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SATELLITE JAMMING FOR GOVERNMENTAL PURPOSES: WHAT DO TELECOMMUNICATIONS
AND SPACE LAW SAY ABOUT ITS LEGITIMACY?**Abstract**

Among the multitude of space applications, satellite services remain the most widespread, essential, and advanced. Satellites are widely used for communications, broadcasting, radio navigation, remote sensing, meteorology, etc. To carry out these functions, satellites need to use the radio frequency spectrum, which is the cornerstone of cyberspace. This means that satellites are vulnerable to cyber threats. The range of threats is wide and can take various forms, while satellite jamming is one of the most typical offensive cyber activities related to outer space. It causes interference to signals transmitted to or from a satellite through the creation of noise at the same radio frequency.

The utilization of radio frequencies, which are considered a limited natural resource, is managed by the International Telecommunication Union (ITU). The ITU's underlying documents are obligatory for 193 ITU member states and require that such resource be used rationally, efficiently, and economically in an interference-free environment. As a general rule, causing harmful interference is prohibited by the ITU statutory provisions, meaning that jamming may be regarded a violation of international obligations of the relevant state. However, a broad exemption is granted to the so-called national defence services of states which enjoy 'entire freedom' regarding military radio installations slightly limited by a couple of exceptions. Consequently, any jamming activity carried out by such special purpose radio installations, be it in peacetime or during a conflict, will not breach the non-causing harmful interference rule. Quite predictably, the trend is to broadly apply such a niche exemption to all governmental purposes in general and to extend it to intergovernmental organizations and non-state actors. The latter is exceptionally alarming due to a comparatively low technical sophistication and cost of cyber activities.

This paper examines the relevant legal issues, including the actual scope of the exemption of military radio installations from the ITU treaty regime for causing harmful interference and circumstances in which jamming for governmental purposes can be legitimate. Since carving out national defence services from the international telecommunications regime does not mean that international law, and space law in particular, cease to apply, the paper emphasizes that states' cyber activity areas, including one that affects outer space, must comply with the applicable rules of international law.