CHAPTER 9

State Practice in Deep Seabed Mining: The Case of the People's Republic of China

Keyuan Zou

1 Introduction

Under the 1982 United Nations Convention on the Law of the Sea (UNCLOS), the international deep seabed area is named "the Area", which, together with its resources, is the common heritage of mankind.[1] No State should claim or exercise sovereignty or sovereign rights over any part of the Area or its resources, nor should any State or natural or legal person appropriate any part thereof.[2]

Since deep seabed areas beyond the limit of national jurisdiction have been treated as the common heritage of mankind, all activities there are governed by the international regime created under the UNCLOS. The International Seabed Authority (ISA) was accordingly established on 16 November 1994, upon the entry into force of the UNCLOS. The ISA has its headquarters in Kingston, Jamaica and functions as the representative of the whole of mankind for the management of deep seabed mining. The ISA is an autonomous international organization under the UNCLOS and the 1994 Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea (the 1994 Agreement),[3] and through it States Parties to the UNCLOS can, in accordance with the regime for the seabed and ocean floor and subsoil thereof beyond the limits of national jurisdiction (the Area) established in Part XI and the 1994 Agreement, organize and control activities in the Area, particularly

* Some parts of this chapter are drawn from my previous article: 'China's Efforts in Deep Seabed Mining: Law and Practice', *International Journal of Marine and Coastal Law*, Vol. 18, 2003, 481–508.

1 United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 21 ILM 1261 (1982) (UNCLOS), Art. 136.

2 UNCLOS, Art. 137 (1).

3 Text is available at <http://www.un.org/Depts/los/convention_agreements/texts/unclos/closindxAgree.htm> accessed 4 September 2017.

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with a view to administering the resources of the Area.[4] Deep seabed mining, once described as 'a remote possibility',[5] has gradually become a more realistic proposition, as can be seen from the increased activities carried out by States concerned. In State practice, China's activities and contributions to the deep seabed mining regime merits closer examination.

2 China at UNCLOS III

In 1971, the People's Republic of China (PRC) took the seat in the United Nations as the sole legitimate government of the whole of China, and accordingly sent delegations to attend UNCLOS III from beginning to end (1973–1982). During UNCLOS III, China submitted a working paper specifically on 'General Principles for the International Sea Area'. According to the Chinese view, the ocean and the sea should be divided into two parts under the law of the sea: the sea area within the limits of national jurisdiction, and the international sea area including 'all the sea and ocean space beyond the limits of national jurisdiction'.[6] The international sea area and its resources are, in principle, jointly owned by the people of all countries.[7] It is clear that China's concept of the "international sea area" is different from that of the "international seabed area" in the sense that the Chinese concept does not limit itself to the deep seabed.

China did not use the term "high seas" in referring to the international sea area, as China viewed the term as obsolete, appearing as it did in the four 1958 Geneva Conventions to which China had not acceded: in China's eyes, the Geneva Conventions were representative of the old law of the sea. While the old law of the sea served only the interests of a few big powers, the new UNCLOS laid down a number of important legal principles for safeguarding

4 See 'About the Authority', available at <http://www.isa.org.jm/en/default.htm> accessed 4 September 2017.

5 M. Lodge, 'International Seabed Authority's Regulation on Prospecting and Exploration for Polymetallic Nodules in the Area', *Journal of Energy & Natural Resources Law*, vol. 20, no. 3, 2002, p. 294.

6 'Working Paper on General Principles for the International Sea Area', A/AC.138/SC.II/L.45, 6 August 1973, reprinted in J. Greenfield, *China's Practice in the Law of the Sea*, Clarendon, 1992, p. 235.

7 Ibid.

the common heritage of mankind and the legitimate maritime rights and interests of all States.[8]

In 1972, the Chinese delegation expressed the view that the international regime should not limit its regulation to seabed exploration and exploitation activities. If the regulatory scope of the international seabed area were only limited to the development of seabed mineral resources, it would neither accommodate the interests of developing countries, nor satisfy the concept of the common heritage of mankind.[9] Later on, when the international regime for the deep seabed was finally established, China shifted its original position so as to support the new regime encompassing only the deep seabed.

In criticizing the superpowers, China considered the 'parallel system of exploitation' put forward by one superpower to be a bad idea.[10] Later on, China changed its stance and did not oppose the establishment of the parallel system, both as a compromise and as a provisional arrangement, provided that the necessary technology and resources for the Authority and the Enterprise were guaranteed.[11]

The Chinese delegation was dissatisfied with the final arrangement for the legal regime of deep seabed mining:

> Resolution II of the Conference, governing preparatory investment in pioneer activities relating to polymetallic nodules, has done too much in the way of meeting the demands of a few industrialized nations and given them and their companies some privileges and priorities. We consider that inappropriate.[12]

8 Mr. Han Xu, 191st Meeting, Plenary Meetings, 9 December 1982, in United Nations, *Third United Nations Conference on the Law of the Sea: Official Records*, Vol. XVII, 1984, at 102.

