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**RESPONSIBILITY SYSTEM ON THE DEFENSE OF NEAR-EARTH OBJECTS**

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**ABSTRACT**

The impact of NEOs has contributed to massive extinctions and the evolution of life on Earth. It is a proven fact that they will continue to hit the Earth at irregular intervals in the future, with the potential for catastrophic damage to life and property. The complexity and danger of the outer space environment determine that the implementation of NEO defense mission is riskier than other general space activities. Moreover, as more and more non-governmental entities participate in space activities, the issue of the attribution of such subjects cannot be ignored. According to Article 6 of the Outer Space Treaty, the State is responsible for all its activities, and whether it can be attributed to the State when non-governmental entities participate in the NEO defense mission. In addition, most of the space activities are completed through inter-country cooperation or cooperation between the state and international organizations, which also exacerbates the difficulty of identifying the responsibility in those activities. Therefore, a comprehensive responsibility system should be proposed to deal with emerging issues.

This article will introduce the legal system of state responsibility and international space law into the field of NEO defense, and propose a responsibility system applicable to this field. The first part will explore the significance of the law of state responsibility on NEO defense. We will discuss the basic premise and consequences of responsibility, some certain circumstances which states may not be considered having wrongfully violated international law and the difference between 'responsibility' and 'liability' in international law, etc. The second part discusses some important issues concerning NEO defense under the international space law system. For example, how to determine the attribution of non-governmental entities according to the Outer Space Treaty, how the state assumes responsibility in international cooperation agreements and how the Liability Convention applies in this field after the occurrence of damage resulting from a NEO defense mission, etc. The third part discusses the liability system of third parties. On the one hand, the subject of international law bears responsibility for the damage caused to the third party due to the implementation of the NEO defense mission. On the other hand, the third party's action leads to the failure of the NEO defense mission or other adverse consequences, and how they take responsibility. For example, issuing false warnings, launching drones in special areas, installing jammers, etc., eventually cause the mission to fail. In short, NEO defense involves many specific responsibility issues, this article will be explained in the next article.

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