



Assessment of Contractor Training Programme

— COMRA



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01 **The view on capacity- building measures of China**

To Co-build a Maritime community with a shared future

China's view on capacity-building measures

◆ UNCLOS, Part XI, Article. 136

-The Area and its resources are the **common heritage of mankind (CHM)**

UNCLOS, Part XI, Article. 143

◆ -The Authority shall promote and encourage the conduct of marine scientific research in the Area, and shall **coordinate and disseminate the results** of such research and analysis when available.

UNCLOS, Part XIV, Article. 273

-**States** shall cooperate with the Authority to encourage and **facilitate the transfer of skills and marine technology to developing States**, their nationals and the Enterprise.

These Articles highly accord with Chinese Concept “Co-build a Maritime community with a shared future”.

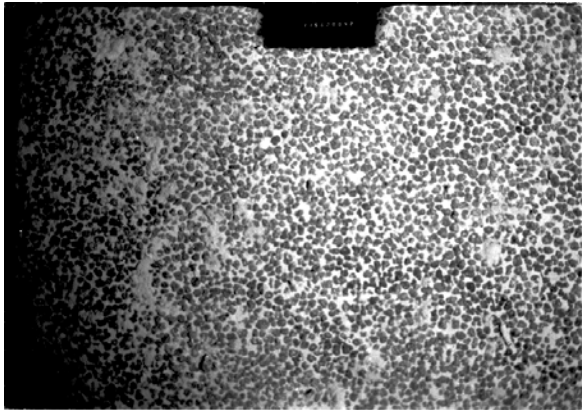
02

Contractor Training Programme of COMRA

Overview of Contractor Training Programme and impact

Contractor Training Programme of COMRA

- ◆ China became **a member State** of UNCLOS .
- ◆ COMRA(China Ocean Mineral Resources Research and Development Association) **sponsored by Chinese Government** has signed **3 contracts with ISA.**



**Polymetallic Nodules
Contract
2001-2016
(extension 2016-2021)**



**Polymetallic
Sulphides Contract
2011-2026**



**Cobalt-rich Crusts
Contract
2014-2029**



Contractor Training Programme of COMRA

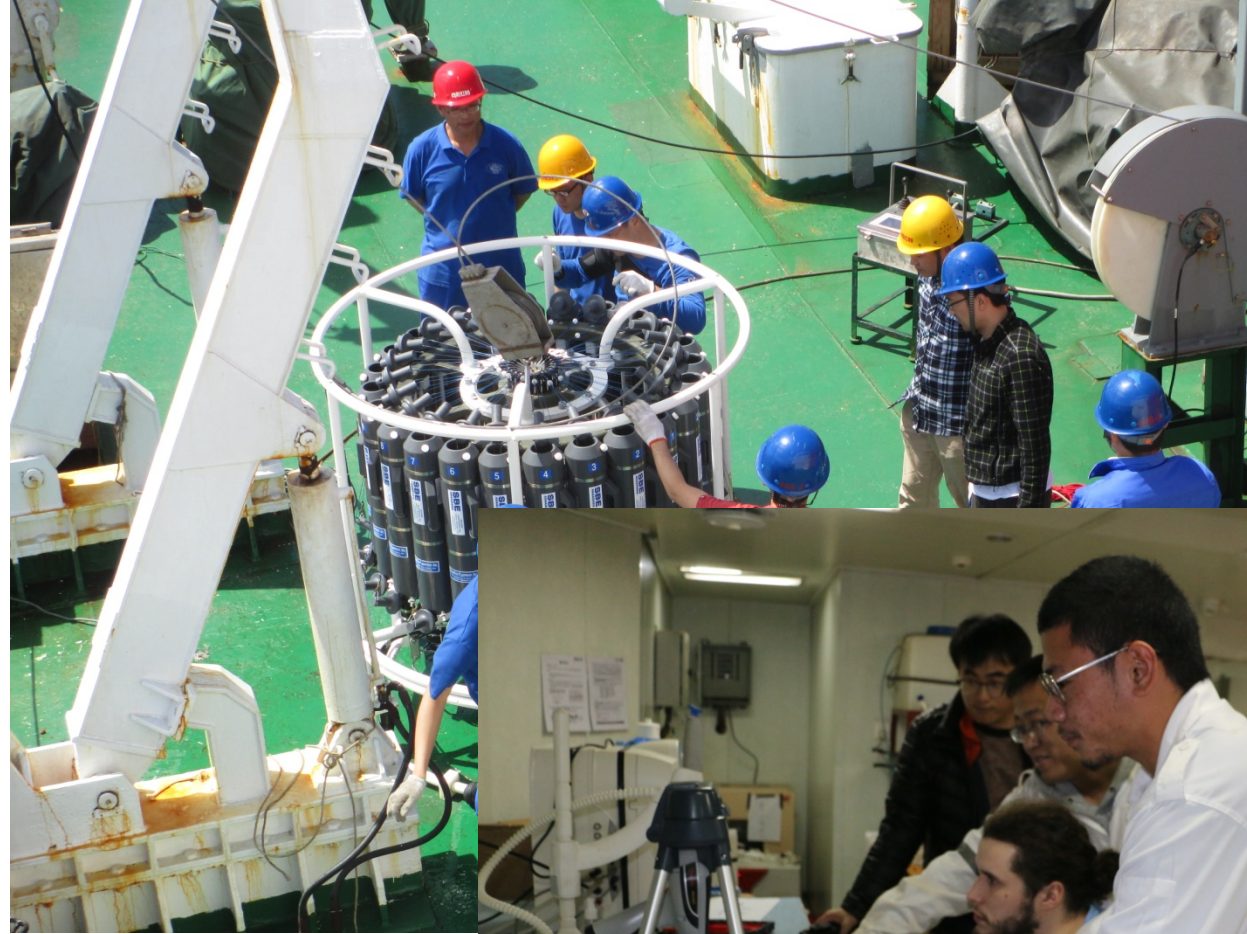
In Accordance with :

