

**DESIGN AND DEVELOPMENT OF LICENSING  
APPLICATIONS FOR IMPLEMENTING  
OCCUPATIONAL SAFETY AND HEALTH ACTIVITIES  
BASED USING ANDROID *RATIONAL UNIFIED  
PROCESS*  
(CASE STUDY : PT. PLN (PERSERO) BENGKALIS)**

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**ABSTRACT**

PT. PLN (Persero) is a company within the scope of BUMN as the supply of electricity in Indonesia which has a very high level of risk that allows accidents to occur in workers who are in the field. Companies with a very high level of risk when in the field need a person in charge of the work. This is the PT. PLN (Persero) enforces work permit documents as an effort to anticipate accidents due to unwanted actions when working with Job Safety Analysis (JSA) supporters. Work permit procedures at PT. PLN (Persero) Bengkulu is still conventional in the form of hard copy. This is in the form of hardcopy document storage is not effective because it hampers the work process. The K3 document is a written approval permit document that is used as a condition in carrying out the work. This study designed a Licensing Application for Android-Based K3L Activities, Case Studies at PT. PLN (Persero) Bengkulu uses the Rational Unified Process development method which facilitates the work permit process so that it can be done iteratively by getting input regarding application weaknesses and is easily repaired without disturbing other processes. From the test results using the blackbox testing technique for Android version 7.1.1, there are no obstacles in using the application. The results of the percentage value of eligibility in the system evaluation obtained a score of 73% which was included in grade B (Good).

**Keyword :** *Working Permit, PT. PLN (Persero), Job Safety Analysis, Rational Unified Process (RUP), Black Box Testing.*