Specification of Competency Standards for the Logistics Industry
Unit of Competency

1. Title	Apply simulation technique to test efficiency of operations
2. Code	LOCUOM417A
3. Range	This unit of competency is applicable to logistics service providers. Practitioners should be capable of applying simulation technique to analyse the flow of large-scale cargo operations and using the result of analysis to improve the flow of cargo operation.
4. Level	4
5. Credit	3 (for reference only)
6. Competency	Performance Requirements: 6.1 Knowledge of simulation technique for testing • Make plans for various long-term repetitive logistics procedures and compare the efficiency and costs of different operations modes so as to optimise the logistics procedures • Understand the standard logistics mode of the company, such as the procedures of loading, access and transport • Master the concepts of statistics, probability and distribution of various kinds of data • Understand the latest mode of operations of the industry and its major advantages and disadvantages • Master the concepts, theories and techniques of Workflow Analysis and Work Study • Understand software of modelling analysis in the market • Know how to judge and use the result generated from the software of modelling analysis 6.2 Apply simulation technique to test operation • Formulate the course, sequence and time needed for existing or proposed logistics procedures • Divide the logistics process into procedures for critical path analysis or other operational analysis • Use statistical methods to find out necessary parameters or input data • Make logical assumption and use suitable mathematical modelling and random sampling method • Use suitable computer software for modelling operation • Try modelling operations based on different assumptions or mathematical modelling types • Use the result of simulation to analyse whether the efficiency has been improved 6.3 Illustrate results • Use the results to show the real effects of logistics procedures of alternative options • Determine the desirable options • Compile reports to illustrate the results
7. Assessment Criteria	The integrated outcome requirements of this unit of competency are: • Capable of working out simulation operation for complex logistics procedures • Capable of using computer software for simulation operation and analysing the result • Capable of compiling reports to illustrate the result of analysis
8. Remarks	This UoC is adapted from the Logistics UoC LOCUOM408A