Proposed Model for a Cybersecurity Centre of Innovation for South Africa

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Abstract

Most communications in the new era are dependent on Information and Communication Technology (ICT). In addition, infrastructure is becoming increasingly interconnected. This not only makes lives easier, but also leaves technology users more vulnerable. Cybercrime, digital espionage and other cyber disturbances dictate the news reports on a daily basis. In general, cyberattacks are no longer confined to small-scale rogue hackers. Cyber-attacks are now a part of organised crime and the underground economy, posing a real threat to critical infrastructure; possibly with state actors driving these actions. The responsibility to protect ICT stretches beyond individual companies, sectors and even beyond nations. The authors of this paper propose a Cybersecurity Centre Of Innovation (CCOI) as a central point for the South African government, business and academia to create a secure cyber space for the country: a cyber space without crime that is resilient and resistant to disruptions; a cyber space that promotes innovation, helps the economy and enhances national security. The key driver of the proposed CCOI is collaboration; solutions to cyber risks require a combined approach. This paper describes the organisational structure, functions, activities and benefits of a CCOI.