

Specification of Competency Standards for the Logistics Industry
Unit of Competency

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| 1. Title | Apply simulation technique to test efficiency of operation |
| 2. Code | LOCUOM408A |
| 3. Range | This unit of competency is applicable to sea freight, air freight and express operators. Practitioners should be capable to apply simulation technique to analyze the flow of large-scale cargo operation and use the result of analysis to improve the flow of cargo operation. |
| 4. Level | 4 |
| 5. Credit | 9 (for reference only) |
| 6. Competency | <p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Knowledge of simulation technique for testing</p> <ul style="list-style-type: none"> ◆ Make plans for various long-term repetitive logistics procedures and compare the efficiency and costs of different operation modes so as to optimize 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 operation 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 |

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| | <p>6.2 Apply simulation technique to test operation</p> <ul style="list-style-type: none"> ◆ Know how to judge and use the result generated from the software of modelling analysis ◆ 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 method ◆ Use suitable computer software for modelling operation ◆ Try modelling operation based on different assumptions or mathematical modelling types ◆ Use the result of simulation operation to analyze whether the efficiency has been improved ◆ Compile reports to illustrate the result of analysis |
| 7. Assessment Criteria | <p>The integrated outcome requirements of this unit of competency are:</p> <p>(I) Capable to work out simulation operation for complex logistics procedures;</p> <p>(ii) Capable to use computer software for simulation operation and analyze the result; and</p> <p>(iii) Capable to compile reports to illustrate the result of analysis.</p> |
| 8. Remarks | |