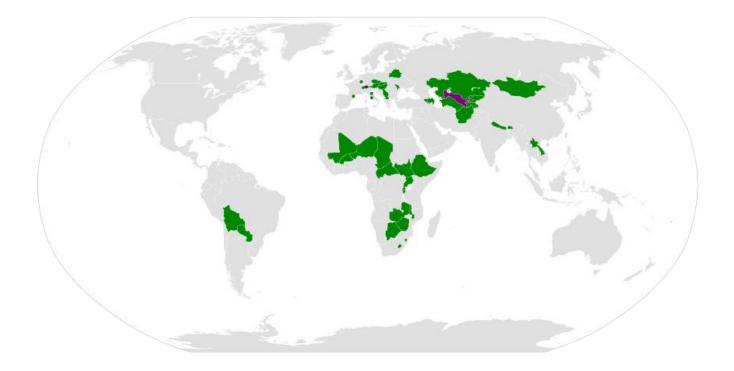
Centre for International Land & Maritime Boundaries

Opportunities for Landlocked Countries at the International Seabed Authority



February 2017

Centre for International Land and Maritime Boundaries

The International Seabed Authority (ISA)

The International Seabed Authority is an organization established under the United Nations Convention on the Law of the Sea (UNCLOS) and the 1994 Agreement relating to the Implementation of Part XI of UNCLOS. It is the organization through which States Parties to UNCLOS can benefit from the "Common Heritage of Mankind" in accordance with the single regime established by the Treaty and the 1994 Agreement for "the Area" or the seabed and ocean floor (and subsoil thereof) beyond the limits of national jurisdiction. ISA has been established with a view of administering the resources of the Area, and its declared budget for 2017-2018 is \$17.1 million. At present, 168 countries are Member States of ISA.

As stated on its website, the main function of ISA is "to regulate deep seabed mining and to give special emphasis to ensuring that the marine environment is protected from any harmful effect which may arise during mining activities, including exploration." The Secretariat of ISA also conducts resource assessment activities in parts of the high seas that are reserved for the Authority, maintains a specialised Database called "POLYDAT" that contains information on the resources of the Area, and monitors the status of scientific knowledge of the deep-sea marine environment as part of its formulation and development of a Central Data Repository system. In addition, the Authority promotes and encourages the following kind of activities in accordance with Articles 143 & 144 of UNCLOS and with the aim of bringing together scientists, legal/marine experts, researchers, academics, and government officials from its Member States as well as to encourage capacity building of developing States in deep sea research and technology:

- Workshops on the scientific and technical nature of deep seabed mining of minerals and its environmental impact
- Regional seminars on issues related to UNCLOS, the work of the Authority, and on marine and seabed mineral resources
- On-going development of a regulatory framework for the exploitation of minerals in the Area through feedback and input from Member States and relevant stakeholders
- Under the Authority's Endowment Fund: supporting the publications of qualified scientists and technical personnel from developing countries in marine scientific research programmes, and offering them opportunities to participate in training, technical assistance and scientific cooperation programmes
- The ISA internship programme for students and young government officials of various backgrounds
- Training programmes for personnel of the authority and nationals of developing States, provided and funded by contractors, as agreed to under schedule 3 of every contract signed with ISA

To date, ISA has signed twenty-six. 15-year contracts for the exploration of three specific types of deep sea minerals: polymetallic nodules, polymetallic sulphides and cobalt-rich ferromanganese crusts. Sixteen of these contracts are for the exploration of <u>polymetallic</u> <u>nodules</u> in the Clarion-Clipperton Fracture Zone (15) and the Central Indian Ocean Basin (1). The contractors under this category are:

- Cook Islands Investment Corporation (Cook Islands)
- UK Seabed Resources Ltd (UK I)
- UK Seabed Resources Ltd (UK II)
- Ocean Mineral Singapore Pte Ltd. (Singapore)
- G-TEC Sea Mineral Resources NV (Belgium)
- Marawa Research and Exploration Ltd (Kiribati)
- Tonga Offshore Mining Limited (Tonga)
- Nauru Ocean Resources Inc. (Nauru)
- Federal Institute for Geosciences and Natural Resources of Germany (Germany)
- The Government of India
- Institut français de recherche pour l'exploitation de la mer (France)
- Deep Ocean Resources Development Co. Ltd. (Japan)