9 X. Pu on Ocean International Regime, 27 July 1972, reprinted in Peking University Law Department (ed.), *Collected Materials on the Law of the Sea*, People's Press, 1974, (in Chinese), pp. 35–36.

10 See Mr. Lin Ching, 76th Meeting of the Plenary Meetings, 17 September 1976, in United Nations, *Third United Nations Conference on the Law of the Sea: Official Records*, Vol. VI, 1977, at 26.

11 See Mr. Ke Zaishuo, 114th Meeting of the Plenary Meetings, 26 April 1979, in United Nations, *Third United Nations Conference on the Law of the Sea: Official Records*, Vol. XI, 1980, at 22.

12 Mr. Han Xu, *supra* note 8, at 102.

In the early 1970s, China had no intention of exploring deep seabed mineral resources itself, and had no capability to carry out any deep seabed exploration even if it had had the intention of doing so, as during that time its economy was on the verge of collapse. Only after China had carried out its economic reforms and introduced its "open-door" policy in 1978 did this become feasible.

3 Operational Mechanism

China began its investigation of seabed mineral resources at the end of the 1970s. In 1983, 1985, and 1987, two scientific vessels – *Xiangyanghong 16* and *Xiangyanghong 9* – completed comprehensive surveys including meteorology, hydrology, physical sampling, environment, and geology in the central, north and northwest Pacific. In 1982 China sent a letter to the chairman of the UNCLOS III stating that it had spent 80 million RMB (ca. $US40 million) on polymetallic nodule investigations, but China did not ask to be listed as a potential pioneer investor. After various surveys, an application area totalling 300,000 sq km was delineated.[13]

The China Ocean Mineral Resources Research and Development Association (COMRA) was eventually established in 1990. COMRA was defined as a state enterprise at that time.[14] The purpose of COMRA was to develop new mineral resources for China, enhance the development of high technology for deep seabed mining, and contribute to mankind's development and utilization of international seabed resources. The supreme authority of COMRA is the Council, which consists of 47 council members from 13 governmental departments and their subsidiaries. The implementing organ is the permanent council while the general office deals with daily affairs in accordance with the decisions of the Council and the Permanent Council.[15]

A milestone national conference was held in October 1999 regarding China's future strategy for deep seabed activities. The following consensus was reached through the conference: (a) to formulate a national strategy for the Area; (b) to adhere to the policy of being actively involved in activities in

13 The delineation followed some indexes: average nodule abundance of the area greater than 5 kg/m^2, nodule grade (content of copper, cobalt and nickel) greater than 1.8%, and the seabed slope less than 5^0. Wang Zhixiong, 'China and the Exploitation of Deep Seabed Polymetallic Nodules', *Marine Policy*, vol. 15, no. 2), 1991, p. 133.

14 Wang, *supra* note 13, p. 133.

15 See 'China Ocean Mineral Resources Research and Development Association', available at <http://www.soa.gov.cn/jigou/2/dayang.htm> accessed 4 September 2017.

the Area and to strengthen China's status in Area affairs and in the international arena; (c) to adopt the policy of 'continuously carrying out deep sea surveys, greatly developing deep sea technology, and establishing in due time a deep sea industry'; and (d) to single out three stages of development for the first half of the twenty-first century: resource prospecting and mining site application, studying and developing deep sea technology, and establishing a deep sea industry.[16]

COMRA is also directly engaged in international cooperation concerning deep seabed mining. In 1993 COMRA signed three agreements respectively: with the Interoceanmetal Joint Organization (IOM) concerning cooperative experiments on hydraulic lifting of polymetallic nodule ore pulp using pumped water; with the Nansen Institute of Norway concerning regional cooperation in deep seabed mining, strategic research, mining technology and other areas; and with the International Ocean Institute (IOI) concerning the organization of a training programme in the management of international seabed mining held in China in 1995.[17] In addition, COMRA was required as a pioneer investor to 'provide training at all levels for personnel designated by the Commission'.[18] Four trainees (from Algeria, Belarus, South Korea and Sudan) selected by the Commission arrived in China in mid-May 1994 to begin their training – COMRA fulfilled its training obligations on 25 April 1995.[19]

4 China and PrepCom

After the adoption of the UNCLOS, the PrepCom was established in December 1982 when 117 States and two other entities signed the Convention. This was in conformity with Resolution I contained in the Final Act of the UNCLOS III in that the UN Secretary-General should convene the Commission, and the

16 See 'Chronology of China's Research and Development of Ocean Mineral Resources, 1998–1999', available at <http://www.soa.gov.cn/dygz/98-99.htm> accessed 4 September 2017.