- UNCLOS, Annex III, Article. 15 - The **legal obligations** of **contractors** with regard to training
《Decision of the Assembly of the International Seabed Authority regarding the amendments to the Regulations on Prospecting and Exploration for **Polymetallic Nodules** in the Area 》 ISBA/19/A/9
- 《Decision of the Assembly of the International Seabed Authority relating to the regulations on prospecting and exploration for **Polymetallic Sulphides** in the Area 》 ISBA/16/A/12 REV. 1
- 《Decision of the Assembly of the International Seabed Authority relating to the Regulations on Prospecting and Exploration for **Cobalt-rich Ferromanganese Crusts** in the Area 》 ISBA/18/A/11
- 《Recommendations for the guidance of contractors and sponsoring States relating to **training programmes** under plans of work for exploration 》 ISBA/19/LTC/14

Providing training opportunities for personnel from developing States and the Enterprise is a way of **Benefit Sharing and Contribution** by COMRA .



Contractor Training Programme of COMRA





Contractor Training Programme of COMRA



Contractor Training Programme of COMRA



Total: 33 opportunities



Polymetallic Nodules Contract

9 opportunities (including 4 opportunities nominated by the Preparatory Commission, August 1995)



Polymetallic Sulphides Contract

14 opportunities (1 was gave up)



Cobalt-rich Crusts Contract

10 opportunities (2 were gave up)

Although they would not be provided other opportunities, some candidates **still gave up the opportunities for their own reasons .**



Contractor Training Programme of COMRA

Polymetallic Nodules Contract—9 opportunities before 2016

Types	Topics	Opportunities
At-sea training	On-board abilities	2
Master Programme	Marine Science	2
Ph.D Programme	Marine Science	1
	Total	5

- **4 trainees were trained under the training programme nominated by the Preparatory Commission, August 1995**



Contractor Training Programme of COMRA

Polymetallic Sulphides contract - 14 opportunities (1 candidate gave up)

Types	Year	Topics	Opportunities	Name of trainees
At-sea training	2014	Geological sampling and analysis; geophysical data collection/analysis; environmental studies.	2	Dieudonne Tchokona Seuwui (M, Cameroon) Apichai Kanchanapant (M, Thailand)
	2014	Geological sampling and analysis; geophysical data collection/analysis; environmental studies.	2	Analía Verónica Serra (F, Argentina) 1 candidate gave up
Engineering and technical training	2015	Marine survey techniques ; marine engineering and techniques indoor; mining, metallurgical processing technology.	2	Md.Minhaj Uddin Monir (M, Bangladesh) Natia Anzori Chomakhidze (F, Georgia)
Fellowship training	2015	Marine survey techniques ; Marine sciences; assessment of distribution and abundance of deep-sea mineral resources	2	Reinier Giralt Ortega (M, Cuba) Natalia Amezcua Torres (F, Mexico)
At-sea training	2019	Operation and use of survey equipments (Geology, geophysics, biology); adaptive path planning for polymetallic sulphides exploration; Marine microbiology .	6	Alana A Mina (F, Argentina) Win M Than (M, Myanmar) Tomas Helle Pessot (M, Chile) Keanu Jershon Sarmiento (M, Philippines) Josephine Njeru (F, Kenya) Syntyche B Harun (F, Nigeria)
Total			14	