- China Ocean Mineral Resources Research and Development Association (China)
- Government of the Republic of Korea
- Yuzhmorgeologiya (Russian Federation)
- Interoceanmetal Joint Organisation (Bulgaria, Cuba, Czech Republic, Poland, Russian Federation and Slovakia)

Six other contracts have been signed by the Authority and the following parties for the exploration of <u>polymetallic sulphides</u> in the South West Indian Ridge, Central Indian Ridge and the Mid-Atlantic Ridge:

- The Government of India
- Federal Institute for Geosciences and Natural Resources of the Federal Republic of Germany (Germany)
- Institut français de recherche pour l'exploitation de la mer (France)
- Government of the Republic of Korea
- Government of the Russian Federation
- China Ocean Mineral Resources Research and Development Association (China)

Lastly, four contracts have been signed for the exploration of <u>cobalt-rich ferromanganese</u> in the Western Pacific Ocean with the following entities:

- Companhia De Pesquisa de Recursos Minerais (Brazil)
- Ministry of Natural Resources and Environment of the Russian Federation (Russian Federation)
- Japan Oil, Gas and Metals National Corporation (Japan)
- China Ocean Mineral Resources Research and Development Association (China)

Of the above contractors, governmental or other entities in **Russia** and **China** have signed contracts with the Authority for the exploration of all three types of minerals: polymetallic nodules, polymetallic sulphides, and cobalt-rich ferromanganese crusts. **French**, **German**, **Indian** and **Korean** entities have signed contracts for the exploration of the first two types of those deep seabed minerals (polymetallic nodules and polymetallic sulphides); **Japanese** entities have ongoing contracts for the exploration of the first and third types of minerals (polymetallic nodules and cobalt-rich ferromanganese crusts); and a **Brazilian** entity has signed a contract for the sole exploration of the third type of those minerals (cobalt-rich ferromanganese crusts).

The rest of the contracts have been signed by various governmental and/or non-governmental entities in the following countries for the sole exploration of polymetallic nodules: **Nauru**, **Tonga**, **Kiribati**, **Belgium**, **Singapore**, the **UK** (two contracts) and **Cook Islands**. One international organisation (Interoceanmetal Joint Organisation) has signed a contract for the exploration of polymetallic nodules on behalf of a group of countries composed of (**Bulgaria**, **Cuba**, **Czech Republic**, **Poland**, **Russian Federation and Slovakia**).

The above contracts allow for the exploration of specified parts of the deep oceans outside of national jurisdictions in accordance with the terms of the Authority's Environment Management Plan and the regulations of its Mining Code. In accordance with the regulations of the "Mining Code," each contractor has the exclusive right to explore an initial segment of up to 150,000 square kilometres of the Area and over the first eight years of the contract, half of this area is to be relinquished.

In the case of polymetallic nodules, these 150,000 square kilometres must not be a single continuous area and each application for the exploration of those nodules must cover an area that is sufficiently large to accommodate two mining operations and be divided into two parts of "equal estimated commercial value." One part would be allocated to the applicant and the other would become a "reserved area" for the Authority. Each application must indicate the coordinates dividing the area under application into those two parts, which accords with the so-called "parallel system" and its sub-system of "site-banking" as elaborated in article 153 of UNCLOS. Reserved areas are decided by the Council of the Authority in accordance with the recommendations of the Legal and Technical Commission and are explored by the Authority either by itself through the Enterprise or in association with developing States.¹

Giving the frequent application by existing contractors for an extension of their exploration licences beyond the timeframe of the initially agreed 15 years of contract, the Council of ISA adopted in July 2015 a decision on the procedures and criteria for the extension of an approved plan of work for exploration pursuant to Section 1, Paragraph 9, of the Annex to the 1994 Agreement. Appendix I of the Council's July, 2015 decision lists the information that need to be contained in an application for extension of a contract for exploration. The authority received six such applications during the period from September to December 2015.

Meanwhile, since 2013, and in accordance with schedule 3 of those contracts, a total of 45 training places have been provided for personnel of the Authority and developing countries under the ISA/Contractors Training Program by eight contractors: **France, Belgium, Nauru, Germany, China, Japan, the UK, and Tonga**. The type of training provided by these contractors have included at-sea training, engineering training, fellowship training, master's and PhD programmes and workshop internships.

