



**INTERNATIONAL SEMINAR ON
UNITED NATIONS GLOBAL GEOSPATIAL INFORMATION MANAGEMENT**

**Partnerships, capacity development and advocacy for integrated
marine geospatial information management**

Capacity Building Challenges and Initiatives

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CBSC Secretary



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SUMMARY

International
Hydrographic
Organization

- CB and the Marine Geospatial Information
- CB objectives
- CB activities
- Partnerships to share resources and expertise
- Revised CB Strategy
- New initiatives



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CAPACITY BUILDING AND MARINE GEOSPATIAL INFORMATION

Source C-17

Hydrographic data and information is acquired, managed, manipulated, and disseminated primarily by Hydrographic Offices (HOs).





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CB OBJECTIVE

International
Hydrographic
Organization

Contribute to the creation of capacities to a sustainable development



- Continuously assesses the status of hydrographic surveying, nautical charting and maritime safety information worldwide (CB Phases)
- Close relationships with national agencies and international organizations
- Cooperates with Regional Hydrographic Commissions

Coastal State/Territory	NH[C]C	Phase 1	Phase 2	Phase 3	Last TV
Albania	1	3	2/3	2/3	2016
Algeria	0	3	4	2/3	-
Bulgaria	1	4	2	3	N/A
Croatia	1	4	4	4	N/A
Cyprus	2	2	3	2	1999
Egypt	0	4	4	2/3	-
France	2	4	4	4	N/A
Georgia	2	2	2	2	2018
Greece	1	4	4	4	N/A
Israel	1	4	2	2	2014
Italy	2	4	4	4	N/A
Lebanon	1	1	1/3	1/3	2019
Libya	-1	-1	-1	-1	-
Malta	1	2	2	2	N/A
Monaco	0	3	3	3	N/A
Montenegro	0	2	2	2	2016
Morocco	0	3	3	3	-
Palestinian Authority	-1	-1	-1	-1	-
Romania	1	2	2	2	2008
Russian Federation	2	4	4	4	N/A
Serbia	0	2	2	2	-
Slovenia	0	4	4	4	N/A
Spain	2	4	4	4	N/A
Syrian Arab Republic	-1	-1	-1	-1	-
Tunisia	1	2	2	2/3	N/A
Turkey	2	4	4	4	N/A
Ukraine	1	4	4	4	N/A



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CB PHASES

International
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Organization



Phases of Development

Phase 0

Raise awareness



Phase 1

Collection and circulation of nautical information, necessary to maintain existing charts and publications up to date



Phase 2

Creation of a surveying capability to conduct:

- Coastal projects
- Offshore projects



Phase 3

Produce paper charts, ENC and publications independently



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CB LONG TERM OBJECTIVES

- Phase 1 for all Countries with navigable waters;
- National plan for Phase 2 and 3;
- Develop 'country profiles' to measure the state of hydrography in every coastal state.





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PRIORITY SETTINGS

Evaluation of the RHC's submissions (procedure 4):

- Phase 1, 2 and 3;
- Number of States that benefitted;
- External funding;
- Neediness, according to the GDP;
- Priority within RHC;
- Potential for success from the IHO viewpoint;
- Discount for recent similar activities;
- General importance of CB in the region.





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CBSC ACTIVITIES

INTERNATIONAL HYDROGRAPHIC ORGANIZATION
Adopted 2021 CBWP

International
Hydrographic
Organization

Broad variety of activities:

- High level visits
- Technical visits
- Training
- Education
- Technical assistance
- Involvement in comprehensive projects

