

## The formal specification for competency requirements

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### **ABSTRACT**

Competency is a vital characteristic to all area of action, especially in an emergency situation. This is because people must react according to what they supposed to react. If an individual lacking competence in the job or life, the person may take wrong action and make more loss in the area of work or situation such loss of life, injured, and others. To make them competence, people need to attend training. The training give them knowledge and skill. So, good attitude with knowledge and skill make them competence. A chemical company in Pahang, Malaysia has been selected as a case study to model the framework of emergency, response and preparedness (ERP). The framework of ERP was according to the company's competency by considering three elements which are the skill, knowledge and attitude. This paper presents the initialization theorem, pre-condition calculation and properties proving for competency requirement. The competency requirement specification written uses Z notation.

### **KEYWORDS:**

Competency; Emergency; Response; Preparedness; Formal Specification; Proving.

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