

Utilizing Artificial Intelligence for Detection, Delay and Response of Chemical, Biological, Radiographical and Nuclear Threats

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According to United Nations Resolution 1540 (2004), the proliferation of nuclear, chemical, and biological weapons, as well as their means of delivery, constitutes a threat to international peace and security. Maintenance of appropriate and effective border controls and law enforcement efforts are essential to detect, deter, prevent, and combat this threat. Cooperation between the state and domestic authorities is seen as a necessity in addressing this problem. In the modern world, this functionality involves the significant involvement of modern technology. Although the full potential of AI is yet to be realized, the utilization of AI for the benefit of these processes cannot be underestimated. Specifically, AI can be employed to enhance the detection, delay, and response (DDR) to CBRN threats that may be exchanged across Sri Lanka's borders. The implementation of AI-driven solutions necessitates updates to existing policies, particularly concerning the integration of AI with traditional security measures and the protection of sensitive data. This study investigated the necessity created among CBRN proliferation, AI, and border security. The methodology used was qualitative. The data was collected from experts in the field. Findings, including the handling of dual-use goods and suggestions for detection, delay, and response (DDR), will be discussed as policy recommendations for state authorities to use in security policymaking.

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