

Coal Industry Transportability Scheme (CITS)

Conference Paper

The concept of transportable coal competencies had been on the Queensland Coal Industry training agenda for a number of years and was largely influenced by the introduction of the Coal Mining Safety and Health Act 1999, in March of 2001. This Act and associated regulations legislated the requirement for all training and assessment activities to be conducted using the endorsed components of the National Coal Industry Training Package, which in turn set a common training platform from which all mine sites were required to operate.

The concept was advanced at a Coal Operators forum in late 2002, where the Site Senior Executives asked for a subcommittee to be formed, with the intent of investigating and developing a working transportability model. The model, involving an audit tool, assessment standards and a steering committee, was developed for underground mobile diesel vehicles and presented back to the forum in April 2003, where it was given further support to progress.

From the outset, the idea of transportability was always deemed by industry as a "nice to have" and was therefore put aside for a period of time due to the need to focus on the training requirements which were introduced with the new Act, mainly the Advisory Council nominated competencies for coal mine workers, supervisors, site safety representatives, etc. It is now suggested that the recent incidents involving the issuing of fraudulent qualifications has moved the need for a credible scheme to enable transportability to a "must have".

The scheme is now ready to be launched. It has changed in appearance from the original model, though the intent, objectives and benefits remain the same. The reasoning behind its development, its content, status and the potential future direction(s) form the basis of this paper.

Rationale

Even though new employees and contractors may have been previously trained and assessed as competent against the requirements of the National Coal Competency Standards, coal mines continue to fully re-assess all personnel when they arrive at their operations to verify that they are in fact competent to perform their assigned tasks.

This is often at great expense, both in cost and time, to the mine site and contractor alike. In recent times, this has been further emphasised by the ever depleting pool of experienced labour, with new personnel constantly arriving at mine sites, placing increasing demands on the site's training resources.

The reasons for this constant reassessment are numerous, and the transportability scheme focuses on overcoming weaknesses and/or barriers evident within the training arena only. These include, although are not limited to;

- The competency standards being quite broad and diverse in their application.
 - This is by design and enables a single standard to cover a range of equipment types, makes, models and applications. It becomes a problem where personnel arrive at a mine site with a Statement of Attainment being their only form of evidence, to prove that they hold the current competency. A Statement of Attainment is issued at the competency unit level only; therefore a mine site is unable to effectively confirm the equipment type, make, model and application on which the assessment was conducted.
 - An example of this is the Statement of Attainment issued for the standard MNC.01018.A Conduct Dozer Operations. This statement applies to all tracked dozers, both Caterpillar and Komatsu, ranging from a D4 to 575A, used in a variety of applications such as dragline/highwall, pit, reclaim and stockpile operations.
 - > Although a number of Registered Training Organisations now issue a second statement indicating the equipment type/model used within the assessment, this is considered as best practice and is not consistent across the industry due to the lack of formal procedural control.
- Variability in the interpretation of the competency standards.
 - > Again this is by design and enables a single standard to be used across a number of different mining operations. It allows the user of the standard to customise their training and assessment material to meet their own business needs and practices, whilst fully addressing the requirement of the standard. The problem is in obtaining a consistent assessment approach between mine sites.

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- > An example of this is that what one mine site requires in a pre-start inspection, maybe completely different to another mine site, though both will address the competency standard which will typically state in the performance criteria "Carry out pre-start, start-up, park-up, shut-down procedures in accordance with manufacturer instructions and/or site procedures".
- Variability in mine site assessment requirements.
 - > The assessment processes, although partially controlled by legislation, vary from mine site to mine site. The problem again is obtaining a consistent assessment approach between mine sites
 - An example of this is that not all mine sites require a Statement of Attainment for personnel to work at their operations, as there is no legislative requirement for them to do so. In a number of cases, operators are not required to address the full requirement of the standard and therefore do not achieve the full competency and cannot be issued with a Statement of Attainment. This is generally the case with equipment availability contracts, where the equipment is pre-started, serviced and maintained by the equipment supplier.
- The competency standards are used nationally.
 - > This makes any changes to the standard a difficult task. The problem is that the standards are currently owned and managed by the Department of Education, Science and Training (DEST), who require the standards be reviewed once every three years. Any changes to the structure and content of the standards are difficult to achieve due to the interstate involvement and other third party agendas. This is further complicated by Queensland currently being the only state directly legislated to use the competencies to their full extent.
 - An example of this was the review process required to update the Coal Training Package from the MNC98 to MNC04 version.

Objectives

The Coal Operators within the Bowen Basin identified the requirement for a local scheme to be developed, which would allow new employees and contractors to move from mine site to mine site, whilst having their previously assessed coal competencies recognised, without compromising the Site Senior Executive's legislative obligations. Thereby achieving the desired transportability.