17 See 'Periodic Report on the Activities of the China Ocean Mineral Resources Research and Development Association (COMRA) in the Pioneer Area', ISBA/3/LTC/R.4, 24 June 1997, 4–6.

18 Resolution II, Para.12 (a)(ii).

19 See 'Training programmes under resolution II of the Third United Nations Conference on the Law of the Sea', ISBA/7/LTC/2, 25 June 2001, 2, 4 and 5; and 'Periodic Report of the China Ocean Mineral Resources Research and Development Association (COMRA) on Its Activities in the Pioneer Areas from 1 January to 31 December 1995', ISBA/4/LTC/R.5, 4 August 1999, at 3.

Commission should meet within 90 days thereafter, upon signature of or accession to the Convention by 50 States. In 1983 the PrepCom held its first session where a Plenary and four special commissions were established to implement the mandates entrusted by Resolution II. The most important result from the PrepCom meetings lie in two areas: the arrangement for the registration of pioneer investors based on Resolution II, and the adoption of the 1994 Agreement.

As referred to in Resolution II, pioneer investors include: (a) France, India, Japan and the former Soviet Union (now replaced by Russia) or their enterprises; (b) four entities whose components are from more than one of Belgium, Canada, former West Germany (now Germany), Italy, Japan, the Netherlands, the United Kingdom or the United States; and (c) any developing country or its enterprises.[20] Pioneer investors have the right to conduct pioneer activities such as undertakings, commitments of financial and other assets, investigations, findings, research, engineering, development and other activities relevant to the identification, discovery, and systematic analysis and evaluation of polymetallic nodules and to the determination of the technical and economic feasibility of exploitation. Pioneer investors can have a pioneer area of no more than 150,000 sq km allocated by the PrepCom for pioneer activities. Half of the allocated pioneer area should be relinquished to revert to the Area in due time in accordance with the schedule set forth by Resolution II.[21] However, there are a set of requirements for a country, or its entity to be registered as a pioneer investor: it should have signed the UNCLOS, identify an area of pioneer activities in its application, and pay a fee of US$250,000. The intended State had spent US$30 million for its pioneer activities before 1 January 1983 (1 January 1985 if the State was a developing country). Since no pioneer investor could be registered in respect of more than one pioneer area, the issue of overlapping claims among some countries needed to be resolved. To this end, the Arusha Understanding was reached in 1986, which laid down new procedures and a timetable for the resolution of overlapping claims.

Based on the Arusha Understanding, a prospective pioneer investor may allocate 52,300 sq km for itself and France, Japan and the Soviet Union together would give the ISA an area of 52,000 sq km. This procedure deviated from the original provision contained in Resolution II, but it was a compromise

20 1(a) of Resolution II.

21 The schedule is: (a) 20% is relinquished by the end of the third year from the date of the allocation; (b) additional 10% by the end of the fifth year from the date of the allocation; and (c) the final 20% after eight years from the date of the allocation or the date of the award of a production authorization, whichever is earlier.

to woo more pioneer investors. Since India's allocated area was in the Indian Ocean where no overlapping claims existed, India was the first to be registered through the PrepCom as a pioneer investor on 17 August 1987.[22] Encouraged, IFREMER/AFERNOD, DORD, and Yuzhmorgeologiya were registered at the end of that year. COMRA was registered on 5 March 1991, followed by IOM (21 August 1991) and the Government of the Republic of Korea (2 August 1994).

At the summer meeting of the PrepCom in 1991, China's obligation as a pioneer investor was discussed. Since the PrepCom treated the registration of India differently from other pioneer investors and imposed fewer obligations on it, China requested the same treatment on the grounds that both were developing countries. With much effort made by the Chinese delegation and repeated consultations at the meeting, the issue of China's obligation was finally resolved in a reasonable manner.

The 1994 Agreement and Part XI of the UNCLOS should be interpreted and applied together as a single instrument. In the event of any inconsistency, the provisions of the Agreement prevail.[23] The Agreement can override and is thus superior to the provisions of Part XI. This practice is unique in the sense that a treaty has been amended before its entry into force. The Agreement came into effect on 28 July 1996. It has changed, to some fundamental extent, the original deep seabed regime created by Part XI of the UNCLOS, though the principle of the common heritage of mankind continues to be maintained.[24] The major changes are reflected in the following eight areas:

(a) The burden of costs on States parties has been reduced;
(b) The privileges of the Enterprise have been cancelled so that it will become a normal enterprise;
(c) The new regulations have simplified the decision-making process;
(d) The special provisions on the Review Conference in Art. 155 (1)(3)(4) of the LOS Convention have been overridden by normal procedures of review and amendment;
(e) The obligation to transfer technology on a compulsory basis by contractors to the Enterprise has been cancelled;
(f) The production limit has been lifted;

22 The registration was described by the then UN Secretary-General Perez de Cuellar as 'one of the significant developments in the law of the sea since the adoption of the Convention'. Press Release SEA/876, 24 August 1987, at 1.

