UNIVERSITI TEKNOLOGI MARA

COMPONENTS OF A CYBER SECURITY FRAMEWORK FOR THE PROTECTION OF THE CRITICAL NATIONAL INFORMATION INFRASTRUCTURE OF MALAYSIA AGAINST CYBER THREATS

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ABSTRACT

The dependability on the Internet by the Critical National Information Infrastructure (CNII) of countries has triggered the need to protect such infrastructures against cyber threats. This is because operational disruptions to the CNII will have a major negative impact on the country such as threats to the national security and the economy. A lot of countries are coming up with a cyber security framework mainly for the protection of the CNII. This study looks at the cyber security initiative of five (5) countries to determine what are the elements to be considered in developing a cyber security framework for the protection of the CNII against cyber threats. Having a cyber security framework with the necessary elements will ensure that the framework provides a holistic approach in providing cyber security to the CNII. In this digital age, the CNII are heavily relying on ICT to cope up with the modern-day communication demands. This has cause countries to consider the cyber environment and the CNII as critical areas and need to be protected. Realizing the detrimental effect of cyber threats, governments are developing cyber security frameworks and having specific machineries to look into the matter. Therefore, the objectives of this study are to determine the components for an cyber security framework for protecting Malaysia CNII against cyber threats, and to determine how to protect the Malaysia CNII against cyber threats base on the identified components

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