

## ***ABSTRACT***

### **RISK ANALYSIS OF INFORMATION SECURITY MANAGEMENT SYSTEMS BASED ON ISO 27001:2013 OF FAILURE MODE AND EFFECTS ANALYSIS METHOD AT PT. TIRTA INVESTAMA**

By

**ERALDY WARDHANU**

**1106120183**

The application of Information and Communication Technology (ICT) governance, one of which is the Information Security Management System (ISMS), has become a necessity and demand in every public service provider agency. Considering the increasingly important role of ICTs in efforts to improve service quality as one of the realization of Good Corporate Governance. PT. Tirta Investama as one of the private companies in Indonesia has an effort to improve service quality with a number of assets used to support business processes. The standard used in this study is ISO / IEC 27001: 2013. This research was conducted by analyzing the current conditions in the company, then carried out a risk analysis using the method of failure mode and effects analysis (FMEA). The assessment of maturity level analysis is based on the results of the gap analysis to find out how well the company is implementing information security controls. The recommendation process is a follow-up of risk assessment and maturity level in the form of controls at ISO / IEC 27001: 2013. The results obtained from risk analysis and maturity level at PT. Tirta Investama can be said to not meet the expected target. This is due to the value of the maturity level in the control A.11 Physical and Environmental Security and A.12 Security Operations have not reached the targeted value. The results of this analysis will eventually refer to recommendations in the form of policies and procedures.

Keywords: Risk Management, ISO / IEC 27001: 2013, Maturity Level, Failure Mode and Effects Analysis, PT. Tirta Investama