23 Art. 2 of the 1994 Agreement.

24 As provided in UNCLOS, Art. 311 (6), the principle of common heritage of mankind should not be amended.

(g) Developing land-based producer countries which are adversely affected by the production of minerals from the Area will be economically assisted by way of a fund to be established by the ISA;
(h) The procedure for financial terms of contracts has been simplified and the rates of payments reduced.

China actively participated in the consultations and it was one of the six proposing States (with Fiji, Germany, India, Indonesia and the United States) of the final draft Agreement. The Chinese delegate was satisfied with the result of the informal consultations and considered the 1994 Agreement a solution to the difficulties in implementing Part XI of the UNCLOS while maintaining the principle of common heritage of mankind and taking care of the countries that had or had not ratified the Convention. The Chinese delegate promised to apply *ad hoc* the Agreement from 16 November 1994 before China's official ratification.[25] It is noted that when China ratified the UNCLOS in 1996, it also ratified this Agreement.

5 China and the ISA

The ISA has been fully operational since June 1996. It has five subsidiary organs: the Assembly, the Council, the Legal and Technical Commission, the Finance Committee and the Secretariat. According to the UNCLOS, there should be a subsidiary organ under the Authority called "the Enterprise", which has yet to be established since no actual mineral exploitation activities have been conducted so far, and its function is currently performed temporarily by the Secretariat. Among the organs, the most important organ is the Council which, as a decision-making body of the ISA, has the power to lay down specific policies following the general policies by the Assembly. Due to its importance, the composition of the membership is very delicate: 36 members of the Authority are to be elected by the Assembly from five interested groups for the Council:

(a) Four members from those States Parties which, during the last five years for which statistics are available, have either consumed more than 2 per cent of total world consumption or have had net imports of more than 2 per cent of total world imports of the commodities produced from the

25 See Z. Lihai, *Studies on the Issues of the Law of the Sea*, Peking University Press, 1996, (in Chinese), pp. 186–187.

categories of minerals to be derived from the Area. The four members should include one State – the largest in terms of gross domestic product – from the Eastern European region.

(b) Four members from the eight States Parties which have the largest investments in preparation for and in the conduct of activities in the Area, either directly or through their nationals.

(c) Four members from States Parties which, on the basis of production in areas under their jurisdiction, are major net exporters of the categories of minerals to be derived from the Area, including at least two developing States whose exports of such minerals have a substantial bearing upon their economies.

(d) Six members from developing States Parties representing special interests. The special interests to be represented shall include those of States with large populations, States which are land-locked or geographically disadvantaged, island States, States which are major importers of the categories of minerals to be derived from the Area, States which are potential producers for such minerals, and less developed States.

(e) Eighteen members elected according to the principle of ensuring an equitable geographical distribution of seats in the Council as a whole, provided that each geographical region shall have at least one member elected under this subparagraph. For this purpose, the geographical regions should be Africa, Asia, Eastern European, Latin America and the Caribbean and Western Europe and Others.[26]

The first Council of the ISA was elected by the Assembly at the second session of the ISA in March 1996. China was elected as a member in Group B and reelected in 2000 for another four-year term from 2001 to 2004.[27] It is interesting to note that China was elected within Group B though China is eligible for candidacy for Groups D (developing countries) and E (regional representation). Since 2013, China has joined Group A – this reflects the change of China's status. In 1997, the Chinese delegation submitted to the ISA at its summer session the exploration plan of COMRA for the period 1998–2012, which was later approved by the Council of the Authority. The plan outlined the basic

26 The composition of the Council was originally provided for in UNCLOS, Art. 161(1), which has been replaced by a revised provision in Paragraph 15, Section 3 of the Annex to the 1994 Agreement.

