

ABSTRACT

Ministry of Agriculture of Indonesia had implemented information technology to provide support for its governance. This IT support is managed by The Information and Data Center (*Pusdatin*) a body under the ministry who provides information system, network services, and statistics. Through the prior interview held, known that several security problems recently occurred at *Pusdatin*, the biggest was a network flooding happened on mid-2011 that disabled the network services at ministry head office. Despite security issues, there was an instruction from the minister to all bodies under the ministry of agriculture to do bureaucracy reformation which is expected to increase the service performance and bureaucracy transparency. Prior to the instruction, *Pusdatin* planned to obtain ISO 9001:2000 certification. As the *BSI Management System* explained, organizations with IT services as the main business, could use the bottom-up approach of obtaining ISO 9001, by using two certifications, ISO 20000 for IT service and ISO 27001 for information security.

This research focused on auditing the information security using ISO 27001 as the standard and *Information Security Management Maturity Model* (ISM3) as the measurement. Scope of the audit was mapped from *Pusdatin's* IT services standard procedures to ISO 27001 controls. Continued with the audit process, that consists of interviewing auditees and observing controls. And then, results of the audit was measured using the capability and maturity model. The scores describe the gaps between the existing condition and expectation.

The result obtained from the research, shows the *pusdatin's* general control capability score of 0.99, which quite far from the minimum expected score of 3. To reach the target, recommendation given into 3 implementation periods which are, short term, mid term, and long term, according to investment allocation and performance measurement. At the end of the third period, *pusdatin* expected to have all controls implemented at fifth level of capability.

Keywords : Audit, ISM3, ISO 27001, Capability, Maturity, Ministry of Agriculture, Security