IHO WP Element: Capacity Building Provision - Technical Workshops, Seminars, Courses					
No.	Events	Responsible	Budget	Status	Resources
P-01	ROK Category "A" Programme	Secretariat	93,495 €	Led by USM, Hattiesburg, USA 1 August 2021-1 August 2022 DONE	ROK
P-01A	ROK Category "A" Programme (Delayed from 2020)	Secretariat	46,747 €	Led by USM, Hattiesburg, USA 1 August 2021-1 August 2022 DONE	ROK
P-02	ROK Category "B" Hydrographic Surveying Program	Secretariat	338,603 €	Led by KHOA, Busan, ROK July-December 2021	ROK
P-03	IHO-NF GEOMAC (Geospatial Marine Analysis and Cartography)	Secretariat	298,866 €	POSTPONED TO 2022	Nippon
P-03A	IHO-NF GEOMAC (Geospatial Marine Analysis and Cartography) Delayed from 2020	Secretariat	265,291 €	POSTPONED TO 2022	Nippon
P-04	Training for Trainers - Basic Hydrography	Secretariat	80,943 €	Led by KHOA, Busan, ROK July 2021 DONE	ROK
P-05	Webinar on Using AI as Sonar Noise Classifier	MBSHC	0 €	Led by Turkish Navy-Office of Navigation, Hydrography and Oceanography 22 NOV21	-
P-06	MSI Regional Workshop	SWPHC	34,400 €	POSTPONED TO 2022	IHO
P-07	Technical Workshop on Hydrographic Governance	SWPHC	33,500 €	POSTPONED TO 2022	IHO
P-08	MSI (training on establishment of MSI structure and basic MSI procedure)	NIOHC	22,120 €	POSTPONED TO 2022	IHO
P-09	MSI Course (from 2020 P-37 with updated costing)	SAIHC	20,580 €	POSTPONED TO 2022	IHO
P-10	S-100 seminar on the future of hydrographic products and services	EaIHC	20,000 €	CANCELED	IHO
P-11	Raising awareness workshop on S-100/S-101	RSAHC	14,940 €	POSTPONED TO 2022	IHO
P-12	Seminar on Raising Awareness of Hydrography	SWAHC	3,160 €	POSTPONED TO 2022	IHO
P-13	Seminar on Raising Awareness of Hydrography	NIOHC	17,250 €	POSTPONED TO 2022	IHO





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TYPICAL FUNDED ACTIVITIES

International Hydrographic Organization

Source of Funds

Phases

Some examples of activities

Non earmarked:

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ROK

Other MS

Earmarked:

ROK

Nippon F.

