observations from submarine cables. Many of the Member States will remember that Dr. Barnes was the Panikaar guest speaker and presented work that he has led on the cabled ocean observatories of Canada’s west coast.

Finally, Canada supports and encourages IOC’s participation in the Global Framework for Climate Services. The role of oceans in global climate is significant and we are increasingly seeing the impacts of climate change in all global oceans. This is a key initiative for the IOC to contribute to.

Republic of Korea

Republic of Korea appreciates the contribution of IOC toward ocean science with the collaboration of other UN organizations. As distinguished delegate from Togo made intervention before, the reason should be clearly shared why ‘Ocean Compact’ is objected by the ‘Group 77 and China’. Executive Secretary mentioned a letter from the ‘Group 77 and China’ to UN Secretary General was received this morning, but discussion is done without knowing what it is for some Member States. If permitted, we request to share the content of the letter to build common understanding for better discussion, since this issue is also related to the Mid-Term Strategy.

Republic of Nicaragua read the letter, but it is hard to understand right away without any written document as a non-UN language native speaking country. May I request to have a break or time before deciding this matter and have a written document for this?

United States of America

The US Delegation appreciates the presentation and review presented by Dr. Valdes. While we are impressed with the breadth and diversity of partnerships cited among the other United Nations organizations, it becomes less clear from the material that is arising from the other components of the United Nations community of organizations as to what is the role of the IOC. This observation calls to mind our ongoing discussion of the "Future of the IOC" and the component of this domain that the balance of the United Nations community might look toward the IOC to uniquely perform.

5.1.2 Other Partnerships

United Kingdom

The UK supports the comments of Australia and the USA regarding the Second Indian Ocean Expedition initiative and notes that new technology such as ocean gliders and Autonomous Underwater Vehicles (AUVs) offer new ways to explore the ocean. The UK played a significant part in the first Indian Ocean Expedition, and the proposed activity fits well with a broad range of IOC High Level Objectives, and offers an opportunity to raise the profile of IOC and Partner organizations.

International Ocean Institute (IOI)

On behalf of the International Ocean Institute I wish to express deep appreciation and honour for the long and fruitful years of cooperation and collaboration with the IOC.

We truly value this partnership which has contributed so much to the achievement of the mission and goals of the IOI. Our current MOU updates the one previously signed in 1993 but our cooperation dates back even earlier, particularly so since the majority of our Executive Directors of IOI came to IOI after successful earlier careers with IOC.

The MOU we signed jointly in November 2010 reflects and further refines the complementary nature of IOC/UNESCO and IOI in strengthening marine related institutions in developing countries through capacity development, through sharing and dissemination of information and through the establishment of partnerships.

We have committed to cooperate to:

- support research, training programmes, scientific exchanges, fellowships, the organization of joint meetings and joint publications;
- strengthen programmes of coral reef protection, eco-villages and eco-tourism projects, women, youth and the sea initiatives;
- improve the quality of education in the marine sciences and to speed up the effort to find solutions to the problems of sustainable development;
- keep each other informed of relevant ongoing and planned programmes, projects and activities;
- share information and outreach material such as newsletters, yearbooks, conference and workshop proceedings and reports and other publications;
- support professionals of developing countries to participate in conferences, workshops and other meetings and training activities through funding or cost-sharing opportunities
- promote linkages between and among regional and national networks and/or centres with regards to training, research, creating awareness, information sharing and other capacity building activities.

The above actions are part of an ambitious programme, but one that is of direct relevance to assisting developing countries and economies in transition in managing their role in ocean governance. It is a programme to which the IOI and its global network of Operational Centres and Focal Points dedicates much of its best effort and time with the ambition of achieving the stated goals, as does the IOC of UNESCO. Nevertheless, despite not having met all goals to the desired level of achievement so that our work remains current, our modest joint achievements remain worthy of the renewal of the MOU for another three years.

Here I wish to mention that some of the most valuable contributions of the IOC have been in the area of intellectual and technical support to the IOI's global and regional training and education programmes in which we have incorporated in the work of IOC as in the workshops offered on marine spatial planning and

natural marine hazards. In the new MOU we wish to retain the focus of our cooperation on capacity building through education and training.

The IOI also continues to invest time and capacity into the creation of new training and capacity building opportunities for the ocean community worldwide, through the expansion of the training programmes being organised through IOI-OceanLearn: the IOI's system-wide programme for the *coordination, delivery, quality assurance and development* of global partnerships of the International Ocean Institute's *capacity building* activities

Therefore in this respect, and with due acknowledgement to the partners who have made this possible, I am pleased to announce that, along with the University of Malta we are launching - a first of its kind – the postgraduate Master Degree in Ocean Governance.

This Master's degree programme on Ocean Governance is unique in its approach; it aims to forge a knowledge base that is essentially legal but which also delves into the natural and social sciences to determine how an effective governance framework should operate within a multidisciplinary perspective. In this era of globalization and sectoral integration, capacity building in the regulation of ocean governance plays a pivotal role in ensuring safe and healthy oceans for the benefit of humankind and the planet.

I also draw your kind attention and extend an invitation to you to our flagship conference in Thailand on 3 to 7 September this year which will address the theme: SUSTAINABLE GOVERNANCE OF THE OCEAN: IMPACTS OF CLIMATE CHANGE & OCEAN RELATED HAZARDS and, specifically, to the LEADERSHIP SEMINAR to be organised within it, entitled: SCIENCE ON TSUNAMI for TODAY'S SOCIETY and its INPUT to SOCIETY SECURITY and SUSTAINABILITY.

Scientific Committee on Oceanic Research (SCOR)

SCOR, the Scientific Committee on Oceanic Research, welcomes the opportunity to cooperate with IOC on this important initiative in the Indian Ocean.

SCOR and IOC share a long history of effective cooperation ever since both organisations were formed within a few years of each other in the middle of the last century.

During the period 1959 to 1965, SCOR worked with IOC to bring about the International Indian Ocean Expedition (IIOE).

This expedition was the first time the countries of the world worked together to understand the natural dynamics and resources of this complex ocean.

Although great progress was made in IIOE and in subsequent studies in understanding the Indian Ocean, many aspects of this ocean remain poorly understood. Today the Indian Ocean remains understudied while our technical capabilities have advanced considerably in fields such as remote sensing, shipboard observations and ocean modelling.

SCOR would welcome working with IOC and with other organisations to improve our scientific understanding of this ocean and, in so doing, bring societal benefits to the large number of countries surrounding the Indian Ocean.

5.1.2.1 Proposal for a Category-2 UNESCO Regional Educational and Research Centre on Oceanography for Western Asia, in Iran (Islamic Republic of)

Iran (Islamic Republic of)

It is my honor and pleasure to extend my sincere appreciations to Dr. Sang-Kyung Byun, the distinguished IOC chairman, Dr Wendy Watson Wright, the respectable Executive Secretary of IOC, and the distinguished Officers of IOC, for the great consideration on the Iranian National Institute for Oceanography's application on the establishment of "Category II Regional Education and Research Center on Oceanography for Western Asia under the auspices of UNESCO". We also appreciate Dr. Iouri Oliouline for carrying out and preparation of the feasibility study report and his Kind advices on this issue.

The delegation of I R of Iran also appreciate the countries that sent us their written supports, including: Islamic Republic of Afghanistan, Islamic Republic of Iraq, Japan, Kazakhstan, Lebanon, Nicaragua, Sri Lanka and Venezuela, Inter-Islamic Science and Technology Network on Oceanography (INOC), and all distinguished delegations of the member states that supported us verbally or will take the floor for supporting Iran on this issue.

Willing to assist IOC in bringing the region to the frontline of UNESCO/IOC efforts in implementation integrated innovative to the research, protection, and use of resources of the seas and coastal zones as well

as in facilitating capacity development of the states of the region and regional cooperation by planning and implementing joint projects and training courses; the Government of I R of Iran- through the Ministry of Science, Research and Technology of Iran- offers the facilities of the Iranian National Institute for Oceanography (INIO) to a Category II Regional Education and Research Center on Oceanography for Western Asia under the auspices of UNESCO fully dedicated to marine and coastal issues. Establishing such centers on oceanography can pave the way for other countries to establish the same centers to contribute more in IOC activities.

The Center is planned as a problem solving transparent mechanism of a regional level where formulation of the research and education programs, planning and implementing joint projects and sharing information will be carried out in accordance with UNESCO/IOC objectives and coherent regional marine policy which will be developed with the assistance of the center. The establishment of this Center can yield to the promotion of marine science and technology in the region.

Marine foundations in Iran have been developed well, among of them, the following may be mentioned:

- Iranian National Committee for Oceanography
- The Union of Coastal and Marine Universities and Research Centers
- Marine Science and Technology Group, affiliated to the Ministry of Science, Research and Technology of Iran
- Iranian Network for Oceanographic Research and Technology

At the time being, there are more than eighteen thousands students in Iran who are studying in Marine Science and Technology Majors at Iranian Universities. Moreover, more than 450 faculty members of Iranian Universities and research centers are working in the field of marine science and technology.

Iranian National Institute for Oceanography (INIO) was jointly established by the Ministry of Science, Research and Technology of Iran and UNESCO in 1992. This Institute is acting as the focal point of IOC and INOC in the country, and the Operational Center of International Institute for Oceanography (IOI) and the node of GCRMN in the region of the Persian Gulf and the Gulf of Oman.

Japan

In view of IOC promote oceanographic observation and marine science, Japan welcomes this initiative.

Malaysia

Malaysia takes this opportunity to thank the Islamic Republic of Iran on its proposal to establish a Category-2 UNESCO Regional Educational and Research Centre on Oceanography for Western Asia.

With regard to the establishment of a Category 2 Centre covering UNESCO activities, Malaysia has always taken a positive attitude on Category 2 Centres where national governments fully sponsor and support financially the operation of such Centres.

Thailand

Thailand would like to express our appreciation to the government of Islamic Republic of Iran on the proposal to establish the "Category II UNESCO Regional Educational and Research Centre on Oceanography for Western Asia".

As we are well aware of the financial crisis in UNESCO that causes the reduction of support to the IOC Regional Subsidiary Bodies, the offering of Member States to contribute in the implementing activities in their regions could absolutely be one of the channels to support IOC.

It would be even more advantage if the establishment of the Centre could be expanded to cover the IOCINDIO area, as that would enhance the opportunity for the Member States of IOCINDIO to participate in the activities of IOC at the beginning stage of IOCINDIO's reactivation.

United Kingdom

The UK supports the proposal by the Islamic Republic of Iran to establish a category 2 UNESCO Regional Educational & Research Centre on Oceanography for Western Asia. We believe it will advance ocean science for the mutual benefit of countries within that region. We also recognize that Iranian universities are training excellent marine science students, whose talents will be of great value in enhancing understanding of the ocean which links us all.

Venezuela (Bolivarian Republic of)

En nombre de la República Bolivariana de Venezuela expresamos nuestro pleno apoyo, agradecimiento y felicitaciones a la República Islámica de Irán por esta excelente iniciativa, bajo los auspicios de la UNESCO.

Creemos que ella es el fruto del proyecto COI y que ahora se traduce en la transmisión horizontal del conocimiento y la cooperación en el ámbito de las ciencias marinas desde centros diferentes a los acostumbrados.

Esta iniciativa y otras futuras son trascendentales, recordemos que el esfuerzo mancomunado es la clave del éxito en uno de los ámbitos de trabajo más costoso y difícil pero al mismo tiempo tan entrañable, que requiere de un gran compromiso y esfuerzo.

5.1.2.2 Endorsement of the IHO-IOC/GEBCO Sub-committee for Regional Undersea Mapping (SCRUM)

Chile

Nuestra Delegación toma nota del informe presentado y endosa la propuesta de establecimiento del Sub Comité para el Mapeo Regional del Fondo Marino del Proyecto GEBCO de la OHI y COI (SCRUM), nos parece la mejor solución a la que se ha llegado entre la OHI y la COI luego de que la COI, por razones presupuestarias debió cancelar el programa de cartografía oceánica.

Cabe señalar que todo el esfuerzo realizado en el pasado estaba en riesgo de perderse ante la ausencia de un grupo que continuara impulsando la batimetría oceánica regional con el objeto de completar y mantener el proyecto GEBCO que en el 2003 celebró el centenario de su creación.

Chile para estos efectos integra la Carta Batimétrica Internacional de dos regiones, la del Pacífico Sud Este (IBCSEP) y la del Océano Austral (IBCSO). Finalmente quiero señalar que nuestro país apoya fuertemente el establecimiento de SCRUM.

India

Indian delegation appreciated the presentation on GEBCO and efforts being planned to map the Indian Ocean. Our delegation considers an important activity and request IOC to extend support. In this regard, we would like to state that India will be willing to cooperate with GEBCO in mapping the international waters of Indian Ocean.

Japan

Japan expressed its appreciation to Dr. David Clark for his joining the present session of Assembly and introducing this initiative of GEBCO Sub-committee for Regional Underwater Mapping (SCRUM). Japan supported the establishment of this new sub-committee, as it actively participated in the GEBCO for many years, and particularly for the last 10 years, through contribution to the GEBCO training course supported by Nippon Foundation of Japan.

United States of America

The US Delegation supports the decision on GEBCO. Recalling two themes before us, to reduce the unknown regions of the sea, and to further the partnerships of IOC with other prominent international organizations, perhaps none enjoying greater esteem than the IOC, this action advances IOC interests significantly. This Delegation is interested in pursuing IOC activity on this subject, perhaps during an inter-session engagement, and supports the efforts to revitalize and reinvigorate global ocean mapping efforts through GEBCO. Noting the budget neutral status of this initiative, this should be supported by this body.

International Hydrographic Organization (IHO)

In recent years the IHO-IOC GEBCO project has increasingly sort bathymetric data inside the 200 metre isobath to validate and expand its coverage to create more comprehensive ocean maps. This has become significantly more important with the IHO-IOC GEBCO regional mapping projects, which have been coordinated and overseen since 2008 by the interim Sub-Committee on Regional Undersea Mapping (iSCRUM). The iSCRUM's work is a vital element in the improvement of bathymetric coverage of the world's oceans, particularly the numerous regional projects, which presently cover the Arctic, Antarctic, Indian Ocean, Baltic and Caribbean areas.

The IHO is leading an initiative on so-called 'crowd-source' bathymetric data gathering, which involves vessels of opportunity gathering shallow water bathymetric data as they make passage along coasts and into and out of bays and anchorages.

This initiative was commenced as a trial on a limited number of cruise liners visiting the Antarctic using small data loggers funded and provided by the UKHO. These trials proved the value and viability of the method, particularly in remote rarely visited areas where hydrographic data of any type is very limited or non-existent. Recently the Professional Yachting Association (PYA), which represents the non-SOLAS super-yacht community, has expressed a desire to become involved in this project, as they recognise the areas they regularly visit are poorly charted and not national hydrographic priorities.

The IHO is considering how to use the data, which, although of great value, does not necessarily meet IHO international standards and validation by relevant national hydrographic offices has proved challenging. The IHO considers the most appropriate repository may be the IHO Data Centre for Digital Bathymetry at Boulder, Colorado, where the data would be freely available for charting and scientific research alongside the deep ocean data already held. To this end the IHO would request this Assembly reiterates its support for the GEBCO ocean mapping projects by encouraging organizations, which gather bathymetric data during other ocean research activities, to render all bathymetric data to the IHO Data Centre for Digital Bathymetry for inclusion in the database so it can be made available for all to use.

Thus the coordination role undertaken by iSCRUM is a key factor in the progression of regional mapping projects and the reason the IHO is keen for the IOC Assembly to endorse the formal creation of the SCRUM under its current Terms of Reference as the IHO has already done.

Finally the IHO would like to invite all countries for which this matter is a priority, to approach and work closely with their national Hydrographic Offices.

5.1.3 Role of IOC Subsidiary Bodies and Decentralized Offices

Australia

Australia is very pleased to be given the opportunity to speak in support of this proposal and Draft Resolution. As has been said, the Perth Regional Project Office in support of IOC was first established as a joint activity by the Government of Australia through the Bureau of Meteorology, the Government of Western Australia and the IOC, in 1998. This was done with the explicit written approval of the then Director General of UNESCO, Federico Major. In the 15 years since then, it has performed beyond expectations in furthering the interests of IOC in the Indian Ocean and Australian Region in supporting and facilitating ocean observations, ocean research, capacity development, and more recently the expanding field of operational ocean services. The Office has had several independent reviews undertaken of its operations and staff since that time, the most recent in 2011. All were highly complimentary of the effectiveness and value of its programmes and achievements, with the Executive Summary of the most recent being included in the Information Document for this item. The Office is hosted by the Bureau of Meteorology in its Regional Office in Perth and, since 2005, in conjunction with the IOC Secretariat for the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System, which provides some important synergies among IOC programmes in supporting countries in the region.

Mr Chairman, Australia remains committed to the continuation of the Office and its work, and we are currently near the end of the process of negotiating a new agreement for the Office, covering a five year period to 2018. Both the Bureau of Meteorology and the Government of Western Australia have signalled their ongoing commitment to the provision of both cash funding and other resources as part of the new agreement. For the Bureau, our new commitment includes full funding for the position of Programme Manager for the Office, plus a recent, one-off, cash injection of \$175,000 towards programme implementation.

Australia believes that the formalisation of the Office as an IOC Programme Office, together with the implementation of the Officer-in-Charge position as a UNESCO staff post, with funding from the Australian partners, will help to further enhance the status of the Office in the region, as well as its effectiveness in implementing its extensive and highly effective programme of work. We therefore very much hope that the Assembly will adopt the Draft Resolution, and also agree to continuing IOC financial support for the implementation of the Office's programmes. We believe that this ongoing show of commitment by IOC is essential to maintaining the concept and practicality of a truly joint partnership.

Before closing, Mr Chairman, I would like to introduce some changes which have been made to the Draft Resolution from that published originally in the Action Paper. These result from an agreement at an informal meeting held yesterday among interested Member States, notably from the WESTPAC region. These changes include, specifically:

- (i) A formal change of name of the Office to Perth Programme Office, following approval of the draft resolution, and to take effect with the signing of the new agreement for the Office in October 2013;
- (ii) Terms of reference for the Office annexed to the draft resolution, which will be subject to formal ratification by the other partners to the Agreement through its signing in October.

Japan

Japan expressed congratulations to Prof. Blivi Adote for his encouraging summary of the meeting of regional subsidiary bodies which took place on Monday, June 24, and supported the idea that it is essential for the IOC to enhance its activities through those of the regional subsidiary bodies. As Japan mentioned in the previous agenda item 3.3, for the last 5 years WESTPAC had been dramatically revitalized in its scientific and service projects and activities. The regional subsidiary body in the region would be pleased to collaborate with other subsidiary bodies as far as possible, so that the IOC could enhance its overall programmes. Japan appreciated PICES for its positive and constructive comments on possible collaborations, and encouraged the Member States of WESTPAC to participate actively in the cooperation with PICES.

With regard to the establishment of the Perth Program Office, Japan welcomed the formalization of the Office in Perth as it would be of great help and support to the regional oceanographic programmes and projects including GOOS. Mr Michida, as the vice-Chair of the region, deeply appreciated Australia for its continuous and strong support to the IOC through the Perth Programme Office. Japan further made a comment on the roles of the Perth Programme Office, emphasizing the necessity to avoid any duplicated efforts in the regional activities within the framework of IOC, and to describe the TOR carefully taking into account avoiding overlapping natures and also taking into consideration the relationship between the existing bodies or programmes and the proposed Office in Perth.

Thailand

I will make my intervention on behalf of the IOC Sub-Commission for the Western Pacific (WESTPAC), WESTPAC appreciate Australian government for the long support IOC Perth Office.

The IOC Sub-Commission for the Western Pacific (WESTPAC) recognized the fact that the IOC Perth Office hasn't be formalized by IOC since its establishment in 1998, welcomes the formalization of this office this time in light of the Guideline for the establishment of IOC decentralized offices (IOC/INF-1193).

Noting there were a lot of confusions generated, before the assembly considers this agenda, among relevant parties concerned, on the nature, geographic coverage, TOR of the IOC Perth office due to lack of adequate consultations and documentation prior to this Session. In this regard, WESTPAC would extend our sincere appreciation to Prof. Michida, Vice Chair of IOC for his great efforts made sessionally to help seek clarifications from relevant parties, and further suggested the documentation and procedure shall be improved next time when IOC conducts the approval process for renewal of this office in 2018 in order to avoid unnecessary confusion and overlapping with other existing RSBs.

United Kingdom

The UK welcomes the formal recognition of the IOC Perth Regional Programme Office, supports the proposal and wishes to thank the Australian government for the support they have provided to enable this activity.

United States of America

The US Delegation supports the proposal and notes the historic and current contributions of the Perth Regional office and the sponsorship contributions of the Australian Government. The Perth Office has been instrumental in the implementation of the international ARGO Program in the Southwest Pacific for over a decade and throughout the Indian Ocean. At the time of great need, the Perth Office provided leadership and execution in the deployment of important ocean observing systems. The Office has performed exceptionally well and there is no better way to convey that support than to support the proposal.

North Pacific Marine Science Organization (PICES)

The first point is to specifically highlight our collaboration with WESTPAC. PICES is an intergovernmental organization with a mandate to promote and coordinate marine scientific research in the North Pacific. PICES can play an important role in bringing a North Pacific perspective to the global activities of IOC, and

by participating in and implementing these activities in the region, advance its own scientific agenda. The most appropriate way for PICES to collaborate with IOC is through WESTPAC. Over the past years, PICES and WESTPAC have jointly developed and organized several capacity building activities on invasive species and remote sensing, and we are currently exploring the possibility of joint activities related on other issues, especially the World Ocean Assessment.

The second point is more general. Scientific and capacity building activities in a region could be facilitated through coordinated efforts of different regional inter-governmental organizations which have overlapping geographical areas of interest and share member countries (e.g., PICES, WESTPAC (regional body of IOC) and NOWPAP (regional body of UNEP) in the North Pacific). There is a clear understanding of the necessity and the value of such collaboration at the level of the Secretariats of these organizations. From our perspective, an issue arises when different agencies have the principle responsibility for the involvement of their country in different organizations. Without inter-agency cooperation and coordination, we run the risk of duplicity or, at worst, conflicting missions. This is a problem that is beyond the scope of Secretariats, but is one that must be faced at the national level. The inter-agency coordination could be advanced if international organizations promote activities that have high national interest and relevance.

5.2.1 Regional Tsunami Warning Systems

Canada

Canada congratulates the Intergovernmental Coordination Groups on Tsunami Warning and Mitigation Systems and appreciates your efforts to maintain the observational networks, coordinate the data management and, issue the warnings.

Success of the tsunami warning systems is clearly dependent on the availability of data particularly to advance our research and understanding of the propagation of tsunami waves. To this effect, we are pleased to state that the ocean data from seafloor pressure sensors along the length of the Canadian Pacific cabled observatory of Oceans Networks Canada are available for use by the Pacific Tsunami group.

Canada would also like to note that there are other intergovernmental bodies - such as International Hydrographic Organization – that are involved in sea level monitoring, as well as in establishing continuous vertical datum through digital elevation modelling. Canada would like to encourage the IOC to build synergies with other organizations – both external and within UNSECO - so as to achieve maximum benefit and efficiencies from ocean monitoring activities.

Finally, Canada joins other Member States in our commitment and continued support to the Coordination Groups, particularly those on our Pacific and Atlantic coasts.

5.2.1.1 Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System (PTWS)

Chile

En primer lugar, la delegación de Chile quiere agradecer y destacar la labor del Grupo Internacional de Coordinación del Sistema de Alarma de Tsunamis del Pacífico (ICG/PTWS) durante los últimos años. Los tsunamis ocurridos en Chile el 2010 y en Japón 2011, en los cuales se vieron afectados diversos países del Pacífico, han generado la preocupación de varias naciones. La baja ocurrencia de estos fenómenos hace difícil poseer conocimiento en detalle de ellos, por lo que es necesario efectuar los esfuerzos extraordinarios para mitigar sus efectos. El PTWS ha trabajado esforzadamente para mejorar la operatividad de los Centros de Alerta de Tsunami, a través de la creación de nuevos productos, probados en los Ejercicios PACWAVE 2011 y 2013.

Chile ha hecho también un esfuerzo, aumentando de 17 a 38 estaciones de nivel del mar en línea para detección y cuantificación de los tsunamis en sus costas, de las cuales todas, sin excepción, se encuentran disponibles en el sitio web de la COI, a disposición del PTWS y de todo el mundo.

Con respecto a los nuevos productos del PTWS, Chile desea manifestar su apoyo a esta valiosa iniciativa, que permitirá mejorar especialmente la evaluación de la amenaza de tsunami para eventos de Campo Lejano. La incorporación de boletines con información gráfica de dirección, amplitudes de ola en aguas profundas y alturas de ola en la costa, muestran un gran avance, comparado a lo existente hoy, donde la evaluación está dada principalmente por una evaluación del Estado. Asimismo, no sólo se mejorará la incertidumbre de que un tsunami afecte las costas de uno u otro país, sino que también se podrá cuantificar, su peligrosidad, en forma aproximada, gráficamente.

En consecuencia, apoya y felicita al PTWS por el trabajo desarrollado a la fecha y por los importantes avances logrados.

Japan

During the Great East Japan Earthquake in 2011, the Japan Meteorological Agency (JMA) issued the first domestic tsunami warning well in advance to the tsunami arrival and successively updated the warnings. However, as you are all aware, around 20,000 people were killed or still missing by the tsunami.

After two years of investigation in both technical and sociological aspect, JMA has implemented renewed tsunami warning service since 7 March 2013, which stands on faster and safer side warning issuance with simpler and more understandable messages. We are going to provide this experience to the IOC as a feedback to its tsunami disaster mitigation activities.

With regard to the present major focus of the ICG/PTWS, the introduction of the PTWC enhanced tsunami products, let me echo the importance of operational trainings mentioned by the Chair.

As mentioned by the Chair, two workshops on standard operating procedures and the PTWC enhanced products in 12-16 August are being organized by the International Tsunami Information Center in collaboration with the IOC and New Zealand, and will be hosted by the New Zealand government.

We are pleased to announce that Japan is now considering assisting the workshop by providing a part of air fare for the workshop participants. We hope the workshop be successful, and this contributes to the effective operation of the PTWC enhanced products in the covered area.

When we turn our eyes to the Indian Ocean, as reported from ICG/IOTWS, the Regional Tsunami Service Providers (RTSPs) of Australia, India and Indonesia are now fully operational. Japan is happy to report that JMA, together with PTWC, ceased the Interim Advisory Services (IASs) on 31 March 2013 based on the letter from the Executive Secretary which formally notified the decision by the IOTWS.

It is our honour that Japan could contribute to the disaster mitigation in the region by providing the IAS for 8 years. Japan would like to congratulate the three RTSPs on their newly established operation since 12 October 2011, and is always glad to support the capacity development of the RTSPs and Indian Ocean countries under the framework of the IOC.

Russian Federation

Russian Federation strongly supports the IOC activities on tsunami warning systems worldwide. In particular, the most important results in Pacific Tsunami Warning System elaboration are development and putting into operational practice extended products, such as maximum expected wave height spatial patterns, potential impact assessment, etc. The use of the extended products during the Pacific Wave 13 exercise has shown their utility.

It is worth noting that introduction of the extended products into the operational practices of the tsunami warning centres should be adjusted to the procedures adopted by the specific national tsunami warning service.

The introduction of the products will be reviewed and recommendations on the ICG/PTWS activities elaborated at the 25th Session of ICG/PTWS (Vladivostok, Russian Federation, 9-11 September 2013)."

5.2.1.2 Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (IOTWS)

India

Indian delegation would like to appreciate the cooperation and encouragement of IOC in the establishment of the Indian Ocean Tsunami warning system.

Our delegation wishes to take this opportunity to thank the PTWC and JMA for the interim services.

During IOTWS meeting in November 2012 in Indonesia, the progress of IOTWS was reviewed in great detail. As *per* the recommendations of committee, the RTSP of India along with Australia and Indonesia assumed full operational responsibility since March 2013 which primarily includes the service of level-2 tsunami advisories for the Indian Ocean

As a part of capacity building, we are happy to inform that a workshop on Standard Operating Procedures and training for NTWC would be hosted in Hyderabad in 2014.

The inter-ICG task team on tsunami watch operations met in Paris in February 2013 made several recommendations on global harmonization of tsunami watch operations. India supports the recommendations and suggests that the status of Task Team 3 on Tsunami Watch Operations could be made more permanent, considering the perpetual nature of its Terms of Reference.

Iran (Islamic Republic of)

Iranian delegation likes to express sincere appreciations to coordination group for tsunami issue. Iranian National Institute for oceanography established the Iranian National Center for Ocean Hazards in December 2011. We receive tsunami warning messages via email, mobile and fax systematically and therefore we appreciate the efforts of IOTWS, as well as the governments of India, Australia, Indonesia and Japan, for giving alert and issuing bulletins for the countries of the Indian Ocean Region on risk of tsunami events.

I R of Iran announces its readiness for any collaboration with IOTWS, especially on the Makran subduction zone.

5.2.1.3 Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (CARIBE-EWS)

Dominican Republic

En primer lugar, quiero hacer un reconocimiento al trabajo desarrollado por los Centros de Alerta Temprana que funcionan en las diferentes partes del mundo y, de manera particular, a las acciones desarrolladas por la Comisión Oceanográfica Intergubernamental (COI) en el Caribe.

Agradecemos a la Sra. Hillebrandt Andrade, Presidente del Grupo Intergubernamental de Coordinación del Sistema de Alerta contra los Tsunamis y otras Amenazas Costeras en el Caribe por el informe producido y al Sr. Bernardo Aliaga por su compromiso y por la calidad de su asistencia técnica en la región.

En el contexto que vive hoy la UNESCO, marcado por la crisis financiera, fruto de la falta de pago de importantes contribuciones, queremos reiterar el apoyo a la COI y el carácter prioritario de su trabajo. La República Dominicana considera que la COI debe ser prioridad en la Estrategia a Plazo Medio y el Programa y Presupuesto de la UNESCO.

Para la República Dominicana, que forma parte de los Pequeños Estados Insulares del Caribe, los Sistemas de Alerta Temprana y Preparación para los Tsunamis y otros peligros relacionados con el océano, son una prioridad. En este sentido, los trabajos y actividades de prevención, y de educación a la prevención, desarrollados por la COI, tienen un impacto real en el desarrollo de una cultura de preparación, tanto de las autoridades como de la población, capacitando y concientizando a los unos y a los otros para responder, de manera concreta, en momentos de catástrofes naturales.

Como ejemplo de las actividades, talleres, capacitaciones y proyectos que resumen el apoyo brindado por la COI a la República Dominicana, durante el 2013, deseamos resaltar lo siguiente:

- En abril se efectuó, en la localidad de las Terrenas, un Taller de fortalecimiento de la planificación de la respuesta ante tsunamis y de ejercicios de evacuación; con el objetivo de fortalecer el sistema de alerta temprana ante tsunamis en la República Dominicana, a través de la capacitación de comunidades locales para la respuesta planificada a eventos- tsunamis.
- Se han realizado además, mapas o rutas de evacuación, proyectos y respuestas para la instalación de signos de tsunami.
- La República Dominicana también participó en el simulacro de ocurrencia de tsunamis en la región, que involucró a cerca de 50.000 personas bajo la coordinación de la COI, donde participaron otros 30 países (marzo 2013).
- Para el mes de julio 2013, se tiene previsto un Taller sobre preparación y respuestas ante tsunamis, dirigido al sector turístico y hotelero.
- Con el apoyo de la COI se realizará también en República Dominicana el proyecto "Lista de Instituciones Nacionales y de comunidades resistentes a terremotos y tsunamis en entornos urbanos en la provincia de Puerto Plata". Este proyecto incluye el desarrollo de mapas de inundación de tsunamis para el norte del país.

Además mencionamos:

- En el 2011, la República Dominicana fue sede de la VI Reunión del Grupo de Coordinación Intergubernamental del Sistema de Alerta contra Tsunamis en el Caribe, donde el modelo de evacuación por tsunami de la República Dominicana fue implementado por varios países de la Región.
- En el 2012, se realizó un Taller nacional de fortalecimiento de Sistema de Alerta Temprana nacional ante tsunamis y sistemas operacionales estándares.

Como se menciona en el informe de la Presidencia, el 4 de agosto del 1946 (hace 67 años) un poderoso tsunami azotó la República Dominicana. El fenómeno natural tenía olas de más de 10 metros de altura, que produjeron enormes daños en las costas del noreste del país, causando la muerte de miles de personas.

Debido a la vulnerabilidad en que la pone su situación geográfica, para la República Dominicana es indispensable contar con la COI que, desde su creación en 1960, viene apoyando a los Estados Miembros a través de programas en investigación marítima, servicios, sistemas de observación, la mitigación de riesgos y el desarrollo de capacidades para la prevención de catástrofes.

Gracias al apoyo de la COI, la República Dominicana dispone hoy en día de sensores de tsunamis, instalados en el mar, que emiten alertas antes de que un maremoto golpee la costa. Además se cuenta con 5 estaciones instaladas y proyectos para más de 6 estaciones en el futuro. De igual manera, tres comunidades basadas en la economía del turismo (Bayahibe, Las Terrenas y Puerto Plata) han firmado acuerdos con la Unidad de Alertas de Tsunamis de ONAMET (UATO) para desarrollar proyectos de respuesta a tsunamis, a nivel de la comunidad, incluyendo instalaciones de turismo.

Saint Vincent and the Grenadines

My Delegation would like to congratulate the Coordinating Working Group for its presentation and for all the efforts and the activities undertaken to improve the existing stations for the tsunami alert systems and for the establishment of new ones, as well as for the evaluation work and all the studies carried out.

My Delegation welcomes the establishment of a Center in Barbados and would like to thank all the countries from the region and outside the region who have contributed and continue to contribute financially and technically in the progress of these systems.

I would like to endorse what has been said by the Dominican Republic, namely that the Tsunami Alert System is vital for us given the vulnerability of our islands. It is not only a question of tsunamis but also floods and hurricanes.

We are looking forward for the installation of the 6 stations next month in St Vincent, St Kitts, Guatemala, Haiti and the Cayman Islands thanks to the donations of Brazil, Monaco (and St Vincent). We remind the Assembly that we still need 40 stations with a budget of 2 M\$ and we hope that the IOC Secretariat will continue to seek extrabudgetary funds. We heard this morning in the presentation of the 1st expert that the international community does not know that IOC is the competent commission which deals with the tsunami alert system and that, as a result, extrabudgetary funds are going to other agencies. This is due to a lack of communication and visibility. My Delegation supports the idea of a campaign to raise awareness so as to attract more donors and partnerships. We also fully support the improvement of the technical Secretariat in IOCARIBE using funds from the Regular Budget because this activity is a priority for us.

Venezuela (Bolivarian Republic of)

La República Bolivariana de Venezuela felicita y valora los esfuerzos de los estados miembros por la implementación de los Centros de Alerta de Tsunami. Damos fe del excelente trabajo que ha llevado la COI para el Caribe coordinado por Bernardo Aliaga y los Jefes de la Maesa y Grupos de Trabajo. Venezuela se prepara para la implementación de su Centro de Alerta de Tsunamis Regional, cuenta con un proyecto aprobado por su gobierno. Apoyamos la propuesta de la República Dominicana, de que gracias a los trabajos de la COI/Caribe se ha abierto conciencia en la prevención y por tanto se dé prioridad a la COI para conseguir fuentes de apoyo. Se adquirió mucha experiencia con los ejercicios de simulacro conjunto 2011 y 2013. Sugerimos trabajar para buscar apoyo gubernamental en nuestros países.

Sr. Presidente, para la región del Caribe la escasa ocurrencia de maremotos ha llevado a acuñar en la zona los términos “Peligro Olvidado”, “otras amenazas”; relacionado este último término principalmente con las mareas de tormenta.

Entre las referencias históricas bien vale la pena recordar la destrucción de Nueva Cádiz, ciudad esta que se comenzó a formar ya para 1500, considerándose el primer asentamiento europeo en el continente americano y que se sospecha fue barrido por un maremoto o una marea de tormenta en el año 1541.

5.2.1.4 Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas (NEAMTWS)

Algeria

Le représentant de la délégation algérienne a tenu à féliciter et à saluer au nom de celle-ci le travail remarquable réalisé par les groupes scientifiques régionaux sur les systèmes d'alerte rapides des tsunamis.

Le représentant de l'Algérie a également souligné qu'au niveau de la région méditerranéenne la prise de conscience par rapport aux enjeux liés aux tsunamis et aux micro tsunamis n'a pas encore atteint le niveau souhaité et qu'il y a lieu de renforcer le travail déjà réalisé par le groupe de travail Méditerranéen.

Le représentant de la délégation algérienne a recommandé que le groupe Méditerranée sur les tsunamis doit capitaliser les expériences menées dans les autres régions du monde et présentées au cours de cette assemblée ; à ce titre il y a lieu de s'inspirer du travail accompli par les autres groupes régionaux et de l'adapter au contexte méditerranéen.

Le renforcement des capacités doit selon le représentant de la délégation algérienne porter sur les thématiques suivantes : (i) les modèles prévisionnels et les simulations numériques, (ii) les méthodologies d'évaluation des risques, y compris l'intégration des risques humains et économiques, (iii) les approches inter opérationnelles.

L'Algérie continuera à apporter sa contribution aux efforts de la COI dans la région méditerranéenne, elle a déjà mis les bases d'un réseau couvrant une partie de la côte algérienne (secteur centre) relatif aux risques côtiers dont les tsunamis et les micro tsunamis. A long terme ce réseau est appelé à devenir national et renforcer le réseau ou le système d'alerte de la Méditerranée.

Le représentant de la délégation algérienne a enfin souligné la nécessité pour la COI de communiquer plus largement le travail scientifique remarquable accompli par les équipes régionales et de le rendre plus visible auprès des bailleurs de fonds afin de mobiliser des financements permettant de continuer le travail effectué et de le pérenniser.

Turkey

Turkey believes that Establishment of TW C is very crucial in context of IOC HLO related with "effective early warning systems and preparedness for tsunamies and other ocean related hazards.

In Northeastern Atlantic, Mediterranean and the Connected Seas region already three Tsunami Early Warning Centers became operational.

