

UN LICENCES KICK OFF SEARCH FOR UNDERWATER MINERALS

The International Seabed Authority (ISA) has begun issuing exploration licences for mining the yet untouched floor of international waters raising concerns about potential environmental impacts.

The licenses, issued on 21 July, grant prospecting rights for underwater minerals to private and state-owned companies from Brazil, Cook Islands, Germany, India, Russia, Singapore and the United Kingdom.

ISA, the UN body responsible for controlling the mining of the oceans, has now granted 26 licences, covering a wide prospecting area of 1.2 million square kilometres scattered around the Atlantic, Indian and Pacific oceans.

Many other proposals are currently under study even as ISA says that companies can still submit new applications for international seabed exploration until 2016.

The existence of valuable minerals in the depths of the ocean, such as manganese, copper and gold, has long been known. But it is only recently that operations to access them have become technically and economically feasible as the location of some of these minerals are 5,000 to 6,000 metres deep.

The prospect of a gold rush in the deep sea has alarmed oceanographers who argue that the extraction of minerals could greatly disturb marine life, leading to unpredictable consequences.

“Marine biodiversity has a low resilience to environmental changes,”

Alexander Turra, a professor from the Oceanographic Institute at the Sao Paulo University (IO-USP) in Brazil, tells *SciDev.Net*. “Any indiscriminate mining could seriously affect many species.”

He warns that the marine biota capacity of processing organic particles could also be compromised as well as the carbon cycle in the marine environment.

NGOs from Australia, Canada and India, through a Deep Sea Mining campaign, likewise stress that many issues should be addressed before mining operations are allowed.

ISA says it is drawing up a protocol to reduce environmental damages before issuing the final permissions for exploitation.

Last August 20, the Pacific island nation of Tonga became the first country in the world to put in place a law that manages seabed mineral activities within its territory.

Roberto Ventura, mineral resources director of the Brazilian Research Company for Mineral Resources (CPRM), tells *SciDev.Net*: “Any intervention in the seabed will be preceded by an environmental study, although collecting sediment samples won't be necessary for obtaining the initial data.” The CPRM is one of the first companies to get a UN licence for deep sea prospecting.

Ventura says his company is open to considering independent environmental studies as long as these come from an authoritative source.

But Paulo Sumida, another professor from IO-USP, tells *SciDev.Net*:

“All decisions ought to be guided by the best available knowledge at this time. As the understanding of the impact of deep sea mining is still insufficient, there should be caution about this kind of exploration.”

He notes that instead of releasing dozens of seabed mining exploration licences, it would be more prudent to carry out experimental and monitored ventures to ensure that any activity will not cause major damage to marine life.

Source: <http://www.scidev.net/global/water/news/un-licences-underwater-minerals.html>