27 See International Seabed Authority, *Handbook 2001*, May 2001, pp. 10–11.

framework for China's research and development activities relating to ocean polymetallic nodules in the Area.[28]

China participated in the deliberations of the mining code and stressed that the code should encourage qualified States or entities, particularly developing countries, to enter into the sphere of deep seabed activities.[29] During the first meeting of the sixth session of the ISA in March 2000 where the draft mining code was discussed, the Chinese delegation made several contributions to the progress of the negotiations. On the issue of confidentiality, the draft provisions favour the miners, containing legal liability and punishment for the disclosure of confidential materials. On the issue of environmental protection, the original wording of 'precautionary measures' was changed to 'precautionary approach' by the efforts of the Chinese delegation and others.[30] To China, precautionary measures or principles require miners to overspend on environmental equipment even before the occurrence of any evidence that the mining activities have caused environmental damage. The phrase 'best available technology' was also amended to 'best available technology to the miners' on the suggestion of China so that miners could avoid a potentially heavy financial burden caused by having to purchase the world's best technology. Finally, with the efforts of China, Russia and other countries, the procedure of reporting to the ISA was simplified. For example, the original separate requirements for marine environmental variations and marine monitoring were combined.[31] The Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area were finally adopted in July 2000 and it was later updated and adopted on 25 July 2013.

Following the successful adoption of the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area, the ISA adopted the Regulations on Prospecting and Exploration for Polymetallic Sulphides in the Area (7 May 2010) and the Regulations on Prospecting and Exploration for Cobalt-Rich Crusts (27 July 2012). All the above three Regulations

28 'Periodic Report of the China Ocean Mineral Resources Research and Development Association (COMRA) on Its Activities in the Pioneer Areas from 1 January to 31 December 1997', ISBA/4/LTC/R.7, 4 August 1999, at 1.

29 Office of Policy Studies, Ministry of Foreign Affairs, PRC (ed.), *China Diplomacy 1999* (in Chinese), pp. 667–668.

30 As acknowledged, the scientific and legal implications of the application of the precautionary approach in the context of activities in the Area are extremely unclear and require considerable further study. See Lodge, *supra* note 5, at 288, no.106.

31 See 'Progress on the negotiation of the mining code at the first meeting of the six session of the ISA', available at <http://www.soa.gov.cn/intercop/ws15/nr6.htm> accessed 4 September 2017.

constitute the current 'mining code' for deep seabed mining. In March 2015, The Authority issued the following two consultation documents to members of the Authority and all stakeholders: Draft Framework for the Regulations of Exploitation Activities; and the Discussion Paper on the Financial Terms of Exploitation Contracts.[32] During the discussions, China expressed its views that while the draft made relatively comprehensive design and arrangements for marine environmental protection, it lacked similar design and arrangements for the development and utilization of seabed resources, particularly concerning the protection of operators. Therefore China urged that the draft should fully reflect the regulations and spirit of Part XI of the UNCLOS.[33]

In 2001, the ISA signed 15–year contracts with all existing pioneer investors except India for deep seabed explorations.[34] On 22 May 2001, the ISA officially signed the exploration contract with the COMRA in Beijing, formalizing the relationship between the two. The contract enables the COMRA to continue its exploration activities for polymetallic nodules in the northeast Pacific Ocean and gives the COMRA exclusive rights to explore the area allocated to it. The conclusion of the contract is a necessary step after a plan of work for exploration has been approved. As early as August 1997, the ISA approved the plans of work from all seven pioneer investors. China's approved plan would last 15 years.[35] Although the detailed terms and conditions of the Chinese contract are not yet available, the standard clauses annexed to the 2000 Regulations should be incorporated as required by the 2000 Regulations.[36] Furthermore, when the ISA concludes a contract with a State or entity, the conditions should be similar to and no less favourable than those agreed with any registered pioneer investor. Thus the principle of non-discrimination applies.

As of 31 January 2016, 23 contracts for exploration have entered into force (14 for polymetallic nodules, 5 for polymetallic sulphides and 4 for cobalt-rich ferromanganese crusts). The contracts sponsored by China are shown

32 'Ongoing Development of Regulations on Exploitation of Mineral Resources in the Area', available at <https://www.isa.org.jm/legal-instruments/ongoing-development-regulations-exploitation-mineral-resources-area> accessed 4 September 2017.

33 See Speech of Ma Xinmin, Deputy Dead of the Chinese Delegation to the 21st Session of the International Seabed Authority on the Agenda of 'Preparing the Regulations of Exploitation Activities', 22 July 2015, reprinted in *Chinese Yearbook of International Law*, Law Press, 2015, p. 742.

34 For details, see 'Deep Seabed Minerals Contractors', available at <https://www.isa.org.jm/deep-seabed-minerals-contractors> accessed 4 September 2017.

35 See Office of Diplomatic History Studies, Ministry of Foreign Affairs, PRC (ed.), *China's Diplomacy 1998* (in Chinese), p. 816.

36 Regulation 23 of the 2000 Regulations.

in Table 9.1 below. From the table below, we can see that China sponsored another Chinese enterprise in addition to COMRA for deep seabed mining. The Chinese contracts which expired in 2016 have now extended for another five years under ISA approval.