For this reason Turkey has accomplished through Kandilli Observatory and Earthquake Research institute (KOERI) to be one of these three operational TWP centers in the NEAM region and the government of Turkey provides intensive budgetary support to the KOERI.

KOERI is also working with close collaboration with the Prime Ministry Disaster and Emergency Management Presidency who is responsible authority to disseminate the warnings nationally or internationally if needed. Besides the national activities, KOERI is also having partnership with the countries in the region.

We also would like to inform member states In this context that, Turkey will host the 26th International Tsunami Symposium which will be held in Göcek/Turkey. The International Tsunami Commission is the mother body for this symposium and Prof Dr Ahmet Cevdet Yalçınır who is the vice chair of ICG NEAMTWS is one of the coordinators of this symposium. As the host country, we would like to inform and invite all countries to participate to this very important symposium.

5.2.2 Global Coordination of Warning and Mitigation Systems for Ocean Hazards (TOWS-WG)

China

China delegation is impressed by the progress made by the regional tsunami warning system globally, including northeast Atlantic TWS...Caribbean EWS...Indian Ocean... Since China is mainly involved in the Pacific tsunami warning system, Particularly, China delegation would like to express its great appreciation to the progress and achievements made by the ICG-PTWS in the past two years, in particular the progress made in promoting the establishment of sub-regional tsunami warning and mitigation system in the SCS region and the introduction of PTWC enhanced products.

For the sub-regional tsunami warning and mitigation system in the SCS region, we are glad to see that all the coastal countries have show great interests and made lots of contribution in this regard. A draft working plan has been developed after two Regional Working Group meetings, with kind support from Japan and the Tsunami experts from IOC headquarters. Considering that the South China Sea is now the only area that has not been covered by any operational tsunami warning system in the Pacific region, we would like to request the IOC continue its support to the establishment of a sub-regional tsunami warning and mitigation system under the framework of ICG-PTWS.

Second, we believe it is a big progress for the introduction of the PTWC Enhanced Products for tsunami threat assessment based on tsunami forecast models, since the new product is more instructive, intuitive and quantitative. However, it is also a quite big challenge to coordinate all the Pacific nations, and make them comprehend the new products correctly. We noted that the New Zealand will host a new product SOP training course this July among the South Pacific island countries. China now is actively corresponding with IOC secretary to host another SOP training course this fall among the SCS countries and adjacent regions. We really hope the IOC secretary and ICG/PTWS can give necessary support and technical advisory to this SOP training course.

Ecuador

La delegación del Ecuador quiere expresar una sincera felicitación y un agradecimiento al trabajo realizado por los diferentes sistemas. Hemos sido testigos de la evolución impresionante de este a gran sistema integrado de alerta de tsunamis. Que ha puesto énfasis en el uso de las ciencias en la asistencia a la toma de decisiones a nivel local, y la tecnología disponible para garantizar las comunicaciones.

Es necesario resaltar que el incremento de la población costera, lleva consigo un incremento en el riesgo, y que justamente iniciativas como "Tsunami Ready", pueden ayudar a las comunidades locales a incrementar la resiliencia y por supuesto la reducción del riesgo.

Somos conscientes de todo el esfuerzo desplegado al interior de cada sistema, haciendo énfasis en los centros que laboran los 7 días a la semana, las 24 horas del día. Resaltamos, sin embargo, que existe mucho más por hacer. Queremos hacer conciencia que, aun con toda la preparación, los tsunamis, los sismos, son eventos que no pueden ser predichos.

Esto debe ser conocido por toda la sociedad, en todos niveles, desde las autoridades hasta la población. No solo para apoyar su trabajo desde la otorgación de un presupuesto aceptable, sino además, para aceptar las limitaciones actuales de los Centros, de no poder pronosticar ni la ocurrencia de sismos, ni tsunamis.

En este sentido, nuestra delegación quisiera exhortar a la Asamblea a realizar un reconocimiento a la labor de los Centros Regionales/Nacionales de Alerta, en apoyo a la gestión, de todos los Centros que son parte de cada uno de los Sistemas. Se debe además exhortar a los países a fortalecer los programas de sensibilización de la población para construir sociedades resilientes que puedan reducir los impactos de estos eventos.

United States of America

The Delegation of the United States expresses appreciation for the work of the International Coordinating Group and those Member States contributing to the success of this work. We further commend the Chairs of the Working Groups for their fine reports and the success that these reports convey. Many Member States have contributed to this effort and success and calls to mind the promise made by IOC to engage in this undertaking and the promise met by the evidence of the many Member States working toward this goal. The United States pledges to sustain our on-going commitment of resources to our global tsunami program and to the TOWS WG efforts and the contributions of the work of the United States to enhance and improve tsunami watch operations, observing networks, and forecasts by working with the various Working Groups. It is not necessary to recount the many contributions reflected in the excellent reports of the Chairs, but will remind the Member States of our commitment to the Caribbean of our phased approach to the establishment of a tsunami warning center in the region.

As recently as February 6, 2013, the Solomon Islands experienced a tsunami event and the loss of ten lives. These events can happen in many places around the world, and have, and the importance of this work demonstrates the value of the IOC.

5.3.1 The Future Needs for Intergovernmental Coordination and Governance for Sustained Ocean Observations and Services

Brazil

My delegation considers this a subject of the utmost importance, as our understanding of oceanographic processes and their interaction with other systems such as the atmosphere, the biosphere and the continents are essential for the development of mankind.

The available knowledge, however, is still insufficient with regard to the correct appraisal of phenomena related to climate change and other serious problems created by extreme events. To fill this gap in our knowledge we need sustained ocean observations.

In this context, our delegation welcomes the results of the consultation to member states and the workshop in Brazil as well, which emphasize that the activities of the IOC in the domain of sustained ocean observations should be coordinated by GOOS and JCOMM.

Canada

Canada wishes to recognize the importance of sustained ocean observations and ocean services. The IOC should be commended in undertaking this questionnaire and for increasing our understanding of global efforts in these key areas.

We support the conclusions of the report and recognize the guidance that it provides to the key organizations of JCOMM and GOOS to meet future challenges.

Canada further notes that this report will be a valuable document in the Future of IOC discussions in the upcoming inter-sessional period.

Japan

First of all, our delegation appreciates the informative report made by Mr Nogueira. Japan thinks that existing IOC programs such as GOOS and JCOMM are vital in enhancing sustained ocean observations and services worldwide, and in this regard, our delegation supports the draft decision under this agenda item. Japan wishes to continue its current contributions to GOOS and JCOMM through the implementation of ocean observations and services mainly in the western Pacific.

Republic of Korea

Korean delegation fully supports IOC's future plans on operational oceanography for global ocean observation and forecasting. As mentioned in the report by Captain (Ret.) Frederico Antonio Saraiva Nogueira, IOC and Member States need to strengthen their function and network in ocean forecasting for predicting ocean-related disasters and climate change. Republic of Korea is pleased to have supported a series of forums on the future of IOC in Eastern Europe and Latin America, and wishes to continue to support in Asia and Africa in the future. We believe this would guide all Member States to recognize the importance of 'sustained ocean observation and services' and for future international cooperation and network building.

South Africa

The South African delegation would like to congratulate Captain Frederico Nogueira on the presentation and work thus far. We thank the IOC for undertaking this survey in a quest to establish the capacities of member states with regards to ocean observations and the sustainability thereof.

We appreciate the IOC's efforts towards making this a possibility. South Africa as a country situated at the interface of three oceans particularly feels that sustained ocean observations are critical in understanding our marine systems and how they will impact our society in the face of climate change. Sustained observation will also become more valuable when transformed into relevant products and information in line with the GOOS strategy.

South Africa has therefore invested in the development and expansion of its own ocean observing system with particular emphasis, in Phase 1, on more clearly defining the role of the Agulhas Current in the question of the Atlantic Meridional Overturning. We welcome a partnership with other member states as sustained ocean observations are critical to us as a member state, as well as to the global community.

This delegation wishes to thank member states that have enthusiastically contributed to the funding of various programmes on the African continent to address these issues particularly the Republic of Korea under the Korea-Africa partnership as well as the Government of Flanders for their sustained support of ODINAFRICA.

We encourage other member states to actively contribute in any way possible towards the implementation of sustainable observations.

Thailand

Due to IOC's works and programmes have been expanding and continuing role on operation and/or sustained ocean service and conducted survey with member countries in the pass year. It indicated that the developing countries acknowledged the need for marine weather and ocean forecast which aid marine time activities and improve safety at the sea including service for ecosystem support.

Thailand recognizes the important role of ocean observation system and services. Due to the implement of observation system is costly, Thailand, therefore, explores the possibility to cooperate with intergovernmental organization in the region especially with IOC Sub-commission of WESTPAC. We contribute in two implementing projects under SEAGOOS namely Monsoon onset Monitoring and Its Social and Ecosystem Impacts and Ocean Forecast System.

On behalf of Thai delegation, we would like to express our appreciation to the Government of the Republic of Korea to provide a platform for development of the cooperation on the Status of Sustained Ocean Observations and Services to serve the requirement of the IOC, especially in recently, for Caribbean & Latin America. It has been showing a great success of the cooperation.

In the coming support of the Government of the Republic of Korea on the Status of Sustained Ocean Observations and Services with ASEAN will be other step forward. As a member of ASEAN and IOC Sub-commission for Western Pacific, we are looking forward to the cooperation and achievement on the Status of Sustained Ocean Observations and Services in our region.

United Kingdom

The UK thanks the secretariat for their work in seeking feedback on this area of great importance to the future of IOC, as our international scientific community seeks to fill the gaps in knowledge about the marine environment.

The UK welcomed the opportunity to respond to the questionnaire, believing that it helps clarify those areas where IOC needs to focus future efforts. We were a little disappointed that only 29 countries returned completed questionnaires, less than a quarter of members. The UK IOC office worked hard to provide a high level of detail to the survey, and we agree with the comments of the Australian Delegation that production of a more detailed analysis of responses, with subsequent publication on the IOC website, would be welcome.

We support the changes to the wording of paragraph six proposed by the Delegation from Germany. We look forward to supporting GOOS and JCOMM in their role in coordinating sustained ocean observations for a wide range of users, producing many data products to support the needs of the community.

5.3.2 Global Ocean Observing System

Belgium

GOOS, le système mondial pour l'observation de l'océan, par son ampleur, sa continuité et les services qu'il rend est sans conteste une action majeure de la COI.

Ma délégation souhaite saluer ici l'ensemble des réalisations et résultats de GOOS. Par ailleurs, dans le contexte de l'alliance régionale qui la concerne, la Belgique se réjouit d'avoir pu créer les conditions pour à la fois doter EuroGOOS d'une personnalité juridique et, grâce au soutien de notre gouvernement fédéral, pour accueillir son équipe de coordination.

Le rôle moteur de GOOS implique que les moyens soient maintenus et développés pour en assurer la continuité. Ma délégation se félicite de la volonté d'étendre GOOS à la problématique du carbone et de s'ouvrir aux domaines de la biologie et des écosystèmes. Dès lors, nous insistons pour que soient explorées non-seulement l'obtention de moyens nouveaux, mais également la coordination et synergies possibles avec d'autres programmes et projets, comme cela a déjà été le cas avec IOCCP.

Canada

Canada would first like to thank Dr Gunn, his colleagues and the IOC Secretariat for the efforts on this file.

Canada believes that the Global Ocean Observing System – GOOS - is a foundational component of the work of the IOC.

Canada also notes our continued support and commitment of GOOS. We are integrating our existing Canadian ocean monitoring systems (such as the Atlantic Zone Ocean Monitoring Program and the Sea-Level program, into this global system.

Furthermore, Canada will make every effort to support and participate in the three GOOS Panels (physics, biochemical and biological) via in-kind support and participation of our science expertise.

Specifically, we are pleased to speak to the Argo program. In the past year, we acquired over thirty new floats that are being deployed on the Northwest Atlantic and the Northeast Pacific Oceans. We are pleased to confirm that we will continue with further investment in the coming year.

Finally, Canada would note that the charge to the GOOS Steering Committee is aimed at both Member States and user communities. It is important that GOOS continue to strengthen its relevance to those user communities for possible support for GOOS activities.

China

Firstly, Chinese delegation would like to congratulate Dr. John Gunn represented the GOOS Steering Committee made the very clearly and comprehensive report on the progress of GOOS and the work plan for the development of GOOS. We would like also to take this opportunity to express our appreciations to the GSC and IOC/GOOS Project Office for their very hard working!

Secondly, our delegation will fully support for the working plan of the development of GOOS. And also support the development of GOOS regional Policy, in particular, fully support IOC's Sub-Committee to play the very important Intergovernmental efficiency coordination for the development of GRAs.

Thirdly, regarding to the requirement for support development of GOOS, our delegation will positively consider the possibility of setting up an IOC/GOOS support office at SOA of China, in order to strengthen the coordination for the development of GOOS and JCOMM in the future.

India

Indian delegation compliments and congratulate John for the excellent presentation highlighting accomplishments of the GOOS including the SWOT analysis. India would continue to contribute towards augmentation of met-oceanographic observing network under IGOOS through national regional, and bi-lateral programmes.

India has a comprehensive national Ocean Observing System (OOS) consisting of moored data buoys, Argo floats, Drifters, Current meter moorings, ADCP moorings, wave rider buoys, XBT transects, besides making measurements through conventional methods on a campaign mode. Govt. of India has committed to support these observing systems.

With regard to regional programme, India has been providing logistical support in the Research Moored Array of Africa-Asia-Australia Monsoon Analysis and prediction (RAMA) being implemented by NOAA USA as a part of (Indian Ocean Observing System) Indoos. So far 70% of planned 46 moorings envisaged under this programme has been established. India contributed to this programme by providing ship time and other logistic support. These moorings deployed in the tropical Indian ocean are providing surface Met ocean parameters and subsurface parameters like temperature, salinity and currents at different depths.

India is also committed to strengthen the satellite missions for ocean applications.

India in collaboration with France, launched SARAL-ALTIKA satellite, in February 2013 to obtain the improved measurements of coastal sea level.

In Jan 2012, "MEGHA-TROPIQUES satellite data was made operational jointly with France. This satellite is providing data on precipitation, atmospheric water vapour, clouds, ice and radiation budget over the tropical ocean.

However, there are a number of challenges being faced currently in the implementation of Observation network (i) vandalism of moored buoys (2) piracy in the western Arabian Sea because of which we are unable to establish the planned moorings in that region.

At the end we would like to reiterate that we are committed to the proliferation of observing systems in the oceans and will cooperate and contribute to the programmes of GOOS.

Japan

Japan highly appreciates the work of GOOS Steering Committee to develop a direction of internationally coordinated ocean observations. GOOS is one the most important frameworks in which IOC takes a lead in the UN system, to allow for international cooperation and coordination on ocean research, observations, and data exchange. Japan has been actively participating in GOOS through the North East Asian Regional GOOS (NEAR-GOOS) and other international programs such as Argo, and we wish to continue our contributions to GOOS in the future as well.

Turkey

I would like to inform you that Turkey is planning to deploy 4 Argo Floats in the Mediterranean Sea and Black sea.

This national project will contribute to the efforts of GOOS in the region.

In this context, I would like to bring your kind attention to the procedures concerning the Argo Floats deployments that must be implemented, according to the decisions EC(41.4)-XLI.4 and Resolution XX-6.

In accordance with these documents, IOC Council has already decided that, concerned coastal states must be informed in advance, through appropriate channels, of all deployment of profiling floats that might drift into waters under their jurisdiction. In this context, through the IOC circular letter 2313, Turkey's request on this matter and designated Argo focal point information was transmitted to the member states.

We would like to invite the relevant states to implement this above-mentioned decision, since we have not been informed yet about the Argo floats that are currently in the waters under the jurisdiction of Turkey. This request is also valid for the Argo Floats which have the possibility of drifting into the waters under the jurisdiction of Turkey.

United States of America

The United States Delegation appreciates Dr. Gunn's presentation and the work of the GOOS Steering Committee and support the GOOS work plan. We are very proud of the work of this body in establishing GOOS and are very familiar with the genesis of this IOC Flagship Program. We support the conclusions of this report, however note the realistic assessment that Dr. Gunn's report conveys about the resources available to reach these objectives. This is particularly frustrating as the U.S. National Committee on IOC recommended support for this expansion of GOOS, but the recommendations that Dr. Gunn conveys provide the limitations of realism, and we commend him for that. We draw particular attention to paragraph 6 in the draft decision, and hope that again the familiar theme of finding a steward to lead the economic generation of a good science idea will be realized.

5.3.3 Joint IOC-WMO Technical Commission (JCOMM) for Oceanography and Marine Meteorology

China

First, my delegation would like to express our sincere thanks to Dr. Nadia Pinard the co-president of JCOMM for her clear and comprehensive report on JCOMM development. Specially, in her report has indicated that JCOMM's development has closely reached the IOC's height levels objectives. Our delegation will fully support JCOMM's work plan and continue to get more development in the future. In particular we will support JCOMM to undertake close cooperative with IOC/IODE on the development of New MCDS Strategy 2020 with through a global network of less than ten CMOCs which fully interoperable with the WMO WIS and IODE/ODP and will provide the services to the member/member states.

Secondly our delegation would like to take this opportunity to reaffirm China's willingness and commitment to establish an IOC-WMO CMOC at its National Marine Data and Information Service (NMDIS), in order to improve our contribution to the development of IOC/IODE and JCOMM. And according to JCOMM-IV held in May 2012, the committee approved the NMDIS to undertake the functions of the CMOC on a trial basis and report the results to JCOMM through the Management Committee. Today we would like to give very brief introduction of the trial basis has been taken at the center:

- (i) To promote the CMOC China in NMDIS, a Steering Group of the center was set up with the Director-General of NMDIS as the Chair. And the working plan for the trial basis was drafted in detail.
- (ii) To start the trial bases on the data and metadata collecting and height quality controlling and drafted the relevant documentations;

- (iii) Construction scheme of CMOC China website and design as an integrated website. The data and information collected so far had been loaded into the trial version system which including some oceanographic and meteorological data from China,
- (iv) To prepare on welcoming and cooperating for JCOMM and IODE joint evaluation committee for the nominator evaluation of CMOCs.

Mr. Chair, According to the requirement of JCOMM-IV, we will provide "The CMOC China on a trial basic Progress Report" to the JCOMM-MAN in the end of this year. And we are looking forward to cooperative with all IOC member states and other CMOCs centers to implement the MCDS and IODE Strategy!

Germany

Germany appreciates the work by JCOMM and supports the decision proposed.

The Expert Team on Marine Climatology (ETMC) of JCOMM (WMO-IOC Joint Technical Commission for Oceanography and Marine Meteorology) has designed a new Marine Climate Data System (MCDS) to formalize and coordinate the activities of existing systems, and address gaps. The Vision is to produce a dedicated WMO-IOC data system operational by 2020, with a standardized structure for existing and new data across JCOMM/IODE.

The system is expected to improve timescales for met-ocean climate data availability, facilitate the exchange of historical met-ocean climate data sets between countries, and thereby increase the amount of ocean observations eventually made available to the relevant end user applications. Furthermore, integrated data and metadata will be available containing comprehensive dataset information e.g. historic details on current and past data codes and formats.

In this sense, the MCDS seeks to benefit climate research, long-term climate monitoring and the Global Framework of Climate Services (GFCS) offering advantages in a restricted budget environment.

Iran (Islamic Republic of)

I R of Iran Delegation congratulate JCOMM for its great achievements. The Iranian Meteorology Organization and the Iranian National Institute for Oceanography have formed the JCOMM of Iran from three years ago.

We would like to pay the attention of JCOMM and IOC to the Caspian Sea. The Caspian Sea is the largest lake in the world and lies between different climatic systems as it is influenced by weather systems from North Atlantic to Asia. The Caspian Sea and its watershed stretch latitudinally and actually is a long cross section of the northern hemisphere. One of the big challenges in studying the climatic variability and extreme conditions is related to sea level changes and its natural and socio-economic impacts. The impact of sea-level changes on the nature of the basins and the coastal communities is largely not on real-time observations because present-day sea-level change proceeds so slowly that it is almost imperceptible in human time scales. The Caspian Sea changes take place here at a pace of 100 times as fast as along oceanic coasts.

According to this short explanation, the Iranian National Institute for Oceanography suggest the world oceanographic community to pay more attention to this unique water body as a natural laboratory for studying the climate change and its consequences on the world sea level. Moreover, this water body can provide us a good opportunity to study the paleoclimatology of the northern hemisphere in a reasonable scale.

Japan

First of all, our delegation thanks Dr. Pinardi, Co-president of JCOMM for her excellent report. Japan highly appreciates the supports provided by the IOC Secretariat and Member States to JCOMM activities in the time of financial difficulties. JCOMM plays key roles in coordinating international ocean services, observations, and data management, and Japan considers that continuous supports should be provided to JCOMM activities in close cooperation with WMO.

South Africa

The South African delegation would like congratulate Dr Pinardi for the excellent presentation. We would like to commend JCOMM for the good work and achievements so far. South Africa, as a WMO co-chair for the JCOMM supports the outlined activities. The objectives of JCOMM are clear and we hope that the related capacity building activities will be expanded to demonstrate clear beneficitation to societal needs. This is especially important in ocean observations, forecasting and early warning systems. South Africa will continue to partner with other members states in advancing the benefits of JCOMM throughout Africa.

We thank the DBCP for the capacity building activities in the Indian Ocean and we hope that this will play an integral role when undertaken planned cruises to commemorate the International Indian Ocean Expedition.

5.3.4 IOC Committee on International Oceanographic Data and Information Exchange (IODE)

Belgium

Our Belgium delegation regards IODE as one of the flagships of IOC. The Flanders Government will continue the hosting the IODE Project Office at the Flanders Marine Institute in Oostende Belgium, of which the funding is secured till 2017. Additional funding through projects of the Flanders UNESCO Science trust fund and through in-kind contributions done by the Marine Data Centre at the Flanders Marine Institute.

We support the Restructuring process as prepared in the 22nd IODE Committee meeting in Ensenada, Mexico

We endorse IODE's cooperation with other IOC programs and initiatives (such as ICAM and ICAN) and with other agencies and international bodies WMO (JCOMM), UNEP, FAO , SCOR. We will continue our support to IODE in the future and hope many of the members states will join us.

We endorse de decision as proposed in the document.

Canada

Canada commends the work of the IODE in the area of global ocean data management. If IOC is the flagship of UNESCO, many around the world will say that IODE is the flagship of IOC. Through the office in Oostend, the IODE's ODIN program, the OceanTeacher Academy, and partnerships with other sister organizations such as WMO and IHO, the IODE has made a mark in the global arena.

We find the documentation of the Strategic Plan to be well written, to show the relevance of the program and to show a clear plan for the future. As Flanders has demonstrated through its Trust Fund, data and information management are fundamental to all activities of the IOC and also to member states.

Unfortunately, the importance of the data management in science activities is not often recognized and not taken into consideration while planning science programs -climate, integrated coastal management, ocean services and others.

Years ago, under the leadership of our colleague from Australia, Dr. Angus McEwan, IOC had established a data policy.

Canada is of the opinion that this IODE Strategic Plan and the IOC Data Policy need to be highlighted within IOC and should be an integral part of the 'Future of IOC' discussions.

Furthermore, noting that not all Member States of IOC have established national oceanographic data centres, Canada would like to encourage Member States to establish such centres and benefit from the training and guidance available through IODE.

Finally, Canada is pleased to note that Fisheries and Oceans Canada has recently contributed the services of Mr. Tobias Spears as the Project Manager for the Ocean Data Portal - a significant initiative under IODE.

India

Our delegation thanks IODE co-chair Mr. Ariel Troisi for the wonderful summary of IODE activities during the past two years and plans for the future.

Considering the importance of the work done by IODE, our delegation supports the activities presented in the report. The RNOIC in India is actively participating and promoting the policies of IODE through oceanographic data archival and dissemination.

As part of the IODE/IOC's "Ocean Teacher Global Classroom" concept, INCOIS/India jointly with IODE organized a training programme on Marine GIS through Tele-presence facility during March 19-23, 2012 for the benefit of trainees. The main focus of the programme was development of Marine GIS application using GIS software. Lectures were transmitted from Oostende (Belgium) to INCOIS, Hyderabad via the Video Conferencing system.

Mr. Chairman, India would like to continue to support such activities through the establishment of International Training Centre for Operational Oceanography at ESSO-INCOIS. Mr. Chairman, we are happy to inform you that the training centre is already functional at INCOIS and the first international training programme in collaboration with International Centre for Theoretical Physics is scheduled to take place

during 5-21 Aug 2013. 24 trainees, from 8 countries, have been selected to participate in this training programme.

Finally, we would like to reiterate that India will support the activities of IODE and continue to participate actively in the programmes on data management and capacity building.

Iran (Islamic Republic of)

Our Delegation would like to congratulate the distinguished co-chair of IODE, Mr Ariel Troisi for his excellent presentation. Like Belgium, we believe that IODE is one of the most important programs of IOC. Therefore, the R of Iran fully supports IODE activities.

Furthermore, we appreciate the efforts of IODE for pay consideration to the Region of the Persian Gulf and the Gulf of Oman in the Ensenada meeting in Mexico. Iran believes that the regional cooperation in the framework of IODE should be pursued as a priority.

Japan

Japan has been actively participating in the whole projects and activities of IODE since its establishment in 1960s. Having had intensive and extensive discussion at the last IODE meeting in Ensenada, Mexico in March 2013, including important issues on IOC strategic plan for oceanographic data and information exchange, IODE quality management framework, and the cooperative works with the WDS of ICSU, Japan expressed its appreciation to the IODE co-chair, Mr Troisi, for his clear report on the discussion made, and the government of Mexico for hosting such an important meeting.

Japan would continue to join all of the IODE activities and contribute to better management of oceanographic data and information within the international cooperative framework, particularly for the projects of Ocean Data Standard and Ocean Data Portal. As Japan repeatedly pointed out in the previous Assemblies and Executive Council meetings, Japan would emphasize the importance of secure archive of oceanographic data as one of the key objectives of IODE. This should be achieved through the collaborative network of NODCs and partner organizations, including WMO, IHO, ICSU and many others. In addition, it is quite important for IODE to actively participate in and interact with global oceanographic research and services, by playing a leading role in data management in such activities. There would be some needs for the future of IODE to consider how the IODE and its data and information services are able to contribute to the decision making processes by providing scientifically reliable data and information for them, and also how to improve the visibility of IODE in the scientific research programmes.

For the Oceanographic Data and Information Network (ODIN) in our region, WESTPAC, Japan has been joining the discussion how to revitalize ODINWESTPAC among the member states and WESTPAC Officers. It is essentially important for the capacity development in ocean data management in the region. With these comments Japan would fully support the proposed decision 5.3.4.

Japan would also express our deep appreciation to the Government of Flanders for its continuous supports to the IODE project office in Oostende.

Mozambique

Mozambique delegation would like to thank the excellent presentation of IODE. Also to support the IODE activities considering the importance of oceanographic data exchange for all member states. Mozambique hopes that this programme will continue to provide the required resources for research, education and capacity building.

Republic of Korea

Korean Delegation would like to express our gratitude to Mr Ariel Troisi for the detailed report. We recognize the importance of IODE's role in oceanographic data management and exchange, and appreciate the active endeavors of IODE. What we care is the Quality Management Framework (QMF), which will increase the value of IODE and Member States' National Oceanographic Data Centers (NODC). We hope that the accreditation procedure for NODC to be established at the earliest possible date. We also think that the new Associated Data Unit (ADU) as a structural element will improve the data coverage of previous IODE structure. Considering that there is no accreditation procedure for ADU currently, we believe that further consideration is needed to ensure the data quality. Last but not least, we would like to stress the importance of the core activities of IODE, such as the Ocean Data Portal and Ocean Data Standard, that they should be proceeded in a prompt manner. Republic of Korea will continue to support the IODE activities by providing quality data and following the IODE-QMF accreditation process.

South Africa

South Africa would like to add its voice to previous interventions of member states in thanking and congratulating the IODE Co-Chair, Mr Ariel Troisi for the report. South Africa as the chair of IOC Sub-Commission for Africa and Adjacent Islands, together with other African Member States, would like to thank the IODE for its activities on the African continent, many member states in the continent have benefited and contributed towards these ocean data and information exchange activities.

We commend the Government of Flanders for its generous and sustained contribution towards various IODE programmes that have had a direct impact in Africa such as ODINAFRICA. We believe that IODE is a strategic programme within the IOC and we urge other member states to contribute in making IODE as relevant as it has been in ocean data and information management. As member states we must ensure that the good work done by the IODE will remain as a flagship within IOC.

Turkey

Data and information are of the crucial elements to achieve the IOC's High Level Objectives.

So we believe that IODE Committee of IOC has the priority importance regarding to the oceanographic data and information management.

Archiving and sharing oceanographic data and information timely, relevantly and accurately plays a key role in management of the world ocean.

As well as encouraging and supporting National Oceanographic Data Centers of member states to archive oceanographic data and information long term, IODE Committee with its Expert Team on Data Management Practices has already implemented Ocean Data Portal (ODP) which enables data and information sharing among the data centres all over the world.

Ocean Data Portal is now one of the best practices of data sharing through which enabling the connection regional data networks globally.

IODE is also contributing capacity building activities, in terms of oceanographic data and information, through its Regional Oceanographic Data and Information Networks, ODIN-AFICA, ODIN-ECET, ODIN-WESTPAC, ODIN-CARSA, ODIN-PIMRIS and ODIN-BLACSEA. Turkey has been actively participating in ODIN-BLACKSEA activities sharing expertise with the BlackSea Countries in close collaboration.

Besides establishing the best practices on ocean data and information sharing, IODE has also been actively working on data and information standardization, quality control tools, making data and information management strategies, providing expertise to NODCs, accreditation procedures of NODCs through its other Group of Experts.

In addition to its global efforts, it is also working in close collaboration with the regional data management projects such as European Union SeaDataNet.

Turkey is actively attending to IODE activities and promoting its products and works nationally and nominates Turkish scientist to IODE Group of Experts.

In compatible with proposed IOC Strategic Plan for Oceanographic Data and Information Management 2013-2016, we believe that distributed data and information management systems at national level and co-ordinated by NODCs will have the great contributions to IOC IODE efforts.

In this regard, we would like to announce that Turkish NODC is now preparing to initiate a national project which will enable to a "distributed data and information management system" in accordance with the IODE strategies and we believe that, through such systems more additional data units will be part of new structure of IODE committee of IOC.

United Kingdom

The UK thanks Ariel Troisi for his detailed report. There are many projects taking place under IODE and the UK is pleased to see that it continues to be a very active programme. Many comments could be made, but we wish to highlight one aspect of IODE, that is the introduction of a Quality Management Framework. The UK welcomes this development and in particular endorses the concept of accreditation for National Oceanographic Data Centres (NODCs) – that is that they should demonstrate that a set of minimum standards can be fulfilled, and subjected to regular review. We are also pleased to see that in identifying the accreditation criteria for NODCs, the work undertaken by the International Council for Science (ICSU) World Data System is being taken into account.

An important aspect of the Quality Management Framework is the link with capacity development and the OceanTeacher programme, to provide the necessary training to ensure all NODCs can meet the criteria, and we thank the Government of Flanders for their support in funding this work.

Finally the UK has experience of accrediting Data Archive Centres within its Marine Environmental Data and Information Network (MEDIN), and is happy to assist IODE as it implements this activity.

United Republic of Tanzania

The URT would like to express appreciation of the great leading role IODE is playing in ocean data and information management. IODE reflecting its role and the 50 years of existence, and the tremendous changes in data collection methods and platforms, the rapidly increasing amount of data and new data types, at its 22nd Session held in Ensenada, Mexico, March 2013, adopted 20 recommendations that entail a major restructuring and re-organization of IODE to cope with the rapid changes and growing role.

The URT fully supports the IODE recommendations, workplan and its restructuring which are aimed at increasing efficiency, effectiveness and increasing the quality of IODE services and products.

The URT humbly appreciates the Government of Flanders for hosting and supporting the IOC Project Office for IODE. The URT is encouraging all Member States and Partners to continue supporting IODE both in-kind and financially, and is hopeful that sufficient resources from the IOC Regular Budget will be allocated for IODE activities and functions.

5.3.4.1 Ocean Biogeographic Information System (OBIS)

Belgium

I would like to thank the Executive Secretary giving this significant importance of OBIS ' not only for the realizations in the past but also even the importance of OBIS in future endeavors related to Marine Biodiversity.

For the Belgium delegation it is of critical importance in continuing the survey of life in our Oceans and seas and therefor considers OBIS as the IODE sister flagship of IOC. The Flanders Government therefor supports OBIS through hosting the OBIS secretariat at the IODE Project Office in Ostend, Belgium, additional funding through projects within the Flanders UNESCO Science trust fund scheme and through in-kind contribution made by the European node of OBIS at the Flanders Marine Institute.

We fully endorse the current proposal under the draft budget to establish a regular program position for OBIS, shared between IODE and GOOS. Our delegation hopes not to be the only donor for the core activities of OBIS so it strongly encourages other Member States to help consolidate OBIS under IOC. And we have to do it now before it is too late. Belgium fully agrees with the presentation given the IOC Executive Secretary. We, as indicated by the Executive Secretary, the 145 members states composing IOC and UNESCO simply cannot afford losing OBIS.

Canada

Thank you Dr Watson-Wright for delivering the OBIS report and for your very clear and to the point presentation on the successes and challenges of OBIS.

Canada recognizes the pioneering leadership of OBIS in promoting the exchange and availability of biodiversity data worldwide, first under the Census of Marine Life (CoML) and now under IODE / IOC.

Canada sees many benefits to the continued existence and growth of the i-OBIS office for its national priorities, including:

- Leadership and training in data management standards and practices for complex biodiversity and ecosystem data
- Enhanced discovery of data for growing national assessment and advice needs for ecosystem-based management
- Considerable efficiencies in time and money in mobilizing data for different programs and projects.

Canada currently maintains an OBIS node at the Bedford Institute of Oceanography which will soon contribute ca 1M new records to i-OBIS. Canada will continue to explore possibilities to provide direct financial support to the Office and/or its OBIS node, look for sustainable long-term solutions for the continued operation of its OBIS node, and provide our expertise to i-OBIS as much as possible,

Who can say that the free exchange and mobilization of basic oceanographic data has not brought enormous benefits to the global oceanographic science community and human needs for oceanographic and climate services?— For example, we just recognized the impact of Dr Levitus' work in making oceanographic

data easily accessible worldwide– Biodiversity data is on the cusp of a similar revolution, spearheaded by the creation of OBIS under CoML and now IOC. It would be a major loss to us all if this revolution was aborted or delayed because of current financial pressures.

Canada urges the Assembly to give strong priority to funding the OBIS office within the regular budget, the Member States to provide support for the OBIS office and to maintain and/or develop new OBIS nodes within the IODE structure in order to fulfill IODE's mission to lead the mobilization of data worldwide for the benefit of ocean sciences and societal needs.

India

Thank you Mr. Chairman for allowing us to take the floor.

Our delegation thanks Exe. Sec. Dr. Wendy Watson-Wright for the summary report on the developments at OBIS and the likely problems for OBIS after June 2014.

Considering the importance of OBIS for biodiversity and considering that the ocean flora and fauna are under great pressure, particularly due to climate change and ocean pollution, there is a need to support the efforts on OBIS. Our delegation would support the efforts of IOC in this regard. India is supporting and maintaining OBIS node and also providing in-kind contribution by hosting the Servers for OBIS Mirror site and the required manpower to maintain the same. Mr. Chairman, we are willing to contribute further in the development of data visualisation and dissemination tools for OBIS as required.

Finally, because IOC has adopted OBIS as a fully operational project under IODE through IOC resolution XXV-4, our delegation is of the opinion that OBIS should find a place in IOC's programme budget, at least to support the core requirements.

United Kingdom

The UK thanks the Executive Secretary for an excellent and detailed presentation that highlighted the success, and clearly stated the funding crisis that is faced by OBIS.

The UK has played a significant role in the gathering of the kind of biogeographic information that is served by OBIS, indeed we provided advice on data handling methods and metadata classification when OBIS was being established. We recognise the need for this service to be continued for the benefit of the widest possible range of users.

The UK delegation will undertake to bring this matter to the attention of our marine science community and funding agencies. We need to learn lessons regarding how to transition from project funding to sustained investment, and look closely at how OBIS can be integrated into the existing data centre network.

United Republic of Tanzania

The URT would like to commend the wonderful work and success achieved by OBIS so far. The report presented by the OBIS Project Manager has just alluded that. Last Friday on 28th June 2013, I participated in the OBIS side event during which detailed presentations on the performance and potential for growth and continued success for OBIS were made. The impact of OBIS was highlighted: for example in the increasing number of Journal citations, the many ways OBIS is increasingly being used as a "decision-support tool" for example in identifying hotspot areas for biodiversity conservation and in many other issues. My delegation is aware that several countries in Africa are using OBIS as source of baseline information for their National Biodiversity Programmes.

The URT is particularly encouraged by the successful transition phase of OBIS from being a private foundation-led activity to become part of an Intergovernmental organization, fully operational as a project under IODE. Through the Resolution, IOC Resolution XXV-4, IOC assumed the responsibility of ensuring that the tremendous efforts that many scientists/experts have put in developing OBIS, the huge amount of resources that have been invested into OBIS so far, and the various services that OBIS is already providing are harnessed and maintained.

The URT is strongly encouraging Member States and Partners to continue supporting OBIS, and is requesting that sufficient budgetary funds from the IOC Regular Budget be allocated for OBIS activities.

United States of America

The United States Delegation appreciates the presentation of the Executive Secretary and the importance of the subject. The U.S. congratulates the OBIS staff and contributing Member States for their contributions and the significant progress in restructuring operations and developing an efficient mechanism for carrying out the mission through multiple task teams and multiple locations. In particular, the U.S. Delegation recognizes both Rutgers University and Duke University in the United States, the Indian National Center for

Ocean Information Services in India, the University of Simon Bolivar in Venezuela, and the Flanders Marine Institute in Belgium. These enterprises have generated the continued success of an important program.

This program is a model of success, up to now, for the IOC. A private foundation generated the funding to create the program at great expense, earning great accolades. IOC took up stewardship of this vital ocean information system, just four years ago.

