

IHB File No. S1/1100

<p>Circular Letter No. 19/2001 2 April 2001</p>

IHO WORK PROGRAMME 2001- 2005

Dear Sir,

A draft IHO Work Programme for the period 2001 – 2005 is attached herewith for comment by Member States.

As required by the IHO Planning Cycle, the Work Programme should be rolled forward one year annually, being amended to include any revisions proposed by the SPWG and the Member States. The draft Planning Cycle is contained in Proposal 3 submitted to the Extraordinary International Hydrographic Conference in March 2000.

In principle the revisions to the Work Programme for 2001–2005 should have been agreed in 2000, but this was not done because it was too soon after the Extraordinary I.H. Conference. Comments provided by the Strategic Planning Working Group at the end of 2000 have been included in this draft.

It would be greatly appreciated if your comments could reach the IHB before 30 April 2001.

In particular, the Chairmen of the Regional Hydrographic Commissions (RHCs) are kindly requested to study the Work Programme concerning the activities of the Commission they chair. It would also be useful that the agenda of the RHC conferences adhere to the Work Programme tasks when and where applicable.

You will have an opportunity to comment on the Work Programme 2002–2006 when the review process commences in April 2001, in accordance with the Planning Cycle.

On behalf of the Directing Committee
Yours sincerely,

Rear Admiral Giuseppe ANGRISANO
President

Encl: Draft Work Programme 2001-2005

INTERNATIONAL HYDROGRAPHIC ORGANIZATION

WORK PROGRAMME OF THE IHO FOR THE PERIOD 2001 – 2005*

December 2000

[* This plan covers five years, and is updated annually.]

Note: This document has not yet been approved by the IHO Member States

WORK PROGRAMME OF THE IHO FOR THE PERIOD 2001 – 2005*

Introduction

The detailed IHO Work Programme for 2001 – 2005 is derived from the objectives and goals of the IHO, which are established in the IHO Strategic Plan.

The work programme contains details of the tasks to be undertaken within each of the five IHO programme areas. Key performance indicators for 2001 are identified.

An annex indicates the principal tasks to be outsourced during the year.

A summary of programme costs for 2001 is also provided.

Contents

Programme 1	page 3
Programme 2	page 5
Programme 3	page 8
Programme 4	page 16
Programme 5	page 18
Programme Schematic	page 21
Outsourced Work	page 22
Resource Allocations	page 23

Key to priority allocations

[HP] = High Priority
[MP] = Medium Priority
[LP] = Low Priority

3
IHO WORK PROGRAMME
2001 - 2005

Programme 1

Co-operation between Member States and with International Organizations

Element 1. 1 - Co-operation between Member States

The aim of this element is to continue the development of international navigation services through:

Ongoing Tasks

Task 1. 1. 1. The work of the regional hydrographic commissions, especially the implementation of the schemes of international charts, and the increase in the number of INT charts published [HP]

Action RHC's

Task 1. 1. 2. Encouraging Member States participation in IHO subsidiary bodies [HP].

Action RHC's + IHB

Task 1. 1. 3 Encouraging bi-lateral co-operation based on agreements between National Hydrographic Offices, which provide for a balanced exchange, whether by means of products, services or copyright compensation [MP]

Action Nations + IHB

Project Tasks 2001

Task 1. 1. 4. Investigating the possibilities of establishing regional hydrographic commissions where none exist, especially in NAVAREA VIII, and INT chart area C1 [HP].

Action IHB

Element 1. 2 - Co-operation with International Organizations

The aim of this element is to continue the collaboration with other international organizations, including IMO, IOC, IALA, ICA, IEC, ISO, FIG, and WMO, working particularly through:

- The IMO maritime safety committee [MSC] the sub-committee on safety of navigation [NAV], the Technical Co-operation sub-committee [TC], the sub-committee on Search and Rescue [COM-SAR] and other bodies of the IMO.
- The GEBCO programme, and the IOC programmes for Ocean mapping,
- Joint initiatives with IALA and IAPH regarding development of navigation infrastructure.
- The ISO technical working group on spatial data standards [TC 211]
- The UN Informal Consultative Process on Oceans and Law of the Sea (UNICPLOS)

Ongoing Tasks

Task 1. 2. 1 Continuous interaction with other International Organizations in pursuit of the objectives of and the strategic issues facing the IHO [HP].

Action IHB + RHC's

Project Tasks 2001

Task 1. 2. 2 Formalise relationships with IALA, ICA and IEC through signature of Memoranda of Understanding [MP].

Action IHB

Task 1. 2. 3 Co-operate with IMO and the Government of Italy in establishing and formalising a consortium to support IMA Trieste, [MP]

Action completed: NB Co-operation Agreement IMO-IMA-IHO signed on 16 November 2000.

Element 1. 3 - Co-operation with non-Member States

Task 1. 3. 1 Establishment and development of relations with non-member states, particularly through RHCs [HP]

List of Key Targets [KT]

KT 1.1 Initiate formation of an RHC for NAVAREA VIII, with a view to hold first meeting by end 2001

Action: Co-ordination NAVAREA VIII and IHB

Summary of IHB 001 Budget Allocations for Programme 1 [million francs]

Personnel costs	0.704
Operations and other costs	0.155
Total	0. 859
% Total Budget	6 %

Programme 2**Capacity Building****Element 2. 1 - Technical Co-Operation****Ongoing Tasks**

Task 2.1.1 Assess continuously the hydrographic surveying, nautical charting and nautical information status of nations and regions where hydrography is developing and provide guidelines for the development of local hydrographic capabilities. This includes visits to member and non-member states, especially in Africa, Central America, Eastern Europe, and the Middle East, in order to identify regional and sub-regional requirements, to encourage development, and discuss the possibilities for technical and financial assistance and training. [These actions should be carried out in conjunction with IMO, IALA, and IAPH, as appropriate, in order to embrace the totality of requirements for navigation infrastructure, such as maritime administration, ports services and aids to navigation.] **[HP]**

Action RHC's Chairman and IHB

Task 2.1.2 Encourage the coordinated provision of technical and financial assistance to hydrographic development projects by establishing close relationships with national agencies and relevant international organizations which may provide funding or other support. **[HP]**

Action RHC's Chairman and IHB

Task 2.1.3 Encourage and follow the development of bilateral or multi-lateral arrangements between countries having well established hydrographic offices, and hydrographic survey organizations, and those desiring to establish or expand their hydrographic capabilities. **[MP]**

Action RHC's Chairman, Nations and IHB

Task 2. 1. 4 Coordinate technical co-operation projects regarding surveying and geomatics through the FIG/IHO Technical Assistance and Co-operation Co-ordination Working Group [TACC]. **[MP]**

NB: IHB has to monitor the real effectiveness of TACC and report to the IHO Member States.