Contractor Training Programme of COMRA

Cobalt-rich Crusts contract - 10 opportunities (2 candidates gave up)

Types	Year	Topics	Opportunities	Name of trainees
At-sea training	2017	Geological sampling and analysis; geophysical data collection/analysis; environmental studies; Introduction to submersibles and the operation of HAIMA ROV; Sampling and description of geological samples;	5	Noah Awuntigi (M, Ghana) Elizabeth A. Perez Gonzalez (F, Mexico) Naftaly Osoro Nyakundi (M, Kenya) 2 candidates gave up
Fellowship training	2017	Marine sciences; geological and geophysical survey techniques ; Marine sciences; mining, metallurgical, processing technology.	3	MD Bazlar Rashid (M, Bangladesh) Gor Gevorgyan (M, Armenia) Mariana Benites (F, Brazil)
Engineering and technical training	2018	Deep-sea mining, metallurgical and processing technology; Visit to the Changsha Research Institute of Mining and Metallurgy, and the Central South University (CSU) etc.	2	Karla Tituana Baren (F, Ecuador) Koffi Vossah Messan (M, Cameroon)
		Total	10	

Contractor Training Programme of COMRA

**Funds expended on Training
Programmes of 3 contracts :
approximately **\$820,000****





Impacts



“This Program Training was a pleasant experience for both my vocational training and my personal growth. As a mining engineer, I am aware of the importance of minerals for the development of industry and the society of today.

----- Karla Tituana(Ecuador) Cobalt-rich Crusts Contract-Engineering and technical training , 2018



Impacts



“The training experience **was highly informative and rewarding**. ... Without a doubt, the training has **added significant value to my skill set as a marine researcher**..... The valuable networks and friendships formed in the course of the training will indeed **be useful in forming future collaborations in marine research**.

----- Josephine Njeru (Kenya) Polymetallic Sulphides Contract At-sea training, 2019

Impacts

- ◆ **Increased participation of developing States in the work of ISA and in activities undertaken in the Area**
- ◆ **Increased skills and additional competences amongst developing States**
- ◆ **Improved management practice of seabed activities**
- ◆ **Increased protection and conservation of marine biodiversity**






03

Other capacity-building schemes implemented by China

Endowment Fund for Marine Scientific Research(EFMSR).

Other capacity-building schemes implemented by China

-  In Accordance with 《Decision of the Assembly of the International Seabed Authority relating to the terms of reference, guidelines and procedures for the International Seabed Authority **Endowment Fund**》 (ISBA/13/A/6)
-  China **donated \$ 20,000** to the **Endowment Fund for Marine Scientific Research in the Area(EFMSR)** of ISA in 2019 .
-  Chinese institutions, such as Marco Polo-ZhengHe, Shanghai Jiao Tong University, Second Institute of Oceanography, have **benefited from EFMSR**. And they have **provided 32 opportunities** for **developing States**.



04

Challenges and Solutions

Challenges and Potential Solutions of capacity-building programme



Challenges

- ◆ Training Programme provided **by Contractors alone cannot satisfy** the **priority needs** and **the specific needs** of integrated participation by developing States in the activities undertaken in the Area.
- ◆ Candidates are suggested to **receive the supports** from their nations and organizations to attend the training programme on schedule in case of losing the precious opportunities
- ◆ It is difficult to ascertain that trainees would still work on deep-sea affairs after returning to their parent organizations, which may lead to **a waste of training experiences.**
- ◆ There is a **lack of effective cooperation** between training programmes of different contractors.