The United States Delegation is concerned by about the status of OBIS funding. We support the program and are willing to work with Member States to find a solution to this challenge, to forestall the termination of the program in 2014.

OBIS is the “canary in the coal mine.” It is an example of what IOC sees in itself and in IOC’s future, as the holder of a world class data base, challenged to determine what is to come of it. Also, it is the data holding that defines global ocean biodiversity which is a measure of ocean health. This is very important service to science for the IOC to sustain.

Venezuela (Bolivarian Republic of)

En esta coyuntura de recursos limitados, hay “programas” y “programas de programas” que ameritan el apoyo de la COI. El OBIS es uno de ellos. Tiene un altísimo impacto en el ámbito científico y académico en muchos países y regiones, independiente de su nivel de desarrollo. Creemos firmemente, que la base de datos de la enorme cantidad de información acumulada debe ser mantenida y aumentada.

Es por ello, que solicitamos al Secretariado y la COI en su conjunto, en nombre del sector académico y científico de la República Bolivariana de Venezuela, encontrar los caminos que vayan en la dirección de mantener y mejorar en el tiempo este programa, que va en el beneficio de todos.

Joint Programming Initiative for Healthy and Productive Seas and Oceans (JPI Oceans)

For the delegations’ information, I am representing the Joint Programming Initiative for Healthy and Productive Seas and Oceans, a young intergovernmental organisation in Europe with currently 18 member countries. We are participating for the first time to the assembly as observer and would like to thank the IOC’s secretariat for the invitation.

We would like to express our appreciation for the clear concern in the presentation concerning OBIS by the Executive Secretary. After all the significant valuable investments in OBIS in the past, including OBIS’ integration in the IODE programme, JPI Oceans’ secretariat would like to emphasise the importance of the continued existence and development of OBIS to elaborate further on biological knowledge of life in the oceans, which is very important for more joint assessment within Europe as well as serving this world-wide.

5.4.1 WMO-IOC-ICSU World Climate Research Programme (WCRP)

China

Chinese delegation thanks the impressive presentation of WCRP and appreciates the great achievement of WCRP on the understanding of the global ocean and climate change.

WCRP is one of the main programs in the world to coordinate and facilitate climate research. IOC is one of the main sponsors of WCRP. But the Chinese delegation concerned about the decreasing visibility and involvement of IOC in the WCRP recently.

Ocean plays a fundamental role in the climate change. For the weather forecast, the ocean may be not so important that sometimes its role was just neglected. However, to face the challenge of improving the predictability of climate change in next several decades and climate change projections, ocean will be in the central place.

As one of the main sponsors of WCRP, IOC should get more involved to the WCRP activities to improve the scientific understanding of the role of the ocean in climate change, to achieve the high-level objectives of IOC, and to meet the vision of the IOC medium term strategy for 2014-2021,

To this end, Chinese delegation strongly suggests the role of IOC in WCRP should be clearly defined and clarified, and the involvement of IOC secretariat should be strengthened. And also, we suggest a brief report about the role of IOC in WCRP could be submitted to IOC governing body for further consideration.

United States of America

The U.S. Delegation congratulates the WCRP community for the fine work represented in this presentation. The U.S. is very familiar with the signature oceanographic programs cited in the presentation. We spend many millions of dollars on these productive signatures of contemporary ocean science enabling our

understanding of the global ocean; these include: TOGA, CLIVAR, GODAE, GO-Ship, and AMOC, among others. We are grateful to those Member States who cooperate to conduct these programs jointly.

Related to these programs, we note that it becomes increasingly difficult for Member States to find sufficient ship time to service all needs of ocean-going programs, and commends those Member States who have joined in the cooperative scheduling of ship time to achieve the needs of these programs.

Finally, in recalling some of the words from the presentation offered by WCRP, there is a notation that says, "Science Saving Lives and Property." It is worthy to note that the IOC, supporting science programs that save lives, receives only 1.7% of the UNESCO budget and remind Member States that there may be a more appropriate distribution of UNESCO resources for such important work.

North Pacific Marine Science Organization (PICES)

Achievements of WCRP in the inter-sessional period are very impressive, and it was truly rewarding to collaborate with WCRP in organizing a symposium in Yeosu and on some other occasions, but my comment will be not on these activities but related to an intervention from Brazil.

First, I would like to thank our colleagues from Brazil for their willingness to host the 3rd International Symposium on "*Effects of climate change on the world's oceans*" in Santos, in the spring of 2015. A very enthusiastic and experienced group from the Institute of Oceanology at the University of São-Paulo was identified as a local organizer and has been already working with the Secretariats of IOC, PICES and ICES to set the stage for the successful meeting.

Along with symposia on "*Oceans in a high-CO₂ world*", symposia on "*Effects of climate change on the world's oceans*" are considered as flagship events by the marine scientific community. IOC, PICES and ICES, who were major international sponsors for the first and the second symposium in this series held in 2008 in Gijón, Spain, and in 2012 in Yeosu, Korea, are working together again to make the third symposium a landmark scientific and capacity building event. Other intergovernmental organizations (such as FAO), international programs (such as WCRP, IMBER and SOLAS) and various national agencies (such as NOAA, Fisheries and Oceans Canada, Ministry of Oceans and Fisheries of Korea, State Oceanic Administration of China) have been or will be invited to be a part of this effort.

The symposium conveners have been selected, the Scientific Steering Committee members have been appointed, and the core scientific program and a call for additional sessions and workshops to be held in conjunction with the symposium will be released by the fall of 2013. The symposium website will be launched at that time.

5.4.2 Intergovernmental Panel on Harmful Algal Blooms (IPHAB)

Chile

La delegación de Chile quiere manifestar que las decisiones adoptadas en la última reunión del IPHAB son muy interesantes y contribuyen a mejorar el conocimiento sobre la temática.

Las recomendaciones también nos parecen precisas y acertadas, ya que la temática tiene un fuerte impacto en la salud del ser Humano.

Para Chile se trata de un tema sensible que va mas allá de la investigación y por lo tanto es de una alta significación e importancia. Por ello expresa su apoyo al significativo trabajo realizado a la fecha, como asimismo a los estudios y otras iniciativas, que se generen al respecto.

Iran (Republic Islamic of)

I R of Iran Delegation appreciate the efforts of IPHAB and the distinguished president of this program for his informative and excellent presentation. As you know alge bloom happened in the Persian Gulf and the Gulf of Oman about three years ago that continued for 11 months. Therefore, Iran is interested to participate in Oman Conference on this issue in 2014. However, it seems that there is a lack of knowledge in some aspects of HAB phenomena in our region. So, organizing of some regional training workshops for capacity building related to toxin detection and using satellite oceanography method for tracking the bloom by IPHAB is required.

Monaco

La délégation de Monaco souhaite remercier le Président du Groupe Intergouvernemental de la COI sur les efflorescences d'algues nuisibles pour la clarté de son exposé. Monaco soutient ce programme de la COI car il constitue une action unique et effective pour la compréhension et la prévention des phénomènes d'efflorescences d'algues nuisibles qui affectent les populations et leurs ressources dans toutes les régions

du monde. Monaco accorde, en particulier, une forte priorité au nouveau programme de recherche GlobalHAB et à ses projets sur les algues benthiques, ainsi qu'au rapport sur l'état global des efflorescences d'algues nuisibles et demande à ce qu'ils soient inclus dans la décision finale de l'Assemblée.

Republic of Korea

Korean Delegation would like to support the initiative by IPHAB. Since we do have many experiences in the field of HAB research, and the term of references of the task team suggested by IPHAB is well matched with current Korean HAB program, we would like to participate in the task team on Biotoxin Monitoring, Management and Regulations, if allowed.

Thailand

Firstly, on behalf of Thai delegation, I would like to thank the chair of IPHAB, for his excellent and clear presentation on the progress of the Intergovernmental Panel for Harmful Algal Blooms and its way forward.

There are many points in the report of IPHAB, especially on encouraging the Member States of IOC to participate in the programme, to set up new research topics and committees for the project including an achievement HAB's development in regional level, which are very well correlated to HAB programme of IOC Sub-commission for WESTPAC.

As we know and well understand that the Algal Bloom is one of the major threats worldwide that many countries have faced the toxic algal blooms for a long period of time, especially its impact on coastal fisheries and seafood security. Thailand is well aware of such critical issue though we have no serious toxic algal blooms at present. We, therefore, have joined HAB programme of IOC Sub-Commission for the Western Pacific, since more than 20 years ago.

There are strong networks and close cooperation on HAB in the WESTPAC region. The proposal of IPHAB to implement the activities in regional level, therefore, needs to be clear in its practical process to avoid duplication and confusion among the Member States in the region.

We require a closer communication of IOC-supporting global programme, and in particular, more closely working within regional programme such as IPHAB and WESTPAC-HAB. As UNESCO is facing financial crisis, the close cooperation or working together in Global and Regional levels would be synergetic of limited resources of UNESCO-IOC.

During the past few days, we realize that most of the Member States have contributed significantly to IOC Regional Subsidiary Bodies as an implementing body of the IOC. We do hope that the close cooperation and communication on global and regional programme will maximize the benefit of limited resources as well as to avoid confusion of Member States of IOC on implementing programme between Global and regional levels.

Secondly, I would like to give an intervention on behalf of the IOC Sub-Commission for the Western Pacific.

In view of considerable negative impacts of HAB on human health and direct economic in the WESTPAC region, the IOC Sub-Commission for the Western Pacific established the WESTPAC-HAB Programme in early 1990s in order to foster regional cooperation on HAB science through the conduct of joint research, development and provision of a series of training courses. In this regard, we would like to express our appreciation to the government of Japan for its long-term financial support to WESTPAC/HAB programme, and other countries in the region for hosting WESTPAC/HAB activities.

Mr. Chair, in accordance with the strategic direction defined for WESTPAC over next medium term even beyond, WESTPAC will enhance its efforts, bearing in mind the concept of the sustainability science, in the development of country-specific programmes in which WESTPAC-HAB will be one of importance components. With a view to further addressing this specific problem our many developing countries have been facing.

United States of America

The U.S. Delegation welcomes Dr. Magnien's report and supports Assembly endorsement of the Panel's recommendations and the draft decisions, including implementation of the biennial work plan.

We are pleased to join consensus on the call for a more concerted study of Ciguatera Fish Poisoning, which affects so many nations represented here at the Assembly and for which new scientific advances hold great promise in protecting public health and commerce in seafood. We also see great benefit in the recommendation for involving other UN agencies, including FAO and WHO, in this initiative.

Finally, the proposed Global HAB Status Report will not only serve the interests of our Member States, but it will add to the content of the World Ocean Assessment and enhance the visibility of IOC therein.

North Pacific Marine Science Organization (PICES)

PICES has partnered with IOC, SCOR, ICES and NOAA in organizing and funding the workshop on “*Harmful algal blooms in a changing world*” held last March. The idea of an open science meeting on “*Harmful algal blooms and climate change*” in 2014-2015 emerged from this workshop (Decision IPHAB-XI.1). PICES appreciates an invitation to co-convene the meeting. The involvement of various PICES expert groups in this important event and our financial commitments will be discussed and decided at the 2013 PICES Annual Meeting to be held in October in Nanaimo, Canada.

PICES has contributed to IOC-led Harmful Algae Information System (HAIS) since 2005. We strongly support an idea to produce a periodic Global Harmful Algal Bloom Status Report (Decision IPHAB-XI.2). This report will be a critical addition to the United Nations World Ocean Assessment, provide a global status of HAB events and the causative species. It will be also an important contribution to future PICES North Pacific Ecosystem Status Reports. If this initiative is approved by the IOC Assembly, PICES will nominate appropriate experts to the Task Team proposed for the development of the Global Harmful Algal Bloom Status Report.

If forming of a new decadal international research program focusing on understanding HABs in the context of global sustainability (GlobalHAB) is accepted by the IOC Assembly (Recommendation IPHAB XI.1), PICES would be prepared to consider participating in a GlobalHAB Scientific Steering Committee to develop a Science Plan and an Implementation Plan for the program.

5.4.4 Integrated Coastal Area Management (ICAM)

Belgium

We would like to thank Julian Barbière for his extensive report in the context of integrated coastal area management.

In this context, my delegation appreciates the work IOC have been conducted in in the last decade in promoting marine spatial planning and ecosystem based management.

In particular the Flanders Government appreciated the work done by IOC in close cooperation with the local regional authority CPPS and therefor decided second a second phase through the Flanders UNESCO Science trust fund scheme. We also welcome the development in the context of coordinating the LME project as presented in the second part of the presentation.

We fully endorse the proposal under the draft budget as presented in the regular program

India

Thanks to Dr. Julian Barbeire for the clear presentation on ICAM & LME, which are important programmes particularly in the light of climate change and associated sea level rise.

The coastal marine environments are undergoing rapid degradation world over due to multiple stresses arising from local to global scale drivers (e.g. water use, influx of sediments, pollutants, ecosystem degradation, river flooding, shoreline erosion, storms, tsunamis, sea level rise, etc.). The decision making, social adaptation and building governance to enable resilience against coastal risks is difficult because of the complex interactions between these drivers and competing concerns (e.g. human migration, lifestyles, land use, and ecosystems services).

This situation often demands the development and use of specific local approaches that are not generic enough to be used elsewhere, and therefore inhibit the wider sharing of knowledge (e.g. between nations).

Hence, we need to develop novel, transferable, coastal vulnerability assessment approaches to facilitate decision making and better management of the coasts.

Iran (Islamic Republic of)

I R of Iran congratulate to the distinguished chair of ICAM program of IOC for his excellent report.

Noting the increasing and significant role of ICAM and states' sincere consideration thereto, we recommend that the IOC provides multiple standards and models of ICAM taking into serious account of a given region the potentials, and challenges, as well as climate, economical, environmental and other conditions of a variety of geographical regions separately in order for the states with different conditions to be able to adopt compatible models and standards there with.

It should be mentioned that the Maritime and Ports Organization of I R of Iran prepared the ICZM plan of the country about three years ago and then based on this plan, an organization was established in Iran for coastal and marine management and development that is affiliated to the Ministry of Interior Affairs of Iran.

United States of America

The Delegation of the United States appreciates the comprehensive presentation and supports the position recommended. This presentation reflects the values of the United States own National Ocean Policy by relying on principles of ecosystem based management, Large Marine Ecosystems, coastal and marine spatial planning, coastal resilience, blue carbon, and other incorporated subjects. The United States will continue working in the areas cited within the presentation through investments in these subjects through our nationally funded global science programs. Further, this Delegation appreciates the attention of the presentation to the financial circumstances of the IOC and the need to raise extra-budgetary funds to enable this work.

5.4.5 A Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socio-economic Aspects (UN Regular Process) — World Ocean Assessment

Canada

Canada has been a strong advocate of assessments as a means to better inform decision making, and as such, has been active in advancing this global initiative. Canada is also pleased to say that we are providing strong participation in the Pool of Experts. A key objective for Canada is that the assessments are based on the best available science, strongly linked to policy/decision makers.

Canada wants to ensure that the World Ocean Assessment strives for equitable geographical representation. Arctic waters should be adequately covered and that Assessments that have been done by others should be considered under the World Ocean Assessment. For example, assessments done via the Arctic Council Working Groups would be an obvious source of information for the WOA (e.g., CAFF's Arctic Biodiversity Assessment for the biodiversity chapter, recent assessment of impacts of Ocean acidification in the Arctic).

Indicators of performance are key to the Assessment process. Canada would suggest that we learn from others, and indicators that have been shown to perform well following established criteria be used for the World Ocean Assessment rather than developing new reporting standards.

Finally, Canada fully supports the draft decision and IOC's engagement with the Secretariat of the Regular Process and all other relevant bodies.

India

Thanks to Mr. Alan Simcock and Mr Julian Barbière for clear presentations on AOA and Integrate coastal area management, respectively.

Our intervention is mainly on the UN's endeavour on Regular Process for Global Reporting and Assessment of the State of the Marine Environment

Recognising the importance of Assessment of Assessments for biodiversity and considering that the ocean flora and fauna are undergoing great pressures by multiple drivers, particularly due to climate change and ocean pollution, our delegation supports the UN endeavour to conduct Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socio-economic Aspects

India has responded to UN notification on the matter and nominated 10 experts covering all the major marine disciplines including socio-economic aspect viz., Marine chemistry, physical oceanography, marine geology, and biology

Secondly, India has decided to organise a Regional workshop to conduct AOA for the northern Indian ocean, in Chennai, India in December 2013 as a part of the first cycle.

Republic of Korea

Korean Delegation would like to share with the Member States the recognition of the importance of the UNRP. On the basis of this recognition, Korean government has already made some financial contributions although not so big, and has participated in several Regional Workshops actively. Korean Government obviously evaluates the IOC's supporting activities very high and valuable, and believes that such support should be continued until the first cycle of World Ocean Assessment is over successfully. One thing to be emphasized is the participation of the scientists not only in the field of ocean science but also in economy and sociology. One of the key guidance given by the UN is the geographic and gender balance of the participating experts. More experts are to be added in the pool of experts. So, we would like to ask Member States to recommend more experts to the secretariat of UNRP, DOALOS.

Thailand

I would like to give my intervention on behalf of IOC Sub-commission for Western Pacific.

The IOC Sub-Commission for the Western Pacific (WESTPAC) would extend its sincere thanks to the Government of China for hosting the workshop for Eastern and South-eastern Asian Seas in support of the regular process, which was convened from 21 to 23 February 2012 in Sanya, China, under the auspices of the United Nations with IOC as one of the key co-sponsors and co-organizers through WESTPAC.

WESTPAC has paid high attention to the movement of this initiative. In response to the capacity building need to identify from the Sanya workshop, held in February 2012, for the integrated marine assessment tool, the first Regional Scientific and Technical Capacity Building Workshop on the World Ocean Assessment was organized in Bangkok, Thailand, during 17–19 September 2012, which co-hosted by UNEP regional seas programmes and APN. The workshop aims to;

- I. To strengthen and promote regional cooperation and networks towards the World Ocean Assessment.
- II. To build capacities in WESTPAC Member Countries to conduct integrated marine assessments;
- III. To contribute to the World Ocean Assessment through the provision of an initial 'regional trial assessment' and a new regional methodology for multi-disciplinary marine assessments.

The summary report of this workshop is available on WESTPAC website and UNEP relevant websites.

Through our engagement into the World Ocean Assessment (WOA) over the past, WESTPAC has been fully aware of the challenges faced on the implementation of WOA of all Member States.

For the further helps of Member Countries involve in and contribute to the WOA, WESTPAC will continuously make every efforts not only to bring the information gaps between the global and national level but also to build the capacity in the WOA by mobilizing funding in support of regional expert workshops and perhaps on the integrate marine assessment tool with other regional partners.

As the distinguished speaker of PICES expressed a couple of days ago, we are exploring the possibility with PICES to joint activities associated with WOA in the region.

United Kingdom

The UK has a national vision of clean, healthy, safe, productive and biologically diverse oceans and seas, and in 2010 published *Charting Progress 2*, a comprehensive report on the state of the UK seas. It was published by the UK Marine Monitoring and Assessment community which has over 40 member organisations. The report is based on a robust, peer-reviewed evidence base and describes progress made since the publication of the first [Charting Progress](#) report in 2005. It provides key findings from UK marine research and monitoring for use by policy makers and others, and is also forming the basis of our Initial State of the Seas assessment as part of the work towards achieving 'good environmental status' by 2020 under the European Marine Strategy Framework Directive. "Charting Progress" presents data in a clear, simple 'traffic light' format that is easily understood by policy makers, with full links to the background data. It demonstrates the considerable expertise that the UK has developed in assessment of the ocean and in presenting the data in an understandable manner, an expertise that the UK would be pleased to share with the World Ocean Assessment community.

North Pacific Marine Science Organization (PICES)

Last June, PICES convened a workshop on the development of socio-economic indicators for the North Pacific held in Honolulu, Hawaii. Overall, the meeting far exceeded our expectations --- despite the short lead time, we were able to bring together experts from all six PICES member countries (Canada, Japan, People's Republic of China, Republic of Korea, Russian Federation and the United States) to generate Human Dimension Indicators for the next PICES North Pacific Ecosystem Status Report *while* assimilating data and information in support of the First World Ocean Assessment (WOA). Important to our success was having Alan Simcock, WOA Group of Experts Co-Chair, who provided critical background on the evolution and cause of the World Ocean Assessment, creating a framework for our discussions.

Although UN Member States must host WOA Workshops, it is clear now that informal meetings such as the PICES workshop will be very valuable as they supply critical information in support of UN processes (not only World Ocean Assessment but also the Convention on Biological Diversity process to identifying ecologically or biologically significant marine areas), and also provide access to an established network of scientific experts with unparalleled knowledge of North Pacific marine ecosystems. Other regional intergovernmental organizations or subsidiary bodies of global organizations would have similar networks for other marine regions.

As its name suggests, the World Ocean Assessment has been established as a “regular process” to consider the state of the ocean. Now knowing well the need for regional input to this process, we expect that PICES will be better positioned to deliver valuable scientific advice to the World Ocean Assessment as the effort matures and additional Assessments are generated. Some recognition of this by the UN might allow PICES to more formally engage in these activities. For example, PICES could establish *ad-hoc* expert groups to review, compile, and synthesize key information/data in support of WOA activities (e.g., produce technical or “white papers”) to allow more in-depth information/data identification.

5.5.1 Development of a New Capacity Development Strategy

Canada

Canada would like to express its appreciation for this report. In a scenario of shrinking resources for science, there is an increasing need for all Member States to contribute to, and participate in, global programs in marine science. This can only be achieved through capacity development.

Canada noted that the presentation and the information document on this Agenda was based on consultations with a number of Member States. However, it is not evident that similar consultations have taken place with other organizations actively involved in Capacity Development, such as POGO, IHO, and WMO. Furthermore, the report provided did not indicate that it will give considerations to gender equality, a high level objective for UNESCO and IOC.

The presentation by Shubha Satheydranath this morning gave IOC valuable guidance and also highlighted that sustained investment in people can bring long-term benefits. She also showed that even small investments can produce large benefits if the right persons are engaged. The questions she left us with will provide additional guidance and help us in the articulation of an IOC Capacity Development Strategy.

Canada supports the establishment of the Intersessional WG. The Sessional Working Group, during its two sessions held over this Assembly, has put together a draft Terms of Reference which will guide the work of the WG during the Intersessional period. Canada will be pleased to participate in this Intersessional WG.

India

Our delegation would like to express our appreciation to the reports on the necessity for preparing a New Capacity development Strategy by Dr. Mitrasen Bhikajee and Prof. Ittikot. Our delegation agrees and fully support this requirement particularly in light of the recent decisions of Rio+20 Conference and the changing requirements of member states. Hence, we support the suggestion to set up a working group to prepare the New Strategy for Capacity Development. However, we would like to suggest that in addition to the capacity development targeted at ocean technology and science, the new strategy should also target the decision making so that the oceans can become an integral part of our society.

Mr. Chairman, India has a long history of supporting the capacity development programmes of IOC and will continue to do so in future also, specially through the newly established ITCOcean. This training centre will initially concentrate on conducting short term training courses but will ultimately design and conduct courses in operational oceanography leading to degrees or diplomas. This facility will be opened to all member states.

Japan

Japan welcomes the directions presented by Dr. Bhikajee and Dr. Ittekot. Japan would like to support to capacity development more effective and efficient by identifying the priorities and needs of countries that require capacity building. For Japan, it is difficult to make an additional budget to develop the work schedule within the Secretariat showed, however Japan will consider the contribution such as dispatching experts to the Sessional Working Group.

Malaysia

Malaysia has long recognized the importance of capacity development to improve its socio-economic well-being. That is why Malaysia has embodied capacity development into our National Agenda to become a high income and developed nation by 2020.

We believe in harnessing the power of Science, Technology and Innovation (STI) and human capital as the way forward to develop the new economy. Our new National Policy on STI among others embraces STI enculturation; development and intensification of talents as well as enhancement of international linkages and collaboration.

In this regard, we welcome the proposed new strategy plan for capacity development in the IOC as outlined in document 27/2 of Annex 10. We thus concur with the need to be closely networked; to share experiences and best practices as well as to improve accessibility to well-informed science and technologies.

As a member of the Advisory Group of IOC-WESTPAC, Malaysia has been contributing towards capacity building within the region. Leveraging on the Fund in Trust under Malaysia-UNESCO Cooperation Program (MUCP), Malaysia will enhance South-South Cooperation for capacity building in the related fields for the benefit of the Least Developed Countries, Small Island Developing States (SIDs) and in support for Priority Africa agenda.

Under the MUCP, we look forward to enhance our contribution towards capacity building such as in the areas of marine and coastal management that could be jointly implemented by international experts from Member States and local experts from various Centers of Excellence in Malaysia. For instance, the Universiti Malaysia Terengganu has undertaken many collaborative actions within the region and these experiences could well be replicated elsewhere.

We look forward to working closely with IOC Member States for the common well-being of the global community and our oceans stewardship.

Republic of Korea

The Korean delegation believes that the new capacity development strategy proposed in this session is well-timed as a follow-up to last Rio+20. We believe that this proposal will provide a good opportunity to enhance IOC's role within the UN system as an ocean specialized international organization. Korea is willing to participate in various activities proposed as a new capacity development strategy, especially in training programs for the young scientist from developing countries. Since these activities will be mainly managed by KIOST, we want to share the information that KORDI, Korean Ocean Research & Development Institute, was reorganized and expanded into KIOST, Korea Institute of Ocean Science and Technology, on 1 July last year. KIOST has now added the educational function through liaison with universities to train young ocean scientists for the next generation and it will also try to expand its research scope for global aspects including ocean observation through international cooperation.

United Kingdom

The UK welcomes the report on capacity development, and the detailed presentations by the speakers. In working forward to develop a new capacity development strategy there is a great deal of scope to include contributions and direct involvement from private industry including ships of opportunity, offshore mining corporations, tourism and insurance, sectors that share common concerns about the need to develop new international talent and also to improve their corporate understanding of the ocean.

In particular IOC can make use of the expertise of Professional Bodies and Learned Societies, the best of whom have global networks of expert volunteers and regional offices that can support capacity development. The Society for Underwater Technology (www.sut.org) and Institute of Marine Engineering, Science and Technology, (www.imarest.org) both of whom have observer status at IOC, are good examples of a Learned Society and Professional Body respectively. Professional bodies can provide accreditation, approval and recognition of training programmes against a set of internationally approved criteria that ensure a high standard of training content and assessment.

Accreditation protects the interest of the student, the delivery body, and potential employers, by ensuring that training is at a level that meets or exceeds standards developed by experts in the field, and that these standards are maintained. Accreditation can also assist with continued professional development, helping to retain students within the marine sector, and to maintain contact with experienced mentors in the wider professional community. Programmes can be tailored to help meet UNESCO gender balance aspirations, especially the promotion of women in science.

5.5.2 Rationale for an IOC Global Ocean Science Report

Argentina

La Delegación Argentina agradece la presentación de la Secretaria Ejecutiva y del Sr. Luis Valdez en este punto. La Argentina apoya las intervenciones realizadas por Brasil y México. Hay una serie de cuestiones que quisiéramos abordar sobre esta propuesta:

1. Notamos en primer lugar que el proyecto de Resolución ha sido introducido por la Secretaría Ejecutiva en base a la aplicación en una fase experimental de las Draft Resolutions Guidelines. Quisiéramos recordar que estas Directrices aún no han sido aprobadas por la Asamblea y que no habido consenso sobre su párrafo 8 que intenta facultar a la Secretaria Ejecutiva para presentar proyectos de resoluciones. Si bien abordaremos con mayor profundidad este tema en el punto 6.4 de la Agenda, esta circunstancia nos plantea dudas sobre la posibilidad de aprobar una resolución como la que estamos analizando hoy sobre la base de una facultad que la Secretaria Ejecutiva según los Estatutos y el Reglamento actualmente no posee.

2. Aún si superásemos esta cuestión de procedimiento en un espíritu de compromiso que mi país tiene con esta Asamblea, observamos que en el párrafo 13 del Anexo 11 se menciona que la Secretaría ha establecido en abril de 2013 un Grupo de Expertos Metodológico para intervenir en el diseño del Global Science Report. La Argentina desearía conocer quiénes componen este Grupo de Expertos y cuáles son los criterios que se han tenido en cuenta para su designación.

3. Observamos también que en el párrafo 2 del proyecto de Resolución uno de los fundamentos es el "Oceans Compact". Se recuerda que ha habido un amplio rechazo de los Estados Miembros a esta iniciativa manifestado en el plenario durante la sesión del viernes pasado bajo el punto de agenda 5.1.1.

4. Adicionalmente, teniendo en cuenta que hoy tanto la Secretaría como así también el Sr. Alan Simcock han explicado con claridad el estado de actual del World Ocean Assessment (UN Regular Process) que se está realizando en el marco de Naciones Unidas, notamos que la COI ocupa un rol estratégico en ese proceso dado que es uno de los organismos a los que se ha solicitado su apoyo técnico y científico. De hecho, como la propia Secretaría ha indicado en el Anexo 2 del Documento Informativo 1301 se han identificado numerosos capítulos del World Ocean Assessment (UN Regular Process) en los que la COI podría contribuir a través de sus programas, proyectos o iniciativas co-auspiciadas. En este sentido, la Secretaría identifica al OBIS y al GOOS, entre otros. Dicho esto, notamos con preocupación que la propuesta de GSR implica una duplicación de esfuerzos. En efecto, tomando en cuenta la presentación del Sr. Alan Simcock en el día de ayer sobre el UN Regular Process en el punto de agenda 5.4.5 si se analiza el citado Anexo 2 del Doc. Inf. 1301 vemos que la Parte III se refiere al Assessment of major ecosystem services from the marine environment (other than provisioning services) – Caps. 3 a 9; la Parte IV sobre Food Security and food safety – Caps. 10 a 16; la Parte V sobre Assessment of other human activities and the marine environment – Caps. 17 a 32, en el cual el cap. 30 se refiere a ICM; Parte VI Assessment of marine biological diversity and hábitats (caps. 33-45). Muchos de estos capítulos que acabamos de mencionar coinciden con la propuesta de Outline del Global Science Report.

5. Aún si eventualmente se aprobara esta propuesta, observamos que en el Capítulo de Gobernanza se incluye un subcapítulo de Organizaciones Regionales de Ordenación Pesquera (OROPs). La Argentina no acepta la inclusión de las OROPs como gobernanza global ya que no representa a la comunidad internacional en su conjunto y no puede imponer sus medidas adoptadas en ese marco a terceros Estados que no forman parte de las mismas.

6. En cuanto a los recursos para llevar adelante esta propuesta, la Secretaría indica que se requieren aprox. USD 740.000 aunque no aclara porcentaje de presupuesto ordinario y de recursos extrapresupuestarios. Sr. Presidente, la Argentina favorece que la COI procure reafirmar su identidad a través de iniciativas propias pero, sin lugar a dudas, ello debe ser realizado teniendo en cuenta el contexto actual de la COI, en particular por la crítica situación financiera que atraviesa. Por eso, consideramos que un buen enfoque consiste en que la COI se concentre en mejorar las oportunidades ya existentes.

Belgium

My delegation would like to thank the executive secretary and Luis Valdez for presenting the rationale of this initiative on the GOSR. We join the many positive reactions of many member states expressed in a very positive manner. For the very reason that this contribution in bringing a complementary report on the state of play on Global Ocean science is right into the heart of the mission of IOC in fostering Ocean Science capabilities, as also stated by the delegation of Norway. This GOSR outline as presented is a well overthought initiative that also could help to set the milestones to be achieved into IOC's attempts in Capacity Building initiatives in the near future.

The Belgian delegation endorse the proposal as presented in the action paper, with some modifications as indicated by the Executive Secretary.

Canada

Canada would like to thank the Executive Secretary and Luis Valdez for their clear presentation on the rationale for taking on a Global Ocean Science Report. Canada also acknowledges the leadership that the IOC demonstrated at RIO+20 in promoting the importance of global oceans.

Canada supports in principle the proposal put forward by IOC for the reasons mentioned by many Member States,

However, Canada is concerned about the financial resources that are needed to support the proposed Global Ocean Science Report at a time of financial restraint. Furthermore, Canada notes that such an initiative would require considerable effort from the Member States; a workshop and a questionnaire may not be sufficient to achieve the desired input from the Member States.

Having participated in the budgetary process intersessionally and during the current session, Canada is of the opinion that should this initiative go forward, IOC would need to have the full funding required from extra-budgetary resources.

Alternately, as this initiative is closely tied to Capacity Building, perhaps the Intersessional WG on Capacity Development can take this on as part of its deliberations. The outcome of such a discussion may lead to the development of a less resource intensive proposal for selected regions or perhaps phased options that would gradually ramp up to all regions.

Japan

Japan recognizes the importance of that to collect fundamental information about the marine science, ocean observation and data management, but all the implementation status of marine research is different in each country, therefore it will be possible to cover all the effective information however, it will be required a large amount of human and budgetary resources. Especially in this time, facing the financial difficulty, we should consider the balance of the feasibility of the programme and the task of IOC. Japan questions their views on effectiveness of the reporting mechanism for the IOC Secretariat.

Norway

Norway welcomes the proposal which appears as a timely initiative for an activity at the heart of the IOCs mission to promote international cooperation and to coordinate programmes in research, services and capacity-building. It is timely in particular because of the increased attention to the oceans after Rio+20 and in connection with the World Ocean Assessment. It is at the heart of the IOCs mission because it focuses on ocean science capabilities. While IOC in its role as a competent body contributes in an advisory role to many ocean-related activities in the UN system, this Global Ocean Science Report which will in effect be an Assessment of Global Ocean Science Capabilities, should unquestionably be led by the IOC. We note with satisfaction that the proposed Chapter 7 of the report entitled “Regional and global governance” has subchapters on Scientific Organizations and International Project Offices and does not aim to cover all other aspects of governance, which would be beyond the scope of an IOC-led exercise. We look forward to input from other organizations, in particular from FAO on the proposed subchapter on Fisheries Management Organizations. The IOC has the competence to compile the required information based on expert efforts and to collect information from as well as report results back to, Member States for their consideration.

We thank the Executive Secretary for having initiated the preparatory work in time so that the Assembly in its decision today can enable the work to go ahead. We believe that the impact of the work on fund-raising for capacity development in future will be particularly high if the first report can be completed at the same time as the first WOA, i.e. before the end of 2014. We therefore urge Member States to consider the possibility of contributing extrabudgetary funds soon so that important effects on capacity building can be achieved.

Republic of Korea

Korean Delegation also thinks duplication is to be avoided for the effectiveness of financial input. Since there is a chapter on “marine scientific research” in World Ocean Assessment (WOA), which will cover the topics, scales and scopes of the marine research programs worldwide, it can be perceived that IOC’s Global Ocean Science Report (GOSR) is a duplicate of this chapter. However, Korean Delegation would like to point out that the chapter in WOA is an assessment which must be based on such report that the IOC is going to produce. The first WOA is supposed to be finished at the end of 2014, which is the same time line for IOC’s suggested 1st GOSR. So the GOSR that IOC is going to produce may not be used or reflected in the first round of WOA. But it will underpin for the next version of WOA. One other aspect to be added is that WOA is more or less focused on social and economic aspects of marine scientific research, including transfer of technology. In this context we believe that IOC’s GOSR has difference in nature with WOA. In conclusion, Korean Delegation supports IOC’s plan for GOSR, and wishes Member States to support it by clarifying some concerns.

United Kingdom

The UK delegation appreciates the scope of this proposal and it’s clear that such a report on global ocean science capability would be a very useful resource, especially as it is envisaged to be repeated on a regular basis, enabling policy makers and funding agencies to easily assess progress, and identify gaps in science capability.

For example, having scientists engage in emerging disciplines such as the environmental impacts of deep sea mining will provide the underpinning marine scientific understanding that will enable the International Seabed Authority to make informed decisions. Hence there is little doubt that the production of the proposed

report fits very closely with the role of IOC, and will help maintain a high profile for IOC within the UN system, especially as we interact with sister organisations in the UN family.

In terms of the funding and staff effort required to produce the report, and then follow it up every four to five years, we are asking a lot of both the secretariat and the Member States, as the work required to do this job well is not inconsiderable – particularly given the target publication date in 2014. The UK delegation will report favourably on this proposal to our funding agencies with a view towards trying to secure either funding or in-kind contributions towards its production.

6.6 Themes of the A. Bruun and N.K. Panikkar Memorial Lectures at the 28th IOC Assembly

Japan

Japan fully recognizes the importance of building the capacity of developing and less developed countries for marine scientific research in order to assist them to achieve the sustainability of their marine and coastal resources. As the distinguished Panikkar Memorial Lecturer emphasized in today “with limited resources and right person in place, CB can make a difference”. It is easy to conduct CB at one time, or two times, over one year or two year, it is no doubt extremely challenging to continuously conduct CB activities for more than 20 years.

In this regard, As a speaker of the IOC N.K. Panikkar Memorial Lecture in 2015 (is traditionally in the areas of technology transfer or capacity-development), Japan would like to recommend Dr. Yasuwo FUKUYO, a former professor of the Asian Natural Environmental Science Center of the University of Tokyo to be the candidate speaker for the IOC N.K. Panikkar Memorial Lecture in 2015, in view of his more than 20 years dedication to CB activities on HAB studies in the Western Pacific.

Thailand

Thailand would like to support the proposal of Japan on the nomination of Prof. Yasuwo FUKUYO as a Panikkar Lecturer in the next Assembly.

Prof. Fukuyo has been involved in IOC Sub-commission for Western Pacific since the establishment of WESTPAC, especially on HAB programme. Under his leadership, WESTPACT-HAB became one of WESTPAC's flagships.