Task 2. 1. 5 Maintain and update an IHO data base of Technical Co-operation Projects. **[MP]**

Action RHC's, IHB and Nations who are encouraged to report to the IHB

Task 2. 1. 6 Co-operate with IMO, IALA, and IAPH on technical co-operation matters related to navigation and maritime safety. **[MP]**

Action IHB

Task 2. 1. 7 Encourage development of capacity for ENC production worldwide. **[HP]**

Action RHC's and IHB

Task 2. 1. 8 Encourage the development of greater training capacity and additional courses for hydrographic personnel from developing nations. **[HP]**

Action RHC's Chairman, IHB and Nations

Project Tasks for year 2001

- Task 2. 1. 9** MEDA Project 7 and MEDA project Part 2 (with EC and IMA Trieste). [HP]
- Task 2. 1. 10** Project for Safety of Navigation Services on Lake Victoria (with IMO and IALA). [MP]
Action IHB, IMA and IALA
- Task 2. 1. 11** Creation of a study team to assess the status of Hydrography, Aids to Navigation and Safety to Navigation in Western and Central Africa (with IMO, IALA, IAPH and others), with a view to formulating a development project. This is an initiative of regional states. [HP]
Action EAthC and IHB
- Task 2. 1. 12** Technical Co-operation for the Development of Hydrography and Aids to Navigation in the Black Sea (with EC and countries involved). This is an initiative of regional states. [MP]
Action Black Sea WG on Safety of Navigation, MBSHC, IHB and IALA
- Task 2. 1. 13** Continuation of a project for the development of navigation infrastructure in the Caribbean and Central America, in co-operation with COCATRAM. This is an initiative of regional states. [MP]
Action COCATRAM and IHB
- Task 2. 1. 14** Schedule visits of Technical Cooperation to the following countries and organizations:
Southern Africa - Namibia [MP]
Central and Western Africa - see task 2. 1. 11 [HP]
Red Sea - Eritrea, Saudi Arabia, Yemen, [MP]
East Asia – Cambodia, DPR Korea, Myanmar, Vietnam. [MP]
Organizations - Asia Development Bank, UNDP, World Bank. [MP]

Element 2. 2 - Membership**Ongoing Tasks**

- Task 2. 2. 1** Encourage entry of new member states, especially those states which sent observers to the XV Conference, with a focus on Africa, Central America, Eastern Europe, and the Middle East. [HP]
Action RHC's and IHB
- Task 2. 2. 2** Encourage Member States to provide a prompt response to membership applications from non-member states which wish to join the IHO. [HP]
Action IHB and Monaco Government
- Task 2. 2. 3** Study the implementation of a less complex procedure for accession to IHO membership [HP]
Action IHB and Monaco Government
- Task 2. 2. 4** Take measures to avoid suspension of Member States, and to restore the rights of suspended Members. [HP]
Action IHB
- Task 2. 2. 5** To encourage Member States to decide on the ratification of the amendments to the Convention proposed in 1987 and 1997. [LP]
Action IHB and Monaco Government

Element 2.3 - Financial Assistance

Ongoing Tasks

Task 2.3.1 Continue efforts to identify aid agencies which are potential sources of funds, and actively seek their assistance in progressing requirements identified under element 2.1. This will involve contact with international and regional organizations such as the Asia Development Bank, European Commission, Global Environment Facility, World Bank, and with national agencies supportive of bilateral projects. [MP]

Action IHB and RHC's

Task 2.3.2 Improve the expertise within the Organization in drafting proposals for aid projects [collect information about requirements for drafting proposals for aid projects, in order to assist developing Member States to obtain funding, and maintain a list of consultants practicing in this field]. [MP]

Action IHB and RHC's

Task 2.3.3 Research the formation of an inter-agency group [with IMO, IALA, IAPH etc] to promote funding of hydrographic projects and capacity building in developing countries. [MP]

Action IHB and nations (proposals to IHB)

Task 2.3.4 Research the establishment of an IHO scholarship scheme for students from developing countries, and propose budget provisions. [MP]

Action IHB and Nations

Element 2.4 - Regional Co-operation

Ongoing Tasks

Task 2.4.1 Develop bilateral and multi-lateral projects between hydrographic offices. [MP]

Action IHB and Nations

List of Key Targets [KT]

- KT 2.1 Arrange Study Team for West and Central Africa in 2001.
- KT 2.2 Visit countries mentioned in Task 2.1.12 during 2001.
- KT 2.3 Increase the number of Member States to 70 by 2002
- KT 2.4 Establish contacts with international funding agencies in 2001.

Summary of IHB 2001 Budget Allocations for Programme 2 [million francs]

Personnel costs	1.107
Operations and other costs	0.650
Total	1.757
% Total Budget	11 %

Programme 3

Techniques and Standards Support

The principal work of this programme will be divided into seven elements, Cartography and Hydrographic Information Services, Hydrographic Surveying, Training, Data for GIS Applications, Maritime Safety Information, Publications Management and Translation Services.

Element 3.1 - Cartography and Hydrographic Information Services

The principal tasks for this element will be

Ongoing Tasks

Task 3.1.1 Continuation of the co-operative work on development of ECDIS services, particularly:

3.1.1.1 On-going refinement and expansion of specifications and standards through the CHRIS and its working groups, with links to the CSC and ISO, with current emphasis on;

W/G on Technical Standards etc [TSMAD]	}	
New edition of S-57 [Ed 3.1]	}	
W/G on Updating of ENC	}	[HP]
W/G on Colours and Symbols Maintenance	}	
New edition of S-52	}	
W/G on Maritime Information Objects	}	
W/G on Data quality	}	
W/G on Standardisation of Nautical Publications	}	[MP]
W/G on Technology Assessment	}	

3.1.1.2 Support and encouragement for the production and distribution of ENC data sets through the WEND Committee, the Northern Europe RENC, and other emerging vehicles such as the SHARED concept in South East Asia / Australasia and initiatives in the Caribbean and the Mediterranean and Black Sea[HP].

Action IHB and RHCs and Committees

3.1.1.3 Involvement in the regulatory aspects of ECDIS through the IMO/IHO HGE, notably matters concerning ECDIS, RCDS, and ECS [HP].

Action IHB

3.1.1.4 Intensify the contacts with the international bodies representing private industry [umbrella organizations], to reduce potential conflicts and to maximise quality and availability of adequate digital nautical products, by inviting their participation in appropriate IHO forums, and through IHO participation in non-government activities such as Open ECDIS Forum [OEF] [HP].