In recent years, China's involvement in ISA activities has intensified. On 3 March 2016, the ISA Legal and Technical Commission selected first-ranked and alternate candidates for the Global Sea Mineral Resources NV (GSR), China Ocean Mineral Resources Research and Development Association (COMRA) and Japan Oil, Gas and Metals National Corporation (JOGMEC) training programmes.

6 China's Legislation

In practice, deep sea mining within areas under national jurisdiction is regulated on the basis of legislation governing land-based mining in accordance with the Mineral Resources Law of the PRC, enacted in 1986 and amended in 1996.[37] This law provides a general legal framework for mining activities in China.

TABLE 9.1 *Contracts sponsored by China (as of 2016)*

1. Contracts for polymetallic nodules:
   COMRA, 22 May 2001, Clarion-Clipperton Fracture Zone, 21 May 2016;
   China Minmetals Corporation to be signed Clarion-Clipperton Fracture Zone (reserved area)
2. Contracts for polymetallic sulphides:
   COMRA, 18 November 2011, South-west Indian Ridge, 17 November 2026
3. Contracts for cobalt-rich ferromanganese crusts:
   COMRA, 29 April 2014, Western Pacific Ocean, 28 April 2029

SOURCE: PREPARED BY THE AUTHOR BASED ON ISBA/22/C/5, 'STATUS OF CONTRACTS FOR EXPLORATION IN THE AREA', 10 MAY 2016, AVAILABLE AT HTTPS://WWW.ISA.ORG.JM/SITES/DEFAULT/FILES/FILES/DOCUMENTS/ISBA-22C–5_1.PDF.

37 English text is available in Office of Policy, Law and Regulation, State Oceanic Administration (ed.), *Collection of the Sea Laws and Regulations of the People's Republic of China*, revised edition, Ocean Press, 1998, (in Chinese and English), pp. 233–252.

In 1994, the State Council passed the Rules for the Implementation of the Mineral Resources Law.[38] Art. 4 of the Regulations provides that the exploration and exploitation of the mineral resources within the territory of the PRC and other sea areas under its jurisdiction must comply with the Mineral Resources Law of the PRC and these Regulations.

China adopted a licensing-type system for mineral resources exploration and exploitation. Art. 13 and 16 of the Mineral Resources Law determine the competent agencies who are responsible for authorizing deep-sea mining: the department in charge of examination and approval of mineral reserves under the State Council or departments in charge of examination and approval of mineral reserves of provinces, autonomous regions and municipalities directly under the Central Government shall be responsible for the examination and approval of the prospecting reports to be used for mining construction design and shall, within the prescribed time limit, give official replies to the units that submitted the reports. Unless it is approved, a prospecting report may not be used as the basis for mining construction design.

Art. 16 provides that anyone who wishes to mine the following mineral resources shall be subject to examination and approval by the department in charge of geology and mineral resources under the State Council, which shall also issue a mining license:

(1) those within the mining areas embraced in State plans or within the mining areas which are of great value to the national economy;
(2) those outside the areas mentioned in the preceding sub-paragraph, and where the minable mineral reserves are at least of a large quantity;
(3) specified minerals of which protective mining is prescribed by the State;
(4) those in the territorial seas and other sea areas under China's jurisdiction; and
(5) other mineral resources as prescribed by the State Council.

The competent departments authorized by the State Council may conduct examination of and grant approval to mining of such specified minerals as oil, natural gas, radioactive minerals and issue mining licenses.

The mining of mineral resources that are not covered by the provisions of paragraphs 1 and 2 and the mineable reserves of which are of medium quantity shall be subject to examination and approval by the departments in charge of geology and mineral resources under the people's governments of

38 Available at <http://en.pkulaw.cn/display.aspx?cgid=9154&lib=law> accessed 4 September 2017.

provinces, autonomous regions and municipalities directly under the Central Government, which shall issue mining licenses. Measures for the administration of the mining of mineral resources not covered by the provisions of paragraphs 1, 2 and 3 shall be formulated by the standing committees of the people's congresses of provinces, autonomous regions and municipalities directly under the Central Government according to law. Where examination and approval are conducted and mining licenses are issued under the provisions of paragraph 3 and paragraph 4, the departments in charge of geology and mineral resources under the people's governments of provinces, autonomous regions and municipalities directly under the Central Government shall collect the cases and submit them to the department in charge of geology and mineral resources under the State Council for the record. The standards for large and medium quantities of mineral reserves shall be formulated by the department in charge of examination and approval of mineral reserves under the State Council.

Regarding maritime legislation, China has two basic laws: the 1992 Law on the Territorial Sea and Contiguous Zone and the 1998 Law on the Exclusive Economic Law and Continental Shelf.[39] Based on these two basic ocean laws, China established the maritime zones in accordance with the UNCLOS which China ratified on 15 May 1996. It is reported that China is preparing a comprehensive Ocean Law.