ANNEX VI

IOC MEMORIAL LECTURES

A. THE A. BRUUN MEMORIAL LECTURE, 2013

The Ocean Health Index: global and regional applications and future directions
(28 June 2013)

Benjamin S. Halpern

*Director, Center for Marine Assessment and Planning
Research Scientist, National Center for Ecological Analysis & Synthesis, UC Santa Barbara*

Dr Ben Halpern focuses his research at the interface between marine ecology and conservation biology. His research has addressed a broad range of questions that span local to global scales, including spatial population dynamics, trophic interactions in community ecology, and the interface between ecology and human dynamics, all with the ultimate aim to inform and facilitate conservation and resource management efforts in marine systems. He received his Ph.D. in marine ecology from UC Santa Barbara and then held a joint post-doctoral fellowship at the National Center for Ecological Analysis and Synthesis (NCEAS) and the Smith Fellowship Program sponsored by The Nature Conservancy. He is currently the Director of the Center for Marine Assessment and Planning and a Research Biologist at UC Santa Barbara, based at NCEAS. He also served as the project lead for a research initiative to evaluate and better inform efforts to do ecosystem-based management (EBM) in marine ecosystems around the world and is the lead scientist for the Ocean Health Index project.

Ben has led and participated in several key synthetic research projects that have advanced our understanding of the state of the world's oceans and the potential for marine reserves to improve ocean condition. In particular he has led the development and mapping of cumulative impact assessments at global and regional scales in marine and freshwater systems. He has also conducted field expeditions in tropical and temperate systems in the Caribbean, Red Sea, Mediterranean, Solomon Islands, Indonesia, various parts of the South Pacific, California and Chile.

Abstract

Assessment and management of the coasts and ocean increasingly focus on achieving healthy oceans, but without a clear definition of what a healthy ocean is or a tool to measure progress towards achieving that goal. The Ocean Health Index provides a quantitative, transparent, flexible and repeatable means of assessing and measuring ocean health across the many different benefits, or values, that people use to define healthy ecosystems. The Index also provides a means for combining the indicators of these benefits into a single overall measure of ocean health. I will present global results launched in 2012 that calculate scores for every coastal country in the world. I will then discuss how we adapted the Index for regional applications in Brazil and the west coast of the United States and present results from those assessments, preview the software tool we are developing to allow others to calculate their own Index, discuss current activities in support of other countries that are applying the Index, and highlight the improvements and additions we are developing for the release of the 2013 global scores. The Index offers a valuable tool for comprehensive assessment of ocean ecosystems that can inform ecosystem-based management, support marine spatial planning efforts, and aid in strategic decision making about key data gaps to fill, efficient options to pursue to improve ocean health, and likely tradeoffs among uses under different management actions.

Discussion

Dr. Halpern started his lecture identifying three main concerns that were considered during the methodological development of the Ocean Health Index (OHI):

- 1) The Global Cumulative Impact Map showed the pressures of human activities in the ocean.
- 2) Policy documents and governmental statements supporting healthy oceans, and
- 3) The most appropriate definition of healthy ecosystems, including people as part of the ecosystem and crucial actor for its sustainability.

A healthy Ocean is delivering a “full” range of benefits to people, now and in the future. In this sense, key attributes of the Ocean Health Index (OHI) are those ones capturing socio-ecological systems, identifying clear targets, as well as the current state and the likely future conditions.

The definition of the main 10 goals included in the OHI provides a general overview of all natural components and socio-economic activities linked with the coast and the sea, including food provision (fisheries and aquaculture), artisanal fishing, natural products, carbon storage, coastal protection, tourism and recreation, livelihoods and economies, sense of place, clean waters and biodiversity (Species and habitats)

The Index aims at identifying different types of reference points: functional relationships, spatial and temporal comparisons (e.g. habitat loss), as well as establishing a benchmark by using the IUCN reference.

OHI analyses the status of both livelihoods and economies, as well as trends, pressures (eg. pollution, alien species, social pressures, et al.) and resilience (eg. CBD habitat signatories, percent of EEZ in MPAs, et al.), both sub-goals are equally weighted for the calculation of the final integrated goal score. Final results have shown a global ocean score of 60/100.

At National and Regional scale, results show the status of the ocean within the national EEZs that could vary depending on the input national data and trends.

Many current initiatives are implementing the OHI at regional level in many countries around the world. Illustrative examples showed the work progress in the Federative Republic of Brazil and the West Coast of the United States of America where national datasets have been used (80%), providing a better spatial and temporal assessment.

At international level, the OHI is also considered in projects related to Large Marine Ecosystems and High Seas Projects, (e.g. Transboundary Water Assessment Project), the UN's World Ocean Assessment and the Biodiversity Indicators Partnership (Aichi Target 10). Some goals have been studied more in detail, this is the case of biodiversity, directly linked with habitats health, which trends are clearly showing the decrease of ocean biodiversity.

Actions need to be taken, in this sense, the consequences of threat categories require specific weighting in order to develop species status scores that support decision makers

The OHI's Global Assessment will be updated in September 2013, based in new datasets with better resolution for national and regional comparisons. Since 2012, 85% of datasets have been updated. High Seas and Antarctica will be incorporated in early 2014 which will provide a true assessment of the whole planet.

Finally, Dr. Halpern described the process of building a Toolbox which will allow users to calculate their own OHI at any scale and any location. The Toolbox will help to explore index results and its implications in different management scenarios.

OHI is a platform, a transparent, quantitative and replicable framework to support decision makers developing policies on ocean health.

Questions from countries

India: how the sustainable index was developed, as well as the parameters used?

B.H. described the work that they have done contacting marine scientists around the work in order to set targets, mainly focusing on food provision (stock assessments), for a sustainable ocean.

India: requested additional information on how the OHI assess ecosystem conditions.

B.H. informed that within the project, ecosystem also assess human interactions, in this way, ecosystem health (including people) means ocean health.

Côte d'Ivoire: Great interest in the presentation and the multicriteria used in his assessment considering that humans understand environment better when they have numbers and parameters. When looking to these parameters, Côte d'Ivoire see that the methodological approach also considers economical parameters, jeopardizing results for those countries with less resources.

B.H. clarified that national economies are compared with themselves years ago, as an example, Ivory Coast is not compared with other countries, but with their own national economy five years ago, in order to determine trends by using the available international data sources.

IODE emphasizes that several links with the work led by Dr. Halpern can be identified with the goals of IODE itself. OHI Toolbox could be considered in the future as part of a training course within the Ocean Teacher initiative, and the OHI mapping results could also be integrated into the International Coastal Atlas Network (ICAN), among other linkages with OBIS and related projects. IODE proposes to facilitate common work with the OHI Community.

B.H. agreed with the linkages and supports future contacts and common initiatives with IODE.

Nigeria: was concerned about the poor results shown in the OHI World Map for the Gulf of Guinea.

B.H. agreed that the Western Coast of Africa showed low results, and many reasons can be identified. The first one due to data availability that could facilitate the understanding of the ocean health in this region, nevertheless the global data used for the index in this area provide a different picture because of the limitation of food provision or habitat loss among others.

Spain: informed about the EU Marine Strategy Framework Directive which main objective is to accomplish a better marine environment by 2020. The initial evaluation on the state of the marine environment was based in 11 descriptors, including biodiversity, pollution, noise or marine waste among others. The results produced by Member States are available since 2012 and it could be used to develop a more precise OHI for Europe.

B.H. was aware about the 11 descriptors included in the EU Marine Strategy Framework Directive and agrees that most of those pressures are already included in the OHI, as well as in the Cumulative Impact Index. The information used for the OHI is the official data reported from countries to international bodies concerning its national marine environment, but not using internal regional data distinctions.

Powerpoint presentation: http://www.ioc-unesco.org/index.php?option=com_oe&task=viewDocumentRecord&docID=11324

Photos: <http://www.unesco.org/new/en/natural-sciences/ioc-oceans/about-us/governing-bodies/ioc-assembly/27th-ioc-assembly/photos-anton-brunn-lecture/>

B. THE N.K. PANIKKAR MEMORIAL LECTURE, 2013

Human Capacity Development in Ocean Sciences: a personal perspective
(3 July 2013)

Shubha Sathyendranath

*Partnership for Observation of the Global Oceans, Secretariat at Plymouth Marine Laboratory,
Plymouth, UK*

Abstract

The human resources available for stewardship of coasts, the exclusive economic zone and the shared heritage of international waters are woefully inadequate. As we struggle to understand how Earth functions as a system, particularly in the context of climate change, we realize that the oceans hold many keys and hide many secrets. Capacity development and ocean stewardship become imperatives for all, not just the prerogatives of a privileged few. From the very early days of the Intergovernmental Oceanographic Commission, Dr. NK Panikkar maintained that it was important to invest in young people. If anything, that need is stronger today than it was then: the requirement for trained personnel is only likely to grow as operational aspects of oceanography increase. The task is huge, but models exist to guide our activities. A variety of approaches is needed to achieve our goals, and there are ways in which individuals, countries and international initiatives can aid capacity development. In this talk, some guiding principles are presented, with examples drawn largely from personal experience and observation, garnered from working with international organisations and charitable foundations, in particular the Nippon Foundation. Nurturing the trainees is often difficult. In spite of many initiatives that are underway, we are far from meeting the requirement. Networking, communication and concerted effort are needed to address some of these challenges. But above all, we need more people committed to investing in the next generation.

Powerpoint presentation: http://www.ioc-unesco.org/index.php?option=com_oe&task=viewDocumentRecord&docID=11369

Photos: <http://www.unesco.org/new/en/natural-sciences/ioc-oceans/about-us/governing-bodies/ioc-assembly/27th-ioc-assembly/photos-nk-panikkar-memorial-lecture/>

ANNEX VII

RESULTS OF ELECTIONS AND LIST OF IOC MEMBER STATES

I. Officers

Chair (by acclamation)	Dr Sang-Kyung Byun (Republic of Korea)	Group IV
Vice Chairs (by acclamation)	Dr Peter Haugan (Norway)	Group I
	Dr Atanas Palazov (Bulgaria)	Group II
	Captain Frederico Antonio Sariaiva Nogueira (Brazil)	Group III
	Dr Yutaka Michida (Japan)	Group IV
	Dr Adoté Blim Blivi (Togo)	Group V

II. Seats on the Executive Council

Electoral Group I: (by acclamation)	Belgium, Canada, France, Germany, Greece, Portugal, Spain, United Kingdom of Great Britain and Northern Ireland, United States of America
Electoral Group II: (by acclamation)	Russian Federation, Ukraine
Electoral Group III: (by acclamation)	Argentina, Chile, Colombia, Cuba, Grenada, Mexico, Peru, Venezuela (Bolivarian Republic of)
Electoral Group IV: (by acclamation)	Australia, China, India, Iran (Islamic Republic of), Malaysia, Pakistan, Thailand
Electoral Group V: (after a ballot)	Algeria, Egypt, Kenya, Nigeria, Senegal, South Africa, Tunisia, United Republic of Tanzania

Member States of the Commission (145)
(as of 3 July 2013)

AFGHANISTAN	(11 March 1991)	LIBYA	(11 Mars 1974)
ALBANIA	(26 January 1993)	MADAGASCAR	(Dec. 1965/Oct. 1967)
* ALGERIA	(Jul. 1964/Nov. 1965)	* MALAYSIA	(Jul. 1964/Nov. 1965)
ANGOLA	(26 October 1982)	MALDIVES	(20 May 1987)
* ARGENTINA	(Before November 1961)	MALTA	(Oct. 1969/Nov. 1971)
* AUSTRALIA	(Before November 1961)	MAURITANIA	(Before November 1961)
AUSTRIA	(Oct. 1962/Jun. 1964)	MAURITIUS	(Oct. 1969/Nov. 1971)
AZERBAIJAN	(27 January 1998)	* MEXICO	(Before November 1961)
BAHAMAS	(29 January 1979)	MONACO	(Before November 1961)
BANGLADESH	(29 October 1982)	MONTENEGRO	(04 October 2011)
BARBADOS	(18 December 1985)	MOROCCO	(Before November 1961)
* BELGIUM	(Before November 1961)	MOZAMBIQUE	(08 April 1981)
BELIZE	(22 September 1995)	MYANMAR	(07 June 1988)
BENIN	(23 October 1986)	NAMIBIA	(25 April 2001)
* BRAZIL	(Before November 1961)	NETHERLANDS	(Before November 1961)
* BULGARIA	(Oct. 1967/Dec. 1969)	NEW ZEALAND	(Nov. 1961/Sep. 1962)
CAMEROON	(Nov. 1971/Nov. 1973)	NICARAGUA	(17 November 1977)
* CANADA	(Before November 1961)	* NIGERIA	(Nov. 1971/Nov. 1973)
CAPE VERDE	(20 August 1984)	NIUE	(01 March 2011)
* CHILE	(Before November 1961)	* NORWAY	(Before November 1961)
* CHINA	(Before November 1961)	OMAN	(16 November 1982)
* COLOMBIA	(Oct. 1967/Dec. 1969)	* PAKISTAN	(Before November 1961)
COMOROS	(08 February 2000)	PANAMA	(Oct. 1967/Sep. 1969)
CONGO (Nov. 1961/Sep. 1962)		PAPUA NEW GUINEA	(10 April 2006)
COOK ISLANDS	(25 Jan. 2006)	* PERU	(Dec. 1965/Oct. 1967)
COSTA RICA	(28 February 1975)	PHILIPPINES	(Oct. 62/Jun. 1964)
COTE D'IVOIRE	(Before November 1961)	POLAND	(Before November 1961)
CROATIA	(24 December 1992)	* PORTUGAL	(Oct. 1969/Nov. 1971)
* CUBA	(Before November 1961)	QATAR	(20 July 1976)
CYPRUS	(05 December 1977)	* REPUBLIC OF KOREA	(Before November 1961)
CZECH REPUBLIC	(20 June 2005)	ROMANIA	(Before November 1961)
DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA	(31 October 1978)	* RUSSIAN FEDERATION	(Before Nov. 1961)
DEMOCRATIC REPUBLIC OF THE CONGO	(23 April 2010)	SAINT KITTS AND NEVIS	(28 June 2011)
DENMARK	(Before November 1961)	SAINT LUCIA	(14 September 1992)
DJIBOUTI	(6 January 2006)	SAINT VINCENT AND THE GRENADINES	(21 January 2013)
DOMINICA	(21 September 1999)	SAMOA	(10 April 1978)
DOMINICAN REPUBLIC	(Before November 1961)	SAUDI ARABIA	(14 June 1978)
ECUADOR	(Before November 1961)	* SENEGAL	(Oct. 1967/Sep. 1969)
* EGYPT	(Oct. 1969/Nov. 1971)	SERBIA	(23 May 2005)
EL SALVADOR	(16 February 1993)	SEYCHELLES	(27 February 1979)
ERITREA	(12 November 1993)	SIERRA LEONE	(19 April 1974)
ESTONIA	(10 March 1992)	SINGAPORE	(Dec. 1965/Oct. 1967)
ETHIOPIA	(05 March 1976)	SLOVENIA	(16 June 1994)
FIJI	(09 July 1974)	SOLOMON ISLANDS	(11 May 1982)
FINLAND	(Before November 1961)	SOMALIA	(10 July 1974)
* FRANCE	(Before November 1961)	* SOUTH AFRICA	(Oct. 1967/Sep. 1969)
GABON (26 October 1977)		* SPAIN	(Before Nov. 1961)
GAMBIA	(30 August 1985)	SRI LANKA	(Jun. 76/Jan. 1977)
GEORGIA	(09 July 1993)	SUDAN	(26 August 1974)
* GERMANY	(Before November 1961)	SURINAME	(21 January 1977)
GHANA	(Before November 1961)	SWEDEN	(Jul. 1964/Nov. 1965)
* GREECE	(Oct. 1962/Jun. 1964)	SWITZERLAND	(Before Nov. 1961)
* GRENADA	(10 November 2009)	SYRIAN ARAB REPUBLIC	(Oct. 1969/Nov. 1971)
GUATEMALA	(Dec. 1965/Oct. 1967)	* THAILAND	(Before Nov. 1961)
GUINEA	(01 May 1982)	TIMOR-LESTE	(19 October 2005)
GUINEA-BISSAU	(26 January 1984)	* TOGO	(22 October 1975)
GUYANA	(20 July 1977)	TONGA	(03 January 1974)
HAITI (23 March 1976)		TRINIDAD & TOBAGO	(Oct. 1967/Sep. 1969)
HONDURAS	(15 March 2012)	* TUNISIA	(Before Nov. 1961)
ICELAND	(Oct. 1962/Jun. 1964)	TURKEY	(Nov. 1961/Sep. 1962)
* INDIA	(Before November 1961)	TUVALU	(20 June 2011)
INDONESIA	(Oct. 1962/Jun. 1964)	* UKRAINE	(Nov. 1961/Sep. 1962)
* IRAN, Islamic Republic of	(03 June 1975)	UNITED ARAB EMIRATES	(02 June 1976)
IRAQ	(Oct. 1969/Nov. 1971)	* UNITED KINGDOM OF GREAT BRITAIN & NORTHERN IRELAND	(Before Nov. 1961)
IRELAND	(07 November 1978)	* UNITED REPUBLIC OF TANZANIA	(Oct. 1967/Sep. 1969)
ISRAEL	(Before November 1961)	* UNITED STATES OF AMERICA	(Before Nov. 1961)
ITALY	(Before November 1961)	URUGUAY	(Before Nov. 1961)
JAMAICA	(Oct. 1967/Dec. 1969)	* VENEZUELA, Bolivarian Republic of	(Oct. 1962/Jun. 1964)
* JAPAN	(Before November 1961)	VIET NAM	(Before Nov. 1961)
JORDAN	(06 April 1975)	YEMEN	(22 May 1960)
KAZAKHSTAN	(24 March 2005)		
* KENYA	(Nov. 1971/Nov. 1973)		
KIRIBATI	(10 May 2012)		
KUWAIT	(13 November 1974)		
LEBANON	(Oct. 1962/Jun. 1964)		

MEMBERS OF THE EXECUTIVE COUNCIL ARE INDICATED WITH AN ASTERISK

ANNEX VIII

LIST OF DOCUMENTS

Document Code	Title	Agenda Items	Languages available
WORKING DOCUMENTS			
IOC-XXVII/1 Prov. Rev.	Revised Provisional Agenda	2.1	E F R S
IOC-XXVII/1 Add. Prov. Rev.	Revised Provisional Timetable	2.1, 2.4	E only
IOC-XXVII/2 Prov.	Provisional Action Paper	All	E F R S
IOC-XXVII/2 Annex 1	Report of the IOC Executive Secretary on Programme implementation (2012-2013) and Medium-term Strategy (2008-2013)	3.2	E F R S
IOC-XXVII/2 Annex 1 Add. 1	<i>cancelled</i>		
IOC-XXVII/2 Annex 1 Add. 2	Summary Report of responses by Member States to Questionnaire on National Oceanographic Committees, 2012–2013	3.2	E only
IOC-XXVII/2 Annex 2	Progress Report on Budget Execution (2012) and Anticipated funding for 2013	3.2	E F R S
IOC-XXVII/2 Annex 3	Draft IOC Medium-term Strategy for 2014–2021	4.1, 4.2, 6.1	E F R S
IOC-XXVII/2 Annex 4	Draft IOC Programme and Budget for 2014–2017 (draft 37 C/5)	4.2, 6.2	E F R S
IOC-XXVII/2 Annex 4 Add.	Draft Complementary Additional Programme of Extrabudgetary Resources (Proposals for extrabudgetary funding, 2014-2015)	4.2, 6.2	E only
IOC-XXVII/2 Annex 5	Development of a New Project on Strengthening Global Governance of Large Marine Ecosystems (LME) and their Coasts	5.4.4	E F R S
IOC-XXVII/2 Annex 5 Add.	Strengthening Global Governance of Large Marine Ecosystems (LME) and their Coasts – GEF Project Information Form	5.4.4	E only
IOC-XXVII/2 Annex 6	Proposal for a Category-2 UNESCO Regional Educational and Research Centre on Oceanography for Western Asia, in Iran (Islamic Republic of)	5.1.2.1	E F R S
IOC-XXVII/2 Annex 6 Add.	Proposal, Report of Fact-finding Mission and Letters of Support	5.1.2.1	E only
IOC-XXVII/2 Annex 7	Endorsement of the IHO-IOC/GEBCO Subcommittee for Regional Undersea Mapping (SCRUM)	5.1.2.2	E F R S
IOC-XXVII/2 Annex 8	Establishment of the Perth Regional Programme Office	5.1.3, 5.3.2	E F R S
IOC-XXVII/2 Annex 8 Add.	Summary Background for New Perth Regional Programme Office (PRPO) Tripartite Agreement 2014-18	5.1.3, 5.3.2,	E only
IOC-XXVII/2 Annex 9	The Future Needs for Intergovernmental Coordination and Governance for Sustained Ocean Observations and Services	5.3.1	E F R S

Document Code	Title	Agenda Items	Languages available
IOC-XXVII/2 Annex 9 Add.	Report on Results of Questionnaire on “the Future Needs for Intergovernmental Coordination and Governance for Sustained Ocean Observations and Services”, 2013	5.3.1	E only
IOC-XXVII/2 Annex 10	Development of a new Capacity Development Strategy	5.5.1	E F R S
IOC-XXVII/2 Annex 11	Proposal for a Global Ocean Science Report	5.5.2	E F R S
IOC-XXVII/2 Annex 12	Review of the IOCARIBE secretariat, 2012 (IOC Sub-Commission for the Caribbean and Adjacent Regions)	3.3.3, 5.1.3	E F R S
IOC-XXVII/2 Annex 12 Add.	UNESCO Internal Oversight Service (IOS). Final Report on the Review of the IOCARIBE Secretariat	3.3.3, 5.1.3	E F R S
IOC-XXVII/4 Prov.	Provisional List of Documents	2.4	E F R S
IOC-XXVII/5 Prov.	Provisional List of Participants	--	E/F/R/S
IOC-XXVII/6	Draft Report of the Intergovernmental Oceanographic Commission (2012–2013) to the thirty-seventh General Conference of UNESCO	3.4	E F R S

REPORTS OF IOC AND COOPERATIVE BODIES REQUIRING ACTION

IOC/EC-XLVI/3s	Executive Summary Report of the Forty-sixth Session of the IOC Executive Council, Paris, 25 June 2013	2.1, 6.5	E F S R
IOCAFRICA-II/3s	Executive Summary Report of the Second Session of the IOC Sub-Commission for Africa and the Adjacent Island States (IOCAFRICA), 3–4 April 2013, Cape Town, South Africa	3.3.1	E F
IOC/SC-IOCARIBE-XII/3s	Executive Summary Report of the Twelfth Session of the IOC Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE), 9–12 April 2013, Panama City, Panama	3.3.3	E S
IOC-XXVII/RSB/3	Executive Summary Report of the Regional Subsidiary Body meeting (Paris, 24 June 2013)	5.1.3	E F S R
ICG/IOTWS-IX/3s	Executive Summary Report of the 9 th session of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS-IX), Indonesia, 27–30 November 2012	5.2.1.2	E only
ICG/CARIBE EWS-VIII/3	Summary Report of the 8 th Session of the Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE EWS-VIII), Trinidad & Tobago, 29 April–1 May 2013	5.2.1.3	E (Ex.sum. in E, F, S, R)
ICG/NEAMTWS-IX/3s	Executive Summary Report of the 9 th Session of the Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North Eastern Atlantic, the Mediterranean and Connected Seas (ICG/NEAMTWS-IX), UK, 10–13 Sept. 2012	5.2.1.4	E only

Document Code	Title	Agenda Items	Languages available
IOC/TOWS-WG-VI/3	Summary Report of the Sixth Meeting of the Working Group on Tsunamis and other Hazards related to Sea-Level Warning and Mitigation Systems (TOWS-WG-VI), Paris, 20–21 February 2013	5.2.2	E (Ex.sum. in E, F, S, R)
IOC/GOOS-SC-II/3s (GOOS-199 ES)	Executive Summary Report of the 2 nd Meeting of the Global Ocean Observing System Steering Committee, Qingdao, China, 25–27 March 2013	5.3.2	E F S R
IOC/IODE-XXII/3s	Executive Summary Report of the 22 nd Session of the IOC Committee on International Oceanographic Data and Information Exchange, (IODE-XXII), Mexico, 11–15 March 2013	5.3.4	E F S R
IOC/IPHAB-XI/3s	Executive Summary Report of the Eleventh Session of the IOC Intergovernmental Panel on Harmful Algal Blooms, Paris, France, 28–30 April 2013	5.4.2	E F S R

INFORMATION DOCUMENTS

IOC-XXVI/Inf.1	Working Arrangements for the session	2.4	E only
IOC-XXVI/Inf.2	Presentation and Abstracts of the A. Bruun Memorial Lectures, 2013 (<i>web presentation</i>)	2.5	E only
IOC-XXVI/Inf.3	Presentation and Abstracts of the N.K. Panikkar Memorial Lectures, 2013 (<i>web presentation</i>)	2.5	E only
IOC-XXVI/Inf.4	Statement on the Chair on the State of the IOC	3.1	E only
IOC-XXVI/Inf.5	Statement From IOC Officers for the opening of the 27th assembly	1.	E only
IOC/INF-1299	Update on the Status of IOC Subsidiary Bodies, 2013	3.3, 5.1.3	E only
IOC/INF-1300	Main Progress and achievements of WESTPAC (2008–2013)	3.3.2	E only
IOC/INF-1302	IOC Commitments and responsibilities in UN Inter-agency coordination	5.1.1	E only
IOC/INF-1303	IOC participation in the WMO Global Framework for Climate Services	5.1.1	E only
IOC/INF-1304	Overview of IOC's Partnerships	5.1.2	E only
IOC/INF-1310	International Indian Ocean Expedition 50 TH Anniversary Initiative (IIOE-2)	5.1.2	E only
IOC/INF-1305	Report of the GEBCO Guiding Committee (2008–2013)	5.1.2.2	E only
IOC/INF-1306	Perspectives for the Regional Tsunami Warning System (PTWS, IOTWS, CARIBE-EWS, NEAMTWS)	5.2.1	E only
IOC/INF-1308	GOOS Regional Policy 2013	5.3.2	E F S R
IOC/INF-1307	JCOMM and the IOC Medium-Term Strategy 2014–2021: a synthesis of common objectives	5.3.3	E only
IOC/INF-1312	Progress and Status of the Ocean	5.3.4.1	E only

Document Code	Title	Agenda Items	Languages available
	Biogeographic Information System, 2013		
IOC/INF-1309	Global Climate Observing System (GCOS) Planning and Implementation	5.3.5	E only
IOC/INF-1298	WMO-IOC-ICSU World Climate Research Programme (WCRP): Year 2013 Report	5.4.1	E only
GEF document	Project: Global foundations for reducing nutrient enrichment and oxygen depletion from land based pollution, in support of Global Nutrient Cycle. Progress Report: First Year of Project Implementation: April 2012 to March 2013	5.4.3	E only
IOC/INF-1311	Progress in the implementation of the Integrated Coastal Area Management (ICAM) Strategy	5.4.4	E only
IOC/INF-1301	Update on the Implementation of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socio-economic Aspects – World Ocean Assessment, 2013	5.4.5	E only
IOC/INF-1313	Baseline Study for an Assessment of National Capacities and Needs in Marine Research, Observation and Data/Information Management	5.5.1	E only
IOC-XXVII/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	6.3	E only
IOC-XXVII/NOM/1	List of Candidates for Elections	6.3	E only
IOC-XXVII/NOM/2	Report of the Chair of the Nominations Committee	6.3	E only
REFERENCE DOCUMENTS			
IOC/EC-XLV/3	Report of the Forty-fifth Session of the IOC Executive Council, Paris, 26–28 June 2012	--	E F S R
IOC-XXVI/3	Report of the Twenty-sixth Session of the IOC Assembly, Paris, 21 June–5 July 2011	--	E F S R
IOC Workshop Report, 254	Consultation on Scientific and Technical Aspects of Sustained Ocean Observations and Services, Rio de Janeiro, Brazil, 5th March, 2013	5.3.1	E only
WMO-IOC/JCOMM-IV/3	Summary Report of the 4th Session of the WMO-IOC Joint Technical Commission for Oceanography and Marine Meteorology, Yeosu, Republic of Korea, 23–31 May 2012	5.3.3	E F S R
JCOMM-MR-104	General Summary of the 10 th Session of the JCOMM Management Committee, 7–10 May 2013, Paris, France	5.3.3	E only
--	GCOS Brochure: 20 Years	5.3.5	E F S
EC-XLV/Dec.5.3	Guidelines for Draft Resolutions (Decision of the	6.4	E only

Document Code	Title	Agenda Items	Languages available
	IOC Executive Council at its 45 th session (Paris, 26–28 June 2012)		

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ANNEX X

ACRONYMS

ABE-LOS	Advisory Body of Experts on the Law of the Sea (IOC)
ACCC	Adaptation to Climate Change in Coastal Zones Project
Add.	Addendum
ANCA	Working Group on Harmful Algae in the Caribbean and Adjacent Regions
C/4	Medium-term Strategy (UNESCO)
C/5	Programme and Budget (UNESCO)
CAP	Complementary Additional Programme
CARIACO	Carbon Retention in a Coloured Ocean
CARIBE EWS	Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions
CBD	Convention on Biological Diversity
CTBTO	Comprehensive Nuclear-Test-Ban Treaty Organization
CD	Capacity development (IOC)
CENALT	CENtre d'Alerte aux Tsunamis (France)
CLME	Caribbean Large Marine Ecosystem
COP	Conference of the Parties
CORDEX	Coordinated Regional Climate Downscaling Experiment (WCRP)
CPPS	Permanent Commission for the South Pacific
CTIC	Caribbean Tsunami Information Centre
CTWP	Candidate Tsunami Watch Providers (IOC)
DG	Director-General (UNESCO)
DOALOS	Division for Ocean Affairs and the Law of the Sea (UN)
DR	Draft Resolution
EC	Executive Council
ER	Expected results (UNESCO)
FAO	Food and Agriculture Organization of the United Nations
FUST	Flanders-UNESCO Science Trust Fund
GBIF	Global Biodiversity Information Facility
GCOS	Global Climate Observing System
GEBCO	General Bathymetric Chart of the Oceans (IHO-IOC)
GEF	Global Environment Facility
GEO BON	Group on Earth Observations Biodiversity Observation Network
GEOHAB	International Science Programme on the Global Ecology and Oceanography of Harmful Algal Blooms
GEOSS	Global Earth Observation System of Systems
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (IMO-FAO-UNESCO-WMO-WHO-IAEA-UN-UNEP-UNIDO)
GFCS	Global Framework for Climate Services
GOOS	Global Ocean Observing System
GOSR	Global Ocean Science Report (IOC)
HAB	Harmful Algal Blooms
HLO	High Level Objectives (IOC)

IAEA	International Association for Educational Assessment
IAMSLIC	International Association of Aquatic and Marine Science Libraries and Information
IBCCA	International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico
ICAM	Integrated Coastal Area Management Programme (IOC)
ICES	International Council for the Exploration of the Sea
ICG	Intergovernmental Coordination Group (for regional tsunami warning systems) (IOC)
ICSU	International Council for Science
ICZM	Integrated Coastal Zone Management
IFAG	Intersessional Financial Advisory Group (IOC)
IHO	International Hydrographic Organization
IIOE	International Indian Ocean Expedition
IMO	International Maritime Organization
INF	Information documents (IOC)
IOCAFRICA	IOC Sub-Commission for Africa and the Adjacent Island States
IOCARIBE	IOC Sub-Commission for the Caribbean and Adjacent Regions
IODE	International Oceanographic Data and Information Exchange (IOC)
OBIS	Ocean Biogeographic Information System (IOC)
IOGOOS	Indian Ocean GOOS
IOS	Internal Oversight Service (UNESCO)
IOTWS	Indian Ocean Tsunami Warning and Mitigation System (IOC)
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPHAB	Intergovernmental Panel on Harmful Algal Blooms
ITCOcean	International Training Centre for Operational Oceanography
ITU	International Telecommunication Union
IUCN	International Union for Conservation of Nature
IWEco	Integrating Water, Land & Ecosystems Management in Caribbean SIDS (GEF project)
JCOMM	Joint Technical Commission for Oceanography and Marine Meteorology
JMA	Japan Meteorological Agency
KOERI	Kandilli Observatory and Earthquake Research institute (Turkey)
LC/LP	Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter (London Convention 1972)
LDC	Least Developed Countries
LME	Large Marine Ecosystems
MLA	main line of action (UNESCO)
MTS	Medium-Term Strategy
N-CIRP	Nutrients and Coastal Impacts Research Programme
NEAMTIC	Tsunami Information Centre for the North-Eastern Atlantic, the Mediterranean and Connected Seas
NEAMTWS	Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas
NOA	National Observatory of Athens (Greece)
NODC	National Oceanographic Data Centre (IOC/IODE)

ODIN	Oceanographic Data and Information Network
ODINAFRICA	Ocean Data and Information Network for Africa
ODINCARSA	Ocean Data and Information Network for the Caribbean and South America Regions
OHRLLS	Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN)
OLA	Office of Legal Affairs (UN)
OOPC	Ocean Observations Panel for Climate
PEGASO	People for Ecosystem Based Governance in Assessing Sustainable Development of Ocean and Coast (European Union project)
PICES	North Pacific Marine Science Organization
PPO	Perth Programme Office
PTWC	Pacific Tsunami Warning Center
PTWS	Pacific Tsunami Warning and Mitigation System
REP	Report (UNESCO documentation)
RP	Regular Programme (UNESCO budget)
RSB	Regional Subsidiary Bodies (IOC)
SC	Steering Committee
SCOR	Scientific Committee on Oceanic Research
SCRUM	Sub-committee for Regional Undersea Mapping (IHO-IOC/GEBCO)
SIDA	Swedish International Development Cooperation Agency
SIDS	Small Island Developing States
SO	Strategic Objectives (UNESCO)
SOA	State Oceanic Administration (China)
SPINCAM	South-East Pacific Data and Information Network in support to Integrated Coastal Area Management
TOWS-WG	Working Group on Tsunamis and Other Hazards related to Sea-Level Warning and Mitigation Systems
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCC	United Nations Educational, Scientific and Cultural Organization
UNGA	United Nations General Assembly
UNIDO	United Nations Industrial Development Organization
WCRP	World Climate Research Programme
WDS	World Data System (ICSU)
WESTPAC	IOC Regional Secretariat for the Sub-Commission for the Western Pacific
WG	Working Group
WHO	World Health Organization
WMO	World Meteorological Organization
WOA	World Ocean Assessment (UN)
XB	Extra budgetary funds

4. 한국대표단 발언문





INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

Twenty-seventh Session of the Assembly
UNESCO, Paris, 26 June–5 July 2012

**TEMPLATE FOR SUBMISSION OF WRITTEN RECORDS
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Member State/Name of Delegation : **REP OF KOREA / NAESUN PARK**

Agenda Item : **3.3.2**

Date and Time of Intervention : 27 JUNE 10:00-11:30

NAME OF DELEGATION POINT OF CONTACT FOR THIS STATEMENT: **NAESUN PARK**

Title Agenda Item : **IOC SUB-COMMISSION FOR THE WESTERN PACIFIC (WESTPAC)**

Statement:

First of all, Korean Delegation would like to congratulate the 25th anniversary of WESTPAC in advance, and appreciates the chair person and the secretariat for their significant achievement in spite of the limited workforce and budget. With the enforcement of workforce as Dr. Somkiat just reported, Republic of Korea expects more active and influential activities in the region.

Supporting the future direction of WESTPAC, Republic of Korea would like to join the coral reef ecosystem research and capacity building programs as a member state.



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Member State/Name of Delegation : **REP OF KOREA / HYUNYEONG KIM**

Agenda Item : **5.1**

Date and Time of Intervention : 01 JULY 10:00 – 11:30

NAME OF DELEGATION POINT OF CONTACT FOR THIS STATEMENT/ **HYUNYEONG KIM**

Title Agenda Item : FUTURE OF THE IOC

Statement:

The Republic of Korea wishes to express its gratitude to Capt. Javier Valladares, the Chair for the Sessional Working Group on “The Future of IOC”, for his excellent summary report through one single meeting. The Working Group had various substantive and positive dialogues on this agenda. One of the main issues was to establish an internal network within IOC among Member States' national committees and an external network between IOC and other UN organizations. This issue has been in the main agenda of the IOC, but has not been well implemented so far. We hope that this suggestion for networking, both internally and externally, encourages Member States to form national committee if not established yet. One other thing to be mentioned is that we fully support the decision of adding "The Future of IOC" sessional working group to the agenda of 2014 as well as that of 2015 IOC session. We hope this agenda to provide a platform for the discussion and considering various issues of IOC activities that Member States face and raise.



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Member State/Name of Delegation : **REP OF KOREA / NAESUN PARK**

Agenda Item : **5.1.1**

Date and Time of Intervention : 28 JUNE 16:30-

NAME OF DELEGATION POINT OF CONTACT FOR THIS STATEMENT: **NAESUN PARK**

Title Agenda Item : UN CONSULTATIONS AND COORDINATION

Statement:

(first statement)

Republic of Korea appreciates the contribution of IOC toward ocean science with the collaboration of other UN organizations. As distinguished delegate from Togo made intervention before, the reason should be clearly shared why ‘Ocean Compact’ is objected by the ‘Group 77 and China’. Executive Secretary mentioned a letter from the ‘Group 77 and China’ to UN Secretary General was received this morning, but discussion is done without knowing what it is for some Member States. If permitted, we request to share the content of the letter to build common understanding for better discussion, since this issue is also related to the Mid-Term Strategy.

(second statement)

Republic of Nicaragua read the letter, but it is hard to understand right away without any written document as a non-UN language native speaking country. May I request to have a break or time before deciding this matter and have a written document for this?



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Member State, Name of Delegation: **REPUBLIC OF KOREA, HAENAM MOON**

Agenda Item: **5.3.1**

Date and Time of Intervention: 1 JULY 15.00-16.30

Name of delegation point of contact for this statement: HAENAM MOON

Title Agenda Item: The Future Needs for Intergovernmental Coordination and Governance for Sustained Ocean Observations and Services

Statement:

Korean delegation fully supports IOC's future plans on operational oceanography for global ocean observation and forecasting. As mentioned in the report by Captain (Ret.) Frederico Antonio Saraiva Nogueira, IOC and Member States need to strengthen their function and network in ocean forecasting for predicting ocean-related disasters and climate change. Republic of Korea is pleased to have supported a series of forums on the future of IOC in Eastern Europe and Latin America, and wishes to continue to support in Asia and Africa in the future. We believe this would guide all Member States to recognize the importance of 'sustained ocean observation and services' and for future international cooperation and network building.