Action IHB and RHC's

3.1.1.5 Participation in the testing and certification aspects of ECDIS through the IEC/TC80 [HP].

Action IHB

Task 3. 1. 2 Continuation of participation in the development of standards for cartography and geographic information in association with groups such as DGIWG, ICA and ISO, in order to ensure that the interests of IHO members receive attention in the formulation of standards. Of particular current interest is the work of:

IEC/TC 80 [ECDIS] [HP]
ISO TC 211 Working Group 5 [HP]
European Union TENT-T Project [MP]

Task 3. 1. 3 Continuation of the development of the international [paper] chart series through the work of the Chart Standardisation Committee, the Regional Hydrographic Commissions and the coordinators of INT Charting Areas [see also programme 1]

Action CSC RHCs INT Chart Co-ordinators

3.1.3.1 Development of new symbology for ship routing, including archipelagic sea lanes, vessel traffic services, environmentally sensitive areas, etc [HP]

Action CSC and IHB

3.1.3.2 Progress of the work of the Committee for the Standardisation of Nautical Publications, particularly the development of standard formats for Notices to Mariners, and for Sailing Directions and other nautical publications [HP].

Action CSNP and IHB

3.1.3.3 Resolution of issues concerning the extension of the INT chart scheme to include large scale charts [MP]

Action CSC, RHC's and INT Chart Co-ordinators

3.1.3.4 Development of policy on the integration of and transition between analogue and digital products [MP]

Task 3. 1. 4 Provide advice and technical assistance to Member States on request, especially advice on cartographic systems and processes, and advice on the construction of national chart schemes [see also programme 2 element 1] [MP].

Action IHB

Task 3. 1. 5 Provide advice on the content of courses in spatial data management [MP].

Action FIG, IHO Advisory Board and IHB

Task 3. 1. 6 Provide advice and technical assistance to users of IHO standards, whether from Member States or Industry [MP]

Action Nations and IHB

Task 3. 1. 7 Revise, develop, and maintain the following publications:

S-52, S-57 [HP]
M-4, M-11, S-23, [MP]
S-59 [LP]

Action Committees, WGs and IHB

Task 3. 1. 8 Produce graphics for the digital versions of publications M-4, M-11, S-23. [HP]

Action IHB

Project Tasks for 2001

Task 3. 1. 9 Co-operate with ICA to develop standards of competence for nautical cartographers. [HP]

Action IHB and Advisory Board

Task 3.1.10 Complete the drafting of a model course for nautical cartographers. [HP]

Action Advisory Board

Element 3. 2 - Hydrographic Surveying

The principal tasks for this element are:

Ongoing Tasks

Task 3. 2. 1 Through the S-44 Working Group, continue the development of specifications and standards for the execution of hydrographic surveys and related activities such as tidal observations, through the existing working groups [MP].

Action WGs and IHB

Task 3. 2. 2 Monitor and inform member states concerning the utilisation of available new technology such as multibeam sonars, with special emphasis on complex aspects such as data processing and data visualisation [MP].

Action RHCs and IHB

Task 3. 2. 3 Monitor and inform member states on emerging technologies which may improve the cost effectiveness of data acquisition, with particular reference to remote sensing techniques [MP].

Action RHCs and IHB

Task 3. 2. 4 Monitor and inform member states on developments in geodesy and datum refinement [LP].

Action IHB

Task 3. 2. 5 Through the Tidal Committee, monitor and inform Member States about developments in tidal observations, especially the space based research programmes relating to tidal constituents [Topex Poseidon, ERS, GFO, Jason etc] [MP].

Action Tidal Committee and IHB

Task 3. 2. 6 Respond to requests for advice from relevant international organizations and Member States on the Hydrographic aspects of the UN Convention on the Law of the Sea [MP].

Action ABLOS and IHB

Task 3. 2. 7 Revise, develop and maintain the following publications :
S-32,S-60 [HP]
S-44, S-50,
S-51, S-55 [LP]

Action WGs and IHB

Project Tasks for the years 2001 and beyond

Task 3. 2. 8 Commence compilation the IHO manual of hydrographic surveying [MP]

Action WG and IHB

Task 3. 2. 9 Development of the WEB version of the IHO Hydrographic Dictionary [Project DHYDRO] [HP].

Action WG and IHB

Task 3. 2. 10 Development of a S-57 profile for a standard exchange format for hydrographic source data. [MP].

Action WG and IHB

Task 3. 2. 11 Consult Member States on the need to establish standards for surveying in navigable rivers and inland waterways, to address special subjects such as hydrometric levels, survey techniques, depiction of coasts, shifting channels etc, and prepare recommendations for the XVI Conference (see also 3.3.5) [MP].

Action RHCs and IHB

Element 3. 3 - Training and Education

Ongoing Tasks

Task 3. 3. 1 Continue to improve the level of international hydrographic competence and to provide guidance to the international hydrographic community about hydrographic education through the Joint FIG/IHO International Advisory Board on Standards of Competence for Hydrographic Surveyors [MP].

Action IAB and IHB

Task 3. 3. 2 Continue the co-operative effort with FIG for the development of standards of competence for hydrographic surveyors, and for the recognition of courses, and review and maintain the Standards to take account of emerging new technologies and methods [HP].

Action IAB

Task 3. 3. 3 Encourage the world wide establishment of courses in hydrography, cartography, spatial data management, and contract and project management, advising on their submission for recognition from the IHO / FIG and IHO / ICA Advisory Boards, in order to increase the number of international courses conforming to agreed standards [HP].

Action RHCs and IHB

Task 3. 3. 4 Assist Member States in their dealings with academia, in order to best harness the training and education capabilities available at universities and other institutions [LP].

Action RHCs and IHB

Task 3. 3. 5 Consult with Member States on the need to establish specific standards for cartography in navigable rivers and inland waterways (see also 3.2.11) [MP].

Action RHCs and CSC

Task 3. 3. 6 Provide advice on the content of courses in cartography [MP].

Task 3. 3. 7 Delivery of training courses relating to the promulgation of MSI [HP].

Action IAB, CPRNW and IHB

Project Tasks for the years 2001 and beyond

Task 3. 3. 8 Complete by the year 2001 the development of the following items of the Standards for Hydrographers : (Organizations involved :IHB and FIG/IHO Advisory Board) [HP]

- Nautical background required for courses in hydrography.
- Guidelines for practical nautical experience, as course pre-requisite.
- Levels of knowledge for essential matters.
- Optional units

Action IAB and IHB

Task 3. 3. 9 Initiate co-operation with international organizations such as ICA and IMA Trieste for the development of Standards of Competence for Nautical Cartographers [see also Task 3.1.9] [MP].