In terms of other related laws, there are the 1982 Marine Environment Protection Law, (amended 1999 and 2014), the 2001 Law on the Administration of the Use of Sea Areas, and the 2002 Law on Environmental Impact Assessment. The Law on the Administration of the Use of Sea Areas provides the regulation in details on the administration of the use of sea areas including the procedures on how to apply for use, the period of use and the approving process. Art. 25 of that Law provides the various lengths of period for the use of sea areas and the maximum period for salt production and mineral exploitation is 30 years.

Marine environmental protection is generally governed by the Marine Environment Protection Law (amended 1999 and 2014). Art. 46 provides general requirements on seabed mining: in building coastal construction projects, effective measures must be taken to protect wild animals and plants and their living environment as well as marine aquatic resources under State and local special protection. It is strictly prohibited to mine sand and gravel along the shore. In conducting coastal opencast mining or shore-based well drilling to

39 English versions of these two laws are appended to Zou Keyuan, *China's Marine Legal system and the Law of the Sea*, Nijhoff, 2005, pp. 338–345.

exploit seabed mineral resources, effective measures must be taken to prevent pollution to the marine environment. Currently, China's marine environmental law can be divided into two parts: legislation on environmental issues, and legislation on marine resources issues. Environmental legislation focuses on the prevention and management of marine environmental pollution, while resources legislation focuses on the exploration and exploitation of marine resources. China has established a relatively comprehensive legal system on marine environmental protection, which includes the Regulations on the Prevention and Control of Pollution Damages to the Marine Environment by Coastal Engineering Construction Projects, Regulations on the Prevention and Control of Pollution Damages to the Marine Environment by Offshore Engineering Construction Projects. The legal system of marine resources legislation is equally comprehensive, including Fisheries Law, Law on the Administration of the Use of Sea Areas, and Law on the Protection of Wildlife. Other legislations are the Provisions on the Administration of the Protection and Utilization of Uninhabitable Islands and the Provisions on the Administration of the Right to Use Sea Areas.

There are still defects in China's legal regime on ocean issues. For example, it focuses more on preventing and managing pollution than protecting marine resources, more on exploring and exploiting marine resources than the sustainable use of marine resources. Moreover, it lacks coordination from one law to another, and there are areas still not covered by the existing marine legal system.

In 1994, the Chinese government adopted *China Agenda 21* based on the spirit of the United Nations Conference on Environment and Development in 1992. The Agenda focuses on the sustainable development and protection of marine resources, rule of law for ocean activities and the improvement of the oceanic environment protection mechanism. Following *China Agenda 21*, the State Oceanic Administration adopted *China Ocean Agenda 21* which covers various areas of marine sustainable development including marine industries, coastal management, islands, marine science and technology, natural disaster prevention and mitigation, marine living resources, and marine environmental protection.

In 2012 and 2013, the State Council published two important documents: the National Marine Economy Development during the "12th Five-Year Plan" Period and the National Marine Programs Development during the "12th Five-Year Plan" Period. These aim to improve the marine legal system, including the promulgation of implementing regulations for the Law on the Administration of the Use of Sea Areas, the Marine Environment Protection Law, Mineral Resources Law, Island Protection Law, Fisheries Law, and Marine Traffic Safety

Law. The documents also aim to strengthen maritime law enforcement and its supervision, to strengthen the guidance for local marine legislation, to support reform and innovative activities in coastal areas, and to a build standard system of marine ecosystem and environmental protection.

7 New Legislation

In 2014, the draft Law on Exploring and Exploiting Resources in Deep Seabed Area, drafted by the NPC Environmental and Resources Protection Committee, had been included in the Legislative Plan of the 12th National People's Congress Standing Committee. During the first session of the 12th National People's Congress held in March 2013, 31 People's Representatives (equivalent to Members of Parliament) proposed a motion on the legislation of ocean resources exploration and exploitation. Delegates proposed in the motion that the deep ocean resources in the international seabed area have strategic significance to states, but China has no relevant domestic legislation, they advised to develop an ocean resources exploration and exploitation law, not only actively fulfilling China's treaty obligations, but also safeguarding national interests.

The Report of the 18th Congress of the Communist Party of China (CPC) states that 'We should enhance our capacity for exploiting marine resources, develop the marine economy, protect the marine ecological environment, resolutely safeguard China's maritime rights and interests, and build China into a maritime power'.[40] From the Report of the 18th CPC Congress and the reform program of the new administration, we can see that the Chinese government attaches great importance to building China into a maritime power and implementing a marine development strategy. Exploring and exploiting marine resources is the foundation of a maritime strategy and maritime economy. China has realised the urgency to adopt the deep seabed mining law, as most of the industrialized countries in the world have already enacted domestic legislation on deep seabed mining. There is also a tendency that whether the State Sponsor has domestic legislation in this field will become a condition for that State's future activities in the Area, which made China's enactment of the deep ocean exploration and development law face more pressing pressure. Hence China needed the legislation on deep ocean exploration and exploitation, which provides legal protection for the involvement of China in exploration and exploitation of mineral resources in the Area.

