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TRANS-GOVERNMENTAL SPACE NETWORKS AS SOFT DISASTER MANAGEMENT
MECHANISMS VERSUS HARD DISASTER MANAGEMENT MECHANISMS; CHALLENGES AND
EFFECTIVENESS**Abstract**

Nowadays space applications including remote sensing satellites, telecommunication satellites and the Global Navigation Satellite Systems make a valuable contribution in many aspects of human life. Disaster management is regarded as one of the main areas in this regard. Having Exchanged the data and information obtained from space applications among the space actors concerned, dealing with disasters may be feasible. There is no doubt that this goal may solely be achieved by means of appropriate mechanisms organizing international cooperation among affected States on the one hand and assisting States or international organizations on the other hand. That being said, trans-governmental space networks as a new form of international cooperation play a crucial part in this realm. Considering the challenges associated with these networks, this paper aims to answering to this main question that to what extent and how can the trans-governmental disaster management networks, as soft mechanisms, be more effective in the cycle of disaster management compared to hard and classic mechanisms. Having selected an analytical research method, this paper firstly deals with the most important networks in the event of disasters, such as the Group on Earth Observations (GEO), the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN- SPIDER), The International Charter Space and Major Disasters and some regional networks including the Sentinel Asia Constellation. In the second part, international space law applicable to these networks is examined. In doing so, both hard law and soft law instruments are taken into consideration. In terms of hard law, general principles of international space law (including the principle of freedom of exploration and use in outer space, non-appropriation of outer space, international cooperation and common heritage of mankind) together with Tampere Convention on the Provision of Telecommunication Resources for Disaster Mitigation and Relief Operations are analyzed. With regard to soft law, the Principles Relating to Remote Sensing of the Earth from Outer Space, the General Assembly Resolution 51/122 and Guidelines for the Long-Term Sustainability of Outer Space Activities are considered respectively. Considering the international organizations law, including the 2011 Draft Articles on the Responsibility of International Organization, the third section takes the legal nature of these networks into account. Eventually, the author seeks to argue that despite the challenges arising from the unique form of legal personality of soft mechanisms, they are regarded as the most effective kind of international cooperation in the event of disasters.