Landlocked Countries

The International Seabed Authority is to give preferential treatment to landlocked and geographically disadvantaged countries. Article 148 of UNCLOS (Participation of Developing States in Activities in the Area) states the following: The effective participation of developing States in activities in the Area shall be promoted as specifically provided for in this Part, having due regard to their special interests and needs, and in particular to the special need of the land-locked and geographically disadvantaged among them to overcome obstacles arising from their disadvantaged location, including remoteness from the Area and difficulty of access to and from it.

Forty-eight of 214 countries and territories in the world are considered landlocked, and together they represent 8% of the world's population and less than 1.5% of the world's GDP. Nine of these are developed countries and thirty-nine are developing countries. The developing countries represent 3.5% of the world's population and less than 0.5% of the world's GDP.

• Sixteen landlocked countries/territories are in Africa: Mali, Burkina Faso, Niger, Chad, Central African Republic, South Sudan, Ethiopia, Uganda, Rwanda, Burundi, Malawi, Zambia, Zimbabwe, Botswana, Swaziland, and Lesotho

¹ The system of site-banking is explained in Annex III - Article 8 of UNCLOS, in Annex – Section 3, Para.11 (b) of the 1994 Agreement, and in Regulations 15-17 of the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area

- Sixteen others are in Europe: Andorra, Austria, Belarus, Czech Republic, Hungary, Kosovo, Liechtenstein, Luxembourg, Macedonia, Moldova, San Marino, Serbia, Slovakia, Switzerland, Transnistria and the Vatican
- Two landlocked countries are in South America: Bolivia and Paraguay
- Fourteen landlocked countries/territories are in Asia: Afghanistan, Armenia, Azerbaijan, Bhutan, Kazakhstan, Kyrgyzstan, Laos, Mongolia, Nagorno-Karabakh, Nepal, South Ossetia, Tajikistan, Turkmenistan and Uzbekistan

Landlocked countries particularly suffer from high trade costs resulting from their geographic disadvantage, which is a situation worsened by their being surrounded by other poor countries. This deprives them of positive neighbourhood benefits such as growth spill over and/or decent infrastructure and transit systems.

Various international organisations, including the UN (2006) and the World Bank (2013) have called for the creation of efficient transit systems for landlocked countries, in order to lower their trade/transportation costs and the prices of basic commodities in those countries.

At a meeting of the Council of the International Seabed Authority in Kingston, Jamaica (July 17 2014), Uganda made an appeal on behalf of land-locked States for training to be made available to the candidates and personnel from those countries. The representative of Uganda at the meeting suggested that workshops and awareness programmes offered in land-locked States would peak interest in deep seabed activities and create a greater awareness of the work of the Authority. Uganda's appeal received the support of Argentina, India, Jamaica, Kenya, Nigeria, Senegal, South Africa, Trinidad and Tobago, and the United Kingdom. The representative of Trinidad and Tobago, drawing attention to Article 152 of the United Nations Convention on the Law of the Sea which addressed the need for special consideration to geographically disadvantaged states, particularly urged the Authority to consider Uganda's request.

It is worth mentioning that while membership of UNCLOS and ISA are open to all States, there are at present 168 Member States of ISA and twenty-seven of these are landlocked countries:

- In Latin America: Bolivia
- In Africa: Mali, Burkina Faso, Niger, Chad, Uganda, Malawi, Zambia, Zimbabwe, Botswana, Swaziland and Lesotho
- In Europe: Austria, Belarus, Czech Republic, Hungary, Luxembourg, Moldova, Macedonia, Slovakia, Serbia, and Switzerland
- In Asia: Armenia, Azerbaijan, Georgia (Including South Ossetia?), Laos, Mongolia, and Nepal

ISA Membership remains open to the remaining 21 landlocked countries, which is possible upon the signing and ratification of UNCLOS and the 1994 Agreement relating to the Implementation of Part XI of UNCLOS

