

NATIONAL SIMULATION GUIDELINE

FOR

NATIONAL ELECTROTECHNOLOGY
TRAINING PACKAGE

2011

**WORKPLACE SIMULATION
AS AN ASSESSMENT TOOL AS IT APPLIES TO
THE NATIONAL ELECTROTECHNOLOGY TRAINING PACKAGE
2011**

PREAMBLE

The issue of simulated environments (for the purpose of assessment of Electrotechnology Units of Competency) has been the centre of much discussion by the industry proponents of the National Electrotechnology Training Package.

The industry proponents want to be assured that all assessments in simulated or actual workplaces are fair, valid, reliable and current, and that the standards and integrity of the National Electrotechnology Training Package are maintained.

Equally, RTOs involved in the delivery and assessment of the units of competency have been eager to ensure that learners, apprentices and/or trainees are not disadvantaged if their workplace cannot offer the full range of workplace experience to successfully achieve all the requirements of the units of competency. A number of RTOs have also requested assistance and approval from the industry proponents for their conduct of assessment in simulated environments for students/learners undertaking institutional based qualifications. These guidelines are in response to the concern of the industry proponents and the requests of the RTOs. These guidelines are meant to ensure that the conditions for simulation for the purpose of assessment in an institutional setting are authentic and as far as possible reproduce and replicate the workplace.

It is of paramount importance to the industry proponents that all RTOs involved in assessment in simulated environments abide by these guidelines, for only in this way will individuals be assessed consistently to industry standards and the integrity of the National Electrotechnology Training Package qualifications be maintained.

INDUSTRY REQUIREMENTS/PRIORITIES

The Industry proponents have developed 6 principles to govern the conduct of assessment in simulated environments; however, the underpinning principle in relation to off-the-job workplace simulation in the Electrotechnology Industry Training Package is that “actual tasks, activities and conditions are as close as possible to real life situations”.

Principle 1: Reflect Workplace Conditions

There are certain conditions that exist in the workplace that need to be present to make workplace simulation realistic and therefore valid and accurate in a way that clearly substantiates competency to workplace standards. The key strategies in achieving this are:

- 1.1 The use of facilities and equipment that meet current industry standards.
- 1.2 Realistic allocations of times to tasks and deadlines.
- 1.3 Integrated approaches to work performance of multiple tasks, prioritisation of completing tasks, application of service standards involving difficult and diverse types of customers and OHS requirements.
- 1.4 Consistency of performance over time.
- 1.5 Operational procedures and processes, technical standards and guidelines.
- 1.6 Working in teams and within budgetary constraints.

Principle 2: Reflect the intent of the Electrotechnology Training Package

The use of simulation as an assessment and competency standard delivery method should:

- 2.1 Accurately reflect the intent of the National Electrotechnology Training Package Assessment Guidelines and address the performance standards specified in relevant units of competency. That is, the requirements of the Work Performance are incorporated in the units of competence. The specific conditions for each element of each unit of competency are to be completed twice under broad supervision consistently across a representative range of equipment (this range sometimes being specified in the form do x of y), whilst applying techniques, procedures, information and resources relevant to performance.
- 2.2 Incorporate the variables specified in the Range Statement from relevant units of competency.
- 2.3 Identify the resources required to demonstrate the competence as detailed in the Evidence Guides.

Principle 3: Involve Realistic and Authentic Activities

The simulated environment must be as realistic and authentic as possible and reproduce workplace conditions, including:

- 3.1 Task Skills (performing the task).
- 3.2 Task Management Skills (managing a number of tasks).
- 3.3 Contingency Management Skills (dealing with workplace irregularities and breakdowns).
- 3.4 Job/Role Environment Skills (working with others and dealing with the pressures and expectations of the workplace).

Principle 4: Facilitate Profiling

The use of an nationally industry endorsed Profiling system (specifically designed data entry cards sent to a system that reports regularly) as a system of workplace evidence gathering permits a more holistic approach to assessment and can include a series of simulation events. In this context simulations need to provide for a number of roles, skills type and situations (see above) over time to enable an accurate profile to be built.

Principle 5: Support Holistic Judgements

Clearly, some rethinking of teaching and learning process will be necessary to replicate workplace performance, processes and characteristics. The use of checklists to identify critical performance criteria and support the holistic judgements associated with collecting workplace evidence such as profiling will be necessary.

When using simulation for the purposes of assessment, the prior opportunity for candidates to have employed self-assessment and participate in briefing and de-briefing will be important.

Principle 6: Undergo Quality Assurance Processes

The effectiveness of the various forms of simulation needs to be regularly assessed. This should include testing the validity and reliability of the simulation event in the way that any assessment is tested.

Outcomes of this may identify a need for more diverse and/or creative simulations as well as a need to improve the educational and technical currency of RTO staff. It will also mean ongoing evaluation of employer and learner/graduate satisfaction.