## **ABSTRACT**

## DESIGN OF INFORMATION TECHNOLOGY SECURITY RISK MANAGEMENT BASED ISO 27001:2013 WITH CONTROL ON PHASE DO AND ACT IN DANA PENSIUN TELKOM (DAPEN TELKOM) BANDUNG

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The use of IT in an enterprise is an important element in protecting corporate information assets. Dana Pensiun Telkom (Dapen Telkom) is a part of Telkom Group which handles pension funds of employees of PT. Telkom. This final project is in the form of information security risk management design based on ISO/IEC 27001:2013 on asset management with control in Do and Act phase. ISO/IEC 27001:2013 Standardization is a standard with respect to Information Security Management System (ISMS). The Information Security Management System (ISMS) is structured on the PDCA risk approach. Implementation of ISO/IEC 27001:2013 based IT risk management on Dapen Telkom can minimize the risks that occur and protect the information assets to stay safe. In this study conducted data analysis and gap analysis. To measure the maturity level using System Security Engineering Capability Maturity Level (SSE-CMM). Based on the results of risk analysis found assets that have a high risk in the Access Control clause. Therefore, researchers make recommendations in the form of policies and SOPs in accordance with the clause of Access Control.

*Keywords:* Information Security Management System (ISMS), PDCA, ISO/IEC 27001:2013, Risk Analysis, Maturity Level, SSE-CMM.