The anticipated benefits of this scheme were:

- Substantial saving in the time and costs associated with the reassessment of new employees and contract workforce
- The increased sharing of industry skills and resources
- The overall increase in industry training standard

To maximise these benefits the following objectives were set;

- For all new employees and contractors to move between mine sites and have a large portion of their competencies recognised, with only a site specific top up required.
 - It was realised from the outset that not all competencies would be suitable for transportability (low reassessment volume, critical and or customised equipment nature). Additionally it was expected not to achieve 100% transportability of some of the selected competencies due to varying site specific requirements.
- To recognise the assessment development work completed to date, whilst not imposing vast amounts of additional work on the sites involved.
 - It was always the intent to use the assessment tools etc that were currently in place at each site. At the time of the scheme's conception, most sites had already put vast amounts of time and money into the development of their training systems to address the legislative requirements of the new Act & Reg's and therefore they were reluctant to change. It was also realised that all sites had limited human resource capabilities and did not want to impose vast amounts of additional work on these people. To do so meant that the anticipated gains would be easily offset.
- To ensure that all training standards are maintained to a high level, with the aim over time of improving the overall industry training standard.
 - > The scheme needed to have in place adequate systems, controls and measures right from the outset to ensure that it remained credible. Initial and ongoing monitoring audits were seen as essential in ensuring that high training standards were maintained. It was also seen as a mechanism to assist sites to improve their overall training standards where opportunities were identified.

- To ensure that the risk to the mine sites, in particular Site Senior Executives was not increased by their involvement in the scheme
 - > The scheme was seen to share risk across industry, by training to a joint industry developed and controlled standard, rather than imposing one site's risk onto another.

To realise these objectives required the;

- Identification of mine sites that were interested in participating in the scheme.
 - > At the time of writing this paper there are 18 mine sites who have registered interest in participating in the scheme; representing the BMA, Anglo, Xstrata, Riotinto, Peabody, Resource Management & Mining and CAML Resource, Leighton, Thiess and Golding organisations.
- Identification of competencies that were best suited for transportability.
 - It was quickly realised that 80% of the volume of reassessment activities being conducted, involved only 20% of the available competencies. With the effort required to capture the remaining competencies realising little or no benefit.
- Identify the assessment items within the competencies that are common across all sites.
 - Simply, if an assessment item was not common across all participating sites, then the item was deemed to be not transportable.
- Development of common assessment benchmarks and assessor guidelines for each common assessment item that defined the required evidence of competence for each of these tasks.
 - > These benchmarks and guidelines are critical to achieving transportability. They enable the weaknesses and barriers identified within the training arena to be adequately addressed.
- Development of management processes, including audit requirements to ensure that the participating site's training system met an agreed standard, in order to maintain the level of risk.
 - It was evident from the initial meeting that there was no way of identifying and controlling every possible variation, and in turn the problems that were likely to be encountered by introducing and running the transportability scheme. To overcome this, a reference group/steering committee was formed from the participating mine site representatives, with the intent that this group would manage the scheme through its development, introduction and ongoing operation.
 - > One of the key management tools recognised by this committee was an audit document, focusing on a training system standard, which was developed especially for this purpose.

Content

The scheme consists of the following major components;

- Reference Group
- Assessment Evidence Benchmarks
- Workplace Assessor Guidelines
- Training System Standard
- Recording and Reporting System
- Administration Systems/Processes

Reference Group (Steering Committee)

The original task given to the reference group was to flesh out, design and document the scheme. It is made up of participating mine site representatives, accountable to a Site Senior Executive. It has a future role in the ongoing development, co-ordination and management of the scheme.

Assessment Evidence Benchmarks

These benchmarks contain details of "what industry expects to find in the site assessment tools". They are reference documents which contain details of the common assessment items/task which must be visible in each assessment tool used within the scheme. They are linked to the Workplace Assessor Guidelines.

Workplace Assessor Guidelines

These guidelines contain details of "what industry expects the workplace assessor to be looking for when conducting an assessment". They are reference documents which contain details of the common measures for the items/tasks detailed in the Assessment Evidence Benchmark, which are to be used by the workplace assessors to deem a person competent within the scheme.

To enable confirmation of common assessment practices, the scheme requires that all workplace assessors who will be assessing transportable competencies attend a professional development workshop and be trained and deemed competent against the requirements of these guidelines.

Training System Standard

This standard contains details of "what industry expects each site's training system to contain". It is a reference document which contains details of the common training system requirements which are expected to be in place and maintained by each site involved in the scheme.

This standard is used to scope regular audits conducted on each site by the Mining Industry Skills Centre, who are required to report all findings back to the reference group.

