ABSTRACT

In the use of information technology, usually, some risks can have an impact on the organization or company. The risk is unavoidable and can be said to be a combination of the probability of an event and its consequences. Therefore, these risks need to be evaluated to determine the impact of events that occur in an activity. Telkom University applies for the Work from Home method which requires most activities to be carried out at home due to the Covid-19 pandemic. This also applies to the Central Directorate of Information Technology, especially regarding the Information Technology Infrastructure section of Telkom University which requires employees to do most work activities from home. By carrying out work from home activities, there are several risks in the Information Technology Infrastructure. This research focuses on looking for possible risks in the Information Technology Infrastructure to minimize or optimize the associated risks. This study uses the ISO 31000:2018 risk management process method to carry out a risk assessment and decision making and uses COBIT 5 Generic Risk Scenario as identification of possible risks that are relevant to Information Technology Infrastructure. Then for the control recommendations using NIST SP 800-53 and DoD Instruction 8500.2 as risk controls to handle the identified risks. The results of this study are in the form of a control recommendation design that is useful for the Central Directorate of Information Technology, which is especially related to the infrastructure section.

Keywords—Risk management, Risk assessment, Work from Home, Information Technology, ISO 31000:2018, COBIT 5 Generic Risk Scenario, NIST SP 800-53, DoD Instruction 8500.2