

34th IAA SYMPOSIUM ON SPACE AND SOCIETY (E5)
Space Assets and Disaster Management (4)

Author: Mr. Wim Ploeg
European Union Agency for the Space Programme (EUSPA), The Netherlands

Mr. Bas Jacobs
International Institute of Air and Space Law, Leiden University, The Netherlands
Mr. Anmol Dhawan
International Institute of Space Law (IISL), The Netherlands

THE NEXT FRONTIER IN HUMANITARIAN DISASTER MANAGEMENT: OPTIMISING
SATELLITE DATA IN THE HUMAN RIGHTS DOMAIN

Abstract

The information drawn from space assets is of growing importance in assessing and managing humanitarian disasters. Private and public satellite information applications often concern mitigation of threats to basic human rights such as access to food, shelter, and healthcare to alleviate massive displacement, sickness, and premature death. However, the current approach to disaster management needs to cover contributions by space assets to support investigations, measures, accountability, and the enforcement of other basic human rights and other protective legal frameworks. To deter the exploitation of vulnerable segments of society, actors must collect time-sensitive evidence of massive and severe human rights violations while providing relief for man-made and natural disasters. Furthermore, successful post-disaster and conflict transition will depend on leaders and institutions acknowledging the harm citizens suffered and offer victims' redress through international and local justice mechanisms. This paper evaluates the steps to be taken in the (legal) space and in the humanitarian domain to overcome this omission. It seeks to engage in this discourse by presenting the outcomes of a seminar on the 'Optimization of the Use of Satellite Information in the Humanitarian Domain' held on 3rd February 2023 in Leiden, The Netherlands. This project was conceptualized by Mr. Wim Ploeg, a former Board member of the European Union Agency for the Space Programme (EUSPA), and involves the participation of technical and legal representatives from the International Criminal Court (ICC), European Space Agency (ESA), the International Institute of Air and Space Law - Leiden University (IIASL), the Satellite Centre of the European Union (SatCen), Kalshoven-Gieskes Forum on International Humanitarian Law (KGF), and other experienced international practitioners. It sought to build upon the work on the "Leiden Guidelines on the Use of Digitally Derived Evidence", which analysed relevant cases of the International Criminal Court and the Criminal Tribunals, as well as the "Berkeley Protocol on Digital Open Source Investigations," published by the United Nations. This paper evaluates the seminar's findings to offer recommendations for streamlining and optimising satellite data for use in important human rights domains. Technical possibilities to overcome possible gaps in information and evidence (place and time, subsequent products, dedicated infrastructure) are addressed. Further steps, based on the outcome of the seminar, are illustrated. Accordingly, this paper calls for an effective and dedicated platform for continuous collaboration between satellite service providers, legal practitioners, and academic institutions to implement satellite information for enforcing basic human rights and enhancing accountability.