Solutions



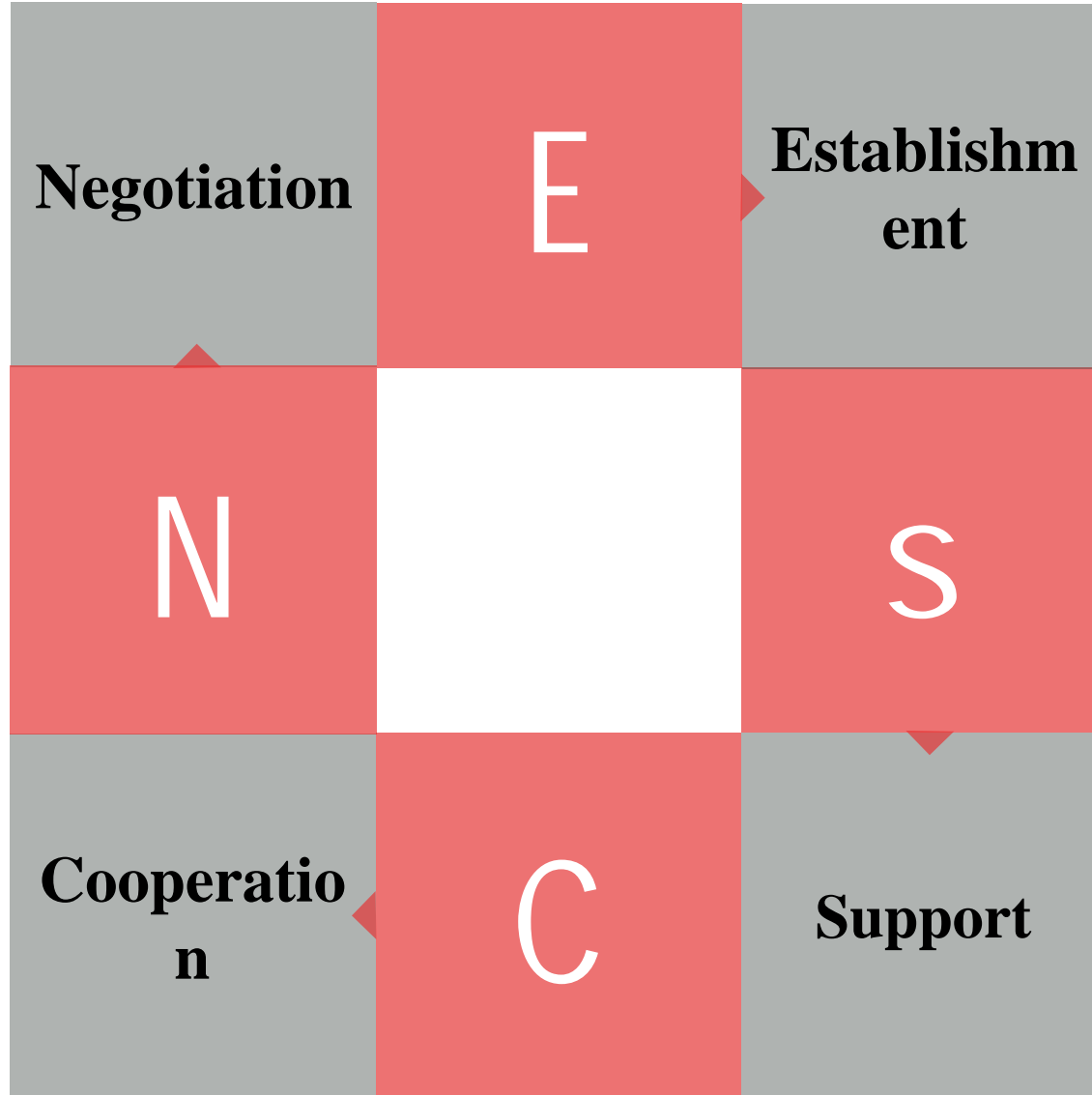
Negotiation

Negotiate with ISA and the developing states for **the priority and specific demands** and **design the training programmes accordingly**



International Cooperation

Member States are suggested to **strengthen international cooperation** with each other. **JTRC** in China can provide the platform for cooperation.



Establish co-training centers

Establish co-training centers, such as **JTRC** in China, to **elaborate multiple forces**, especially the support by governments.



Support from nations

Nominated nations are suggested to protect the trainees' rights and interests and **support them** in contributing themselves to deep-sea affairs by utilizing the skills from training programmes.

05

Conclusion

Summarize China's Training Programmes

Summary

- ◆ China has provided **33 opportunities under CTP** (overall costs is approximately **\$ 820,000**) and **32 opportunities under EFMSR** for developing States.
- ◆ COMRA Training Programmes **improved** skills , management practice of seabed activities of trainees from developing States.
- ◆ There are still **many challenges** during performance of CTP and EFMSR.
- ◆ COMRA provide some **potential solutions**, eg establishing co- centers, support from nations and strenghten International Cooperation.

China will further promote the implementation of the principle of the common heritage of mankind and co-build a Maritime Community with a Shared Future.

**Thank you for
your attention**