Action IAB and IHB

Task 3. 3. 10 Complete the drafting of a model course for nautical cartographers. [HP]

Action Advisory Board

Task 3. 3. 11 Initiate actions with international funding agencies for the promotion of hydrographic training and education in developing countries [see also task 2.3.4] [MP].

Action IHB and Nations

Task 3. 3. 12 Research the need for specialised courses in cartography and surveying for inland waterways [LP].

Action IHB

Task 3. 3. 13 Revise, develop and maintain M-5, M-6 [new publication] and S-47 [HP].

Action IHB and IAB

Element 3. 4 - Data for Geomatics Applications

The principal tasks under this heading are :

Ongoing Tasks

Task 3. 4. 1 To assist member states to optimise and extend the use of their hydrographic data sets for purposes other than navigation through;

3.4.1.1 Monitoring of geomatics developments around the world, especially those connected with coastal zone data management and the development of national, regional and global spatial data infrastructures [LP].

Action IHB

3.4.1.2 Exchange of information about effective practices, popular services and products, media for distribution, pricing, customer profiles, market research etc [HP].

Action RHCs and RENCs

3.4.1.3 Development of generic product and service specifications [HP].

Action RENCs

3.4.1.4 Monitor and contribute to development of training standards for geomatics applications [MP]

Action Nations and IHB

3.4.1.5 Encouraging the holding of workshops, and conferences on the above subjects [MP].

Action RHCs

3.4.1.6 Engagement in the process of development of the interpretation of the law of the sea through the ABLOS group. [HP]

Action ABLOS and IHB

3.4.1.7 Close collaboration with IOC through the MOU signed in 2000 [HP]

Action IHB

Task 3. 4. 2 Continuation of participation in the development of standards for cartography and geographic information, and the alignment of IHO standards with more general standards for spatial data, through the work of:

- ISO TC 211 Working Group 5 [HP]

Action Nations and IHB

- European Union TENT-T Project [LP]

- Global Spatial Data Infrastructure [MP]

Action IHB in co-operation with ICA

- ICA Commission on Spatial Data Standards [MP]

Action IHB

Task 3. 4. 3 To continue to contribute to the development of world-wide ocean and shallow water mapping through:

3.4.3.1 Encouraging member states to contribute data for international ocean mapping [MP].

Action RHCs and IHB

3.4.3.2 Continuing development of the digital data centre at Boulder, Colorado [MP].

Action IHB in co-ordination with IOC

3.4.3.3 Re-affirming the role of Hydrographic Offices in collecting and managing digital bathymetric data for GEBCO and ocean mapping projects [HP].

Action RHCs and IHB

3.4.3.4 Participating in the definition and development of GEBCO and IOC products and projects [HP].

Action RHCs and IHB

3.4.3.5 Participation in the IOC sponsored regional international bathymetric chart [LP]

Action RHCs and IHB

3.4.3.6 Co-operating with IOC and the United Nations in monitoring the naming of undersea features in international waters [HP]

Action SCUFN and IHB

3.4.3.7 Providing an information service for Oceanographic matters [LP]

Action IHB

Task 3. 4. 4 Revise, develop and maintain the following publications ; B-2, B-4, B-6, B-7, and B-8 [HP]

Action WGs and IHB

Project Tasks for 2001

Task 3. 4. 5 Complete harmonisation of IHO spatial data standards with ISO standards [HP]

Action TSMAD and IHB

Task 3. 4. 6 Organise the GEBCO Centenary Conference in 2003 [LP].

Action IHB in co-ordination with IOC

Element 3. 5 - Maritime Safety Information

The principal tasks will be:

Ongoing Tasks

Task 3. 5. 1 Implement the GMDSS through the work of the NAVAREA co-ordinators and the Committee for the Promulgation of Radio Navigation Warnings [CPRNW]. [MP].

Action CPRNW and IHB

Task 3. 5. 2 Co-operation with IMO and WMO on improving the global standards for disseminating Maritime Safety Information [MSI] [HP].

Action CPRNW and IHB

Project Tasks for the years 2001 and beyond

Task 3. 5. 3 Revise, develop and maintain the following publications :

M-12 [MP]

Action IHB

S-53 and Appendix [HP]

Action CPRNW an IHB

Element 3. 6 - Editorial and Publications Management

The principal tasks of this element will be to:

Ongoing Tasks

Task 3. 6. 1 Organise the production and distribution of the IHO publications in appropriate languages, digital and hard copy and CD ROMS. [HP].

Action IHB

Task 3. 6. 2 Establish and develop within the IHB a "Computer Graphic" section in support of the technical sections.

Action IHB

Task 3. 6. 3 Provide other information to Member States through the issue of Circular Letters [HP]

Action IHB

Task 3. 6. 4 Operate and maintain the in-house printing facilities and contract printing in support of the activities of this element [HP]

Action IHB

Task 3. 6. 5 Provide a service for the sale of publications to interested users [MP].

Action IHB

Task 3. 6. 6 Maintain an informative IHO Web-site. [see 4. 1. 5]

Action IHB

Project Tasks for 2001

Task 3. 6. 7 Complete follow up actions relating to the transition of the IHB publications programme to a digital service.(80% completed at the end of 2000) [HP].

Action IHB

Task 3. 6. 8 Research the feasibility and advantages of establishing a digital hydrographic library. [MP].

Action IHB

Task 3. 6. 9 Maintain Publication P-4 [LP]

Action IHB

Element 3.7 - Translation Services

The principal tasks for this element will be to:

Ongoing Tasks

Task 3.7.1 Provide translation services into the languages of the Organization, in accordance with the obligations established in the IHO Basic Documents and IHO Resolutions (publications M1 and M3) [HP].

Action IHB supported by Nations as appropriate

Task 3.7.2 Provide informal verbal interpretation services at IHB when required [MP].

Action IHB

List of Key Targets [KT]

KT 3.1 Co-ordinate and publish regional ENC production and service plans, commencing with Europe in 2000, followed by North America, South East Asia and the Caribbean by 2001, South West Pacific and South America by 2002.

KT 3.2 Complete “Standards of Competence for Nautical Cartographers” and submit to Member States by end 2001.

KT 3.3 Complete harmonisation of IHO standards with ISO standards by end 2001

KT 3.4 Complete transition of IHO publications to digital media by end 2001.

KT 3.5 Provide an annual distribution of IHO publications on CD-ROM

KT 3.5 Produce new editions of listed publications.