40 Available at <http://www.china-embassy.org/eng/zt/18th_CPC_National_Congress_Eng/t992917.htm> accessed 4 September 2017.

The Law on Exploring and Exploiting Resources in Deep Seabed Area of the PRC was officially adopted on 26 February 2016 and came into force on 1 May 2016. It contains 7 chapters and 29 articles.[41] Deep Seabed Area refers to the seabed, ocean floor and subsoil thereof, beyond the limits of national jurisdiction of China and other countries. The Law is designed to regulate exploration and exploitation activities, promote research on deep sea science, technology and resource investigations, protect the marine environment, promote the sustainable use of deep seabed resources, and safeguard the common interest of mankind.

According to the Law, any PRC citizen, legal person, or other organization, before applying to the ISA, shall apply to the competent authority of the State Council. The approved applicant can conduct exploration and exploitation only after it has signed such contract with ISA. Transfer or any substantial change should be subject to the approval of the competent authority of the State Council.

As for marine environmental protection, the new Law has a chapter containing three provisions. Accordingly, the contractor should, within reasonable and feasible limits, adopt necessary measures to prevent, reduce and control pollution or other harm to the marine environment arising from its activities in the area of exploration and exploitation (Art. 12). The contractor should determine environmental baselines, evaluate possible impact on the marine environment from development activities, prepare and implement environmental monitoring schemes (Art. 13). The contractor should take necessary measures to protect and preserve rare or vulnerable ecosystems, endangered species, and marine biodiversity (Art. 14).

It is noted that there are no specific rules regulating environment impact assessment (EIA) in deep sea mining. In the Chinese legal system, there is the Law on Environmental Impact Assessment, but it only applies to mining activities within China's jurisdiction. It is recalled that in 2009, the Chinese government issued the Regulations on Environmental Impact Assessment of Planning, and Art. 8 of the Regulations provides that 'An environmental impact assessment of planning shall include the analysis, forecast and assessment of the following items: 1. the possible overall impact on the ecological system of the relevant regions, basins and sea areas as a result of the execution of planning; 2. the possible long-term impact on the environment and human health as a result of the execution of planning; and 3. the relationship between the economic & social benefits and the environmental benefits, and

41 Available at <http://www.soa.gov.cn/zwgk/fwjgwywj/shfl/201602/t20160229_50172.html> accessed 4 September 2017.

the relationship between the present interests and the long-term interests from the execution of planning'.[42] Unfortunately, the new Law does not provide more detailed stipulations on EIA and its procedures.

The Law further provides that the State supports research on deep sea science and technology and resource investigations. The competent authority of the State Council should monitor and inspect the activities of the contractor. The Law also provides legal liability arising from deep seabed mining activities.

It is applauded that 'the promulgation of this law will help China better fulfil its responsibilities as a sponsoring State. This law has been filed with the International Seabed Authority for the record'.[43] However, the Law is more like an administrative rule. It provides details on how to apply and approve the mining activities. It does not provide the responsibilities of a sponsoring State, nor detailed rights of a contractor. Second, it is curious why it uses the term 'Deep Seabed Area' instead of 'International Seabed Area' as provided for in the UNCLOS. Since the Law is very general, there should be detailed regulations to be worked out for the implementation of the Law. The coordination of the Law and the relevant regulations adopted by the ISA in terms of implementation. There might be a potential conflict between the two.

8 Conclusion

China's deep seabed exploration began under the centrally planned economic system, but after two decades, China's economic system has shifted fundamentally to that of a market-oriented economy. It affects China's attitude and policy on deep seabed mining. As a potential producer of deep seabed minerals, China may have conflicts of interest with land-based producers. Such potential conflicts may be resolved under the UNCLOS or the WTO framework. As a rising big power, China's commitment to the international deep seabed regime may invite close and strong attention from the international community. With the rapid growth of its economy, China needs more mineral resources.

42 Available at <http://en.pkulaw.cn/display.aspx?cgid=120685&lib=law> accessed 4 September 2017.

43 Statement by H.E. Ambassador NIU Qingbao, Head of Delegation of the People's Republic of China, At the 22nd Session of the International Seabed Authority, July 2016, available at: <https://www.isa.org.jm/sites/default/files/files/documents/china-en.pdf> accessed 4 September 2017.

The new Law provides a legal basis for Chinese companies to engage in more activities in the Area, though more detailed implementing regulations should be worked out in the near future.

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