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SPACE DEBRIS IN THE OCEAN: WHAT IS THE LEGAL REGIME THAT PROTECTS THE
MARINE ENVIRONMENT BEYOND NATIONAL JURISDICTION AND WHO BEARS
RESPONSIBILITY FOR SPLASHDOWNS?

Abstract

At the end of their life cycle, non-functional man-made space objects, including fragmented parts thereof, known as space debris, continue to orbit the Earth until they re-enter the atmosphere and, if not burnt completely by the atmospheric drag, they fall on the ground. Such re-entry is either uncontrolled or controlled. In the latter case, it is usual for the debris to be directed to fall in the ocean and more specifically on the High Seas, a maritime zone which lies beyond national jurisdiction. A very well-known region usually chosen for such splashdowns is the Point Nemo which lies in the Pacific Ocean. In fact, the International Space Station (ISS) is expected to fall in this maritime area when it becomes defunct.

Although Point Nemo is located on the farthest point from any land and thus any splashdowns there are considered to have less impact compared to a fall on any other region, the environmental impact that such re-entry is capable of causing is not negligible. International Law, whether of customary or treaty origin, poses very specific obligations with regards to the protection of the marine environment and it is bound to space faring states by virtue of article III of the Outer Space Treaty. What is more, on the 20th of September 2023, states signed the Treaty of the High Seas, (BBNJ Agreement) affirming thus their commitment to the protection of the marine biological diversity of areas beyond national jurisdiction which can also be threatened by polluting material, such as space debris.

In view of the foregoing, this article will analyze the legal regime that protects the marine environment in case of splashdowns in the areas beyond national jurisdiction, under both international customary and treaty law, such as the United Nation's Convention on the Law of the Sea and the recently signed BBNJ Agreement. Followingly, it will identify who is bound by such legal obligations (whether the launching state or the state of registry) that aim at achieving sustainability in space activities that may have an impact on Earth and in areas beyond national jurisdiction.