B-4

B-6 English / French

B-7

B-8

M-2 New Edition

M-4

M-12

S-52 App. 2 [French]

S-52 App. 3 [French]

S-52 App. 4

S-57 Edition3.1

M-6 New edition

M-5 New edition

M-1 Re-edition

Summary of IHB 2001 Budget Allocations for Programme 3 [million francs]

Personnel costs	5.863
Operations and other costs	0.635
Total	6.586
% Total Budget	43 %

Programme 4

Public Relations and General Management Support

Element 4.1 - Public Information

The aim of this element is to raise awareness of the importance of hydrography, and to ensure that the need for and responsibilities of hydrographic offices are properly understood, particularly in government and in the user community, through:

Ongoing Tasks

Task 4.1.1 Establish a collection of public information material already in use by Member States [MP].

Action IHB

Task 4.1.2 Provide briefings to senior decision makers on request and during visits to Member and Non-Member States [HP].

Action IHB in co-operation with IMO IALA IAPH and RHCs

Task 4.1.3 Take opportunities to deliver papers on this subject at appropriate conferences and seminars [MP].

Action IHB

Task 4.1.4 Issue press releases during all major IHO meetings [MP].

Action IHB

Task 4.1.5 Maintain an informative and up to date web-site [HP].

Action IHB

Task 4.1.6 Publish appropriate public information material for use by member states, including IHO publications:

M-2 [National Maritime Policies and Hydrographic Services Part 2], P-7 [HP].

P-3, P-5, P-6, M-1, and M-3 [MP].

Action IHB

Project Tasks for 2001 and beyond

Task 4.1.7 Establish a Public Relations Strategy and Implementation Plan, using external expertise if necessary [HP].

Task 4.1.8 Establish a compendium of legal cases related to charting and nautical accidents [LP].

Task 4.1.9 Develop an information paper/ web entry for promoting hydrography as an interesting career which is recognised by educational institutions [LP].

Task 4.1.10 Production of the new edition of M-2

Element 4.2 - Management Information

The aim of this element is to assist member states to obtain an appropriate level of budgetary support, and to strive for best practice in use of resources and service delivery, through:

Ongoing Tasks

Task 4. 2. 1 Monitor and inform Member States about contemporary management issues in hydrography, and new initiatives in optimising the use of resources, for example initiatives in re-structuring, re-training, outsourcing, partnering with industry, privatisation etc [MP].

Action IHB and Nations

Task 4. 2. 2 Monitor and inform Member States about appropriate comparative information concerning responsibilities and resources employed, in order to provide a "benchmarking" service to identify "best practice" [see note below] [HP].

Action IHB and Nations

Task 4. 2. 3 Monitor and inform Member States concerning dealings with academia and industry, in order to best harness the research and development capabilities available in these sectors [MP].

Action IHB and Nations

Task 4. 2. 4 Monitor and inform Member States about developments in quality management, and encourage quality management accreditation (ISO 9000), to strengthen the position of hydrographic offices as quality service providers [MP].

Action IHB and Nations

Project Tasks for 2001

Task 4. 2. 5 Complete research for the Benchmarking Service, to commence in 2002 (task may be outsourced?) [HP]. [See notes below].

Task 4. 2. 6 Undertake research into quality management accreditation (ISO 9000) [MP].

Note 1: Benchmarking is defined as "a continuous, systematic process for evaluating the products, services and work processes of organizations that are recognised as representing best practices for the purpose of organisational improvement".

Note 2. It is proposed that the SPWG should set up a working group to refine these new tasks and establish an appropriate development programme.

List of Key Targets [KT]

KT 4.1 Propose a draft public relations strategy to Member States and publish an agreed Implementation Plan by 2001.

Summary of IHB 2001 Budget Allocations for Programme 4 [million francs]

Personnel costs	0.300
Operations and other costs	0.225
Total	0. 525
% Total Budget	3 %

Programme 5

Corporate Affairs

The principal work of this programme will be:

Element 5. 1 - IHO Corporate Development

This element is established to manage appropriate development of the IHO, in order to ensure that it is able effectively to address the tasks set by Member States.

Ongoing Tasks

- Task 5. 1. 1** To conduct an annual update of the IHO inter-sessional Work Programme [HP].
- Task 5. 1. 2** To research opportunities for the exchange of staff between HOs and IHB. [Decision 3, XVth IH Conference] [LP].
- Task 5. 1. 3** To improve communications within the Organization, particularly encouraging the use of digital media [eg e-mail, digital publications etc] [MP].
- Task 5. 1. 4** Maintain at the IHB a library with an appropriate collection/compendium of technical books and journals for reference and research [especially those produced by maritime organisations such as DOALOS, FIG, IALA, ICA, IMO, IOC, etc] [MP/LP].

Action IHB

Project Tasks for 2001

- Task 5. 1. 5** To research proposals and to report to the XVI Conference concerning the further restructuring of the Organization so that it can better respond to the requirements of Member States and the objectives articulated in the Strategic Plan, and to improve cost-effectiveness. Some matters to be researched include:

Action SPWG and IHB

- | | |
|---------------------------------------|----------------------------|
| Programme for future IH Conferences. | <i>Action SPWG and IHB</i> |
| Frequency of IH Conferences. | <i>Action SPWG and IHB</i> |
| Language Policy for the Organisation. | <i>Action SPWG and IHB</i> |

Policy for NGO participation in the work of the IHO. *Action SPWG and IHB*

Means for improving Member States' participation in IHO business. *Action SPWG and IHB*

Continuing review of Management Structure and Business Processes of the IHO. *Action SPWG+ IHB*

Adjustment of the budget to reflect new strategic directions. *Action SPWG, FC and IHB*

Reduction of the costs of IHO, and introduction of a zero growth budget *Action SPWG, FC and IHB*

Review of IHO Strategic Plan for presentation to the XVI IH Conference. *Action SPWG and IHB*

Annual review of IHO Work Programme. *Action SPWG*

All these matters are [HP].

Element 5. 2 - IHO Administration

This element satisfies the requirements for the administration of the IHO Secretariat through a number of cost centres:

Ongoing Tasks**Task 5. 2. 1 IHO Financial Management**

- 5.2.1.1 Financial Planning , budgets, financial administration . }
- 5.2.1.2 Manage member states' contributions, and monitor timely payment }
- 5.2.1.3 Manage investment of IHO funds } **[Routine] Action IHB**
- 5.2.1.4 Book keeping, accounting and financial reporting }
- 5.2.1.5 IHB Shop and miscellaneous activities }

Task 5. 2. 2 IHB Personnel Management

- 5.2.2.1 Personnel administration }
- 5.2.2.2 Staff development } **[Routine] Action IHB**
- 5.2.2.3 Manage retirement funds, medical insurances etc }

Task 5. 2. 3 IHB Secretariat Administration

- 5.2.3.1 Registry and Reception Service }
- 5.2.3.2 Postage, telephones, customs etc } **[Routine] Action IHB**
- 5.2.3.3 Hotel reservations and other services to representatives
of M.S. in Monaco. }

Task 5. 2. 4 IHB Travel Administration

- 5.2.4.1 Programme, arrange, and monitor travel for IHB staff **[Routine] Action IHB**

Project Tasks for 2001**Task 5. 2. 5 Projects regarding financial management issues**

Undertake projects regarding financial management issues as proposed by the Directing Committee, the Finance Committee and the Auditor.