Phase 0

Phase 1

Phase 2

Phase 3

Training

Workshops

Seminars

etc

High level visits

Technical visits

MSI Courses

Seminars

Workshops

ROK Hydrography Cat A - USM

ROK Hydrography Cat B course

ROK TFT courses Hydro/Carto

Nippon Foundation GeoMAC course - UKHO

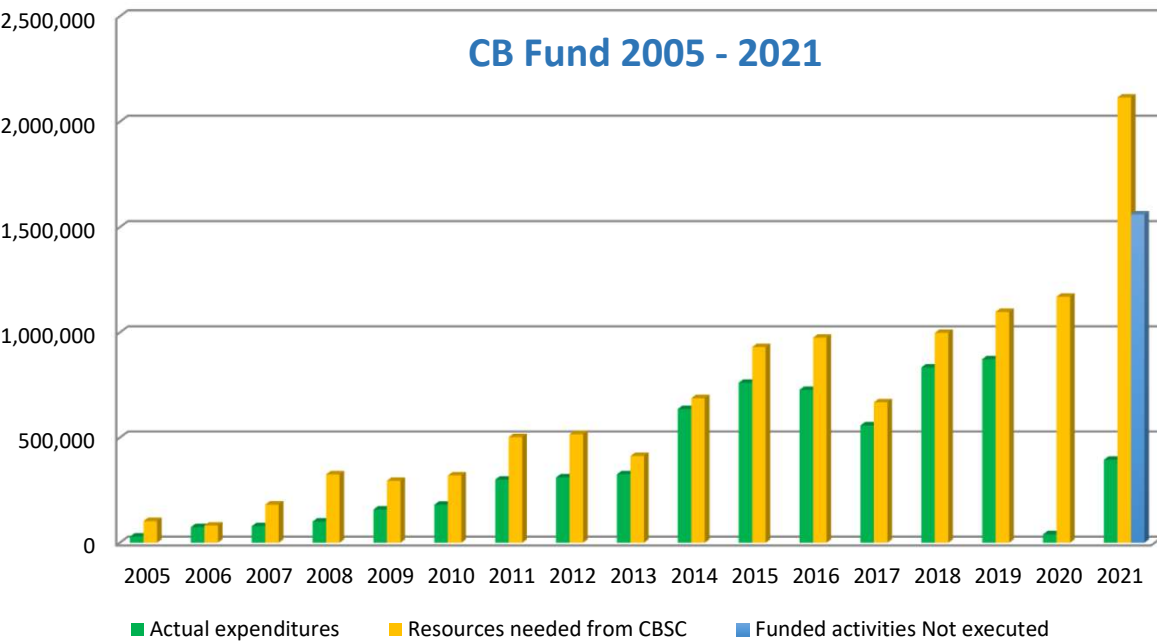


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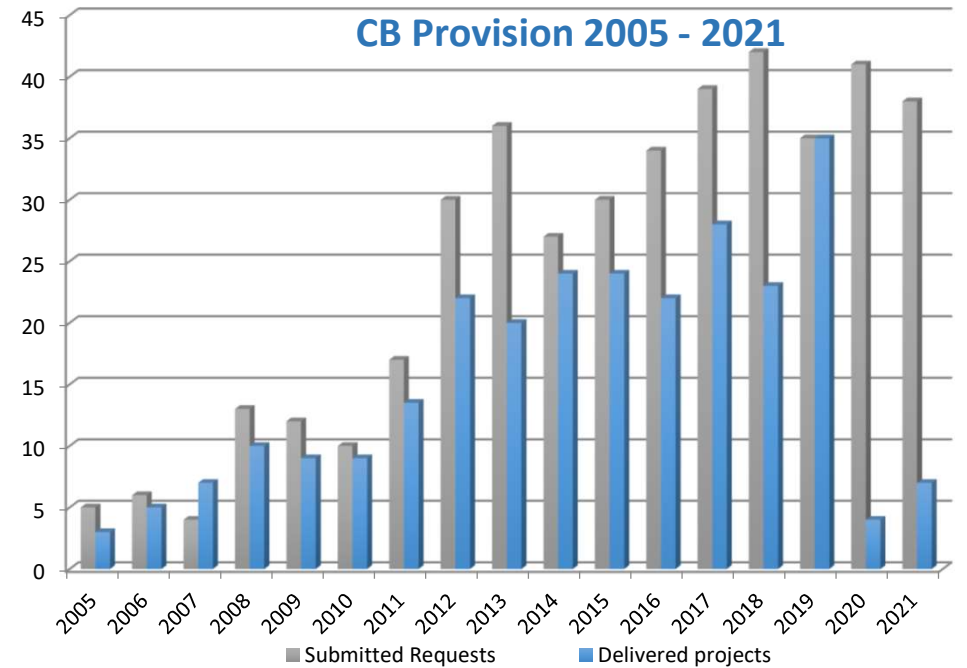
CBSC ACTIVITIES

International Hydrographic Organization

CB Fund 2005 - 2021



CB Provision 2005 - 2021





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CBSC ACTIVITIES

2021 Executed:

- 2 TV Ivory Coast and Congo
- 2 ROK – 3 students at USM Hydrography Cat A and
23 Training for Trainers - Basic Hydrography
- 3 MBSHC: Webinar on Using AI as Sonar Noise Classifier

Online Workshop on Airborne Lidar Bathymetry

Online Workshop on Transition to S-1xx Products

SATELLITE-DERIVED BATHYMETRY WEBINAR
30 June 2021, 13:30 CEST

Organized by:
The Mediterranean and Black Seas Hydrographic Commission (MBSHC)
with kind contribution of SHOM

Sponsored by:
EOMAP

PRESENTERS:

- Dr. Thomas Heege
Managing Director at EOMAP
- Mona Reibanner
Data Analyst at EOMAP
- Sandra Loger
Proj. Manager at SHOM
- Elgijo Gracin
Consultant at TERKA SRI

CONTENT:

- Fundamentals
- Uncertainties
- Recognition of SDB in IHO Technological Progress
- Machine Learning Applications
- Experience & Use cases
- Products & Services
- Hands-on Experience

For further information:
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c.cultrik@shom.gov.fr
cultrik.dore@shom.fr

Link - <https://red2021.launcherpad.com/8066814967>
Passcode - 985487

Background image © EOMAP, 2021





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CALENDAR CBSC ACTIVITIES

International Hydrographic Organization

Share resources and expertise through partnerships is essential

CBSC

- Basic Sub-Committee Documents
- Miscellaneous
- Project Empowering Women in Hydrography
 - Activities
 - Activities around the World
 - Documents
- **Calendar CBSC Activities**
 - CBSC Letters
 - CBSC17 (2019)
 - CBSC18 (2020)
 - CBSC 19 - (2021) Intersessional Meeting
 - CBSC19 (2021)
 - CBSC 20 - (2022) Intersessional Meeting
 - CBSC20 (2022)

HOME > CBSC > CALENDAR CBSC ACTIVITIES

Calendar CBSC Activities

Capacity Building Calendar where the relevant remote activities of the Regions (Seminars, workshops and courses) could be advertised to provide more publicity and allow Members from other regions to participate.

