

ABSTRACT

Information is organization's asset that must be protected. Information security goal is to protect confidentiality, integrity and availability of information. As information provider UPT Sisfo does not have any guidelines related to information security, lack understanding about losing information risk and how to manage information security risks.

In this final assignment information security management system is designed as a first step of organization to protect information. ISMS can be built using ISO 27001 International standart. Stages in designing process involve determining scope of ISMS, risk analysis, and determining control objective and security control. Application built using waterfall method to facilitate risk analysis process. After that maturity level of ISMS will measured to determine implementation capability of ISMS at UPT Sisfo and given enhancement recommendations.

Application that have built can accomodate the process of risk analysis and give convenience for users. Based on ISMS design, critical assets in UPT Sisfo are I-Gracias Server, DNS Server, Web server IT Telkom, and others. And obtained 24 Objective controls, 57 security controls that spread in 8 clauses. Maturity level of entire control is at 3rd level.

Keywords : *information security, information security management system, ISO 27001, Risk analysis , Maturity level.*