Recording and Reporting System

The reference group elected to use the Mining Industry Skills Centre Database as the scheme's recording and reporting system. Currently populated with the Generic Induction Passport information of more that 85,000 employees and contractors, it best met their requirements by;

- Being proven
- Being secure
- Being readily accessible to all sites involved
- Having no distinct commercial advantage to the owner
- Being of reasonable cost to all users

Administration Systems/Processes

These systems are modeled on the controls similar to those used for the Generic Induction program including;

- Registration and Enrolment Processes (Provider/Assessor/Trainee)
- Mapping Documents (Benchmark/Competency)
- Approvals Documents
- Change Issues Register
- Handbook (System Procedures/Requirements)
- Licence Agreement

Process

Although the content and structure of the scheme has been developed, it is in only the early stages of its introduction, therefore the process shown below must be viewed as a guideline as it may vary as the scheme is further introduced. The process has been allowed to be dynamic, though with controlled movement and growth. The process can be broken into three distinct functions namely;

- Registration
- Assessment
- Management

Registration

Prior to entering the scheme all providers (Mine Sites/Contractors/Register Training Organisations) must first meet the minimum requirements of the registration process. This includes verifying that their;

- Assessment tools meet the requirements of the Assessment Evidence Benchmarks and Workplace Assessor Guidelines
- Workplace assessors meet the requirements of the Training System Standard, including evidence of their attendance and successful completion of the professional development workshop.
- Site training system meets the requirements of the Training System Standard.

Assessment

Primarily the operational leg of the scheme, the assessment process is critical to achieving transportability. It provides the controls necessary for an employee or contractor to move from one site to the next whilst having their transportable competencies recognised. The key steps within this process are;

- The employee or contractor (trainee) arrives at the first provider's site and requires assessment
- The provider arranges for the trainee to be assessed using assessment tools and workplace assessor approved via the registration process. Details of the assessment are then recorded on the database.
- The trainee arrives at the second provider's site, requires assessment and advises that they are the holder of a transportable competency.
- The provider verifies that the trainee has been assessed to the transportable standard via the database, and then will either assess the trainee in the non transportable/site specific components only or fully reassess the trainee as per site requirements. The extent of this assessment activity will be determined by the site and may differ on a site by site basis.

It has always been the intent for the scheme to have a phased introduction, with the providers continuing their current practice of reassessment/challenge testing. Overtime where evidence supports that the scheme is working as required, it is anticipated that the reassessment process will be reduced to an auditing function. (i.e.10 - 15%)

Management

The management processes are all of the controls and functions required to ensure the effective running, expansion and in turn ongoing creditability of on the scheme. These include, but are not limited to, the scheme's;

- Ongoing administration and data maintenance
- Monitoring audits (6 & 12 months intervals)
- Ongoing development/expansion

Current Status

Scheme Development

At the time of writing, the reference group is operational and has instigated the development of Assessment Evidence Benchmarks and Workplace Assessor Guidelines for the following equipment types;

Underground

MNC.U1014.A – Dozers (Domino Myne Dozer) MNC.U1015.A – Man Transporters (PJB/Driftrunner/Ranger) MNC.U1017.A - Loaders (Eimco, Seneca, Wright, Wagner, Juganaut) MNC.U1026.A - Portable Gas Detectors (Minigas/Odalog)

<u>Surface</u>

MNC.G1040.A – Overhead Gantry Crane MNC.G1048.A – Forklifts MNC.G1049.A – Elevated Work Platform MNC.G1061.A – Light Vehicle

These have been drafted, verified by industry content experts and are awaiting final approval by the reference group. Likewise, the training system standard, associated audit documents, registration and enrolment forms, assessment summary forms, mapping documents and other administration control documents have been drafted and await final approval.

Scheme Introduction

The registration process has commenced, with 18 mine sites and 8 Registered Training Organisations having completed the first part of the process to date. This will be further expanded upon the granting of final approval for the associated administration documents.

Scheme Awareness

Presentations and papers similar to this one have been presented to;

• A number of Queensland coal trainer's networks

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- A number of individual representatives from Registered Training Organisations
- Two major Queensland metalliferous trainer's networks
- A New South Wales Hunter Valley coal trainer's network.

To date, the concept of the scheme has been well received and supported.

Future Direction

Where continued support is maintained, the intent is for the scheme to expand over time by;

Shorter Term

- Developing further Assessment Evidence Benchmarks and Workplace Assessor Guidelines based on mine site reassessment volume (e.g. Hand Held Bolters, Medium Rigid Vehicles)
- Increasing the number of coal providers participating

Longer Term

- Increasing the level of achieved transportability within existing Assessment Evidence Benchmarks (e.g. 80% to 90%) by encouraging site's to move by recognising best practice.
- Looking for opportunities to move the scheme outside the local area/across states via larger mining organisations/contractor groups.
- Looking for opportunities to move the scheme across training packages(Metaliferrous, Quarrying and Civil)
- Looking for opportunities to modify the competency standards to better obtain transportability based on the evidence/experience obtained from operating the scheme.

This direction aligns with a base principle that is "The basic operation of an item of plant/equipment remains the same regardless of the mine site, industry sector or state legislation involved" Put simply, a forklift remains a forklift regardless of where it is operated.

Any comments or questions can be directed to; Tony Mapp General Manager Operations Mining Industry Skills Centre 0749446900 or 0428198248