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Member State, Name of Delegation: **REPUBLIC OF KOREA, JOONSOO LEE**

Agenda Item: **5.3.4**

Date and Time of Intervention: 2 JULY 10.00 - 11.30

Name of delegation point of contact for this statement: JOONSOO LEE

Title Agenda Item: IOC Committee on International Oceanographic Data and Information Exchange (IODE)

Statement:

Korean Delegation would like to express our gratitude to Mr Ariel Troisi for the detailed report. We recognize the importance of IODE's role in oceanographic data management and exchange, and appreciate the active endeavors of IODE. What we care is the Quality Management Framework (QMF), which will increase the value of IODE and Member States' National Oceanographic Data Centers(NODC). We hope that the accreditation procedure for NODC to be established at the earliest possible date. We also think that the new Associated Data Unit (ADU) as a structural element will improve the data coverage of previous IODE structure. Considering that there is no accreditation procedure for ADU currently, we believe that further consideration is needed to ensure the data quality. Last but not least, we would like to stress the importance of the core activities of IODE, such as the Ocean Data Portal and Ocean

Data Standard, that they should be proceeded in a prompt manner. Republic of Korea will continue to support the IODE activities by providing quality data and following the IODE-QMF accreditation process.



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Member State, Name of Delegation: **REPUBLIC OF KOREA, JOON-SOO LEE**

Agenda Item: **5.4.2**

Date and Time of Intervention: 2 JULY 16.45 – 18.00

Name of delegation point of contact for this statement: JOON-SOO LEE

Title Agenda Item: **Intergovernmental Panel on Harmful Algal Blooms (IPHAB)**

Statement:

Korean Delegation would like to support the initiative by IPHAB. Since we do have many experiences in the field of HAB research, and the term of references of the task team suggested by IPHAB is well matched with current Korean HAB program, we would like to participate in the task team on Biotxin Monitoring, Management and Regulations, if allowed.



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Member State/Name of Delegation : **REP OF KOREA / NAESUN PARK**

Agenda Item : **5.4.5**

Date and Time of Intervention : 2 JULY 11.45-13.00

NAME OF DELEGATION POINT OF CONTACT FOR THIS STATEMENT: **NAESUN PARK**

Title Agenda Item : UN REGULAR PROCESS

Statement:

Korean Delegation would like to share with the Member States the recognition of the importance of the UNRP. On the basis of this recognition, Korean government has already made some financial contributions although not so big, and has participated in several Regional Workshops actively. Korean Government obviously evaluates the IOC's supporting activities very high and valuable, and believes that such support should be continued until the first cycle of World Ocean Assessment is over successfully. One thing to be emphasized is the participation of the scientists not only in the field of ocean science but also in economy and sociology. One of the key guidance given by the UN is the geographic and gender balance of the participating experts. More experts are to be added in the pool of experts. So, we would like to ask Member States to recommend more experts to the secretariat of UNRP, DOALOS.



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Member State/Name of Delegation : **REP OF KOREA / HYUNYEONG KIM**

Agenda Item : **5.5.1**

Date and Time of Intervention : 3 JULY 15:00 – 16.30

NAME OF DELEGATION POINT OF CONTACT FOR THIS STATEMENT: **HYUNYEONG KIM**

Title Agenda Item : Development of a New Capacity Development Strategy

Statement:

The Korean delegation believes that the new capacity development strategy proposed in this session is well-timed as a follow-up to last Rio+20. We believe that this proposal will provide a good opportunity to enhance IOC's role within the UN system as an ocean specialized international organization. Korea is willing to participate in various activities proposed as a new capacity development strategy, especially in training programs for the young scientist from developing countries. Since these activities will be mainly managed by KIOST, we want to share the information that KORDI, Korean Ocean Research & Development Institute, was reorganized and expanded into KIOST, Korea Institute of Ocean Science and Technology, on 1 July last year. KIOST has now added the educational function through liaison with universities to train young ocean scientists for the next

generation and it will also try to expand its research scope for global aspects including ocean observation through international cooperation.



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Member State/Name of Delegation : **REP OF KOREA / CHUL PARK**

Agenda Item : **5.5.2**

Date and Time of Intervention : 3 JULY 16.45 – 18.00

NAME OF DELEGATION POINT OF CONTACT FOR THIS STATEMENT: **CHUL PARK**

Title Agenda Item : Rationale for an IOC Global Ocean Science Report

Statement:

Korean Delegation also thinks duplication is to be avoided for the effectiveness of financial input. Since there is a chapter on “marine scientific research” in World Ocean Assessment (WOA), which will cover the topics, scales and scopes of the marine research programs worldwide, it can be perceived that IOC’s Global Ocean Science Report (GOSR) is a duplicate of this chapter. However, Korean Delegation would like to point out that the chapter in WOA is an assessment which must be based on such report that the IOC is going to produce. The first WOA is supposed to be finished at the end of 2014, which is the same time line for IOC’s suggested 1st GOSR. So the GOSR that IOC is going to produce may not be used or reflected in the first round of WOA. But it will underpin for the next version of WOA. One other aspect to be added is that WOA is more or less focused on social and economic aspects of marine scientific research, including transfer of technology. In this context

we believe that IOC's GOSR has difference in nature with WOA. In conclusion, Korean Delegation supports IOC's plan for GOSR, and wishes Member States to support it by clarifying some concerns.

5. IOC 집행이사회 선거결과



Results of the Elections for Officers and Seats at the IOC Executive Council

27th IOC Assembly (26 June – 5 July 2013)

Chair (by acclamation)

Dr Sang-Kyung Byun (Republic of Korea) Group IV

Vice Chairs (by acclamation)

Dr Peter Haugan (Norway) Group I

Dr Atanas Palazov (Bulgaria) Group II

Captain Frederico Antonio Sariaiva Nogueira (Brazil) Group III

Dr Yutaka Michida (Japan) Group IV

Dr Adoté Blim Blivi (Togo) Group V

Seats on the Executive Council

Electoral Group I (by acclamation):

Belgium, Canada, France, Germany, Greece, Portugal, Spain, United Kingdom of Great Britain and Northern Ireland, United States of America

Electoral Group II (by acclamation):

Russian Federation, Ukraine

Electoral Group III (by acclamation):

Argentina, Chile, Colombia, Cuba, Grenada, Mexico, Peru, Venezuela (Bolivarian Republic of)

Electoral Group IV (by acclamation):

Australia, China, India, Iran (Islamic Republic of), Malaysia, Pakistan, Thailand

Electoral Group V (after a ballot):

Algeria, Egypt, Kenya, Nigeria, Senegal, South Africa, Tunisia, United Republic of Tanzania

6. 2012년 IOC 예산 집행보고 및 2013년 예산(안)





INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
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Twenty-seventh Session of the Assembly
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Item 3.2 of the Provisional Agenda

**PROGRESS REPORT ON BUDGET EXECUTION (2012)
AND ANTICIPATED FUNDING FOR 2013**

Summary

[Part I](#) of the report provides a general overview with regard to the implementation of the 2012 IOC budget as at 31 December 2012, including an overview of the [IOC staffing situation](#).

For the IOC Special Account, the [statement](#) of income and expenditure and changes in reserves and fund balances for the period 1 January to 31 December 2012 prepared by the Bureau of Financial Management is included.

Information on the level of programme implementation based on the available funding is provided as [appendix](#) to this document.

[Part II](#) provides information on the anticipated level of funding for 2013.

Closure of the budget of the previous biennium (2010–2011): The report on the IOC budget execution for the previous biennium (2010–2011) was presented to the Forty-fifth session of the IOC Executive Council, Paris, 26–28 June 2012 as document [IOC/EC-XLV/2 Annex 3](#). The Executive Council, in its decision EC-XLV/Dec.5.1, confirmed that the budget for 2010–2011 had been executed in accordance with the approved Programme and Budget for 2010–2011.

Proposed decision: This document will be examined by the statutory open-ended Financial Committee and the decision reflected in the Resolution that the Financial Committee will submit for adoption by the Assembly in accordance with paragraph 15 of the draft revised guidelines for the preparation and consideration of draft resolutions.

This report covers three types of funding provided to the IOC budget:¹

A. Regular Programme allocation (UNESCO budget – 36 C/5 for 2012-2013)

B. Voluntary (Extrabudgetary) Contributions to the IOC Special Account:

B1. Programme Activities (191-series accounts)

B2. Earmarked Activities (193-series accounts)

C. Voluntary (Extrabudgetary) Contributions for specific projects

PART I

IMPLEMENTATION OF THE IOC BUDGET IN 2012

Table 1. Consolidated Report on 2012 Expenditure as at 31 December 2012:
all sources of funding (in US dollars)

HLO/Action	36 C/5 workplans	Special Account	Extrabudgetary Projects	Total
HLO 1. Prevention & reduction of the impacts of natural hazards				
1a Promote integrated & sustained TWS	36 432	649 329	999 211	1 684 972
1b Educating communities at risk	984		200 070	201 055
1c Develop MS' capacities for coastal hazard assessment			192 174	192 174
Total HLO 1	37 416	649 329	1 391 456	2 078 201
HLO 2. Mitigation of the impacts and adaptation to climate change and variability				
2a Increase understanding of ocean's role in climate change		70 966		70 966
2b ocean observations and information for climate	43 945	268 142	587 817	899 904
2c Increase the understanding of the impacts of climate change	10 000		35 363	45 363
2d Climate change adaptation for Africa & SIDS			69 013	69 013
Total HLO 2	53 945	339 108	692 193	1 085 246
HLO 3. Safeguarding the health of ocean ecosystems				
3a Regular Process	6 700	11 349	21 369	39 418
3b Research for prevention of marine env. degradation	15 000		14 953	29 953
3c Capacity development/IODE & OBIS	25 940	51 245	1 581 770	1 658 955
Total HLO 3	47 640	62 594	1 618 091	1 728 326
HLO 4. management procedures & policies leading to the sustainability of coastal and ocean environment and resources				
4a Regional cooperation	26 443	71 454		97 897
4b Coastal research		9 544	27 972	37 516
4c Decision support tools	8 540	10 128	235 081	253 749
Total HLO 4	34 983	91 126	263 053	389 162
IOC Governing bodies; Coordination & Outreach	65 622	77 871		143 493
Programme-related & operating costs, common charges	110 632			110 632
TOTAL PROGRAMME OPERATIONS	350 239	1 220 028	3 964 793	5 535 060
TOTAL STAFF	3 276 459	260 159		3 536 618
TOTAL	3 626 698	1 480 187	3 964 793	9 071 678

¹ All figures in this report were reviewed by the UNESCO Bureau of Financial Management, with the exception of those in Table 9: 'Direct Contributions to Ostend and Perth Offices in 2012'

Chart 1. 2012 Expenditure by source (Regular Programme vs Extrabudgetary) – \$9,071,678

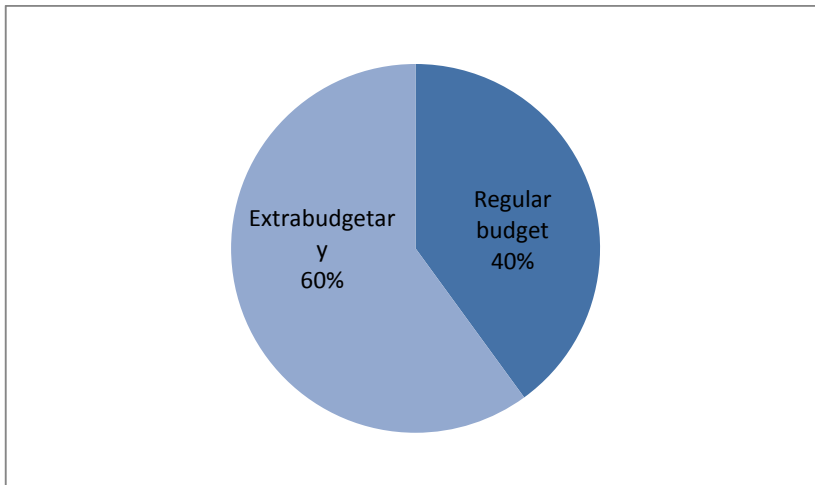
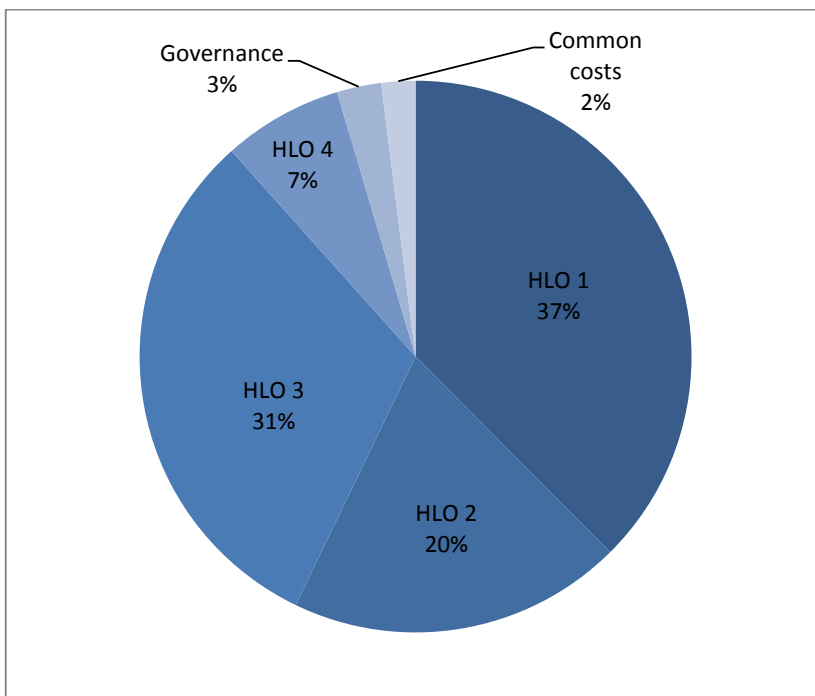


Chart 2. 2012 Expenditure on programme operations by HLO (all sources) – \$5,535,060



DETAILED INFORMATION BY SOURCE OF FUNDING

A. Regular Programme allocation (UNESCO budget – 36 C/5 for 2012–2013)

1. The General Conference of UNESCO at its 36th session adopted the Organization's Programme and Budget for 2012–2013 (36 C/5), with the total appropriation of \$653 million. The allocation of regular budget resources by programme activities was guided by Resolution XXVI-12 of the IOC Assembly (June 2011) 'IOC Biennial Priorities and Implementation Strategy and Draft Programme and Budget for 2012–2013'. In this context, the budgetary allocation to the IOC for the biennium 2012–2013 was as in the table below.

2. However, due to the cash-flow problems experienced by the Organization, the actual 2012–2013 budgetary allocation to the IOC was revised as follows. Here the figures are compared to previous Programme and Budget 2010–2011 (35 C/5).

<i>(In US dollars)</i>	36 C/5 approved	36 C/5 workplans	35 C/5 (2010–2011)
Programme activities	3 439 400	842 199	3 449 900
Staff	6 966 000	6 689 600	6 037 300
Total	10 405 400	7 531 799	9 487 200

3. This information was communicated to IOC Member States through [Circular Letter 2416](#) of 20 December 2011. The Executive Council at its 45th session, Paris, June 2012, examined document IOC/EC/XLV/2 Annex 8 'Status of IOC Budget and Priority Funding Plan for 2012–2013' and report IOC/IFAG-2012-1 on the Status of IOC budget from all sources under the reduced budget envelope and implementation of the programme for 2012–2013.

4. In its decision EC-XLV/Dec.5.1, the Executive Council endorsed the Priority Funding Plan for 2012–2013 presented by the Executive Secretary 'as an interim measure to ensure programme continuity consistent with the priorities of the Medium-term Strategy for 2008–2013 and without prejudice to the development of the Medium-term Strategy for 2014–2021'.

Table 2. Regular Programme Allocation 2012–2013 (36 C/5)

HLO/Action	Approved 36 C/5	36 C/5 Workplans	
		\$	% of approved
HLO 1. Prevention & reduction of the impacts of natural hazards			
1a Promote integrated & sustained TWS	135 700	81 097	60%
1b Educating communities at risk	80 000	20 000	25%
1c Develop MS' capacities for coastal hazard assessment	80 000	0	0%
Total HLO 1	295 700	101 097	34%
HLO 2. Mitigation of the impacts and adaptation to climate change and variability			
2a Increase understanding of ocean's role in climate change	284 400	20 000	7%
2b ocean observations and information for climate	576 300	119 000	21%
2c Increase the understanding of the impacts of climate change	70 000	20 000	29%
2d Climate change adaptation for Africa & SIDS	80 000	0	0%
Total HLO 2	1 010 700	159 000	16%
HLO 3. Safeguarding the health of ocean ecosystems			
3a Regular Process	70 000	20 000	29%
3b Research for prevention of marine env. degradation	66 200	30 000	45%
3c Capacity development	225 000	20 000	9%
3cbis IODE/OBIS	285 900	77 770	27%
Total HLO 3	647 100	147 770	23%
HLO 4. management procedures & policies leading to the sustainability of coastal and ocean environment and resources			
4a Regional cooperation	255 900	95 000	37%
4b Coastal research	90 000	0	0%
4c Decision support tools	100 000	30 000	30%
Total HLO 4	445 900	125 000	28%
IOC Governing bodies; Coordination & Outreach	610 000	126 949	21%
Programme-related & operating costs, common charges	430 000	237 176	55%
TOTAL PROGRAMME	3 439 400	896 992*	26%
TOTAL STAFF	6 966 000	6 689 600	96%
TOTAL	10 405 400	7 586 592	73%

*of which \$54 793 of additional appropriations

Table 3. Additional Appropriations to Regular Budget 2012–2013 (36 C/5) as at 31 Dec. 2012

IOC Action	Amount \$	Donor
1a Promote integrated & sustained TWS	6,127	Kandilli Observatory and Earthquake Research Institute (KOERI)
	14,970	Islamic Educational, Scientific and Cultural Organization (ISESCO)
3cbis IODE/OBIS	17,770	IFREMER
IOC Governing bodies; Coordination & Outreach	6,211	Institut Océanographique Paul Ricard
	9,715	Rachel Carson Center for Environment and Society
TOTAL	54,793	

5. To the resources allocated to the IOC under UNESCO's regular budget and shown in Table 2 above, should be added \$1,1 M allocated by the Director-General of UNESCO from the UNESCO Emergency Fund, thus raising the total funding available for programme activities from 26% to 58% of the 36 C/5 approved.

6. IOC requests to the Emergency Fund were based on the priorities endorsed by the IOC Executive Council at its 45th session in June 2012 in Annex B to [Decision EC-XLV/Dec.5.1](#) (Status of IOC Budget and Priority Funding Plan for 2012–2013). Detailed reporting on the Emergency Fund is not included in the present document as a specific reporting was issued by the Bureau of Financial Management in document [191 EX/4 Part II-B](#) and Table 1 of Document [191 EX/4. INF](#) and was presented to the UNESCO Executive Board at its 191st session in April 2013.

Table 4. 2012 Expenditure under Regular Programme (in US dollars)

HLO/Action	36 C/5 Workplans	Allotment 2012	Expenditure 2012	Exp. Rate (based on allotment 2012)
HLO 1. Prevention & reduction of the impacts of natural hazards				
1a Promote integrated & sustained TWS	81 097	62 797	36 432	58%
1b Educating communities at risk	20 000	10 000	984	10%
1c Develop MS' capacities for coastal hazard assessment	0	0	0	0%
Total HLO 1	101 097	72 797	37 416	68%
HLO 2. Mitigation of the impacts and adaptation to climate change and variability				
2a Increase understanding of ocean's role in climate change	20 000	10 000	0	0%
2b ocean observations and information for climate	119 000	64 000	43 945	69%
2c Increase the understanding of the impacts of climate change	20 000	10 000	10 000	100%
2d Climate change adaptation for Africa & SIDS	0	0	0	0%
Total HLO 2	159 000	84 000	53 945	64%
HLO 3. Safeguarding the health of ocean ecosystems				
3a Regular Process	20 000	12 000	6 700	56%
3b Research for prevention of marine env. degradation	30 000	15 000	15 000	100%
3c Capacity development	20 000	20 000	0	0%
3cbis IODE/OBIS	77 770	46 770	25 940	55%
Total HLO 3	147 770	93 770	47 640	51%
HLO 4. management procedures & policies leading to the sustainability of coastal and ocean environment and resources				
4a Regional cooperation	95 000	55 000	26 443	48%
4b Coastal research	0	0	0	0%
4c Decision support tools	30 000	18 000	8 540	47%
Total HLO 4	125 000	73 000	34 983	48%
IOC Governing bodies; Coordination & Outreach	126 949	80 026	65 622	82%
Programme-related & operating costs, common charges	237 176	123 909	110 632	89%
TOTAL PROGRAMME	896 992	527 502	350 239	66%
TOTAL STAFF	6 689 600	3 344 800	3 276 459	98%
TOTAL	7 586 592	3 872 302	3 626 698	94%

Note: For the Regular Programme, the overall expenditure rate (vis-à-vis \$7.586 M) as at 31 December 2012 was 47.8% which is within the biennial time-elapsd theoretical target implementation rate.

B. Voluntary (Extrabudgetary) contributions to the IOC Special Account

INCOME

Table 5. 2012 Contributions to the IOC Special Account by donor (in US dollars) for the period 1 January – 31 December 2012

B1. PROGRAMME ACTIVITIES (191IOC9000)		
Funds received:		\$
		\$
	Barbados	5 000,00
	Canada	15 243,90
	China	150 000,00
	Colombia	17 757,00
	India	49 970,00
	Korea Rep. of	980,00
	Norway	357 916,21
	United Kingdom	13 000,00
	CLS France	19 948,00
	Hasselt University	6 459,95
	Marine Technology Society	5 003,06
	MARIS	13 925,70
		655 203,82
Interest		16 255,00
TOTAL A		671 458,82
B2. EARMARKED ACTIVITIES		
<u>Argo Information Centre (193AIC2000)</u>		
	Australia	47 020,77
	Germany	6 476,70
	India	9 975,00
	France	13 280,20
	Japan	9 985,00
	United Kingdom	12 987,00
		99 724,67
<u>Indian Ocean Tsunami Monitoring and Warning System (193TSU2000)</u>		
	UN Volunteers, Bonn Germany	3 202,57
<u>Tsunami and Other Coastal Hazards Warning System for the Caribbean (193TSU2001)</u>		
	Monaco	25 906,80
<u>Secretariat for the Indian Ocean Tsunami Monitoring and Warning System (193ICG2000)</u>		
Australia	Australia	451 182,42
TOTAL B		580 016,46
TOTAL (B1 + B2)		1 251 475,28

EXPENDITURE

Table 6: 2012 Expenditure (in US dollars) under the IOC Special Account

A. PROGRAMME ACTIVITIES	
ADDRESSING THE IMPACT OF CLIMATE CHANGE (191GOS2000)	
GLOBAL OCEAN OBSERVING SYSTEM	32 011,51
MARINE OBSERVATIONS AND SERVICES	58 615,57
OOPC Coordinator	2 263,10
IOCCP Coordinator(s)	70 965,92
Sub-total	163 856,10
SAFEGUARDING MARINE ECOSYSTEM HEALTH AND INTEGRATED MANAGEMENT (191SCI2000)	
GRAME	11 349,22
COASTAL RESEARCH, MONITORING & MODELLING	9 544,28
TOOLS & METHODOLOGIES FOR ICAM	10 128,27
Sub-total	31 021,77
CAPACITY-BUILDING, DATA & INFORMATION SERVICES & LEGAL PROCEDURES (191CAP2000)	
CAPACITY DEVELOPMENT	7 398,46
IODE	27 489,04
UNCLOS/ABELOS	0,00
OBIS	16 357,44
Sub-total	51 244,94
GENERAL POLICY AND COORDINATION (191POL2000)	
IOC GOVERNING BODIES MEETINGS	0,00
IOCARIBE	-91,83
WESTPAC	71 545,65
GENERAL OPERATING & COORDINATION COSTS	48 125,46
OCEAN GOVERNANCE & POLICY	29 745,47
RESERVE	0,00
Sub-total	149 324,75
Tsunami AND OTHER MARINE HAZARDS (191SER2000)	
ICG INDIAN OCEAN	0,00
ICG CARIBBEAN	628,98
ICG PACIFIC	16,57
ICG MEDITERRANEAN	0,00
TOWs	127,40
ITIC	0,00
OCEAN MAPPING	0,00
COASTAL HAZARDS/ICAM	0,00
Sub-total	772,95
IOC TEMPORARY PERSONNEL (191PER2000)	
Sub-total	260 159,41
TOTAL A	656 379,92
B. EARMARKED ACTIVITIES	
ARGO INFORMATION CENTRE (193AIC2000)	77 231,15
DBCP/SOOP TECHNICAL COORDINATOR (193DBC2000)	98 020,25
INDIAN OCEAN TWS (193TSU2000)	59 809,13
COASTAL HAZARDS FOR THE CARIBBEAN (193TSU2001)	223 752,74
SECRETARIAT FOR THE INDIAN OCEAN TWS (193ICG2000)	364 994,15
TOTAL B	823 807,42
TOTAL (A + B)	1 480 187,34

C. Voluntary (Extrabudgetary) Contributions for Specific Projects

Table 7. 2012 Income under Extrabudgetary projects (in US dollars)

Budget code	Project title (short)	Donor	2012 Revenue (Return of funds to Donor)
HLO 1 - Prevention & reduction of the impacts of natural hazards			
1a Promote integrated & sustained monitoring and warning systems			
504INT2001	Global Tsunami Warning and Mitigation System	NORWAY	
507GLO2000	Secondment of Mr Ulrich Wolf	GERMANY	-72 279,09
552GLO2003	Capacity building provider, trainer and tsunami advisor	JAPAN	
473HAI2000	Recover and enhance Haiti's warning services	VOL.CON	-3 061,27
490GLO2200	TEWS, especially in the Indian Ocean	VOL.CON	-8 886,12
549HAI2000	Strengthening Haiti capacities for tsunami preparedness	EUR.COM	
549RLA2002	Strengthening national and regional TWS	EUR.COM	
1b Educating communities at risk			
473JPN2000	Preparation of the Japan-UNESCO Symposium	VOL.CON	
549INT2001	NEAMTIC	EUR.COM	
230RAS2003	Enhancing Tsunami Risk Assessment and Management	UNESCAP	288 500,00
230RAS2004	History of tsunami events in the Makran region	UNESCAP	73 000,00
1c Develop Member States' capacities for coastal hazard assessment			
230RAS2002	Assessment & Awareness of Makran Tsunami Hazards	UNESCAP	-77 157,11
514GLO2000	Tsunami Teacher translation into Spanish	SPAIN	
920OMA2000	Technical Expert Advice to Establish a National EWS	OMAN	
Sub-total HLO 1			200 116,41
HLO 2 - Mitigation of the impacts and adaptation to climate change and variability			
2a Increase the understanding of the ocean's role in climate change & variability			
523GLO2002	Support for the IOCCP	USA	8 651,83
2b Ocean observations and information for climate			
255GLO2000	JCOMM-IV (cooperation in joint programming)	WMO	120 000,00
526GLO2000	JCOMM-IV	REP. OF KOREA	150 000,00
526GLO2001	JCOMM Associated Support	REP. OF KOREA	192 392,23
513RAF2008	FET-REMSENS Remote Sensing Application	BELGIUM	
549GLO2005	GEOWOW GEOSS interoperability for Weather, Ocean & Water	EUR.COM	835 124,49
580GLO2000	Secondment of an official from SOA/PR China	CHINA	119 215,00
582RAF2000	Sustaining and enhancing the African sea level observations	BULGARIA	
2c Increase the understanding of the impacts of climate change			
510GLO2003	International Seminar on Climate Change	DENMARK	
526GLO2002	Ocean Carbon Sources and Sinks	REP. OF KOREA	157 800,00
2d Climate change adaptation for Africa & SIDS			
RAF0053951	Adaptation to Climate Change - Western Africa	UNDP	
Sub-total HLO 2			1 583 183,55
HLO 3 - Safeguarding the health of ocean ecosystems			
3a Regular Process			
513GLO2028	Clearing House Mechanism for the UN Regular Process	BELGIUM	22 000,00
3b Research & monitoring for the prevention of marine environmental degradation			
513GLO2027	The IOC Harmful Algal Information System	BELGIUM	14 960,00
3c Capacity development Incl. IODE/OBIS)			
513GLO2016	Ocean teacher Academy: a human capacity	BELGIUM	150 000,00
513RLA2006	Caribbean Marine Atlas	BELGIUM	
549GLO2006	iMarine-Data e-Infrastructure Initiative	EUR.COM	156 914,18
549RER2000	SEADATANET	EUR.COM	-10 081,76
513RAF2013	Integrated Data and Information Products	BELGIUM	709 500,00

Budget code	Project title (short)	Donor	2012 Revenue (Return of funds to Donor)
3c Capacity development Incl. IODE/OBIS) (Cont'd)			
513RAF2016	Ship-based visual survey to evaluate the spatial and temporal distribution of marine mammals in the Canary Current Large Marine Ecosystem	BELGIUM	
526INT2003	IOC-Yeosu Project Capacity Enhancement 2	REP. OF KOREA	310 000,00
546GLO2003	Secondment of a staff member of JAMSTEC	JAPAN	238 000,00
809RAF2000	ReCoMaP funded project: Empowering NSAs in Tanzania	ITALY	
216RLA2000	Support to the Caribbean Large Marine Ecosystems Project	UNOPS	51 500,00
216RLA2001	IMS & REMP for CLME project	UNOPS	313 196,99
526RAS2008	Research & Dev. Of Marine Renewable Energy technologies	REP. OF KOREA	
555RAS2011	Promoting the Awareness on Coastal Marine Env. Change	JAPAN	113 000,00
Sub-total HLO 3			2 068 989,41
HLO 4 - Management procedures & policies leading to the sustainability of coastal and ocean environment and resources			
4b Science for coastal and ocean resource management			
213GLO2010	Global Foundations for Reducing Nutrient	UNEP	165 000,00
4c Decision support tools for integrated coastal and ocean management			
513GLO2023	6th Biennial International Water Conf, Dubrovnik, Oct. 2011	BELGIUM	-4 322,44
513GLO2025	SEPIS/SIBIMAP II	BELGIUM	
513GLO2029	IOC Guidelines for managers in coastal hazards mitigation	BELGIUM	26 400,00
513RLA2004	SPINCAM I	BELGIUM	-181 476,56
513RLA2013	SPINCAM II	BELGIUM	74 680,00
526RAS2007	Enhancing regional capabilities for coastal hazard forecasting in North Indian Ocean	REP. OF KOREA	
549INT2002	PEGASO	EUR.COM	101 333,69
570GLO2006	Principles & Guidelines for ecosystem-based MSP	PRIVATE DONOR	
570GLO2009	A Step-by-step Guide to Monitoring & Evaluating MSP	PRIVATE DONOR	190 545,00
Sub-total HLO 4			372 159,69
TOTAL			4 224 449,06

Table 8. 2012 Expenditure under Extrabudgetary projects (in US dollars) (PSC = Project support costs)

Budget code	Project title (short)	Allotment 2012 (with PSC)	Expenditure 2012
HLO 1 - Prevention & reduction of the impacts of natural hazards			
1a Promote integrated & sustained monitoring and warning systems			
504INT2001	Global Tsunami Warning and Mitigation System	10 891,49	322,08
507GLO2000	Secondment of Mr Ulrich Wolf	11,47	11,47
552GLO2003	Capacity building provider, trainer and tsunami advisor	143 189,15	121 941,61
473HAI2000	Recover and enhance Haiti's warning services		-2 194,50
490GLO2200	TEWS, especially in the Indian Ocean		
549HAI2000	Strengthening Haiti capacities for tsunami preparedness	589 206,92	585 082,04
549RLA2002	Strengthening national and regional TWS	295 653,68	294 048,44
1b Educating communities at risk			
473JPN2000	Preparation of the Japan-UNESCO Symposium	90 000,00	74 181,54
549INT2001	NEAMTIC	154 507,63	125 888,92
230RAS2003	Enhancing Tsunami Risk Assessment and Management		
230RAS2004	History of tsunami events in the Makran region		
1c Develop Member States' capacities for coastal hazard assessment			
230RAS2002	Assessment & Awareness of Makran Tsunami Hazards	4 876,00	4 876,00
514GLO2000	Tsunami Teacher translation into Spanish	28 306,04	
920OMA2000	Technical Expert Advice to Establish a National EWS	364 403,27	187 298,18
Sub-total HLO 1		1 681 045,65	1 391 455,78

Budget code	Project title (short)	Allotment 2012 (with PSC)	\$Expenditure 2012
HLO 2 - Mitigation of the impacts and adaptation to climate change and variability			
2a Increase the understanding of the ocean's role in climate change & variability			
523GLO2002	Support for the IOCCP		
2b Ocean observations and information for climate			
255GLO2000	JCOMM-IV (cooperation in joint programming)	120 000,00	67 694,76
526GLO2000	JCOMM-IV	150 000,00	107 754,62
526GLO2001	JCOMM Associated Support	192 392,22	131 798,68
513RAF2008	FET-RESENS REMOTE SENSING APPLICATION	37 485,25	1 235,85
549GLO2005	GEOVOW GEOSS interoperability for Weather, Ocean & Water	528 080,46	189 965,85
580GLO2000	Secondment of an official from SOA/PR China	109 681,60	89 520,55
582RAF2000	Sustaining and enhancing the African sea level observations	7 569,27	-153,29
2c Increase the understanding of the impacts of climate change			
510GLO2003	International Seminar on Climate Change	7 914,36	5 661,41
526GLO2002	Ocean Carbon Sources and Sinks	157 799,98	29 701,80
2d Climate change adaptation for Africa & SIDS			
RAF0053951	Adaptation to Climate Change - Western Africa	70 290,91	69 013,18
Sub-total HLO 2		1 381 214,05	692 193,41
HLO 3 - Safeguarding the health of ocean ecosystems			
3a Regular Process			
513GLO2028	Clearing House Mechanism for the UN Regular Process	22 000,00	21 368,60
3b Research & monitoring for the prevention of marine environmental degradation			
513GLO2027	The IOC Harmful Algal Information System	14 960,00	14 952,80
3c Capacity development Incl. IODE/OBIS)			
513GLO2016	Ocean teacher Academy: a human capacity	139 225,20	136 391,07
513RLA2006	Caribbean Marine Atlas	185 273,92	33 794,30
549GLO2006	iMarine-Data e-Infrastructure Initiative	156 914,12	111 356,69
549RER2000	SEADATANET		
513RAF2013	Integrated Data and Information Products	1 165 010,15	792 016,85
513RAF2016	Ship-based visual survey to evaluate the spatial and temporal distribution of marine mammals in the Canary Current Large Marine Ecosystem	3 958,90	-1,10
526INT2003	IOC-Yeosu Project Capacity Enhancement 2	155 000,00	111 675,35
546GLO2003	Secondment of a staff member of JAMSTEC	225 858,93	6 667,00
809RAF2000	ReCoMaP funded project: Empowering NSAs in Tanzania	16 766,85	2 764,16
216RLA2000	Support to the Caribbean Large Marine Ecosystems Project	37 532,54	32 773,12
216RLA2001	IMS & REMP for CLME project	313 197,56	252 509,44
526RAS2008	Research & Dev. Of Marine Renewable Energy technologies	42 189,63	35 403,25
555RAS2011	Promoting the Awareness on Coastal Marine Env. Change	206 489,44	66 419,86
Sub-total HLO 3		2 684 377,24	1 618 091,39
HLO 4 - Management procedures & policies leading to the sustainability of coastal and ocean environment and resources			
4b Science for coastal and ocean resource management			
213GLO2010	Global Foundations for Reducing Nutrient	165 000,00	27 971,94
4c Decision support tools for integrated coastal and ocean management			
513GLO2023	6th Biennial International Water Conf, Dubrovnik, Oct. 2011		
513GLO2025	SEPIS/SIBIMAP II		
513GLO2029	IOC Guidelines for managers in coastal hazards mitigation	25 699,11	11 490,60
513RLA2004	SPINCAM I		-167 163,08
513RLA2013	SPINCAM II	74 680,00	67 961,83
526RAS2007	Enhancing regional capabilities for coastal hazard forecasting in North Indian Ocean	13 691,49	8 777,81

Budget code	Project title (short)	Allotment 2012 (with PSC)	\$Expenditure 2012
4c Decision support tools for integrated coastal and ocean management			
549INT2002	PEGASO	244 854,82	138 024,05
570GLO2006	Principles & Guidelines for ecosystem-based MSP	5 214,20	
570GLO2009	A Step-by-step Guide to Monitoring & Evaluating MSP	214 291,87	175 989,37
Sub-total HLO 4		743 431,49	263 052,52
TOTAL		6 490 068,43	3 964 793,10

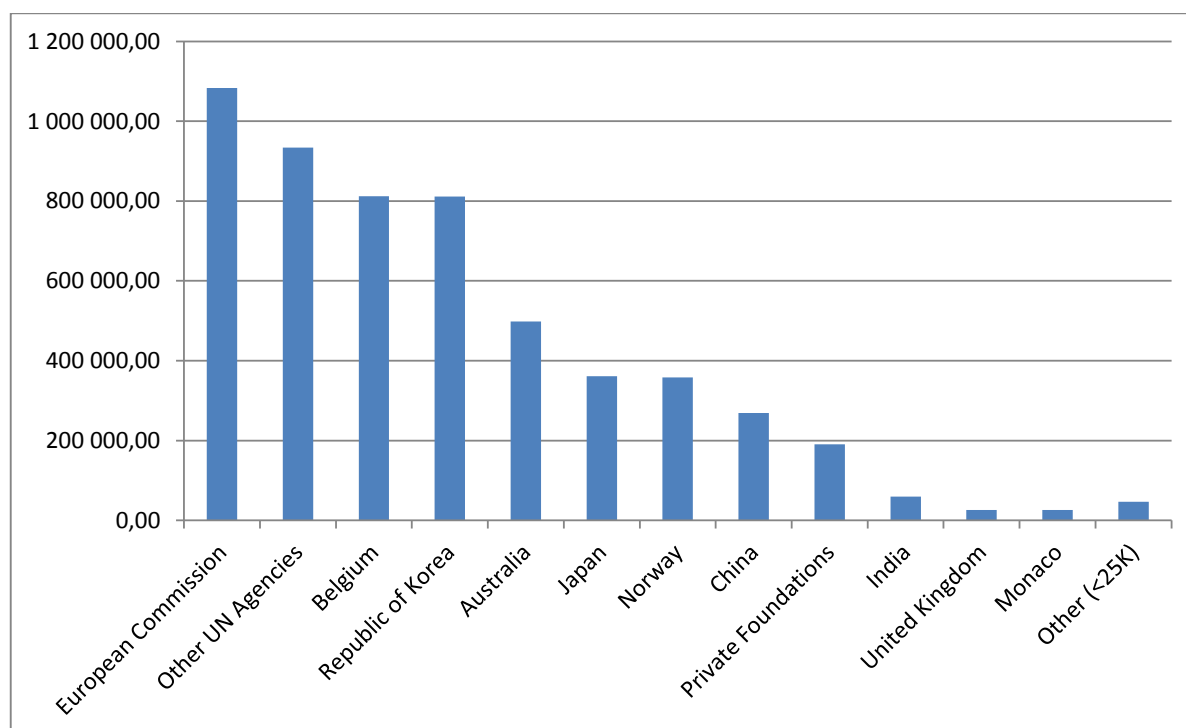
Direct contributions to the UNESCO/IOC Offices in Ostend, Belgium and Perth, Australia