Action Finance Officers Committee and IHB

- 5.2.5.1 Prepare for the introduction of a zero growth budget for period 2003 -2007 **[HP]**
Action IHB
- 5.2.5.2 Complete proposals for incentives for prompt payment of contributions, including proposals to reduce the financial burden to small nations **[MP]**
Action IHB
- 5.2.5.3 Develop the budget presentation software to enable presentation of a programme based budget from 2003 onwards.
Action IHB

Task 5. 2. 6 Projects regarding staff issues

Undertake projects regarding staff issues, as proposed by DC, FC, Auditor

- 5.2.6.1 Prepare proposals for new salary structures to apply to future IHB staff **[HP]. Action IHB**
- 5.2.6.2 Study of alternative social security arrangements **[MP]. Action IHB and Monaco Government**
- 5.2.6.3 Study of staff assessment procedures **[MP] Action IHB**

Element 5. 3 - Property and Information Technology**Ongoing Tasks****Task 5. 3. 1 IHB Property Administration**

- 5.3.1.1 Building repairs and maintenance }

5.3.1.2	Occupational Health and Safety	}	
5.3.1.3	Office equipment and furnishings	}	Routine
5.3.1.4	IHB purchasing function	}	Action IHB
5.3.1.5	Intersessional Conferences, Meetings and Receptions at IHB	}	Action IHB

Task 5. 3. 2 IHB Information Technology

5.3.2.1	Manage the IHB Web-site	[Routine]	Action IHB
5.3.2.2	Manage the maintenance and enhancement of the IT facilities i.a.w. the IT Master Plan	[per plan]	Action IHB
5.3.2.3	Administer the IHB Local Area Network	[Routine]	Action IHB
5.3.2.4	Provide IT training for IHB staff	[Routine]	Action IHB

Element 5. 4 - Host Government Affairs

Task 5. 4. 1 Implement the Host Agreement [Routine]
Action IHB and Monaco Government

Task 5. 4. 2 Maintain good relations and personal contacts with the Monaco Government at all levels, and with Monegasque diplomatic posts in key countries and the UN, including visits, briefings etc [HP]
Action IHB

Element 5. 5 IHO Membership Administration

Task 5. 5. 1 Manage all aspects of applications for membership and accessions to the Convention [Routine].
Action IHB and Monaco Government

Element 5. 6 - IHO Conferences

Task 5. 6. 1 Organise XVI IH Conference and Exhibition [Routine]
Action IHB

List of Key Targets [KT]

KT 5.1	Submit proposals for organisation re-structure if needed to XVI IH Conference.
KT 5.2	Submit proposals for a zero growth budget to XVI IH Conference.
KT 5.3	Submit proposals for an alternative social security regime for IHB staff by end 2001.

Summary of IHB 2001 Budget Allocations for Programme 5 [million francs]

Personnel costs	3.752
Operations and other costs	1.916
Total	5. 602
% Total Budget	37 %

**IHO WORK PROGRAMME
SCHEMATIC**

Programmes				
1	2	3	4	5
International Co-operation ↓	Capacity Building ↓	Techniques and Standards ↓	Management Support	Corporate Affairs ↓

Programmes				
1.1 International Co-operation	2.1 Technical Assistance	3.1 Cartography & Information Services	4.1 Public Information	5.1 Corporate Development
1.2 International Organizations	2.2 Membership Development	3.2 Hydrographic Surveying	4.2 Management Information	5.2 IHO Administration
1.3 Non-Member States	2.3 Financial Assistance	3.3 Training and Education		5.3 Property & I.T.
	2.4 Regional Co-operation	3.4 GIS Application		5.4 Host Government
		3.5 Maritime Safety Information		5.5 Membership Administration
		3.6 Editorial & Publications		5.6 Ordinary IH Conferences
		3.7 Translation		

Provisional List of Technical Consultancy Tasks for year 2001

<u>Element</u>	<u>Task</u>	<u>Priority</u>
<u>Programme2</u>		
2.1	Support of Black Sea project at EC	Medium
2.1	Study Team in West Africa	High
2.1	Lake Victoria Consultancy [with IALA] ?	Medium
2.3	Support of Development Bank projects [WB,ADB,GEF,etc]	High
<u>Programme 3</u>		
3.1	Implementation of MIO information on ECDIS:	Medium
3.1	Revision of S-23[continued].	High
3.1	Work of Open ECDIS Forum [sponsorship].	Medium
3.2	Manual of Hydrography.	High
3.4	Follow up of 2000 TSMAD/TC 211 harmonisation work	Medium
3.4	Development of additional Profiles for S-57.	High
3.5	Development of M-6 (list of reference texts for hydrographers).	High
3.6	Development of computerised dictionary for the use of IHB Translation network.	High
<u>Programme 4</u>		
4.5	Media Relations support (new edition of M-2)	High
4.5	Translation of Articles for IH Bulletin	High
4.5	Address Data Base for Web Site	Medium
4.6	Develop Benchmarking Service	Medium
<u>Programme 5</u>		
5.2	Develop salary structure for future IHB Cat B staff	High
5.2	Inter-sessional review of IHB Salaries [SR IV.I.I.c]	Medium

Budget Note; The 2001 budget allocation for consultancy is 3% of budget.