Regional and Int. Organisations in which Landlocked Countries are Member States

In Africa

- The African Union/The African Economic Community (AEC): Mali, Burkina Faso, Niger, Chad, Central African Republic, South Sudan, Ethiopia, Uganda, Rwanda, Burundi, Malawi, Zambia, Zimbabwe, Botswana, Swaziland, and Lesotho
- African Development Bank Group (AfDB): Botswana, Swaziland and Zimbabwe
- African Development Fund (ADF): Burkina Faso, Burundi, Central African Republic, Chad, Ethiopia, Lesotho, Malawi, Mali, Niger, Rwanda, South Sudan, Uganda, Zambia and Zimbabwe
- **Common Market for Eastern and Southern Africa (COMESA)** One of the AU Building Blocks: Ethiopia, Burundi, Malawi, Rwanda, Uganda, Swaziland, Zambia and Zimbabwe
- **Community of Sahel-Saharan States (CSSS)** One of the AU Building Blocks: Burkina Faso, Chad, Mali, Niger, Central African Republic
- East African Community (EAC) One of the AU Building Blocks: Burundi, Rwanda, South Sudan and Uganda
- Economic Community of Central African States (ECCAS) One of the AU Building Blocks: Burundi, Chad, Central African Republic and Rwanda
- Economic Community of West African States (ECOWAS) One of the AU Building Blocks: Mali, Burkina Faso and Niger
- Intergovernmental Authority on Development (IGAD) One of the AU Building Blocks: Ethiopia, South Sudan, and Uganda
- Southern African Development Community (SADC) One of the AU Building Blocks: Botswana, Lesotho, Malawi, Swaziland, Zambia, and Zimbabwe
- The Economic Community of the Great Lakes Countries (ECGLC)/ The Bank of Development of the States of the Great Lakes (BDEGL)/ and the Research Centre for the Development of the Mining Resources in Central Africa (CRDRMAC): Burundi, and Rwanda
- United Nations Economic Commission for Africa (UN-ECA): Botswana, Burkina Faso, Burundi, Central African Republic, Chad, Ethiopia, Lesotho, Malawi, Mali, Niger, Rwanda, South Sudan, Swaziland, Uganda, Zambia, and Zimbabwe
- African, Caribbean and Pacific Group of States: Burkina Faso, Mali, and Niger (ECOWAS Group); Burundi, Rwanda, and Uganda (EAC Group); Ethiopia, Malawi, Zambia and Zimbabwe (COMESA Related); Central African Republic and Chad (ECCAS Related); Botswana, Lesotho, and Swaziland (SADC Group)

In Africa/Asia

- African-Asian Rural Development Organization. 30 Member States in total, 15 Asian and 15 African, of which the following are landlocked countries: Burkina Faso, Ethiopia, and Zambia
- Asian-African Legal Consultative Organisation (AALCO). 46 Member States of which Mongolia, Nepal, and Uganda are landlocked

In Asia

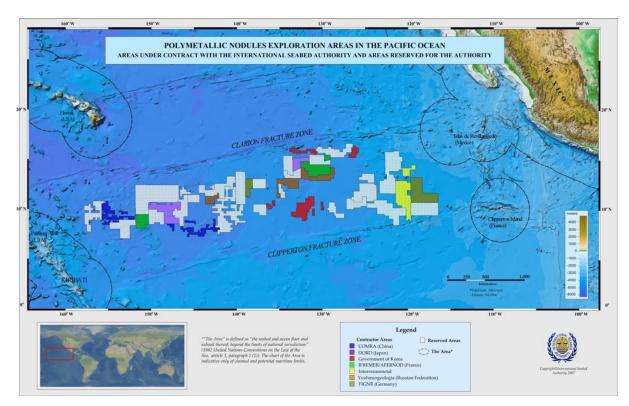
- Association of South East Asian Nations (ASEAN): Laos
- South Asian Association for Regional Cooperation (SAARC) and SAARC Development Fund: Afghanistan, Bhutan and Nepal
- The Shanghai Cooperation Organisation (SCO) or the Shanghai Pact: Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan; Afghanistan (Observer); Azerbaijan (Dialogue Partner), Armenia (Dialogue Partner), Nepal (Dialogue Partner), Turkmenistan (Guest)
- The Asian Cooperation Dialogue (ASC): Afghanistan, Bhutan, Kazakhstan, Kyrgyzstan, Laos, Mongolia, Nepal, Tajikistan and Uzbekistan
- The Economic Cooperation Organization: Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan
- Asian Development Bank (ADB): Afghanistan, Armenia, Azerbaijan, Bhutan, Georgia (including South Ossetia?), Kazakhstan, Kyrgyzstan, Laos, Mongolia, Nepal, Tajikistan, Turkmenistan and Uzbekistan
- United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP): Afghanistan, Armenia, Azerbaijan, Bhutan, Georgia (Including South Ossetia?), Kazakhstan, Kyrgyzstan, Laos, Mongolia, Nepal, Tajikistan, Turkmenistan, and Uzbekistan
- **The Central Asian Union.** Prospective Members: Kazakhstan (main actor / proposing country), Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan
- Partnership in Environmental Management for the Seas of East Asia (PEMSEA): Laos
- Colombo Plan for Cooperative Economic and Social Development in Asia and the **Pacific:** Afghanistan, Bhutan, Laos, Mongolia, and Nepal