Table 9. Direct Contributions to Ostend & Perth Offices in 2012*

	Amount	Currency
UNESCO/IOC Perth Office, Australia		
Western Australian State Government	400 000,00	AUD
Australian Bureau of Meteorology (cash support)	30 000,00	AUD
Australian Bureau of Meteorology (in-kind support)	280 000,00	AUD
UNESCO/IOC Project Office for IODE, Ostend, Belgium		
Vlaams Instituut voor de Zee (VLIZ - Flanders Marine Institute)	540 599,00	EUR

* These contributions do not enter the budgetary flow of UNESCO/IOC but are managed by partner organizations (VLIZ for Ostend office, BOM for Perth Office, IEO for Vigo)
Amounts are provided by the donors in official correspondence to ADG/IOC

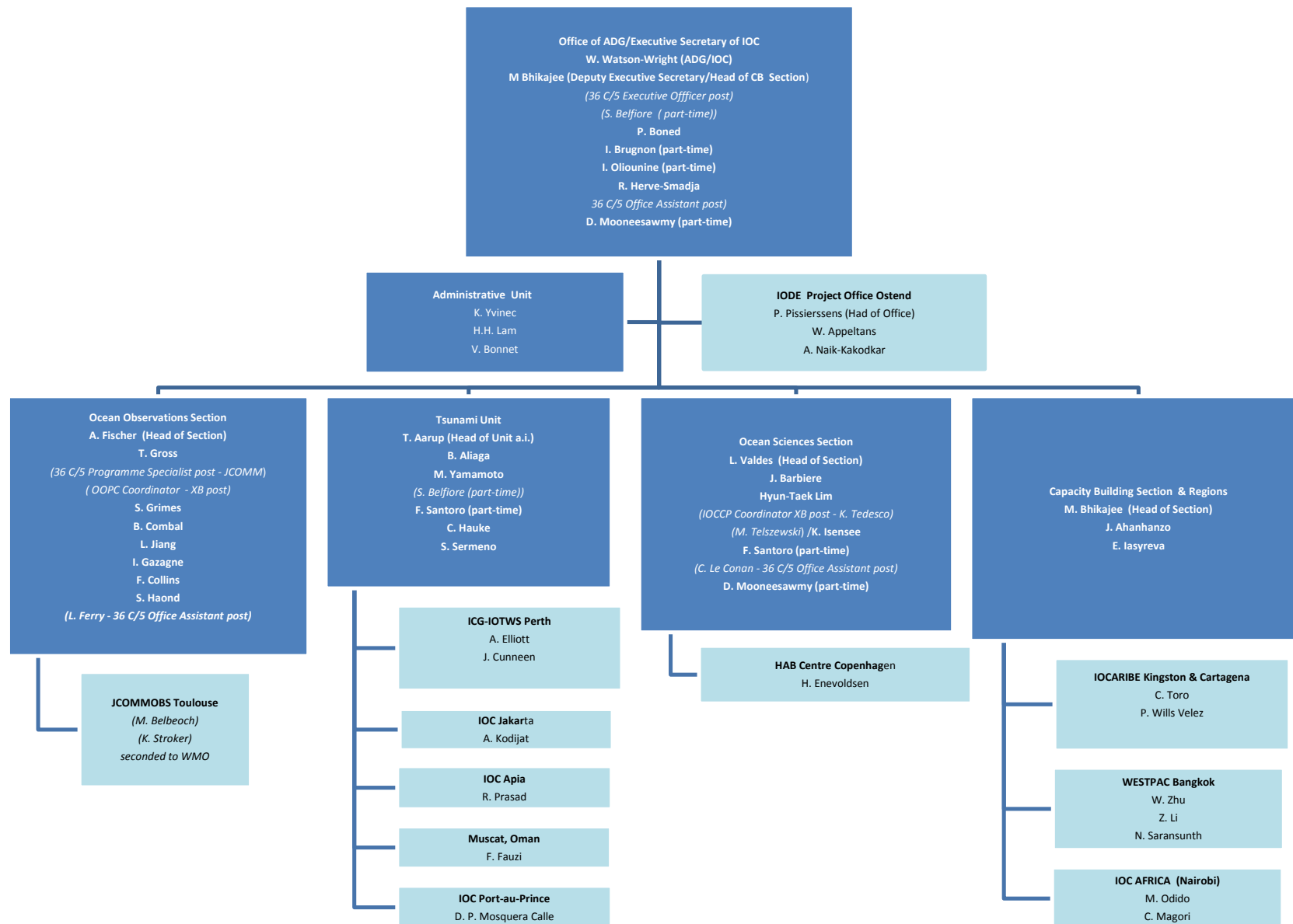
Chart 3. Main extra-budgetary donors – based on 2012 revenue/contributions to the IOC Special Account and to the Funds-in-Trust (Total of \$5 475 924,34)



OVERVIEW OF THE IOC STAFFING SITUATION IN 2012

7. The cash flow difficulties faced by the Organization in this biennium also had a considerable impact on the IOC staffing situation.
8. With regard to the 36 C/5 approved staff establishment, two professional posts and one general services post were frozen for the entire biennium (Executive Officer, JCOMM Programme Specialist and assistant in the office of ADG/IOC), and two other general services posts (one in Ocean Observations Section and one in Ocean Science Section) were frozen in 2013.
9. The freeze of two regular budget-funded professional positions had its impact on IOC's delivery capacity, in particular due to the departure of a temporary staff who assumed the tasks of the focal point for the North-eastern Atlantic and the Mediterranean Tsunami Warning System (NEAMTWS) in addition to those of the Executive Officer. However, the most important impact in terms of staff was caused by the suspension of USA voluntary contributions. This led to the loss of 5 positions (2 JCOMM Observing Platform Support Centre posts and 1 Ocean Observation Panel for Climate (OOPC) coordinator post to WMO; International Ocean Carbon Coordination Project (IOCCP) officer and assistant project officer – project with Polish National Academy). While IOC managed to maintain its involvement in the programmes through partnerships with WMO and SCOR, its leadership and impact are clearly reduced, in particular as regards the North-eastern Atlantic and the Mediterranean Tsunami Warning System (NEAMTWS).
10. In this context, the secondment/loan of staff by China (2 professionals, one to the Ocean Observations Section at HQ and one to WESTPAC Secretariat in Bangkok), Republic of Korea (1 professional to the Ocean Sciences Section at HQ) and Kenya (one professional to the IOCAFRICA Secretariat in Nairobi) are particularly welcome.
11. The IOC organizational chart 2012 next page shows the affected posts and employees in italics in brackets.

IOC ORGANIZATIONAL CHART – 2012 (English only)



**STATEMENT OF INCOME AND EXPENDITURE AND CHANGES IN RESERVES
AND FUND BALANCES FOR THE PERIOD 1 JANUARY 2012 TO 31 DECEMBER 2012**

1

UNESCO

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (IOC)

STATEMENT OF INCOME AND EXPENDITURE AND CHANGES IN RESERVES AND FUND BALANCES
FOR THE PERIOD 1 JANUARY 2012 TO 31 DECEMBER 2012

(EXPRESSED IN US DOLLARS)

	Programme Activities	Earmarked Activities	Total Year 2012	Total Year 2010
INCOME				
Voluntary Contributions - Schedule 1.3	655,203.82	-	655,203.82	1,042,538.97
Other income:				
Interest	16,255.00	-	16,255.00	16,312.00
Earmarked - Schedule 1.3	-	580,016.46	580,016.46	639,306.94
Transfers	-	-	-	-
TOTAL INCOME	671,458.82	580,016.46	1,251,475.28	1,698,157.91
Cash Disbursements Schedule 1.2	740,848.38	870,208.99	1,611,057.37	1,973,650.64
Increase (Decrease) in balance of unliquidated obligations	(84,468.46)	(46,401.57)	(130,870.03)	(118,895.79)
TOTAL EXPENDITURE	656,379.92	823,807.42	1,480,187.34	1,854,754.85
EXCESS (SHORTFALL) OF INCOME OVER EXPENDITURE	15,078.90	(243,790.96)	(228,712.06)	(156,596.94)
Reserves and fund balances, beginning of the period	1,898,472.26	1,627,560.92	3,526,033.18	4,477,100.23
Reserves and fund balances, end of the period	1,913,551.16	1,383,769.96	3,297,321.12	4,320,503.29

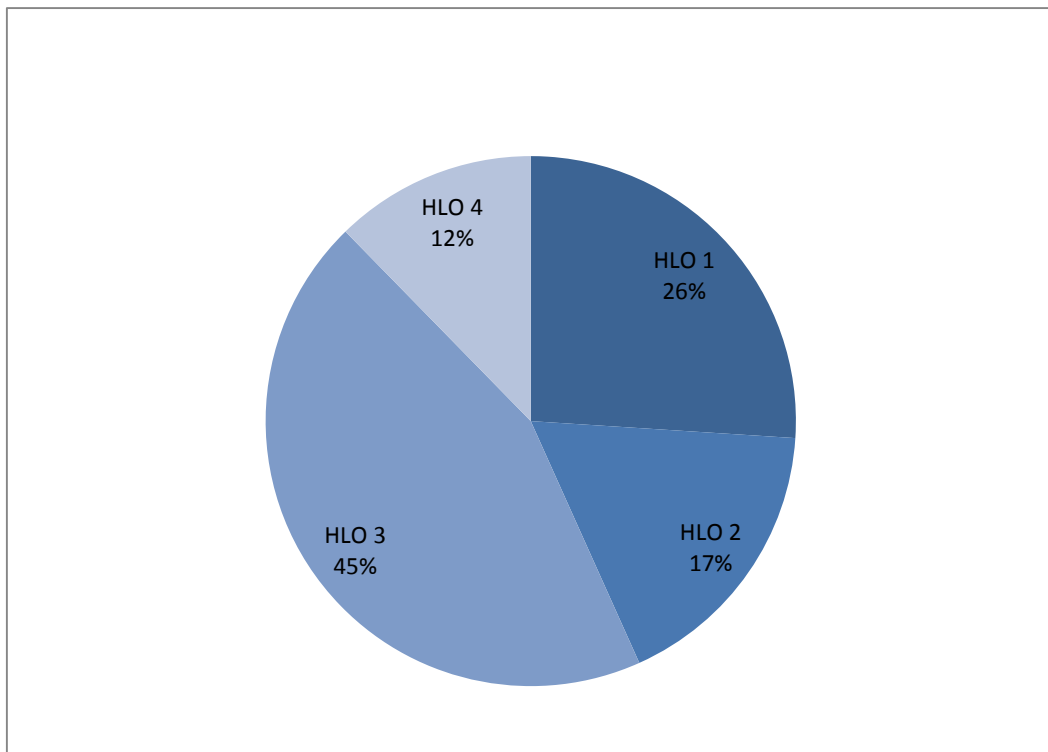

Ebrima Sarr
Senior Accountant

PART II

ANTICIPATED FUNDING FOR 2013

12. The implementation of the 36 C/5 (2012–2013) regular budget will continue in 2013 and is expected to be supplemented by approximately \$8.3 M of extrabudgetary funding for IOC. This estimate is based on the information available as at 30 April 2013 and covers funds already received or firmly committed. Chart 4 below shows the percentage of anticipated extrabudgetary funding by IOC High-Level Objective (HLO).

Chart 4: Extrabudgetary funding expected to be available for programme implementation in 2013 by HLO



Appendix²

**UPDATE ON PROGRAMME IMPLEMENTATION UNDER 36 C/5 WORKPLANS
As at 31 December 2012**

High-level objective 1: Prevention and reduction of the impacts of natural hazards

What we can implement

- *Action 1a - Promote integrated and sustained monitoring and warning systems*
 - There appears to be sufficient programme continuity in the provision of secretariat support for the organization of the sessions of the Intergovernmental Coordination Groups (ICGs) for the tsunami warning systems of the Indian Ocean (ICG/IOTWS), the Caribbean (ICG/CARIBE-EWS) and the Pacific (ICG/PTWS). We are also able to convene the intergovernmental coordination group meetings for this biennium for the four regional tsunami warning systems.
 - For the Caribbean and the Eastern Pacific, reliance on the UNESCO Field Offices in Kingston, Port au Prince, San José, and Santiago has proven very successful for launching and implementing projects. A similar approach is used with Apia office for South West Pacific.
- *Action 1b - Educating communities at risk with respect to natural hazards impact prevention, preparedness and mitigation measures*
 - It has been possible to contribute to the continued development of the regional Tsunami Information Centre (TIC) in the Caribbean. It has been possible to provide partial support for the Indian Ocean Tsunami Information Centre. The budget cuts will impact activities of the TIC for North-eastern Atlantic and Mediterranean, i.e. number of participants that can be supported in events and/or the extent of the studies planned as well as dissemination of results and publications.
- *Action 1c - Contribute to develop Member States' capacities for coastal hazard assessment (new action)*
 - The planned hazard assessments will go ahead at a reduced budget levels. The budget cuts will impact participation (number of participants that can be supported in events and/or the extent of the studies planned) as well as dissemination of results and publications.

What we cannot implement

- *Action 1a - Promote integrated and sustained monitoring and warning systems*
 - No support travel for TOWS and its Task Teams meetings. The TOWS-WG Inter-ICG Task Team on Hazard Assessment Related to Highest Potential Tsunami Source Areas established by the Assembly at its 26th session has not met yet due to lack of funds.
 - Reduced secretariat support for intergovernmental coordination of the four regional tsunami warning systems, support for the standing working groups, technical advice and the training, coordination of tsunami exercises, preparedness and awareness raising. If no extrabudgetary support is found for NEAMTWS we will not be able to support coordination of that activity.
 - No resources for spinning up new proposals or for providing matching funds/resources to, for example, European Union projects proposals.
- *Action 1b - Educating communities at risk with respect to natural hazards impact prevention, preparedness and mitigation measures*

² This appendix remains in English only. It updates Appendix A of document [IOC/EC-XLV/2 Annex 8](#) (June 2012)

- The budget cuts will impact activities that the TIC for North-eastern Atlantic and Mediterranean can engage in (i.e. number of participants that can be supported in events and/or the extent of the studies planned) as well as dissemination of results and publications.

Strategies

- The Secretariat is engaged in seeking extrabudgetary support (as has always been the case) and seeking to continue existing extrabudgetary projects.
- The Secretariat is seeking secondments from new donor countries.
- Some ICGs are moving to a two-year meeting cycle though it remains to be seen if some meetings are replaced by newly formed steering groups
- Staff travel for ICG meetings (including task teams and working groups) may have to be directly covered by hosting countries.

High-level objective 2:	<i>Mitigation of the impacts and adaptation to climate change and variability</i>
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What we can implement

- *Action 2a - Increase the understanding of the ocean's role in climate change and variability*
 - Thanks to emergency funds made available and extrabudgetary funds obtained in 2012, the IOCCP programme of work will be fully implemented.
- *Action 2b - Ocean observations and information for climate*
 - The GOOS Steering Committee will be able to meet twice (June 2012 and March 2013) to prepare and advance their work plan and prepare material for acceptance by the IOC Assembly..
 - GOOS regional activities will be supported at their full expected level, with particular support to GOOS-Africa (meeting in January 2013) and the GOOS Regional Forum (meeting in May 2013), to identify priorities, capacity and requirements, and work towards raising extrabudgetary funds for regional observing activities.
 - The subpanels of the GOOS SC (OOPC, biogeochemical, biology / ecosystems) will be supported in their work on requirements, observations coordination, and coordination of data streams in their areas of competence.
 - Partial implementation of the work plan of GLOSS, from the regular programme.
 - The JCOMM-4 session (May 2012) and the large majority of the JCOMM work plan under IOC responsibility will be supported, coordinating in situ observations, developing ocean forecasting systems, thanks to extrabudgetary support from the Republic of Korea (KMA, Expo 2012, Jeollomando province, Yeosu city) for JCOMM-4 and the associated work plan, and a secondment of a professional staff member in Paris from China (SOA).
 - Improving integration of GOOS with the GEOSS Common Infrastructure and improving understanding of global ecosystem variables needed for assessment through the EC-funded GEOWOW project.
- *Action 2c - Increase the understanding of the ocean's role in climate change and variability*
 - IOC was able to sponsor the 3rd Symposium on “The Ocean in a High-CO₂ World” (Monterrey, CA, USA, 24–27 September 2012) and the 2nd ICES/PICES/IOC International Symposium (Yeosu, Republic of Korea, May 2012).
- *Action 2d – Climate change adaptation for Africa and SIDS*

- The second phase project proposal on coastal adaptation in West Africa has been formulated with a view to submit it to GEF or the Adaptation Fund.

What we cannot implement

- *Action 2a - Increase the understanding of the ocean's role in climate change and variability*
 - The contribution to WCRP is limited to \$20,000.
 - IOCCP will not be supported by two staff but only one consultant; the International Project Office is now hosted –in agreement with SCOR– in the Polish Academy of Sciences.
- *Action 2b - Ocean observations and information for climate*
 - GLOSS sea level and JCOMM observations and services capacity building efforts supported in the past by IOC.
 - Outreach and communications on GOOS and JCOMM activities.
 - Continued employment of the two JCOMMOPS technical coordinators in Toulouse (France) and a technical secretariat for the Ocean Observations Panel for Climate (OOPC) - although these posts will all continue under the purview of our partnerships with WMO (JCOMM and GCOS), with US extrabudgetary funding now directed to WMO. These posts are no longer under IOC supervision.
 - Significant support in developing an ocean acidification observing system as a part of the GOOS Framework
- *Action 2c - Increase the understanding of the ocean's role in climate change and variability*
 - It will not be possible to provide any financial support to the Blue Carbon Science Working Group (in collaboration with Conservation International (CI), IUCN and UNEP).
 - Sponsorship of scientific events with UNESCO Field Offices in Asia, the Caribbean, and the Mediterranean will not be possible.
- *Action 2d – Climate change adaptation for Africa and SIDS*
 - Planned activities to develop adaptation intervention in SIDS, particularly in Caribbean, Indian Ocean, and Pacific region will not take place. Further consultation with West African countries for the second phase coastal adaptation project did not happen.

Strategies

- The Secretariat is engaged in seeking extrabudgetary support (as has always been the case) and seeking to continue existing extrabudgetary projects.
- Working with WMO secretariat to transfer employment of three staff members (two filled posts at JCOMMOPS and one vacant post for OOPC), ensuring continuity of technical support and a new recruit for climate observations support but reducing IOC involvement.
- Orienting the [GEOWOW](#) project (2012–2014) as much as possible to support GOOS objectives in expansion of observations, data and information in the area of ocean ecosystems.
- Partnerships with SCOR, exploration of partnerships with POGO to achieve IOC objectives,
- Cost savings for meetings through electronic meetings (often less effective than face-to-face meetings).
- Fundraising with IOC Member States on regional GOOS activities, climate change and coastal adaptation, and capacity development.
- Staff travel using RP budget will be reduced.

High-level objective 3: <i>Safeguarding the health of ocean ecosystems</i>
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What we can implement

- *Action 3a - Regular Process*
 - Participation of IOC in the Global Meetings of the UN Regular Process (World Ocean Assessment) as well as contribution to the organization of the Regular Process Regional Workshops taking place in 2012. IOC is also contributing to the development of the web-based clearing house mechanism of the Regular Process and provided inputs to the UN Group of Expert overseeing the preparation of World Ocean Assessment (together with UNEP and GRID-Arendal).
 - A project proposal on conducting a Transboundary Water Assessment Programme has been formulated and submitted to GEF. It is expected that 1 Million USD will be allocated from this project to conduct a global assessment of the world's Large Marine Assessment and Open Ocean areas.

- *Action 3b - Research and monitoring for the prevention of marine environmental degradation*
 - Scientific Steering Committee Meeting of GEOHAB June; staff attendance to ICES-IOC Working Group on Harmful Algal Bloom Dynamics, field staff attendance to governing body meeting at the Headquarters.

- *Action 3c – Capacity building, including IODE*
 - IODE implemented four training courses: 10 courses were organized. This number is higher than planned thanks to availability of extrabudgetary funding.
 - IODE implemented meetings as follows:
 - IODE-FAO Workshop on AgriOcean DSpace was held at the IOC Project Office for IODE, Ostend, Belgium, 23 January 2012
 - SG-OceanDocs was held at the IOC Project Office for IODE, Ostend, Belgium, 24–27 January 2012
 - IODE Officers meeting (24–27 January 2012): by WebEx conferencing (cost=0)
 - Technical meeting ODP was held at the IOC Project Office for IODE, Ostend, Belgium, 27–29 February 2012
 - Meeting of the intersessional working group on the IOC D&IM strategic plan) (partially face-to-face, partially Webex)
 - SG-GTSP: was held at the IOC Project Office for IODE, Ostend, Belgium, 16–20 April 2012 (9 participants in Ostend, rest by Webex or Livestream)
 - SG-ODS: was held at the IOC Project Office for IODE, Ostend, Belgium, 23–25 April 2012
 - 2nd OBIS technical meeting: was held at the IOC Project Office for IODE, Ostend, Belgium, 21–22 June 2012
 - SCOR/IODE/MBLWHOI Library Workshop on Data Publication, 5th Session: held at WHOI/MBL, USA
 - ETDMP-III: 3rd Session of the JCOMM/IODE Expert Team on Data Management Practices: was held at the IOC Project Office for IODE, Ostend, Belgium, 16–19 October 2012
 - 2nd IODE Workshop on Quality Control of Chemical and Biological Oceanographic Data Collections: was held at the IOC Project Office for IODE, Ostend, Belgium, 22–24 October 2012
 - Ad hoc Session of the GE-BICH: was held at the IOC Project Office for IODE, Ostend, Belgium, 25 October 2012
 - SG-OBIS: was held at the IOC Project Office for IODE, Ostend, Belgium, 19–21 November 2012
 - ETMC-4: was held at the IOC Project Office for IODE, Ostend, Belgium, 26–28 November 2012
 - 6th Joint inter-agency Capacity Building Meeting: was held at the IOC Project Office for IODE, Ostend, Belgium, 10 December 2012

Conclusion: instead of the 6 meetings originally planned it was possible to organize 15 meetings in 2012. This was possible thanks to the extended use of video-conferencing (Webex), as well as organizing meetings back-to-back.

What we cannot implement

- *Action 3a – Regular Process*
 - IOC will not be able to develop a training module on marine assessment, in order to facilitate the participation of developing nations in the Regular Process. No resources were provided to support the meetings of the World Ocean Assessment Group of Experts.
- *Action 3b - Research and monitoring for the prevention of marine environmental degradation*
 - Co-financing commitment to SCOR concerning GEOHAB not kept. GEOHAB young scientist meeting cancelled, capacity development training course subsidies cancelled, GEOHAB publications reduced. Staff travel will be reduced.
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- *Action 3c – Capacity building, including IODE*
 - Further development and operation of regional data and information networks in the IOC regions cannot be assured and are therefore fully dependent on the leverage of extrabudgetary resources and the concerned Member States.
 - No co-funding could be provided to networks in Latin America, Caribbean small islands, Eastern Europe, Indian Ocean/Persian Gulf, Pacific small Islands.
 - Ocean data portal: although a priority activity for IODE, it was not possible to further develop this system just based on IOC resources.
 - No development can be reported for ODP in 2012 due to the lack of travel funds to Member States to assist with installation of software and to provide hands-on training
 - It will not be possible to organize the first IODE Group of Experts for OBIS in 2012/2013.
 - This event has been postponed to 2013, provided Extrabudgetary funds can be identified. The tasks of the Group are being covered partially by the SG-OBIS (cost covered by RP and self)
 - Technical meetings under JCOMM-IODE may need to be cancelled in 2012 (ETDMP, DMCG) due to lack of funds.
 - DMCG was cancelled. ETDMP could be held (see above)
 - It was not possible to hold the 12th Session of the IODE Group of Experts on Marine Information Management in 2012.
 - This event was postponed to 2013

Strategies

- Efforts are being made to rejuvenate the memorandum of understanding with Spain. Fundraising succeeded with Flanders. New partnerships are being sought in the Gulf region for the HAB Programme and desalination, and in developing capacity-development activities less dependent on direct ex-bud contributions.

- Physical participation in meetings of secondary subsidiary bodies (groups of experts and tasks teams) may be replaced further by full or partial video conference-based meetings.
 - This has been done successfully in 2012
- The proposed establishment of an IOC Support Centre for the Ocean Data Portal in Moscow is expected to provide a mechanism for advancing this component of the IODE Programme.
 - The support centre is expected to be opened in 2013

High-level objective 4: Management procedures and policies leading to the sustainability of coastal and ocean environment and resources

What we can implement

- *Action 4a – Enhance regional cooperation and involvement of the Member States through capacity-building and transfer of technology*
 - The sessions of the WESTPAC (2012), IOC Africa (2012) and IOCARIBE (2013) will take place.
 - Preparation of Strategic Plan for IOC Africa
- *Action 4b – Coastal research*
 - For 2012 we can fulfill commitments made to UNEP and the GEF for co-financing of GEF Project. 2013 not covered at present.
- *Action 4c – Decision support tools*
 - Development of Marine Spatial Planning Guidelines on Monitoring and evaluation through a Grant from the Moore Foundation. Coastal Hazards Mitigation Manual initiated thanks to support from Rep. of Korea and Belgium (Flanders).
 - A second phase of the SPINCAM Project (South Pacific Information Network for Integrated Coastal Area Management) was formulated and successfully submitted to Belgium (Flanders). 880,000USD will be made available to assist 5 countries of Latin America (Colombia, Chile, Ecuador, Panama, and Peru), to develop national and a regional coastal atlas that provide essential ecological and socio-economic indicators to national authorities in charge of coastal management.

What we cannot implement

- *Action 4a – Enhance regional cooperation and involvement of the Member States through capacity-building and transfer of technology*
 - Pending support from the Member States of the region the session of IOCINDIO will not take place. It should be noted that funds for the organization of the session of IOCINDIO were decentralized to the UNESCO Field Office in Doha in 2008–2009 and 2010–2011 with the meeting not taking place. At the end of 2011, due to the budget shortfall, the funds were returned and were part of the 11% IOC contribution to reduce the budget shortfall.
 - *Action Support for UNESCO/IOC Chairs in Africa*
- *4b – Coastal research*
 - Establishment of Steering Committee and launch of a new initiative “Nutrients and Coastal Impacts Research Programme” (N-CIRP) (Resolution XXV-9) will not take place.
- *Action 4c – Decision support tools*
 - Marine Spatial Planning training course in regions will not take place. Additional support is needed to complete the Coastal Hazards Mitigation Manual.

Strategies

- Overall, additional fundraising will be pursued in order to fill the gap.

Rio+20

What we can implement

- Thanks to the Director-General's support through the UNESCO Emergency Fund and the contribution to the IOC Special Account from India, the IOC could implement a work plan to promote the role of the ocean in sustainable development in the context of the Rio+20 process:
 - Organization or sponsorship of several events to promote the *Blueprint for ocean and coastal sustainability*. Among activities implemented is the organization of four side events on the ocean and sustainable development during the Rio+20 Negotiation process and at the European Parliament, Brussels (January-May-2012). At Rio +20 conference, IOC organized a session on ocean sciences at the ICSU Forum on Science, Technology for Sustainable Development (June), as well as the Ocean Day at Rio+20 (16 June, together with the Global Ocean Forum), and a IOC-led side event on UNESCO's contribution to Ocean management on 20 June 2012.
 - Under Action 3c, a Survey with the participation of the three Sub-Commissions, is being undertaken among IOC Member States for assessing national capacities and related needs in marine sciences, research, observation and data management, focusing on IOC strategic priorities as a follow-up to Rio+20.
 - IOC has played a leading role in the formulation of the Secretary-General *Oceans Compact* that was launched in Yeosu in August 2012 as a key inter-agency initiative on oceans in the follow up of Rio+20.
 - IOC also became an official partner of the Global Partnerships for Oceans launched by the World Bank.
 - IOC was actively involved in the review of UN-Oceans. It provided its view to the Joint Inspection Unit in charge of the evaluation and contributed to the preparation of new terms of reference for UN-Oceans.

Governing bodies

What we can implement

- The 45th session of the Executive Council was organized in June 2012 with cost-saving measures: 3-day session, tight and decision-focused agenda, limited reporting items, reduced documentation in electronic format only, no coffee breaks. Interpretation and translation in four languages was provided as per Rule of Procedure 33. This allowed the overall cost to be reduced by more than 50%.
- 27th session of the Assembly in 2013 will be held in similar manner, but taking into account Member States comments in the post-Executive Council assessment questionnaire, in particular as regards ensuring that sufficient quality time will be made available for plenary debate. This is considered particularly crucial given that the Assembly will be asked to adopt the draft Medium-Term Strategy for 2014–2021, to provide guidance for the preparation of the draft Programme and Budget for 2014–2017 and in view of the financial situation faced by the organization and the challenges it represents.

What we cannot implement

- The sessions of the IOC Governing Bodies in 2012–2013 will have to be shortened and run in a cost-efficient manner, requiring understanding and cooperation of Member States representatives.

Cost-effectiveness/efficiency measures

As in the last part of 2011, cost-effectiveness/efficiency measures in the first half of 2012 concerned internal coordination (e.g., more rigorous management of telephone and shipment costs, whenever possible charging project-generated costs to relevant extrabudgetary projects, elimination of mobile phones, except for ADG/IOC). Use of the regular programme for temporary assistance contracts was brought virtually to zero.

Staff travel expenditure on the regular programme was kept within the 8% ceiling. New on-line videoconferencing facility has enabled some substitution for missions.

In order to ensure programme delivery under current financial constraints, IOC initiated the re-negotiation of programme partnerships: (e.g., contribution to WCRP reduced from \$100K to \$20K, funding to the Perth Regional Programme Office from \$80K to \$20K; two fixed-term JCOMMOPS staff were seconded to WMO, the OOPC project officer was hired on the vacant post of Head of Ocean Observations Section and the programme will now be hosted by WMO, two other temporary staff could be relocated and programme continued through partnership with SCOR and the Polish Academy of Science).

The Secretariat is engaged in active pursuit of secondments and non-reimbursable loans from Member States to deal with understaffing.

Particular measures were put in place, in consultation with IOC Member States, for the organization of the 45th Session of the Executive Council (Paris, 26–28 June 2012). These included:

- Reduced duration of the session with a focused agenda;
- Reduced number and pages of documents, including the conversion of the annotated agenda ("pre-report") into an Action Paper;
- Draft resolutions submitted before the session;
- Going paper-free using electronic documents;
- Reduced number of staff traveling to the session;
- No hiring of room clerks;
- Elimination of travel support for delegates.

7. 의장 연설문 및 기념 강연 자료



Paris, 17 June 2013
English/French



INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

Twenty-seventh Session of the Assembly
UNESCO, Paris, 26 June – 5 July 2013

Item 3.1 of the Provisional Agenda

**CHAIRMAN'S STATEMENT
ON THE STATE OF INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(IOC)**

By Dr Sang-Kyung Byun

Summary. In accordance with rule of procedure 8.1(a), the Chairman of IOC delivers an oral statement on recent developments in the work of the Commission and perspectives for the coming years.

Your Excellencies,
Distinguished guests and colleagues,
Ladies and Gentlemen,

It is a pleasure and honour for me to report on the state of the Intergovernmental Oceanographic Commission (IOC) to its Twenty-seventh session of Assembly on behalf of the IOC Officers.

As this is the first meeting of IOC Assembly since my election, I would like to express my sincere appreciation to the member states for allowing me to work together as a Chair and I hereby pledge to discharge my responsibilities to the best of my ability. Your support is a source of constant inspiration to me during my term of office. Taking this opportunity, I would like to pay tribute, on behalf of the Assembly, to Capt. Javier Armando Valladares, former chairman of IOC, who has a strong passion for oceanography and a good sense of humour, for his cooperative advices and sharing his vast experience in the field.

During the past two years we have faced various challenges arising from the change of external and internal circumstances. Among them has been the financial situation of UNESCO and IOC that drew our keen attention. As indicated in the two IOC Circular Letters No. 2416 of 20 December 2011 entitled "URGENT: financial situation of UNESCO and the IOC and Programme and budget for 2012–2013 (36 C/6)" and No. 2426 of 15 March 2012 "Update on the Status of the IOC Programme and Budget for 2012–2013 (36 C/5)", the United States of America and Israel have both withheld their assessed contribution after UNESCO admitted Palestine as a Member State through voting. This resulted in a 76% cut to resources for activities and 8% cut for staff in the IOC budget. The allocation of the Emergency Fund from UNESCO, however, increased the total available funding for programme activities from 24% to 58% of the approved 36 C/5 level, with a large increase in High Level Objective 1. The present budget reduction has never before been experienced, but the IOC secretariat staff immediately showed their readiness and willingness to respond to it. During this session, active discussion on this issue is expected among the member states.

As regards the decision of the Director-General of UNESCO to extend the contract of the Executive Secretary from 14 November 2013 to 11 January 2015, the IOC Officers, during the courtesy call to her office on 28 June 2012, inquired to the DG about the possibility of extension to ensure the continuity of work, and we received her positive reaction. Replying to a formal letter on 15 November 2012 as a follow-up, Ms Irina Bokova subsequently informed the Chair that she decided to extend Ms Wendy Watson-Wright's contract for a fourteen-month period beyond the previous contract. Therefore, we should reconsider the administrative process going forward from now.

Ladies and gentlemen,

The 2012 IOC officers' meeting was held on 1–2 February 2012 at IOC headquarters to discuss the overall matters including the financial situation of UNESCO and IOC, and to prepare the provisional agenda and timetable for the 45th IOC Executive Council. The officers took note of IOC budget reductions and they agreed to adopt new methods of working such as shortening the meeting period of the Executive Council to three days and refining the meeting procedure.

The 2013 IOC Officers' Meeting was convened on 14–15 January 2013, again at IOC headquarters. The Officers discussed the pending questions and issues, especially on the organizing of the 46th Session of the Executive Council and the 27th Session of the Assembly, the financial situation of IOC and UNESCO, the Medium-Term Strategy for 2014-2021, the proposal for a Category-2 Centre from the Government of the Islamic Republic of Iran, and a new global mechanism entitled "Global Ocean Science Report" for assessing and reporting the level of capacity in ocean science.

After the last IOC Assembly, the Chair and the Officers had an exchange of letters with the Director-General, Ms Irina Bokova, regarding the budgetary allocation for IOC in the revised programme and budget for 2012-2013 that was adopted by the 36th General Conference (36 C/5 Addendum). The Director-General was responsive to our request and IOC was benefited with a lesser budgetary reduction than average, that is, minus 3.4% instead of a minus 4.5%.

Through two letters of 2 February 2012 and 30 January 2013, after the IOC officers' meetings in February 2012 and January 2013 respectively, we explained the current situation of IOC and expressed appreciation for the support of Director General in spite of the present UNESCO financial difficulties. I believe that IOC keeps good relations with the Director-General for maintaining functional autonomy and operational flexibility within UNESCO.

I had an opportunity to report the main activities of the IOC 50th anniversary at the UNESCO 36th General Conference on 31st October 2011, focusing on creating awareness of IOC and promoting a better image of UNESCO and its IOC, and obtaining the governments' commitment to the ocean. UNESCO in the ocean side event on 1st November 2011 launched the report "A blueprint for Ocean and Coastal Sustainability and its summary for decision-makers" which was published by IOC in collaboration with UNDP, IMO, and FAO. I know that this report was translated into a few languages and was used as an important background reference for Rio+20 to drive sustainable use of the ocean. Another important General Conference side event on "The official presentation of the IOC Sub-Commission for Africa and Adjacent Island States" was organized on 29th October 2011 jointly by IOC and African Group. Representatives of Africa Members States including Ministers and Secretary General of National Commissions for UNESCO and Africa Regional Committees attended the event.

Ladies and gentlemen,

I am very pleased to report to you on regional activities.

The IOC Sub-commission for Africa and Adjacent Island States, IOCAFRICA, was established and its first Intergovernmental Session was held in United Nations Offices in Nairobi, Kenya, during 2-3 May 2012. The session was chaired by IOC Vice-Chair for Group V, Prof Adoté Blim Blivi. The IOC Regional Committee for the Eastern Atlantic (IOCEA) and the IOC Regional Committee for the Western Indian Ocean (IOCWIO) were dissolved in line with Resolution XXVI-3 of the IOC Assembly. The Sub-Commission elected one Chair from South Africa and three Vice-Chairs from Egypt, Cameroon and Mauritania for the next intersession and adopted 4 recommendations including IOCAFRICA Strategic Plan and programmes of work for 2012–2013.

I am honoured to report to IOC Assembly of my participation in "The Second Session of the IOC Sub-Commission for Africa and Adjacent Island States (IOCAFRICA-II)" held during 3-4 April 2013, in Cape Town, South Africa, with the support of the South Africa's Department of Environmental Affairs. During the Session, there were comprehensive discussions and constructive suggestions for the future development of IOCAFRICA, with the full participation of Member States, on the strategic plan, programme of work for 2014-2017 and cooperation with other organizations. I am sure there will be a detailed report on this during this Assembly.