IHB BUDGET ALLOCATION TABLES 2001**Table 1: Summary of Budget provisions by Programme [million Francs and % of budget]**

Programme 1	0.8	6 %
Programme 2	1.8	11 %
Programme 3	6.6	43 %
Programme 4	0.5	3 %
Programme 5	5.6	37 %
Total	15.3	100 %

Table 2 : Budget Provisions by programme and Chapter [million francs]

	Programme 1	Programme 2	Programme 3	Programme 4	Programme 5	Total
Ch. 1 Personnel	0.704	1.107	5.863	0.300	3.752	11.726
Ch. 2 Operations	0.155	0.650	0.635	0.225	0.916	2.581
Ch. 3 Capital	0.000	0.000	0.018	0.000	0.334	0.352
Ch. 4 – 7 Funds	0.000	0.000	0.070	0.000	0.600	0.670
Total	0.859	1.757	6.586	0.525	5.602	15.329

Table 3; Programme and chapter allocations as % of total budget

	Programme 1	Programme 2	Programme 3	Programme 4	Programme 5	Total %
Ch. 1 Personnel	5	7	38	2	25	77
Ch. 2 Operations	1	4	4	2	6	17
Ch. 3 Capital	0	0	0	0	2	2
Ch. 4 – 7 Funds	0	0	0	0	4	4
Total %	6	11	42	4	37	100

IHB STAFF ALLOCATION TABLES 2001

Table 4: Allocation of Staff Time [Weeks]

	Programme 1	Programme 2	Programme 3	Programme 4	Programme 5	Total	%
Directors	40	38	22	2	30	132	<i>14</i>
PA's	15	40	110	5	50	220	<i>24</i>
Cat. B/C	2	22	330	3	215	572	<i>62</i>
Total	57	100	462	10	295	924	100
%	<i>6</i>	<i>11</i>	<i>50</i>	<i>1</i>	<i>32</i>	100	

Table 5: Allocation of staff time by programme as % of total category time

	Programme 1	Programme 2	Programme 3	Programme 4	Programme 5	Total %
Directors	30	29	17	1	23	100
Category A	7	18	50	2	23	100
Category B	1	3	58	1	37	100

Table 6: Allocation of consultancy effort by programme as % of total consultant effort

	Programme 1	Programme 2	Programme 3	Programme 4	Programme 5	Total %
Consultants	0	37	30	26	7	100

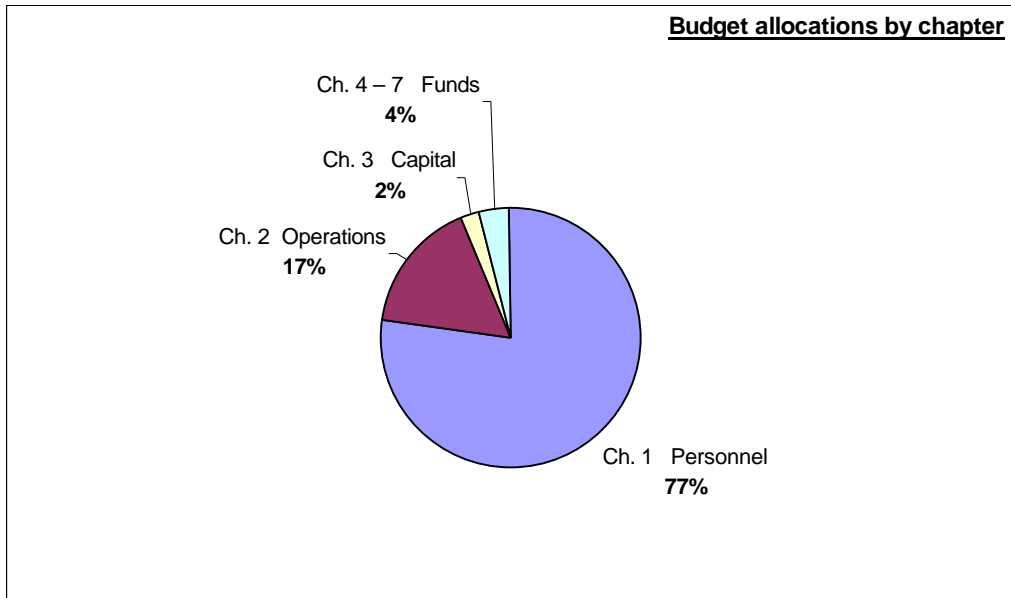
Notes: 1. In order to complete the programme with only two Directors, it will be necessary to utilise some external expertise to undertake the work formerly done by the third Director. The salary and allowances of the third director will be used to pay for this work. Therefore the allocation of Directors time and cost in these tables has not been altered.

2. The figures in these tables differ slightly from the figures in the tables contained in the IHO Budget papers attached to Finance Committee Letter 1/2000. This is because the budget applications of the IHB's new analytical accounting software are not yet fully developed. It is intended that the figures in the Work Programme and the Budget will be aligned in future years. It is also intended, in due course, to develop the presentation of resource allocation by programme for the full 5 year period covered by this rolling work programme.

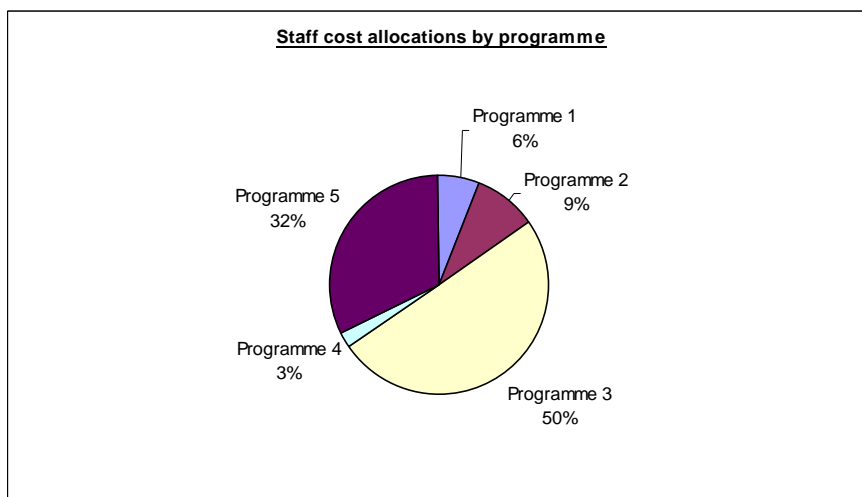
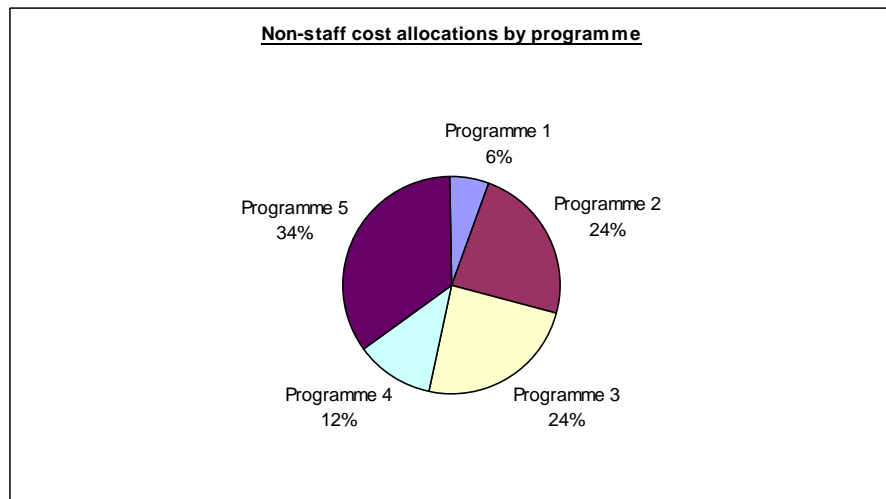
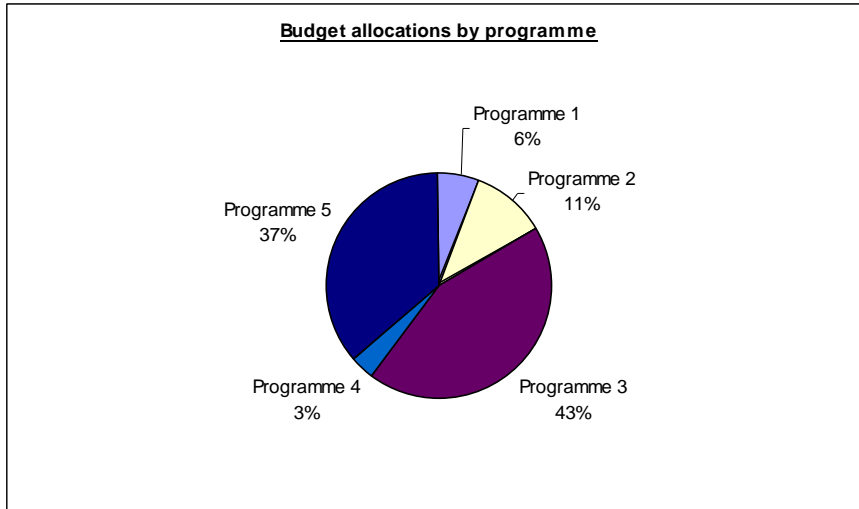
PROGRAMME ALLOCATION GRAPHICS