IHO CBSC - RHCs VTC activities

Today March 2022

Print Week Month Agenda

Mon	Tue	Wed	Thu	Fri	Sat	Sun
28	Mar 1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27

CBSC20 Intersession



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PARTNERSHIPS

International
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REVISED CB STRATEGY

- CB created a Strategy Project Team to revise the CB Strategy
- To define the context and the processes that will lead to improving global hydrographic capability, capacity, training, science, data management, and techniques.
- PT conducted a Gap analysis between new IHO Strategy and the CB strategy identifying three work items:
 - Draft aligned CB strategy
 - Update phases of development (to include a phase 0 on governance)
 - Add a 5th step to the process of the CB Strategy (Awareness; Assessment; Analysis; Action) to address Measures of Effectiveness (MoE)

INTERNATIONAL HYDROGRAPHIC ORGANIZATION



IHO Capacity Building Strategy



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IHO E-LEARNING CENTER

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- The IHO Assembly endorsed the installation of an IHO e-Learning Center
- Main reasons include the recognition of:
 - The importance and potential of the e-Learning
 - The incrementation of the e-Learning during and post-pandemic
 - The initiative from Republic of Korea to establish and support an IHO e-Learning Center





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IHO E-LEARNING CENTER

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<https://elearning.iho.int/>



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IHO E-LEARNING CENTER

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➤ Start the tests

➤ Necessary contents

4 e-Learning courses are loaded:

- 1 Hydrographic Surveying
- 1 Cartographic Production
- 2 MSDI

The screenshot displays the IHO E-Learning Center interface. At the top, there are search filters: a 'Category' dropdown menu set to 'Select category', 'Registration Type' with radio buttons for 'Self-paced' and 'Instructor-led', 'Progress Status' with radio buttons for 'All', 'Accepting', 'Ongoing', and 'Closed', and 'Sort by application deadline' with radio buttons for 'Ascending' and 'Descending'. Below these filters is a search bar with the text 'Course name' and an orange 'Search' button. To the right of the search bar are 'Reload' and 'Detailed Search' options.

The main content area shows a grid of course cards. The top row contains three cards: 1. 'Ongoing' status, 'TRDC' logo, 'MSDI Fundamentals of MSDI (Marine Spatial Data Infrastructure)', 'Instructor-led', 'Lecture time: 2h38m', 'Enrollment Period 11-01-2021 - 05-31-'. 2. 'MSDI fundamentals', 'Instructor-led', 'Lecture time: 2h 28m', 'Enrollment Period 01-03-2022 - 01-31-'. 3. 'Carto Fundamentals of Chart Production', 'Instructor-led', 'Lecture time: 5h35m', 'Enrollment Period 12-01-2021 - 12-31-'. The bottom row contains one card: 'Hydro Fundamentals of Hydrographic Survey', 'Instructor-led', 'Lecture time: 2h32m', 'Enrollment Period 12-01-2021 - 12-31-'. A 'Total 4' indicator is visible at the top left of the course grid.



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EMPOWERING WOMEN IN HYDROGRAPHY

- The 2nd Session of the IHO Assembly (A-2) approved the adoption of a new work item of Empowering Women in Hydrography (EWH) to the Work Programme of the IHO CBSC
- The goal is to initiate, organize and track a series of activities and initiatives which will **enable more women to participate equitably in the field of hydrography** and to assume more leadership roles within the hydrographic community.





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EMPOWERING WOMEN IN HYDROGRAPHY

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UN DECADE OF THE OCEAN

#14 : *Conserve and sustainably use the oceans, seas, and marine resources*

#5 : *Gender equality, Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life*





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FIRST YEAR ACHIEVEMENTS


- Kick-off meeting (33 participants from 16 countries)
- 1 internships on the outreach of the EWH project, in the IHO office
- 3 internships related with the review process of submitted programmes to the IBSC, with in-person participation on the IBSC45 Meeting.
- 3 at-sea experiences made available by NOAA.
- Submission to the 'Call for Decade Actions No. 02/2021' as part of the United Nations Decade of Ocean Science for Sustainable Development
- Webinar on Gender-balance and empowering leaders
- Women role-models - interviews among volunteer women from all position in the hydrographic community





Thank you

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