The 9th Intergovernmental Session of the IOC Sub-Commission for the Western Pacific, IOC/WESTPAC, was held in Busan, Republic of Korea on 9–12 May 2012. During the Session, the WESTPAC ocean research priority plan, and regional programmes, projects and working groups were reviewed and approved by the member states. IOC Vice-Chair for Group V, Prof Adoté Blim Blivi was invited to attend the Session with the support from the Republic of Korea for mutual cooperation between IOC/WESTPAC and IOCAFRICA.

The Twelfth Session of the IOC/UNESCO Sub-Commission for the Caribbean and Adjacent Regions (SC-IOCARIBE-XII) was held in Panama City, Panama from 9 to 12 April 2013 with the support of the Panama Maritime Authority. The Session was attended by 37 participants from

twelve countries of the Caribbean Region, UN Agencies and regional organizations. The Session reviewed progress made during the intersessional period 2011–2013, and adopted three recommendations concerning: (i) Review of the IOCARIBE Secretariat; (ii) Caribbean Large Marine Ecosystem (CLME); and, (iii) IOCARIBE-GOOS. The IOC Executive Secretary attended the meeting, offering three presentations and interacting with delegates. Again, there will be a report on this at this Assembly.

It is also worth mentioning two workshops held in the WESTPAC area.

One was a workshop on “The Status of Marine Renewable Energy Technology Development in the Western Pacific” held in Malacca, Malaysia, 16–18 February 2012. This workshop was organized by the Malaysian government in collaboration with IOC/WESTPAC and the Republic of Korea in order to exchange information on the current status and future potential of marine renewable energy in the Western Pacific countries. Extensive interests were expressed from the technological as well as economical points of view to the development of future marine renewable energies using tide, current, wave, wind, and ocean temperature, etc.

The other was the UNESCO/UNU Symposium on “The Great East Japan Tsunami on 11 March 2011 and Tsunami Warning Systems: Policy Perspectives” held during 16-17 February 2012 at United Nations University, Tokyo, Japan with an attendance of about 300 participants. Welcoming remarks were provided by His Imperial Highness Crown Prince Naruhito. This symposium was officially opened by the Director General of UNESCO, Ms Irina Bokova, and the Rector of the United Nations University, Dr Konrad Osterwalder. Former Director General of UNESCO, Mr Koichiro Matsuura provided closing remarks.

Furthermore, I have to mention three regional workshops held in Group II, Group III and Group V respectively.

The first meeting was held in Varna, Bulgaria during 19–22 March 2012 by the Institute of Oceanology, Bulgarian Academy of Science with the support of the Korean government. Two fora were organized consecutively during the meeting, namely, one forum on "The future of IOC toward next 10 years" for the purpose of exchanging views among IOC ex-chairs, and another forum on "The Operational Oceanography of IOC for Group II" to share information on the current status of ocean observation system in the region of Eastern Europe.

Following decision 4.2 of the 45th Session of IOC Executive Council to improve IOC's activities in the area of sustained ocean observations and services, the second workshop was held 5-8 March 2013, in Rio de Janeiro, Brazil, with the participation of 36 experts from 15 Member States of Group III and Korea, under the auspices of the Brazilian Navy and the government of Republic of Korea. This workshop was intended to broaden the discussion initiated at the Group II Forum held in Varna, Bulgaria, in 2012, and was organized in two consecutive fora—“The Future of Sustained Ocean Observations and Services in Group III” and “The Present Status of Sustained Ocean Observations and Services in Caribbean and Latin America Countries.” I am expecting such workshops to be continued in other regional groups as well.

The first African-Korea Forum on Ocean Sciences, Technology and Innovation was held in Cotonou, Republic of Benin, from 8 to 10 August 2012, with the support from the governments of Benin and Korea and also IOC. The Forum aimed to bring together the experts and policy makers working in marine science in order to identify gaps in ocean observation systems and to develop human capacity. There were about 100 participants from Benin, other African countries and Korea. The Forum received an unprecedented political support from the Government of Benin, by the attendance of His Excellency, The Minister of Environment, Housing and Urban Development of Benin, Mr Blaise Onisephore Ahanhanzo, and especially by a courtesy visit to His Excellency, the President of the Republic of Benin who was also the president of the African Union with 54 African countries, Dr Boni Yayi.

In May 2012, two IOC-related meetings were held in the Republic of Korea in conjunction with the "EXPO 2012 Yeosu Korea" which aimed in projecting a vision for green growth from the sea under the theme of "The Living Ocean and Coast". Namely they were:

- "The 2nd International Symposium on Effects of Climate Change on the World's Ocean", held in Yeosu, Korea from 13–20 May 2012 as a collaboration between IOC, ICES and PICES, and
- "The 4th Session of the Joint IOC-WMO Technical Commission for Oceanography and Marine Meteorology" in Yeosu, Korea during 23–31 May 2012 by IOC and WMO. The Session elected Mr Johan Stander (South Africa) and Dr Nadia Pinardi (Italy) as meteorology and oceanography co-presidents, respectively.

On the final day of 12 August 2012, UN Secretary-General Ban, Ki-Moon launched a new initiative called "The Oceans Compact" to protect the ocean and the people whose livelihoods depend on it, and called on countries to work together to achieve more sustainable management of this precious resource and address the threats it is currently facing.

The "Expo 2012 Yeosu Korea" concluded with the Yeosu declaration whose main goal is to enlighten the world's civil society to have greater stewardship over the protection of marine environment and simultaneously to seek sustainable use of the ocean for future generations. Through a series of ocean related events, I believe the awareness for the importance of the ocean in the national or international societies will be enhanced significantly.

On behalf of IOC, I had an opportunity to participate as a panelist at the International Ocean Forum 2012 held during World Ocean Week, 2-8 November, in Xiamen, China, with the theme of "Blue Economy, Green Growth - Science-Led Development of Marine Economy". The World Ocean Week of Xiamen provided a platform for promoting sustainable development of the ocean, particularly for regional cooperation and enhancing the interaction between the marine natural science and social science.

I would like to remind you of the letter addressed on 15 April 2013. From this we, IOC Officers, requested to the Member States that each government should be informed of the present financial situation of IOC so as to explore the ways to contribute to its extra-budgetary funds. We also stressed that all delegates participate fully in the discussion on the new Medium Term Strategy for 2014-2021 during this session.

Mesdames et Messieurs,

Nous avons célébré il y a trois ans le cinquantième anniversaire de la COI. Et en accord avec ses Statuts, la COI a poursuivi ses efforts de promotion de la coopération internationale et de la coordination des programmes dans les domaines de la recherche scientifique et des services océaniques ainsi que le renforcement des capacités. Ces efforts visent à promouvoir les connaissances sur la nature et les ressources de l'océan et de la zone côtière dans le but ultime d'aider les Etats membres à renforcer les mécanismes de prise de décision pour une meilleure gestion et la protection de l'environnement marin; bref, assurer le développement durable. A cet égard, l'Afrique et les petits Etats insulaires qui constituent une priorité majeure pour l'UNESCO et la COI méritent plus d'assistance pour le développement de leurs capacités dans le domaine des activités océanographiques.

Fort de son autonomie fonctionnelle au sein de l'UNESCO, la COI doit renforcer son rôle en tant qu'organe compétent et point focal des questions relatives à science océanique dans le Système des Nations Unies. Pour ce faire, notre Commission doit démontrer de façon continue sa capacité de leadership avec une participation active dans les activités régionales et internationales telle que la Conférence des Nations Unies sur le Développement Durable (RIO+20) à Rio au Brésil et l'initiative du Secrétaire Général des Nations Unies « Oceans Compact ». Dans ce contexte, la COI

doit faire preuve de volontarisme en restant toujours mobilisée et prête à montrer et démontrer l'importance des océans pour la vie humaine avec une attention particulière sur l'utilisation durable des ressources océaniques et l'économie verte.

L'océan joue un rôle clé dans le développement durable de notre planète, qui promet l'avenir de la COI avec l'océan bleu et vert. Depuis sa création en 1960, les activités de la COI semblent se concentrer davantage sur la science plutôt que de services. Cela porte du COI à faire face aux défis continus en provenance d'autres organisations internationales et nationales au cours de la dernière décennie en termes de son leadership dans le système des Nations Unies. Afin de répondre à des questions en suspens des Etats membres, la COI devrait développer la fonction de prévision océanique pour prédire des catastrophes liées à l'océan et le changement climatique sur l'océan mondial et des zones côtières et, en outre, trouver des mécanismes appropriés, dans le consensus, comme l'océanographie opérationnelle d'observation et de services ainsi que la recherche et la connaissance scientifique durable.

Il est vrai qu'aujourd'hui, nous faisons face à des difficultés dues à la réduction du budget de la COI et de l'UNESCO et également des questions urgentes reflétées dans les quatre actuels objectifs de haut-niveau de la Commission. Malgré ces difficultés, je reste persuadé que l'avenir de la COI est prometteur et prospère à condition que nous avançons ensemble les Etats membres, en travaillant la main dans la main. Mes chers collègues et distingués Représentants des Etats Membres, allons-y ensemble!

Il est vrai que nous avons aujourd'hui de nombreuses difficultés causées par les réductions budgétaires récentes et également par les questions liées à l'océan urgentes formulées par les quatre actuels objectifs de haut niveau de la COI. Cependant, je suis convaincu que l'avenir de la COI sera prometteur et prospère si nous nous efforçons de l'avant main dans la main avec nos Etats membres. Mes chers collègues et distingués Représentants des Etats Membres, allons-y ensemble!

Je vous remercie de votre aimable attention.

[Ladies and gentlemen,

We celebrated 50th anniversary of IOC three years ago. As stated explicitly in the Statutes, IOC has been working on promoting international cooperation and coordinating programmes in research, services and capacity-building, in order to learn more about the nature and resources of the ocean and coastal areas and to apply that knowledge for the improvement of management, sustainable development, the protection of the marine environment, and the decision-making processes of its Member States. In this regard, Africa as well as Small Island Developing States, as priority for UNESCO and for IOC, need more help for their capacity development in ocean activities.

In order to strengthen the role of IOC as the competent body and focal point for ocean science matters in the UN system with a functional autonomy within UNESCO, IOC should voluntarily demonstrate its capability by actively participating in regional and international activities such as the UN Conference on Sustainable Development (Rio+20) in Rio, Brazil and UN's "The Oceans Compact". In this connection, IOC should be always ready to demonstrate the importance of the ocean for human life through focusing on the sustainable use of the ocean and the blue green economy.

The ocean plays a key role in the sustainability of our planet, which promises IOC's future with the blue and green ocean. Since its establishment in 1960, IOC's activities seem to be more focused on science rather than services. This brings IOC in facing continuous challenges from other international and domestic organizations during the last decade in terms of its leadership in the UN system. In order to meet the pending issues of member states, IOC should develop the function in ocean forecasting for predicting ocean-related disasters and climate change over the global ocean

and coastal seas and, furthermore, find proper mechanisms, in consensus, such as operational oceanography for sustainable observation and service as well as scientific research and knowledge.

It is true that today we have many hardships caused by recent budgetary reductions and also by urgent ocean related issues as stated in the current four High Level Objectives of the IOC. However, I am sure that the future of IOC will be promising and prosperous if we strive forward hand in hand with our member states. Let's go together!

Thank you for your attention.]



The Ocean Health Index: Global and regional applications and future directions

Benjamin Halpern

Director, Center for Marine Assessment and Planning; Research Scientist, NCEAS/UCSB
IOC Anton Bruun Memorial Lecture; 28 June, 2013

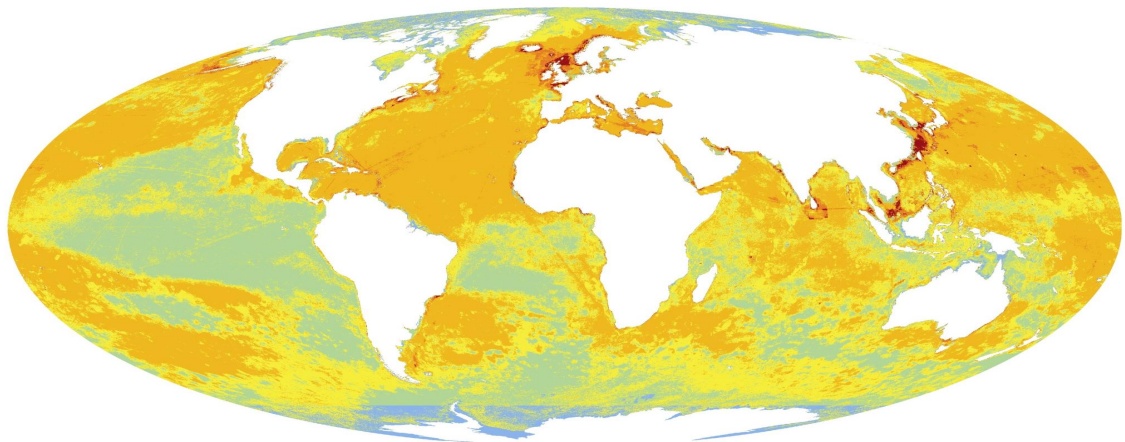


**Our coasts and ocean are changing in
unprecedented ways**





Global Cumulative Impact Map



■ Very Low Impact
■ Low Impact

■ Medium Impact
■ Medium High Impact

■ High Impact
■ Very High Impact

Policies strive for healthy oceans, without a tool to measure health

WEST COAST GOVERNORS'
AGREEMENT on OCEAN HEALTH
CALIFORNIA OREGON WASHINGTON



PugetSoundPartnership
our sound, our community, our chance



You can't manage what you don't
measure

Lord Kelvin



What is 'healthy'?

DOES HEALTHY MEAN PRISTINE?



**People are a part of marine ecosystems
Everywhere.**







A healthy ocean delivers a range of benefits to people now and in the future.



Key attributes of the Ocean Health Index

- Coupled social-ecological systems, focused on benefits/services to people
- Clearly defined reference points
- Current state + likely future condition
- Neutral and scientific; not prescriptive

10 Public Goals and Sub-goals



Food Provision

Fisheries
Mariculture



Artisanal Fishing Opportunities



Natural Products



Carbon Storage



Coastal Protection



Tourism and Recreation



Livelihoods & Economies

Livelihoods
Economies



Sense of Place

Iconic Spp
Places



Clean Waters



Biodiversity

Species
Habitats

Establishing reference points

1. Decide what to measure
2. Decide what to compare it to

Samhuri et al. 2012 Ecosphere



Types of reference points

1. Functional relationships
2. Spatial comparisons
3. Temporal comparisons
4. Established benchmark

Samhuri et al. 2012 Ecosphere

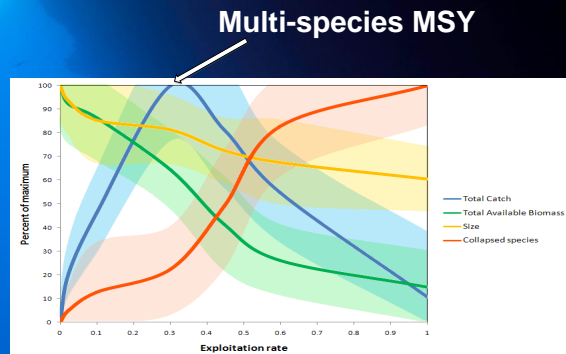


Types of reference points

1. Functional relationships
2. Spatial comparisons
3. Temporal comparisons
4. Established benchmark



Food Provision:
Wildcaught Fisheries



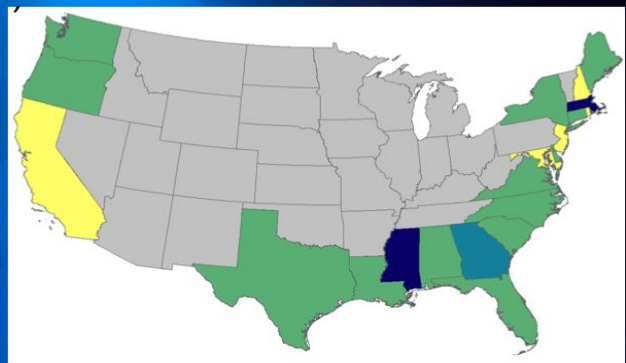
Types of reference points

1. Functional relationships
2. Spatial comparisons
3. Temporal comparisons
4. Established benchmark



Livelihoods:
wages

Worse Better



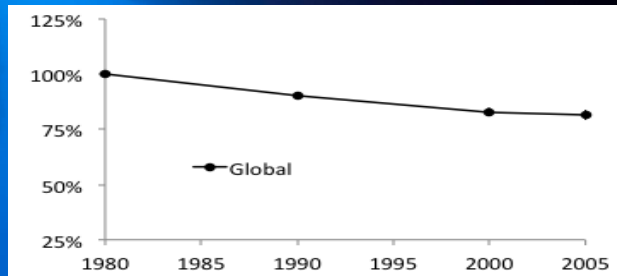
Types of reference points

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2. Spatial comparisons
3. Temporal comparisons
4. Established benchmark



Carbon Storage

Change in mangrove area extent



Types of reference points

1. Functional relationships
2. Spatial comparisons
3. Temporal comparisons
4. Established benchmark



Biodiversity:
Species



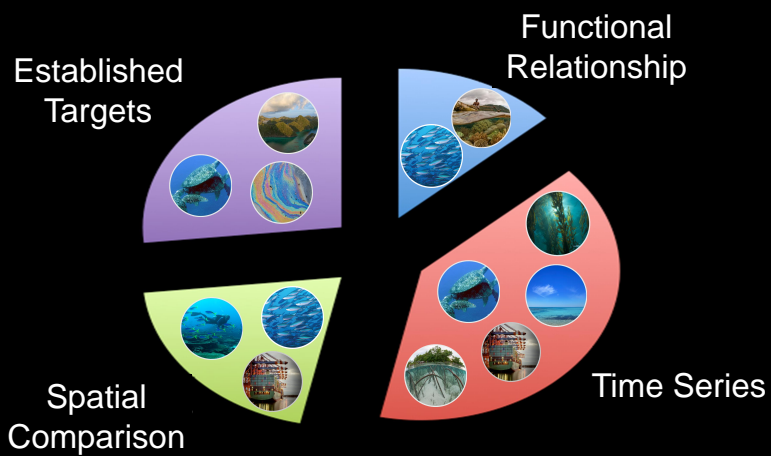
- Least concern
- Near threatened
- Vulnerable
- Endangered
- Critically endangered
- Extinct

Selecting the right type of reference point

1. The gold standard: functional relationship
2. Otherwise, be SMART
 - Specific
 - Measurable
 - Ambitious
 - Realistic
 - Time-bound



Reference Points for the Global Analysis



Coastal Livelihoods & Economies



Pressures and Resilience indicators

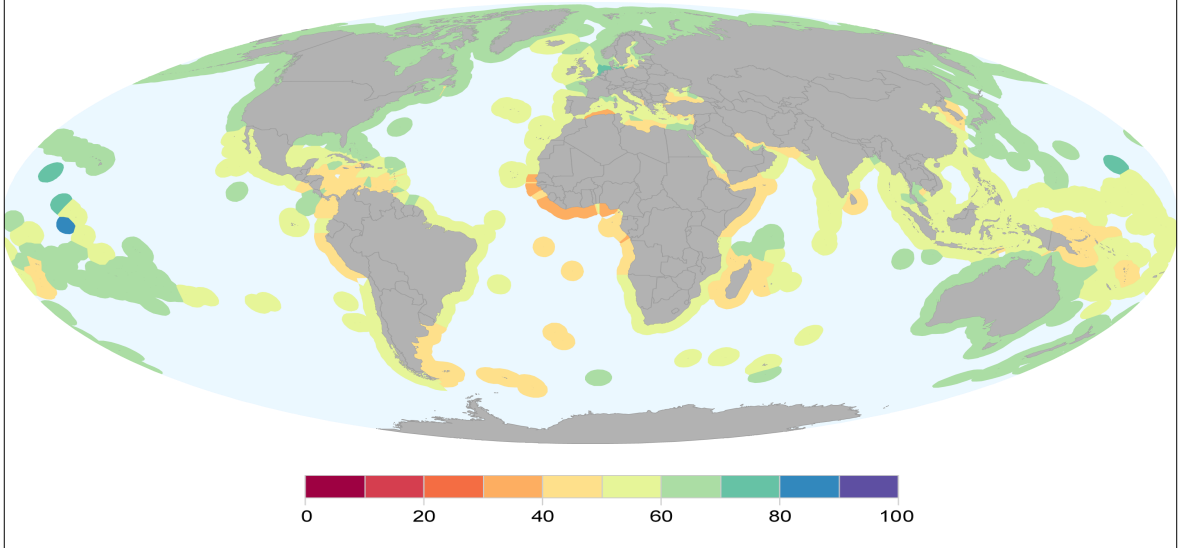
Pressures

- Chemical pollution
- Nutrient pollution
- Habitat destruction
- Alien species
- Genetic escapes
- Commercial fishing (high and low bycatch)
- Artisanal fishing
- Social pressures

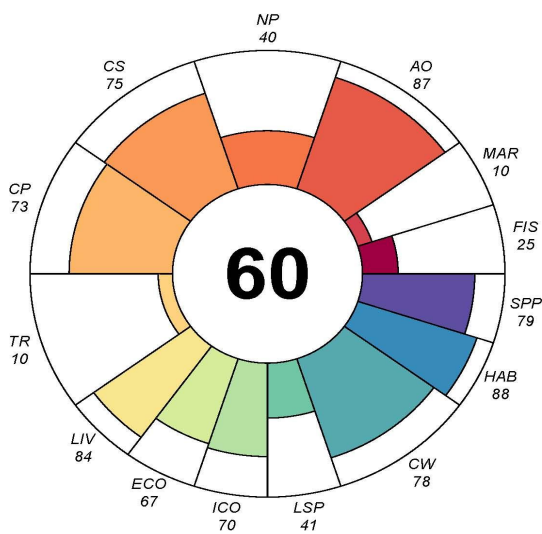
Resilience

- CBD habitat signatories
- Percent of EEZ in MPAs
- Fisheries management effectiveness
- Ecological integrity
- Quality of governance (World Governance Indicators)

Global Ocean Health Index

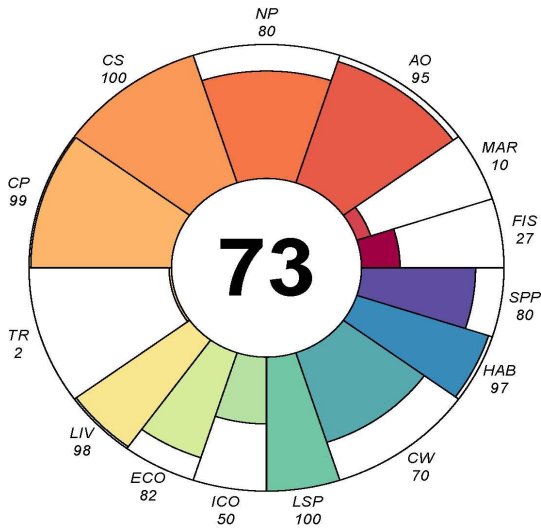


Global



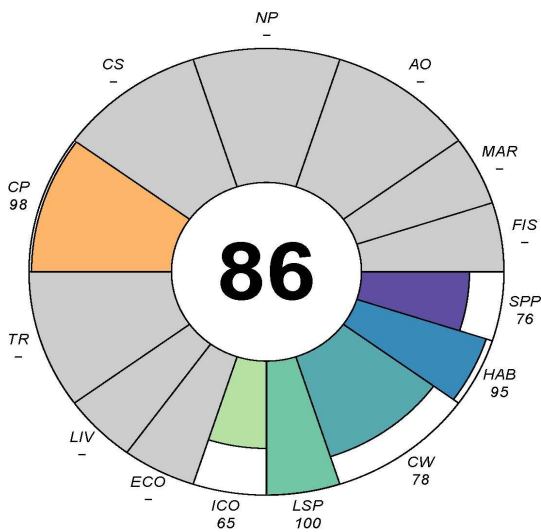
- NP = Natural Products
- AO = Artisanal Opportunities
- MAR = Mariculture
- FIS = Fisheries
- SPP = Species
- HAB = Habitats
- CW = Clean Waters
- LSP = Lasting Special Places
- ICO = Iconic Species
- ECO = Economies
- LIV = Livelihoods
- TR = Tourism & Recreation
- CP = Coastal Protection
- CS = Carbon Storage

Germany



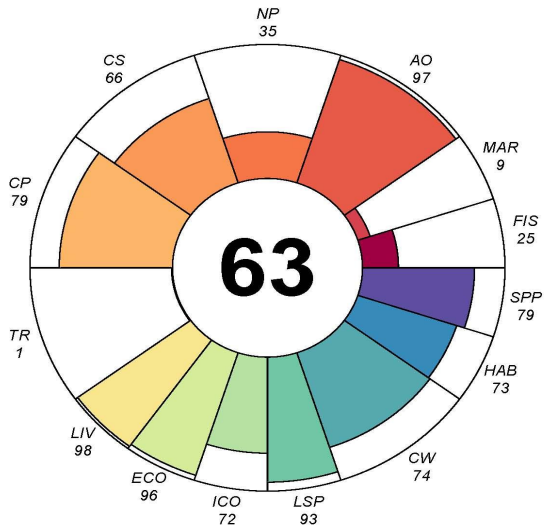
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Jarvis Island



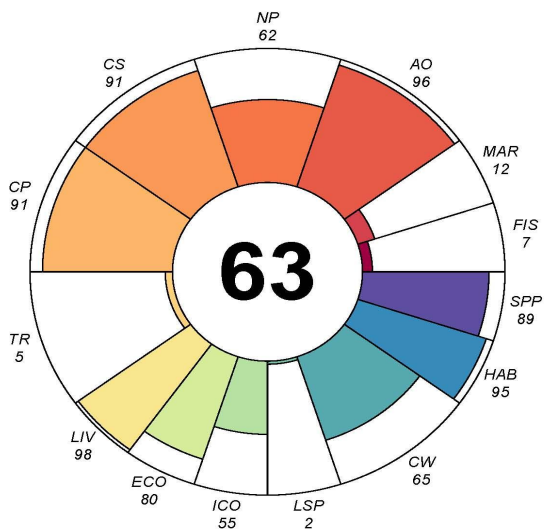
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United States



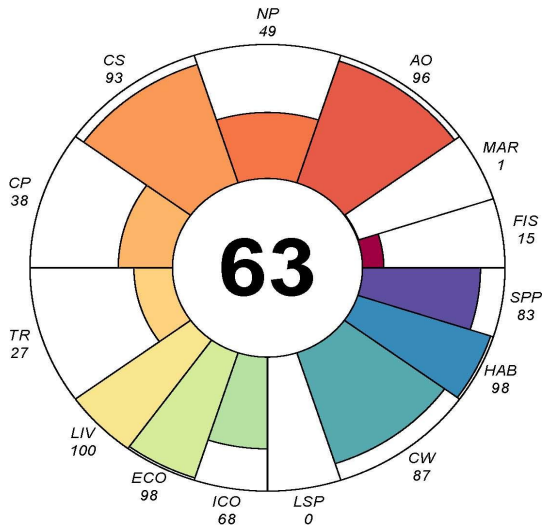
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Israel



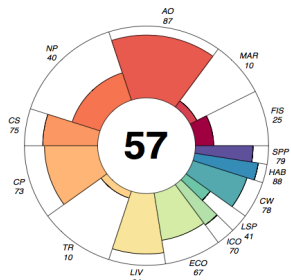
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United Arab Emirates

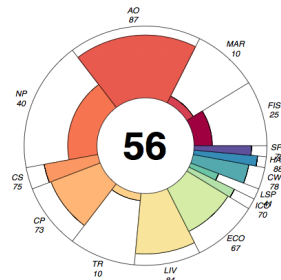


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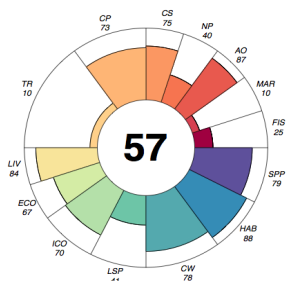
Extractive



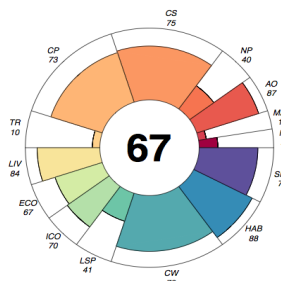
Strongly Extractive



Non-extractive



Preservationist

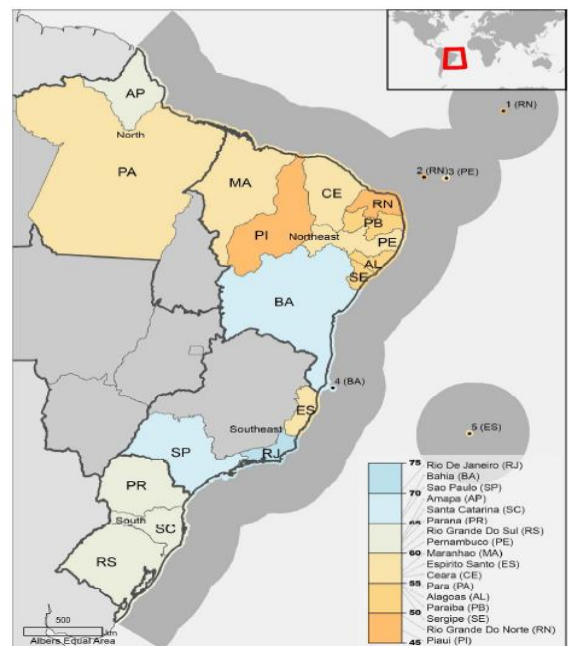


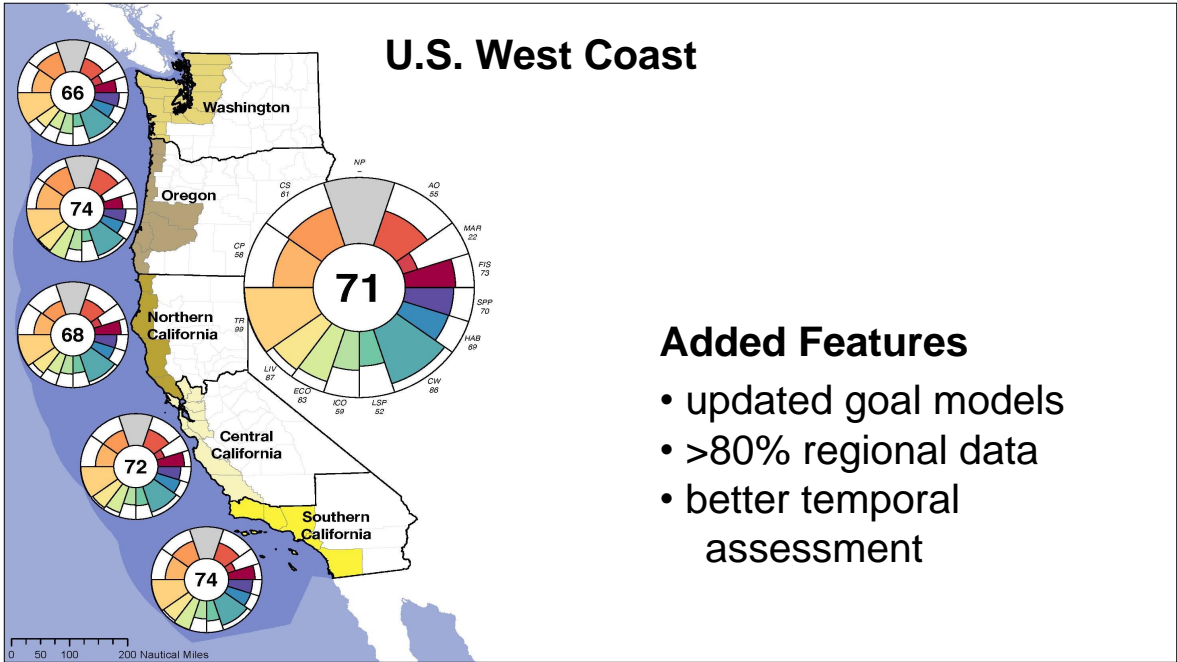
Current Activities and Next Steps

- Regional Applications

Brazil

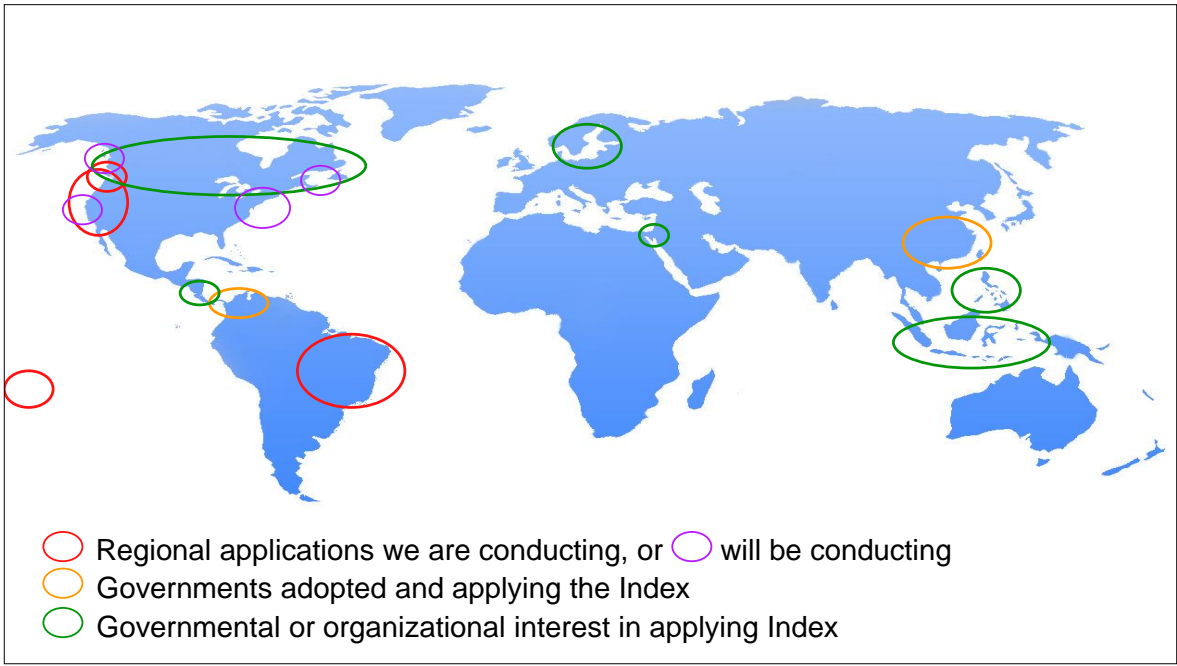
- unique score for each of 17 coastal states
- best available regional data





Added Features

- updated goal models
- >80% regional data
- better temporal assessment



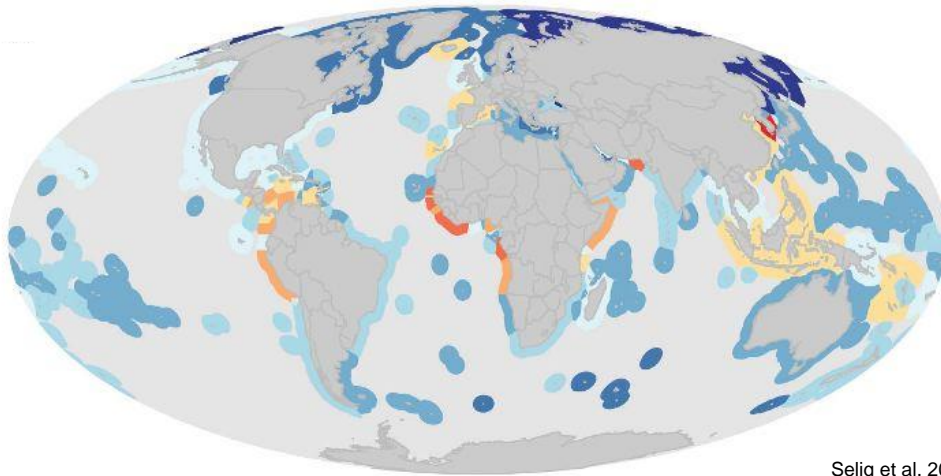
Current Activities and Next Steps

- Regional Applications
- International Applications
 - LMEs/High Seas, Transboundary Water Assessment Project
 - UN's World Ocean Assessment
 - Biodiversity indicators Partnership (Aichi target 10)

