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Analysis on Cyber Threat Actors Targeting Automated Border Security Systems

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Abstract: Border crossing automatization reduces required human resources in handling people crossing borders. As technology replaces and augments the work done by border officers, new cyber threats arise to threaten border security. This research analyses the current cyber threat actors and their capabilities. The analysis is conducted by gathering the threat actor data from a wide range of public sources. A model for a general border automatization system is presented, and its most significant cyber-security attributes are then compared to threat actor activity and capabilities in order to predict priorities in securing such systems. Organized crime and nation-state actors present the clearest threat to border cyber-security, and additional focus is given to their motivations and activities.

Keywords: border automation, cyber-security, threat actors, border cyber-security

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