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Potential Application of Unmanned Aerial Vehicles for On-Site Inspection

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In 2018 the 51st Session of Working Group B (WGB-51) of the Provisional Technical Secretariat of the Preparatory Commission for the Comprehensive Nuclear Test Ban Treaty Organization (CTBTO) noted potential applicability of remotely operated vehicles (ROVs) for OSI purposes, but their practical use raises several serious issues that WGB should discuss at its future sessions.
Implementation of OSI missions with application of unmanned aerial vehicles (UAV) for aerial multispectral imaging, gamma-radiation monitoring as well as geomagnetic field mapping specified in paragraph 69 Part II of the Protocol would be technically feasible. But at the same it will be necessary to consider legal, technical and organizational issues relating to UAV use for OSI purposes.
Based on the example of mostly geomagnetic field mapping technique this paper examines technical capability of UAV application for OSI purposes, its consistency with the Treaty provisions and potential approaches for their resolution.

Promotional text

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