Current Activities and Next Steps

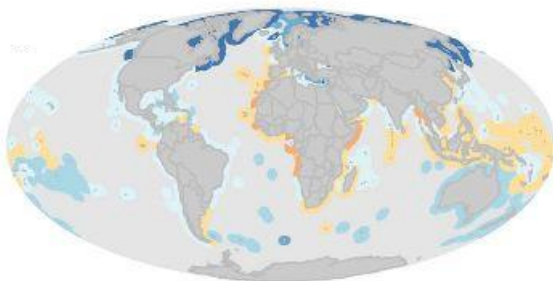
- Diving deeper into some goals

Biodiversity

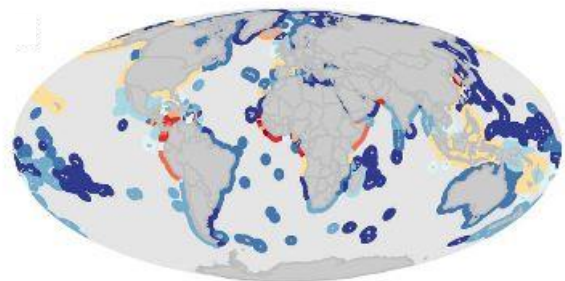


Selig et al. 2013 PLoS One

Species

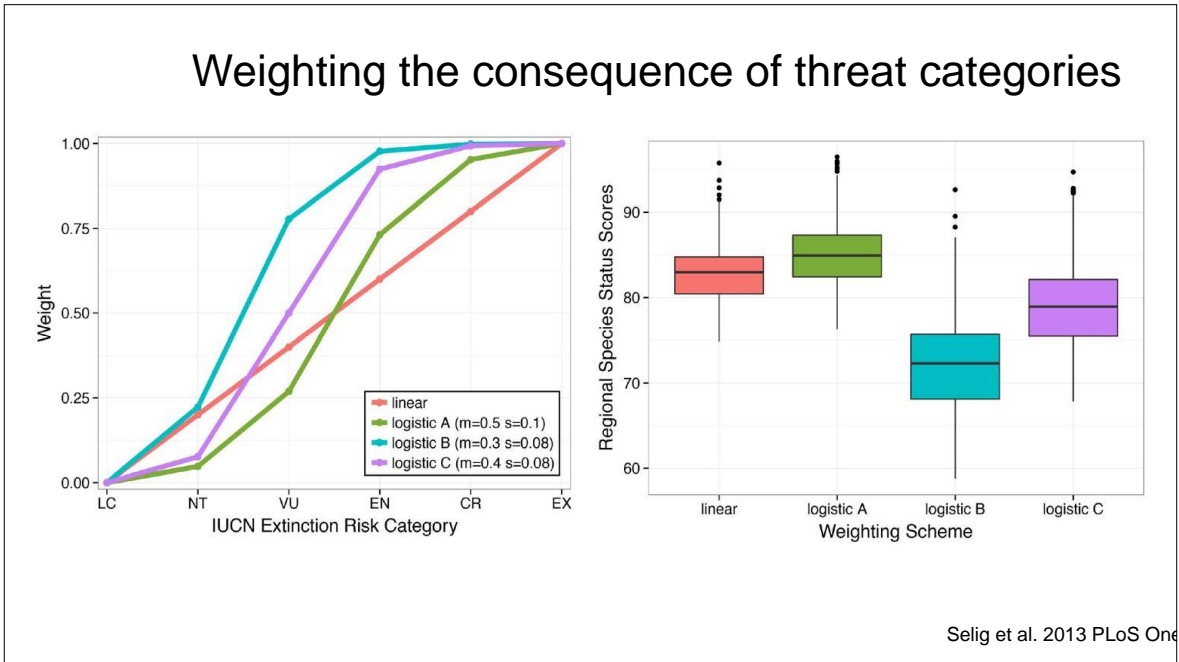
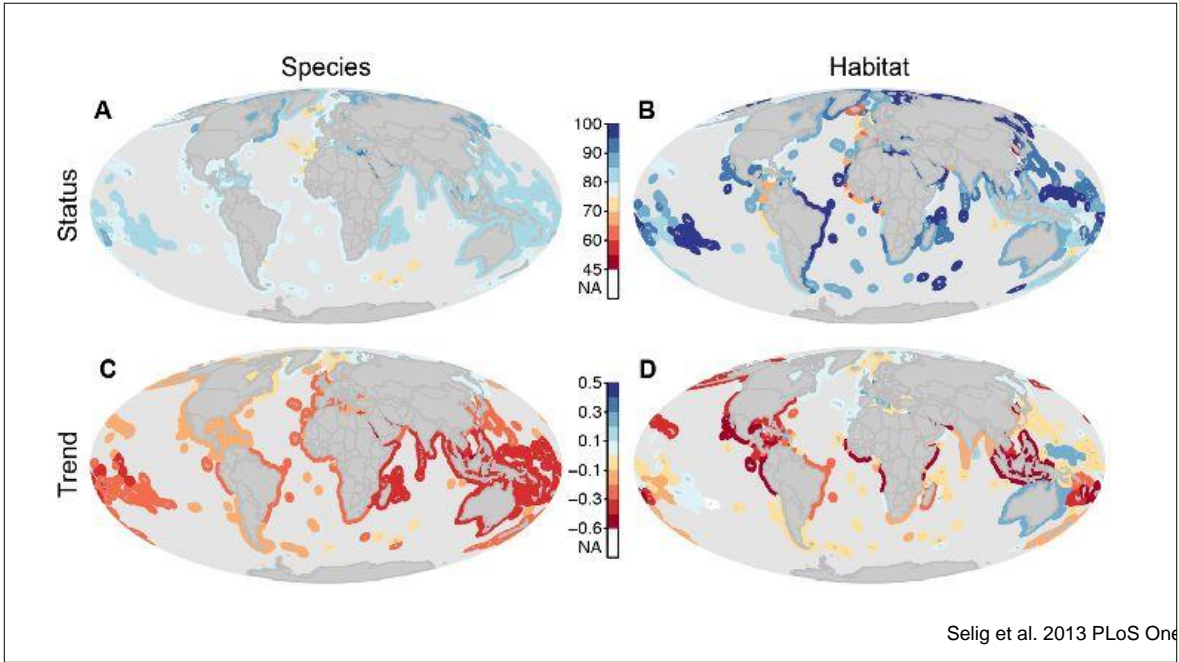


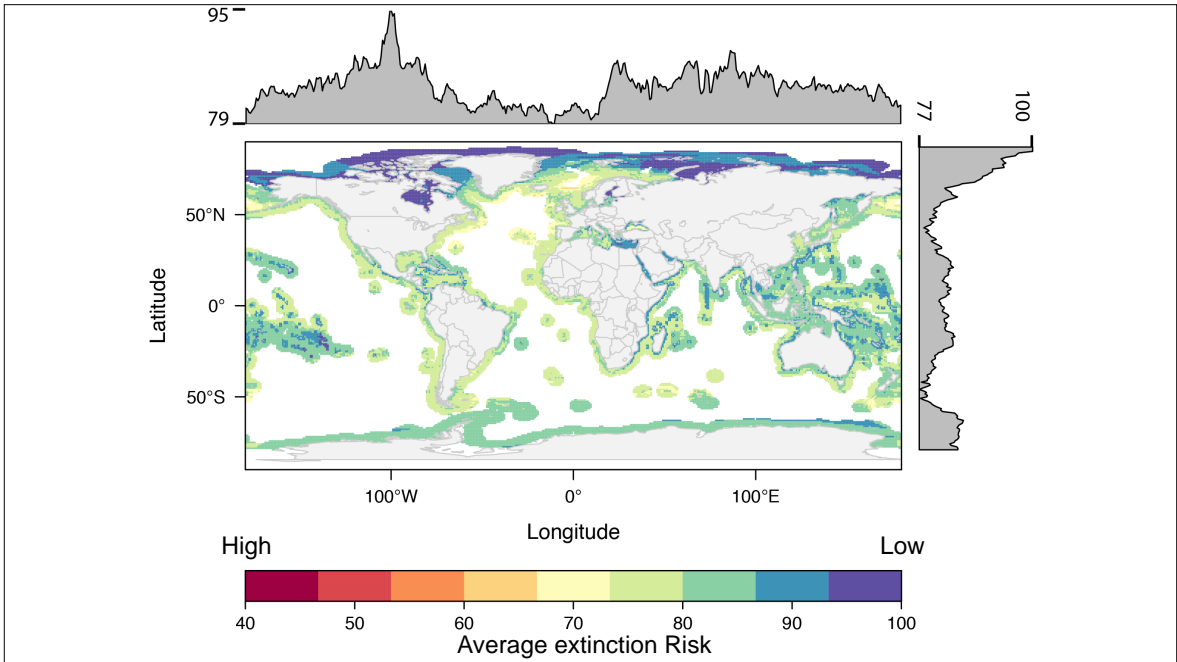
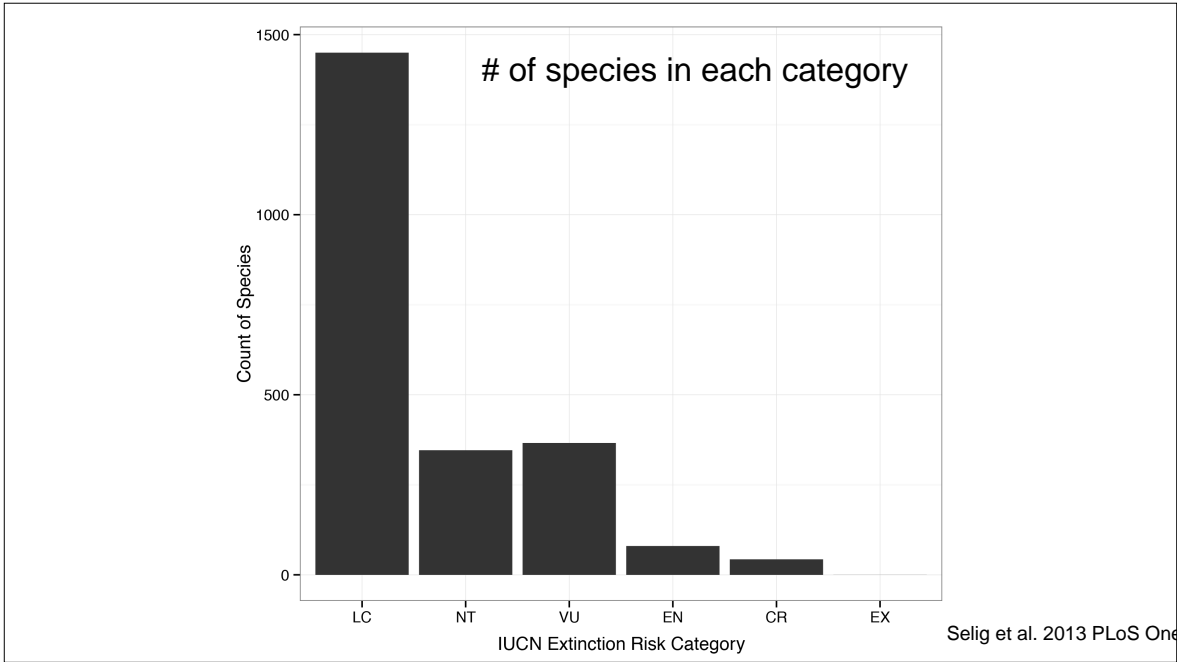
Habitats

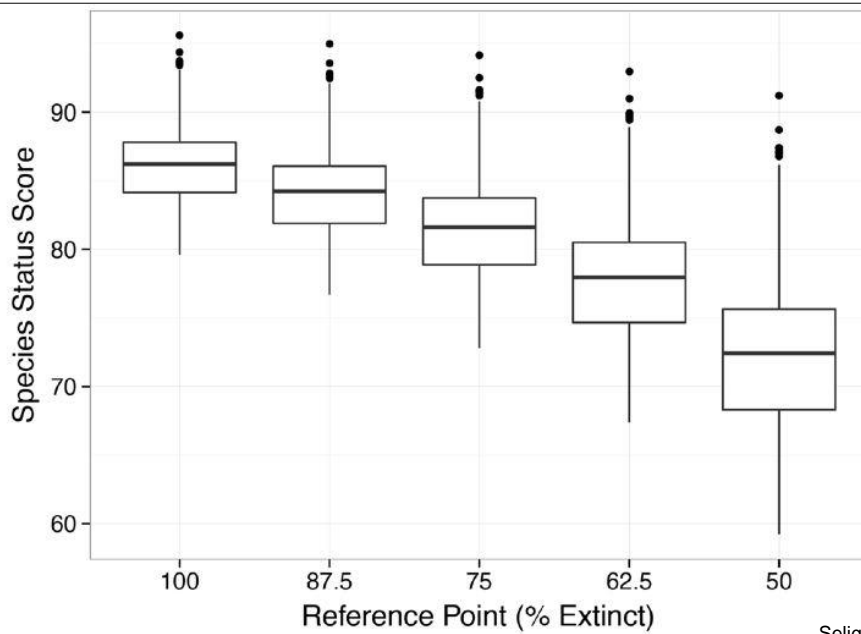


QuickTime™ and a decompressor are needed to see this picture.

Selig et al. 2013 PLoS One







Selig et al. 2013 PLoS One

Current Activities and Next Steps

- Diving deeper into some goals
- Updating/refining global assessment

Global update 2013

- New goal models for Food Provision and Tourism & Recreation
- ~10 new data layers (e.g. for global domestic tourism)
- ~85% of all layers updated
- High Seas (early 2014)
- Antarctica (early 2014)

Current Activities and Next Steps

- Diving deeper into some goals
- Updating/refining global assessment
- Toolbox



Building a Toolbox

- Allow for anyone to calculate the Index at any scale and any location
- Allow for exploration of Index results
- Assess implications of management scenarios



OCEAN
HEALTH
INDEX

www.oceanhealthindex.org



Human capacity building in ocean sciences: A personal perspective

Shubha Sathyendranath
Partnership for Observations of the Global Oceans
Secretariat at Plymouth Marine Laboratory, UK

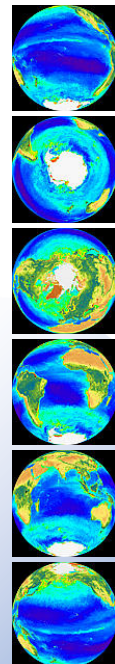
Why do we need more people in ocean sciences?

- **Stewardship of oceans:** sustainable management of coasts, the Exclusive Economic Zone, the shared heritage of international waters
- **Operational oceanography:** increasing demands for sustained ocean observations (fisheries, transport, energy, mining, recreation)
- **Climate change:** in our struggle to understand how Earth functions as a system, oceans hold many keys and hide many secrets

Capacity development for ocean stewardship becomes, in this context, an imperative for all, not just the prerogative of a privileged few.

In the early days of IOC, Dr. NK Panikkar recognised the importance of investing in young people (“instruments and ships rust” as quoted by Dr. Hempel).

The need, if anything, is greater today, than it was then.



The task is great

What can we learn from past experience, to make our effort more effective?

- Models exist, to guide our work
- A variety of approaches and players is needed
- What guiding principles have emerged so far?
- What are the challenges?

One man can make a difference

Dr. NK Panikkar: Scientist, Teacher



Key figure in international oceanography

- Chair of IOC 1964-65
- Active in SCOR
- Instrumental in design of IIOE



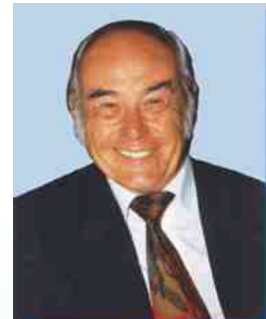
Father of Indian Marine Sciences

- First Director of National Institute of Oceanography, India
- Established Indian Ocean Biological Centre, Ernakulam, India
- Instrumental in setting up many fisheries institutions in India
- Vice Chancellor, Cochin University
- Historian of ancient oceanography

Prof. Dr. Otto Kinne:

Scientist, Publisher, Philanthropist, Teacher

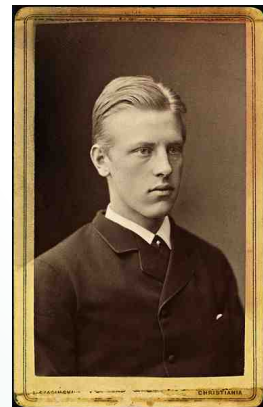
- Founder of Inter-Research, publisher of nine scientific journals in aquatic and climate science
- The Otto Kinne Foundation supports promising young environmental scientists in eastern European countries, without distinction of race, religion, nationality or sex.
- The IRPE Prize (International Recognition of Professional Excellence) honors a young ecologist who has published uniquely independent, original and/or challenging research.
- Founder of International Ecology Institute (ECI), a non-profit organization of research ecologists dedicated to fostering ecological knowledge and awareness.
- The ECI Prize is awarded to an ecologist distinguished by outstanding and sustained scientific achievements.
- President of Eco-Ethics International Union



A country can make a difference

Norway

- Nansen Centres (India, South Africa, Russia, China): To serve the society through advancing knowledge on the behavior of the marine environment and climate system in the spirit of Fridtjof Nansen
- Nansen Scientific Society (Knowledge without Borders)
- Research vessel Dr Fridtjof Nansen: has provided support for fisheries surveys off the coasts of more than 60 poor countries
- Impact of a single individual, Dr. Nansen (explorer, scientist, diplomat and humanitarian), on a national programme is striking



© Anton Bergstrom
MarineTraffic.com

RV Dr. Fridtjof Nansen at Cape Town

Germany

- German Academic Exchange Service DAAD. “Change by Exchange”: provides information and financial support to over 67,000 highly-qualified students and faculty for international research and study
- Humboldt Research Fellowship for postdoctoral researchers to carry out a long-term research project of their own choice in cooperation with an academic host they have selected themselves at a research institution in Germany.

These are open to all sciences. But oceanographers have certainly benefited from these opportunities

France

- IRD (Institut de Recherche pour le Développement)
Emphasizing interdisciplinarity, the IRD has focused its research for over 65 years on the relationship between man and environment, in Africa, Mediterranean, Latin America, Asia and the French tropical overseas territories.
- Les Unités Mixtes Internationales de CNRS: One or more foreign laboratories linked to French Laboratories. CNRS deputed each year young scientists and teachers to the foreign laboratories
- French Government International Fellowships

India

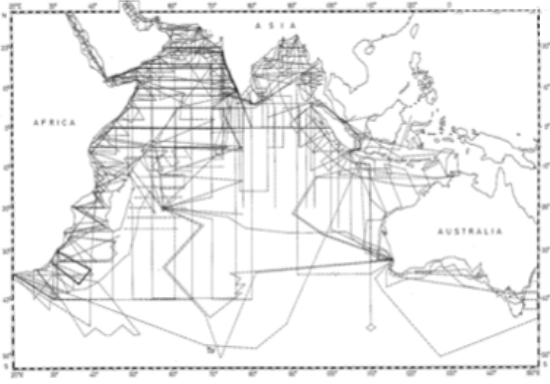


International Training Centre for Operational Oceanography at INCOIS (Hyderabad): To provide advanced training in operational oceanography for young scientists, technical persons and decision makers from India, Indian Ocean Rim countries and other developing nations on a regular basis, to enable creation of a large pool of trained young manpower with core skills.



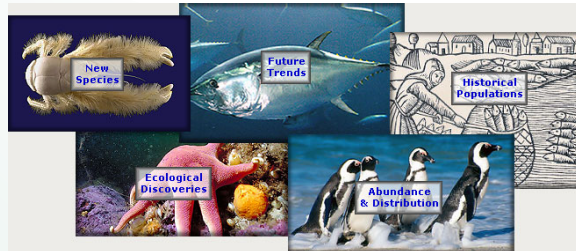
International collaboration can
make a huge impact

International Indian Ocean Expedition 1959-1965



Cruise tracks of research vessels during the IIOE

- A true voyage of discovery to a monsoon-dominated system
- Capacity building was an integral part of the plan
- The origin of oceanography in India can be traced back to the Indian Ocean Biological Centre established in Kochi
- Wealth of scientific data still valued today
- Inspiration for IIOE-2, now under planning



- The Census of Marine Life was a global network of researchers from more than 80 nations engaged in assessing and explaining the marine biodiversity.
- The Natural Geography In Shore Areas (NaGISA) project aimed at inventorying and monitoring habitat specific biodiversity in the global nearshore. NaGISA held a unique position in the Census of Marine Life as an ambassador project, linking CoML to local interests around the world.
- By virtue of the international nature of the project, and its commitment to involve scientists at a level that was appropriate for their country and their region, it was able to create a world community dedicated to the task, which is perhaps the greatest legacy.

Small investments can make huge differences



POGO-SCOR Fellowship Programme (Initially: POGO-IOC-SCOR Fellowship Programme)



- Supports visit of young scientists from developing countries to laboratories abroad for training for a period of up to 3 months.
- SCOR is a partner (and IOC, until 2005).
- Between 9 and 15 Fellowships awarded every year since 2001 (148 by 2013).
- Programme in high demand (up to 8 times more applications than funds available).
- Feedback has been uniformly enthusiastic.
- EAMNet (European Project, led by PML, UK) has implemented fellowships along these lines for African countries.
- Cost per fellowship is on average about €3,000



University of Cape Town: POGO Bursary



- Provides bursary for an African student (from outside South Africa) to undertake graduate programme at UCT.
- Started in 2008, with budget of about US\$ 5,000.
- Seen as a vehicle for African countries to benefit from oceanographic expertise in South Africa and to develop UCT as a regional centre of excellence in oceanography.



Universidad de Concepción Austral Summer Institute

Austral Summer Institute is an initiative of the Universidad de Concepción, with international collaboration and funding support from various sources (including a UNESCO Chair).

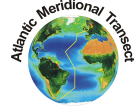


- Organized as a series of short, intensive courses on various topics in ocean sciences.
- Invited lecturers of international repute from around the world.
- The program was designed primarily for the benefit of students from Chile.

POGO support allows participation of students from neighbouring countries (about 6-8 students each year). Modest contribution, \$5,000, high impact.



POGO-AMT Fellowship Programme



- Since 2008, supports participation of one trainee from a developing country in the Atlantic Meridional Transect (AMT) cruises from the UK to the Southern Ocean.
- Initiated jointly with SCOR; now being continued as a POGO Programme.
- Fellows so far have been from Uruguay, Philippines, Czech Republic, Egypt, Brazil and India.



Aims:

- For Fellow to transfer new knowledge and skills acquired to the home institution;
- To promote collaboration between the host and home institutions.



- Programme provides for participation in cruise preparation (one month), in the cruise itself, and in post-cruise data analysis and interpretation (up to 2 months).
- Expansion of this programme to other cruises (Porcupine Abyssal Plain Cruises).
- Budget GBP 5,000 per trainee.

Long-term commitment is essential

Nippon Foundation – POGO Visiting Professorship Programme 2004 - 2007

Provided unique opportunity for capacity building through visits of eminent scientists to developing countries for training and building facilities.

- 2004: Prof. Trevor Platt (Canada) to NIO-Kochi, India
Prof. Motoyasu Miyata (Japan) to USP, Fiji
- 2005: Dr. Charitha Pattiaratchi (Australia) to NARA, Sri Lanka
Dr. Robert Frouin (USA) to INPE, Brazil
- 2006: Dr. Satsuki Matsumura (Japan) to IO, Vietnam
Prof. Vladimir G. Koutitonsky (Canada) to INSTM, Tunisia

Now continued on a more modest scale as the POGO Visiting Professorship Programme.



POGO Visiting Professorship Programme (since 2009)

- Modest successor to the NF-POGO Visiting Professorship Programme
- POGO funds 1 professor every year to visit an institute in a developing country for between 2 weeks and 3 months.
- Aims to provide mentoring and tutoring, develop collaborations and enhance networking.
- Visiting Professorships to date:
 - Prof. Stephen Hawkins (UK) to Argentina (2010)
 - Profs. Lisa Levin and David Checkley (USA) to Namibia (2011)
 - Prof. Walker Smith (USA) to Viet Nam (2012)
 - Prof. Iossif Lozovatsky (USA) to Sri Lanka (2012).



Nippon Foundation – POGO Centre of Excellence – since 2007

- Provides unique opportunity for training for 10 months at a POGO Institute. First phase was held at Bermuda Institute of Ocean Scientists
- Training programme includes specialised modules of 2-3 weeks each (including guest lecturers from around the world; on-board training on research vessel; project work).
- Some 10 candidates are selected each year, primarily from developing countries, but not exclusively.
- Every year regional training programme conducted in a developing country as part of the CofE.
- IODE is a partner.
- Networking is a high priority for the programme.



Nippon Foundation – POGO Regional Training Programme

Part of the activities of the NF-POGO Centre of Excellence.

Uses previous trainees as nucleus for regional programme.

Also a vehicle for identifying suitable candidates for other capacity-building initiatives.



Each year, a regional training course is organised:

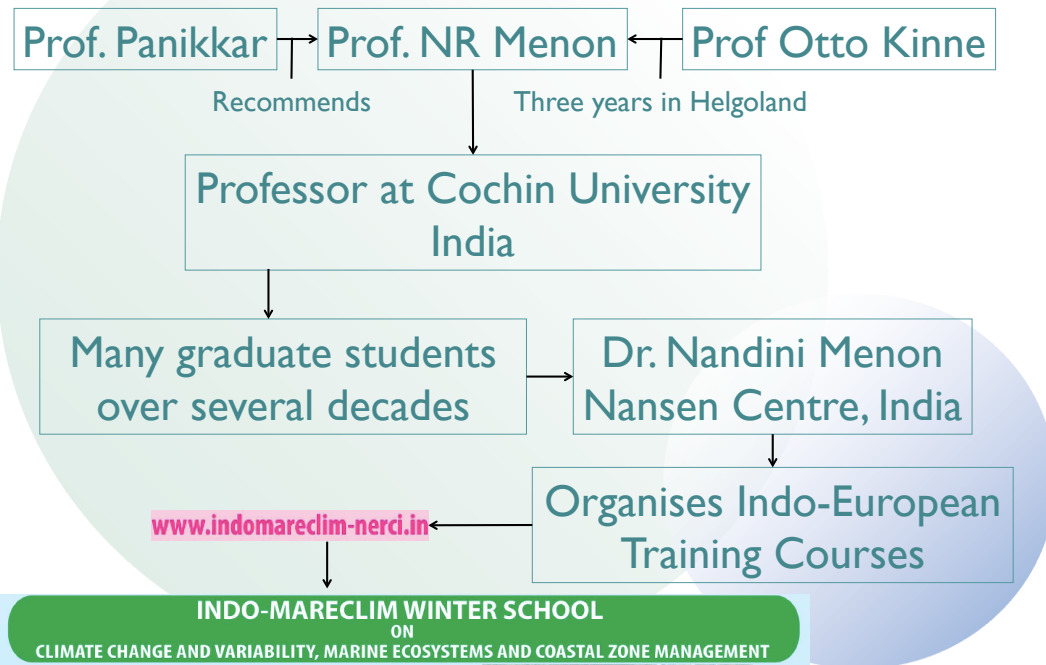
In 2009-2010: Brazil (host: Milton Kampel)

In 2010-2011: Vietnam (host: Prof. Hoang Son Tong Phuoc)

In 2011-2012: India (host: Srinivas Kumar)

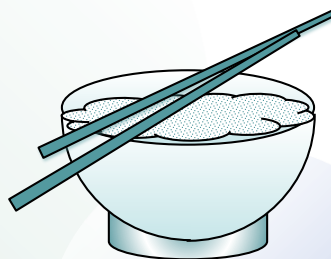


Great leaders have a cascading influence



It is not just about science

- Success in international science collaboration requires that we reach across cultural barriers
- More than colleagues, we need friends to walk the extra mile with us (or to sail the seas).
- “Eating from the same bowl”: the NF-POGO Centre of Excellence Programme promotes cultural sensitivity as well as scientific excellence



The message can make the difference

Partnership for Observation of the Global Oceans



≡ The São Paulo Declaration ≡

2001

The Participants of POGO call upon the world leaders of government, industry, science, and education to use their influence and resources, within their own countries and through relations with others, to devote necessary attention to extending ocean observing systems in the Southern Hemisphere, as a minimum requirement towards implementing an integrated strategy for observing the global oceans.

Partnership for Observation of the Global Oceans



The São Paulo Declaration

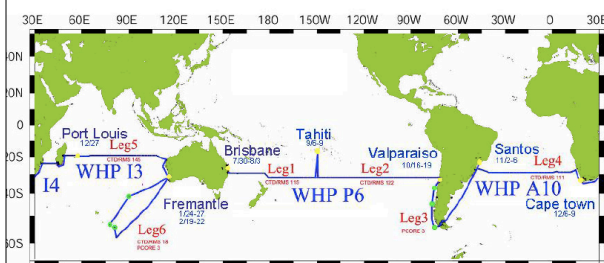
was used by:

- University of Concepción (Chile) to justify why Chile was uniquely positioned to make valuable and unique contribution to the field
- JAMSTEC (Japan) to justify a circumpolar cruise of their research vessel *Mirai* in the Southern Hemisphere
- NIOZ (the Netherlands) to justify a project for three long-term time-series stations (two in the Indian Ocean)
- AOML (USA) to initiate a new XBT line from Cape Town to Buenos Aires

POGO-IOC-IOCCG Scholarship JAMSTEC circumpolar cruise BEAGLE on *Mirai* in Southern Hemisphere



- First major cruise for JAMSTEC in Southern Hemisphere
- Interdisciplinary: geochemistry, geology, physical oceanography and bio-optics
- Strong participation from Southern Hemisphere countries
- Trained 18 oceanographers from S.America, Africa & Asia
- Incremental cost to programme very modest
- Outstanding scientific results

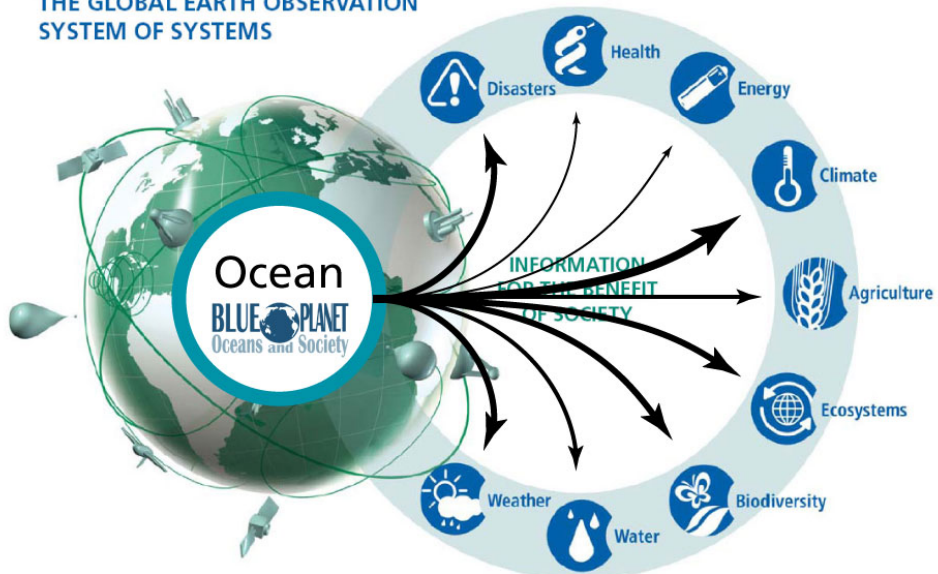


Important to speak with a common voice

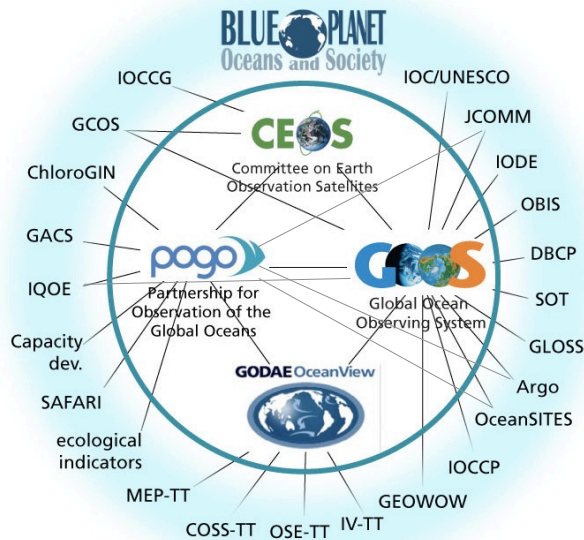
GEO GROUP ON
EARTH OBSERVATIONS

BLUE PLANET
Oceans and Society

**THE GLOBAL EARTH OBSERVATION
SYSTEM OF SYSTEMS**



A wide and diverse community



- In-situ and satellite physical, chemical, biological observations
- Analysis and modelling networks
- Links to end-users and stakeholders
- Developing individual and institutional capacity

Challenges and Questions

- How do we identify the Dr. Panikkars of the future?
- Is the community aware of available opportunities?
- How do we reconcile regional balance with overall excellence of candidates in a training programme?
- Are we able to compete well with other branches of sciences for resources?
- The rate of attrition of past trainees is high
- Nurturing past trainees is a challenge

NF-POGO Alumni Network for Oceans (NANO)

Initiated in 2010, it brings together the former scholars from all NF-POGO training programmes.

• The goals of the network are:

- ✓ to maximize the benefits to the alumni from the training received;
- ✓ to facilitate active contacts among alumni and with the faculty;
- ✓ to promote joint research activities that will build on the training.

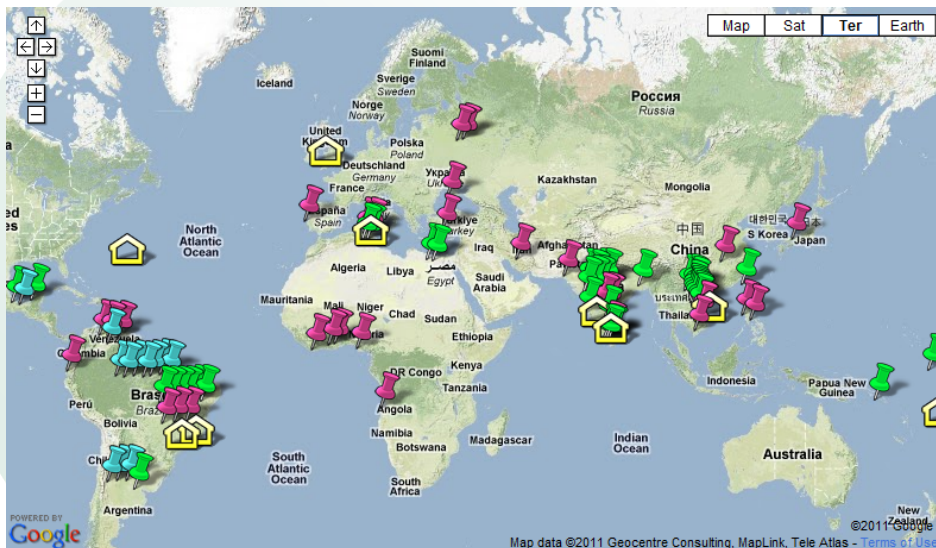
• NF-POGO alumni are the future leaders in their field and collectively, they can tackle the issues facing oceans and society today and in the future.

• Network is supported by 46 eminent scientists around the world.

• NANO has a website (www.nf-pogo-alumni.org) and biannual newsletter.



Where are the Alumni from?



150 official members from 37 countries

NANO Research Projects

- *Indian Sub-Continent*
Monitoring the coastal waters of India and Sri Lanka for the occurrence of HABs.
 - *South-East Asia*
Validation of a Harmful Algal Bloom Remote Sensing Model (RS-HAB) for SE Asian Region using time-series data from Vietnam.
 - *Latin America*
Pigment analysis using HPLC in ANTARES Network coastal time series stations (Latin America).
 - *North-West Africa*
Monitoring coastal pollution and erosion of Northern and Western Africa.
- Total budget for 2012: 125 K USD.



ChloroGIN: Chlorophyll Globally Integrated Network

- Grew out of a training course in Chile, where the participants, who did not want to return to status quo after training, conceived of Antares, a South American Network
- ChloroGIN, a network of regional networks, emerged from an IOC/GOOS/ POGO/GEO/PML sponsored workshop in Plymouth, UK (Sept 2006), to help maintain and promote sustained observations and facilitate user access to relevant data.
- Addresses a GEO task: “Build upon existing initiatives to develop a global network of organization-networks for ecosystems, & coordinate activities to strengthen observing capacity in developing countries”.
- ChloroGIN aims to promote *in situ* measurement of chlorophyll in combination with satellite-derived estimates & associated products.
- Recognised as a Pilot Project of GOOS
- Spawned EU Projects (e.g., EAMNet, DevcoCast)

www.chlorogin.org

Some Strategic Considerations

- Target capacity building to fill identified gaps in the ocean observing system and to serve society;
- Identify centres in developing countries that have shown drive and initiative in providing training and education at regional levels, and promote their activities;
- Encourage north-south partnerships and initiatives where both the trainer and the trainee benefit from the effort;
- Encourage south-south partnerships to disseminate regional expertise;
- Enable the trainee to become a trainer in the region, so that the knowledge can reach a wider population;
- Encourage the developing countries to take the lead in deciding on the types of capacity building that best serve their needs; and
- Make a long-term commitment.

A life-changing experience:

Not just for the trainees, but for the teachers as well

Lisa Levin and Dave Checkley (USA), POGO Visiting Professors to Namibia

“Arranging to work in Namibia requires interest and enthusiasm from visitors and their hosts. The payoff is exciting science, adventure, and the opportunity to help Namibia better understand and manage its own resources. It was the sabbatical of a lifetime for us both.”



“In this land, sunlight through the window serves as microscope light, tea strainers sieve animals from sediments, drinking bottles hold seawater samples, and water is filtered using gravity.”



Lisa Levin showing staff Aljerreau Kotze and Alfeus Namalenga (Aqauculture Directorate) how to sample sediment cores on board the Namibian research vessel *RV Welwitchia*

Sabbaticals in Namibia

► **Science Careers** From the Journal *Science*

<http://sciencecareers.sciencemag.org>

In Conclusion

- For those who are engaged in capacity building, the work is highly rewarding. So I encourage more colleagues to become engaged.
- The task is huge, and resources are limited. But inaction is not a solution. It is important to break the problem down to manageable levels and do what we can.
- Inspiring examples exist which we can aspire to emulate.
- As noted by Prof. Hempel in an earlier lecture, oceanography defies partition along the developed/developing country divide. When it comes to oceanography, we all need development. Working together is the only solution.
- The examples used here are not meant to be exclusive. The same points could have been made using a large number of other excellent examples.
- After half a century, Dr. Panikkar's position that we should invest in people first has been vindicated: with the right people in the right places, other assets follow. See India's success story in oceanography, which now has more research vessels than many developed countries. Equally true of other countries.
- But this does not happen overnight. Hence it is worth emphasising the need for long-term investment in human capacity development.



New: NF-POGO Centre of Excellence at AWI Germany

Web: www.awi.de/NF-POGO-AWI-COE

Programme:

- Integrated, multidisciplinary oceanography at a global scale.
- Formal introductory training
- Detailed courses will be provided both on core skills and specialised scientific topics
- Training in instrumentation, sample collection and analytical protocols.
- Conduct an independent research project during the programme.
- Programme will be developed in co-operation with IODE, Belgium, India and South Africa



Acknowledgement:

POGO: the leaders of ocean science institutes, who made a collective commitment to global capacity development as part of a long-term strategy to sustained ocean observations

The Nippon Foundation

Secretariat hosted by
Plymouth Marine Laboratory

The people in the Secretariat and outside: Trevor Platt, Sophie Seeyave, Vikki Cheung, Laura Ruffoni and Gerry Plumley, who work tirelessly to translate the strategy into action



Partnership for Observation
of the Global Oceans

<http://ocean-partners.org>