Pie charts [camemberts] showing budget allocation

1. programmes divided by chapter



2. chapters divided by programme



Comment on new tasks introduced to the IHO Work Programme for 2001

A number of new tasks are introduced in the Work Programme for 2001. This Annex provides some background information and justification for these tasks.

- 1.2.3** The IMA Trieste has become an important source of training for hydrographic authorities in developing nations, who find it difficult to obtain funding for hydrographic training from their own governments. IMA is able to offer excellent quality courses at very low cost because it receives support from the IMO and the Government of Italy. IHO has provided technical support. There is now significant pressure on resources due to the heavy demand for places, and indeed only 50% of requests for places can be met. It is therefore necessary to review, strengthen and formalise the consortium arrangements which underpin the IMA programmes in hydrography.
- 2.1.8** As mentioned in the comments on task 1.2.3 above, the provision of training for hydrographic personnel in developing countries is one of the most fundamental and important aspects of capacity building. Many courses are available around the world, but the training capacity is still insufficient. It is absolutely necessary to increase the number of courses available, or to increase the capacity of existing courses.
- 2.1.14** This task identifies regions where there is a lack of effective hydrographic services, and targets particular nations which are attempting to establish or strengthen their hydrographic arrangements. Capacity building activity consumes a large amount of IHO resources, and it is important that these resources are focussed on defined regions. The list in this task varies from year to year.
- 2.2.2** The long list of nations whose IHO membership is pending attests to the complexity of the process for adhesion to the IHO Convention. The procedures for joining sister organisations such as IMO are much less complex. The IHO has already approached the Government of Monaco who is the depository of the IHO Convention. To study this issue please see copy of letter attached at Annex D.1 Every effort should be made to remove unnecessary obstacles to IHO membership. This comment also applies to task 2.2.3.
- 2.3.3** This task arises from a recommendation of the 2nd Extraordinary IH Conference. The Conference recognised that funding for capacity building for maritime safety and navigational purposes would be most effectively achieved through inter-agency and inter-disciplinary co-operation.
- 2.3.4** Many organisations offer scholarships for the training of hydrographers from developing countries, but more such scholarships are needed. It is time for the IHO to establish a scholarship fund. See also comment on task 2.1.8.
- 3.1.9** The major problems in hydrography today are concerned with the management of digital data, and the provision of data services. These issues are in the realm of the cartographer rather than the surveyor. By contrast the majority of training development to date has been focussed on the surveyor rather than the cartographer. This task, and task 3.1.10, are intended to correct this significant shortcoming. There is a correlation to tasks in element 3.4 concerned with geomatics, where the surveying and cartography disciplines will eventually merge.
- 3.4.5** The spatial data standards of the IHO were developed before the establishment of the ISO suite of spatial data standards. In order that hydrographic data may be made available to the widest possible spectrum of users, it is vital that the IHO standards are compatible with the ISO standards.
- 5.2.5.3** The effective direction of resources into priority activities requires a better understanding of the existing allocation of resources, and a means of adjusting existing allocations in the desired

directions. In 1999 the Directing Committee introduced a new analytical accounting software. This is currently able to provide reports of expenditure by programme, and it must now be developed to enable the preparation of programme based budgets.

Note: Member States are invited to note that the Directing Committee intends to adjust the balance of resources within the programmes, so that more resources will be devoted to programmes 1 and 2, with corresponding reduction of resources in programmes 3 and 5. These adjustments accord with the relative priorities in the Strategic Plan and Work Programme. Such adjustments must of necessity be gradual, involving only 1 or 2 percentage points each year, and will be made over a period of years. The tables in Annex C reflect this intention.

Lists of tasks deleted from the Work Programme

The following is a summary of the tasks which were completed in 2000, and which have been deleted from the work programme in 2001. Many other tasks have made significant progress but are not yet complete, and these have been carried forward to the programme for 2001. Full details of progress achieved in these ongoing tasks is contained in the Annual Report 2000.

- 1.1.4 The RHC for the ROPME Sea Area was established [part of NAVAREA IX].
- 1.2.2 MOU with IOC has been signed.
- 1.2.3 The revision of SOLAS Chapter V is complete.
- 2.1.11 The first meeting of the RHC for the ROPME Sea Area was held in November 2000.
- 2.1.14 Visits to Central America, Russia and the Black Sea States, China and the World Bank were all completed. See also the more extensive list of visits in the Annual Report.
- 3.2.8 IHO Manual of Hydrography has progressed to Phase 2.
- 3.2.12 The Tidal Constituent Data Bank has been closed.
- 3.6.6 The digital publications programme is now in place.
- 5.1.5 The study on voting procedures has been completed.
- 5.2.5.1 Analytical accounting procedures for budgeting and reporting are now in place.
- 5.2.5.2 A 'package' of new accounting measures has been introduced.