

IAEA Input to 2018 SG report on oceans and the law of the sea (RES 73/124)

Second part

The International Atomic Energy Agency (IAEA) continues to provide inter alia, support to its Member States to develop and improve relevant nuclear and isotope-based tools and techniques to monitor the coastal and marine environment. The IAEA also provides guidance on the safe management of radioactive and non-radioactive materials released into the marine environment, on the sustainable use of coastal and marine resources, and on the protection of the general public, including the maritime workforce.

The IAEA's Ocean Acidification-International Coordination Centre (OA-ICC), cooperated or participated in several major meetings, such as the Sustainable Blue Economy Conference in Nairobi, Kenya, November 2018, the Blue Ocean conference in Monrovia, Liberia, March 2019 and the 4th international workshop of the Global Ocean Acidification Observing Network (GOA-ON), April 2019, bringing together world ocean acidification experts together from around the globe. The OA-ICC is also working closely with IOC-UNESCO and GOA-ON on developing methodology and guidelines for countries to report on SDG14.3, which specifically focuses on ocean acidification, and is co-focal point of the UN Community of Ocean Action on Ocean Acidification – a process to follow up on and facilitate progress on the 250 Voluntary Commitments submitted by various entities towards the SDG14.3.

As part of its longstanding decades-long collaboration with UN Environment (UNEP) Mediterranean Action Plan (MAP), the IAEA Environment Laboratories held two training courses on techniques to measure and monitor pollutants in the marine environment, part of the Programme for the Assessment and Control of Marine Pollution in the Mediterranean (MED POL), UN Environment's programme on pollution in the Mediterranean. Scientists from Mediterranean countries participated in two training courses hosted by the IAEA, which provided a combination of both theoretical and practical training, including sessions on sampling and analytical methods for organic and inorganic pollutants in biota such as fish or mussels. Since the beginning of this collaboration with UN Environment, the IAEA, has jointly organised 60 training courses and 50 proficiency tests with more than 350 representatives from the majority of Mediterranean countries to strengthen pollution monitoring in the region.

The programme "Modelling and Data for Radiological Impact Assessments"(MODARIA II) is currently underway. A working group on "Assessment of Fate and Transport of Radionuclides Released in the Marine Environment" is looking at different scenarios of marine environmental contamination and working to improve ocean circulation and dispersion models used for environmental and radiological assessment.

Supporting information:

As the only UN System Organization operating marine laboratories, the IAEA provides, inter alia, support to its Member States to develop and improve relevant nuclear and isotope-based tools and techniques as well as to monitor the coastal and marine environment. This support is provided primarily by the IAEA Environment Laboratories in Monaco and the IAEA Technical Cooperation Programme.

The IAEA Environment Laboratories implement activities, improve knowledge, and develop methods to assist Member States laboratories, including through Regional Seas Conventions, to accurately monitor the behaviour of radionuclides, organic contaminants (including Persistent Organic Pollutants), hazardous trace elements, such as mercury, and marine biotoxins (Harmful Algal Blooms-HABs), and to assess their impacts on marine biota and ecosystems. Monitoring concentrations of these contaminants in environmental matrices and biota helps Member States to enhance knowledge on biomagnification in marine organisms, seafood safety, coastal and marine pollution, and the oceanic carbon cycle, particularly in the context of future climate change scenarios. Such work helps Member States fulfil their obligations in the framework of Global Conventions, such as the Stockholm Convention on Persistent Organic Pollutants and the Minamata Convention on Mercury, as well as for the implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities.

Related to §§187 and 191 of resolution 73/124

The Analytical Laboratories for the Measurement of Environmental Radioactivity (ALMERA) network is a collaboration of analytical laboratories that currently consists of 184 laboratories representing 89 countries that work together to address standardization and validation of analytical methods, interlaboratory

International Atomic Energy Agency (IAEA)

comparisons and proficiency tests. The Agency's Environment Laboratories in Seibersdorf and Monaco are the central coordinators of the ALMERA network's activities.

In the framework of the IAEA project “Marine Monitoring: Confidence Building and Data Quality Assurance”, initiated as a follow-up activity to recommendations made on marine radioactivity monitoring related to the decommissioning of the Fukushima Daiichi Nuclear Power Station, the IAEA, through its Environment Laboratories, has organized between 2014 and 2018, eight sampling missions to collect seawater, sediment and fish samples for interlaboratory comparisons (ILCs).”

Related to §§200 and 216 of resolution 73/124

Since 2012, the IAEA Environment Laboratories in Monaco have been hosting the Ocean Acidification-International Coordination Centre (OA-ICC), supported through the IAEA Peaceful Uses Initiative (PUI). The second phase of the OA-ICC serves all ocean acidification experts and stakeholders by facilitating, promoting and communicating global efforts on ocean acidification, including targeted research activities. Each year, the IAEA-hosted Ocean Acidification-International Coordination Centre (OA-ICC) co-organizes or participates in a series of high-level symposia or events, such as most recently, the annual Our Ocean Conferences, the Sustainable Blue Economy Conference in Nairobi, Kenya, the Blue Ocean conference in Monrovia, Liberia, and the 4th international workshop of the Global Ocean Acidification Observing Network (GOA-ON), bringing together ocean acidification experts from around the globe. The OA-ICC is also working closely with IOC-UNESCO and GOA-ON on developing methodology and guidelines for countries to report on SDG14.3, which specifically focuses on ocean acidification, and is co-focal point of the UN Community of Ocean Action on Ocean Acidification – a process to follow up on and facilitate progress on the 250 Voluntary Commitments submitted by various entities towards the SDG14.3.

The IAEA's methodology to derive environmental criteria for the assessment of marine water quality within the North-East Atlantic was agreed upon by the OSPAR Commission³ as one of the assessment tools applicable within the framework of the OSPAR Convention. The derivation of these criteria by the IAEA is based on considerations of potential radiation doses to marine flora and fauna and to members of the public, taking account of the consumption of seafood and human activities in coastal areas.

²Available at the IMO MODOC web page.

³The agreement can be found at <https://www.ospar.org>