



52 Ickburgh Road
London E5 8AD
Telephone: 020 8806 4910
Mobile: 0780 8296278
E mail: denise.clarke@homelandsecurityqualifications.co.uk
Website: www.homelandsecurityqualifications.co.uk

QinetiQ's experiences of implementing HSQ's competence-based qualifications

Background

In July 2009, the MoD published a requirement to demonstrate competence against the National Occupational Standards (NOS) for Explosive Substances & Articles (ESA), where an article is any equipment containing explosives. This applies to all people working with or responsible for ordnance, munitions and explosives (OME). Specifically, it says:

The competence of those working in Weapons, Ordnance, Munitions or Explosives (WOME) shall be demonstrated against the standards of best practice set by the sector; these are the National Occupational Standards (NOS) for Explosives Substances and Articles (ESA).¹

Further, the MoD has stated that it would encourage the take-up of explosives-related qualifications whenever possible. In addition, QinetiQ's training system specified training requirements but no detailed specification of training content existed. A more robust, auditable system of training was therefore sought that would prove competence. Consequently, QinetiQ decided to implement Homeland Security Qualifications' (HSQ) vocational qualifications which are built on the ESA NOS and which accredit the competence of those who work with explosives as this would provide the sought-after robustness and an audit trail that would prove the compliance of QinetiQ's staff with the ESA NOS.

¹ Temporary Explosives Bulletin 008/2009 (for JSP 482), Explosives Storage and Transport Committee, Defence Ordnance Safety Group, July 2009

QinetiQ first identified its target candidates for the industry-recognized explosives qualifications that were to be delivered:

- Safety Management (levels 3 & 4);
- Test & Evaluation (levels 2, 3 & 4);
- Storage (levels 2, 3 & 4);
- Transport (levels 2 & 3);
- Disposal (levels 2, 3 & 4);
- Munitions Search (level 2);
- General Explosives Operations (level 2).

QinetiQ's next task was to train the identified Assessors and Internal Verifiers upon whom success of the scheme would depend. For around 500 candidates in all QinetiQ's sites across the whole of the UK, this involved training 4 Internal Verifiers and 11 Assessors. The experiences described below have come about through the delivery of assessor and verifier training and the business benefits that have arisen have similarly come about through this initial preparatory process - ie even before the qualifications have been implemented.

Business benefits

... to the business ...

- role profiles have been created for people who work with explosives which have been mapped to the ESA NOS. These will be embedded in QinetiQ's HR system so that, in future, people will be appraised against them annually as the qualifications' assessment specifications are seen as amplifying QinetiQ's expectations;
- through the implementation of qualifications that measure the competence of the explosives workforce, QinetiQ now has a demonstrably proven, competent and safe workforce. It also has evidence of workers' limitations and identified training needs which has informed the development of targeted training plans which in turn has led to better use of resources when commissioning training;
- the implementation of the qualifications has led to the formalization of a common standard of technical knowledge and expertise among supervisors and managers who may have arrived in their current positions by various routes;

- by encouraging supervisors and managers to get more closely involved in day to day operations, this has increased their knowledge of explosives-related processes and facilitated a system for continuous improvement to safety, processes, quality and standards;
- as business practices are enhanced and the workforce works to consistent processes and standards, there has already been a reduction in re-work;
- many of QinetiQ's UK sites have evolved from different starting points and ownership structures which has led to variations of practice. The introduction of HSQ's qualifications has begun to bring together business practices to a common standard and modus operandi. This has also led to a reduction in the amount of re-learning and re-certification that was needed when people transferred from one site to another;
- a culture of quality-assured competence is growing;

... to supervisors and managers ...

- supervisors and managers do not all share the same background, training, experience and expertise. By using the ESA NOS and qualifications' assessment specifications, supervisors and managers are developing a more detailed understanding on technical issues eg resource allocation, process methods, safety and standards. Reductions in mistakes and re-work are expected as a result;
- previously, in a climate of economic difficulty and recent redundancies, workers were concerned about voicing their concerns about work processes. However, as supervisors and managers have held confidential reviews of individuals' performance, people now feel more confident about expressing their concerns and making suggestions for improvements;
- by providing objective evidence of competence in the appraisal process, the use of the qualifications' assessment specifications has reduced the "horns and haloes" effect of other performance review processes that are not built upon observed evidence;
- supervisors and managers have already noticed a difference in the candidates' performance as they now have a detailed focus for their attention, provided by the qualifications' assessment specifications;

- traditionally, there has been a perception among workers that the only valuable training was that which was delivered through a training course. However, there has been an increasing recognition by workers that training can be delivered in many ways, particularly when it comes to developing skills;
- new tools for HR and an updated concept of the quality assurance of personnel and processes;

...to workers (ie candidates)...

- by comparing what they do with QinetiQ's Standard Operating Procedures (SoPs), workers have identified gaps in their knowledge for which they have asked for more training which in turn is helping to create greater robustness of training - both in terms of the delivery and content;
- as workers now have sight of the qualifications' assessment specifications at higher levels than their own roles, they are now able to take an informed view as to what is required to progress to higher levels. This will in turn help to inform QinetiQ's career management and succession plans;
- in discussion with their supervisors, workers have questioned why procedures have been traditionally carried out in a particular way and have made suggestions for improvements to processes and, as a result, greater efficiency, quality and safety has been achieved;
- improved communications between workers and their supervisors has come about as a result of private one-to-one discussions about individuals' performance when measured against the qualifications' assessment specifications. This in turn has led to greater clarity of expectations, greater trust and enhanced levels of self-esteem and confidence which has led to improvements in morale and motivation;
- workers now have the confidence to discuss control systems for managing explosives processes so already, there is evidence that people are looking beyond their immediate activities to spot the potential for improvements to the robustness of systems;
- workers acknowledge the investment that the company has made in their training, development and the accreditation of their competence and skills. The fear that qualified people will leave the company has proved

untrue: as the achievement of a qualification has introduced a note of stability, people are content to remain in an environment where they feel that their contribution is valued.

In short, QinetiQ's experience has been that the implementation of these qualifications provides a vehicle to unequivocal communication, a shared, consistent understanding of the company's expectations and standards and a reduction in the scope for variation of interpretation of SoPs. By embedding this degree of detail, high quality standards of work, safety and best practice will be built into everyday work.

Already, even before the qualifications have been implemented, tangible business benefits have been identified which are directly attributable to the qualifications. For example, workers have been able to use the qualifications' assessment specifications as process audit tools and question the clarity and currency of work instructions. This has led to suggestions for business improvement. QinetiQ anticipates more opportunities for business improvement as HSQ's qualifications are rolled out across all UK sites.

Denise Clarke

13 July 2011