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THE DEVELOPMENT OF CYBER SECURITY FRAMWEORK FOR DIGITAL TV BROADCASTING INDUSTRY: A CASE OF ZIMBABWE BROADCASTING CORPORATION

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ABSTRACT

Cyber security comprises of technologies, processes and controls that are designed to protect systems, networks and data from cyber-attacks. The world at large is fast becoming fully digital in all spheres including the broadcasting and telecommunications industry. In Zimbabwe, the broadcasting regulatory authority, Broadcasting Authority of Zimbabwe (BAZ), together with Transmedia, the signal distributor and Zimbabwe Broadcasting Corporation (ZBC), the content producer has embarked on the project to digitize the television airwaves. This digitization encompasses the full changeover of analogue broadcasting of television, that is from content acquisition, to distribution and receiving at home. This whole cycle needs to be secured in order protect broadcasting content. Failure to adequately protect these systems will result in broadcasters losing revenue as they are prone to hacking and abuse. This project will give rise to a boom in the digital television industry in Zimbabwe. New players who will join the television industry after completion of the digitization project will need to be guided in terms of securing their digital networks and have defined cyber security strategies. Digital Television broadcasters depend on the reliable functioning of critical infrastructure. Cyber security risks can harm the organizations ability to innovate and to gain and maintain customers. The effective use of cyber security strategies can help to mitigate or reduce the effects of cyber-crime. This document was developed to improve cyber security on critical infrastructure tailor made for digital TV broadcasters. To a greater emphasis the suggested framework will cater for the new digital TV broadcasters licensed by the BAZ. The broadcasters taken into consideration are those in less developed nations where their budgets do not necessarily prioritize cyber security activities and information security in general. An organization can use the Framework as a key part of its systematic process for identifying, assessing, and managing cybersecurity risk. The study used the mixed method approach in data gathering. Data was analysed and conclusions and recommendations were made as well as future suggestions for similar studies.