In Euro/Asia

- The Asia Europe Meeting (ASEM). Partnerships: in total 21 Asian and 30 European Countries, plus the ASEAN Secretariat and the European Union. Of these the following are landlocked: Austria, Czech Republic, Hungary, Luxembourg, Slovakia, Switzerland, Kazakhstan, Laos, and Mongolia
- Euroasian Economic Union: Armenia, Belarus, Kazakhstan, and Kyrgyzstan
- The Russian Commonwealth of Independent States: Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan (Associate State) and Uzbekistan
- **GUAM Organisation for Democracy and Economic Development**: Azerbaijan, Georgia (Including South Ossetia?), and Maldova.

Opportunities for Landlocked countries at ISA

- 1. Signing and ratifying UNCLOS and the 1994 Agreement to be able to enjoy access to ISA. Twenty-one landlocked countries still have not done so.
- 2. Developing landlocked countries can apply for training programs they are entitled to under the terms of all contracts presently signed with the Authority.
- 3. Training applications could be either submitted directly to the Authority, under the Endowment Fund, or to an individual/group of contractor(s).
- 4. Submitting individual, and joint applications to the Authority to claim benefits from the mining of the "reserved areas" of the Authority, for purposes such as establishing efficient transportation systems. The investment in such systems, and their establishment for landlocked countries has often been called for by both the UN and the World Bank and is within the provisions of Article 148 of UNCLOS.
- 5. Submitting individual, and joint applications for the exploration and mining of seabed minerals through direct access to the Authority, or through regional/int. organisations such as those named above.



Case Study Annex: Polymetallic Nodules and the UK Seabed Resources Ltd

Polymetallic nodules are metal-rich, golf-ball sized precipitates that lie in water depths of approximately 4000-5000 meters. The world's "greatest known concentration of high grade polymetallic nodules containing manganese, nickel, copper and cobalt is located in the Clarion Clipperton Zone of the East Pacific Ocean ("CCZ"),"² and as former UK Prime Minster David Cameron declared in March 2013, the British seafloor polymetallic nodule industry "is expected to be worth up to £40bn to the UK economy over the next 30 years."³

The UK Seabed Resources Ltd, a wholly owned subsidiary of Lockhead Martin UK has signed two contracts with ISA for the exploration of polymetallic nodules in two different zones of the Clarion-Clipperton Fracture Zone of the East Pacific Ocean; the first contract started on February 8, 2013 and the second commenced on July 15, 2016. Each contract runs for a period of 15 years. On 14 March 2013 the UK government, under the department for Business Innovation and Skills has sponsored UK Seabed Resources Ltd in its polymetallic seabed explorations.

The company uses low-risk, commercially available equipment and technology including seabed vehicles, seabed to surface collection systems, and transportation systems to storage facilities and processing plants. The bi-product is rich and rare minerals that are in demand for high-tech applications such as in telecommunication equipment, defence systems, hybrid systems and steal production. Environmental and econ-protection considerations are made throughout the entire process of exploration, extraction and processing.

² Quoted "Polymetallic Nodules," Deep Green Resources http://www.deepgreenresources.com/polymentallicnodules.html (accessed 23/02/2017)

³ Ibid.