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RESPONSIBILITY AND LIABILITY FOR THE CONSEQUENCES OF A CYBERATTACK ON A  
SPACE OBJECT

**Abstract**

An increasing amount of the world's critical infrastructure - defence systems, communications, aviation, maritime trade and other business services - are dependent upon space infrastructure. Yet, space assets and satellites are no different from other digital infrastructure in that their systems are vulnerable to cyberattacks. For example, industry stakeholders have known since the 1998 attack on the U.S.-German ROSAT X-Ray satellite that space assets are vulnerable to this type of attack. However, even though further cyberattacks have since taken place against space assets, there are still no cybersecurity standards for satellites and no governing body to regulate and ensure their cybersecurity. This regulatory vacuum has led to a lack of clarity among stakeholders.

In terms of the Liability Convention 1972, launching states are internationally liable for damage caused by a space object on the Earth's surface or for fault-based damage elsewhere. This definition is both open and broad. Yet, there is a lack of clarity amongst stakeholders as to who (if anyone) bears international liability for damage caused by a space asset that has been subject to a cyberattack. Particularly, if the vulnerability is known and if no counter-measures have been taken. In the event that the launching state is liable, this lack of clarity also affects both the insurer and the insured. This is because the former do not know the extent of their exposure and the latter because they do not know the extent of their cover.

Accordingly, this paper will address the legal consequences of the regulatory vacuum by discussing both absolute liability and fault-based liability for damage caused by a satellite that has been subject to a cyberattack. It will also consider whether international regulation is required and the consequences for insurance.