RISK ANALYSIS AND MITIGATION USING INTERPRETIVE STRUCTURAL MODELING (ISM), ANALYTIC NETWORK PROCESS (ANP), AND HOUSE OF RISK (HOR) FOR PROCUREMENT GOODS AND SERVICES AT PT. SEMEN INDONESIA (PERSERO) TBK.

Name: Chendrasari Wahyu Oktavia  
NRP: 2511203001  
Main Supervisor: Prof. Dr. Ir. I. Nyoman Pujawan, M.Eng  
Co-Supervisor: Imam Baihaqi, S.T, M.Sc, Ph.D

ABSTRAK
Every company requires goods and services in order to support the achievement of corporate goals. To obtain goods and services, then companies need to undertake activities of procurement of goods and services. Procurement activity is considered as a strategic decision companies, because this activity contribute to build a competitive advantage. However, the process of procurement of goods and services can not separated from a risk because many decision of the strategy is decided by company in process procurement of goods and services. To anticipate risks, company implement risk management for process procurement of goods and services. However, managing risk involves various problems namely interrelationship between several risks, interrelationship between several the cause of risk, and interrelationship between risk events and the cause of risk. This research analyzed those three interrelationships using interpretive structural modelling (ISM), analytic network process (ANP), and house of risk (HOR). As a case study, this research gathered data from procurement goods and services section at PT. Semen Indonesia (Persero) Tbk.

The analysis identified 7 major causes of risks. From these major causes, the analysis then identified eleven main mitigation plan including: tightening selection process of suppliers, giving sanctions, flexible supply market strategis, increasing accuracy of price estimates (HPS), provide deviation of tolerances of HPS, determine range of max and min for each HPS, establish a special unit for market survey, monitoring and compiling a database of the latest prices, using price data base from historical data coordination, coordination, and develops systems to be able to contract monitoring.

Keywords: Risk Management, Risk, The cause of risk, Interpretive Structural Modelling (ISM), Analytic Network Process (ANP), dan House Of Risk.