

## Benefits of Working to Explosives Standards and Qualifications

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## Introduction

Worldwide, explosives handling regulated by law

Prescribed:

- Procedures
- Duties
- Responsibilities
- Obligations

“Competence” not defined till Explosives National Occupational Standards (ESA NOS) developed

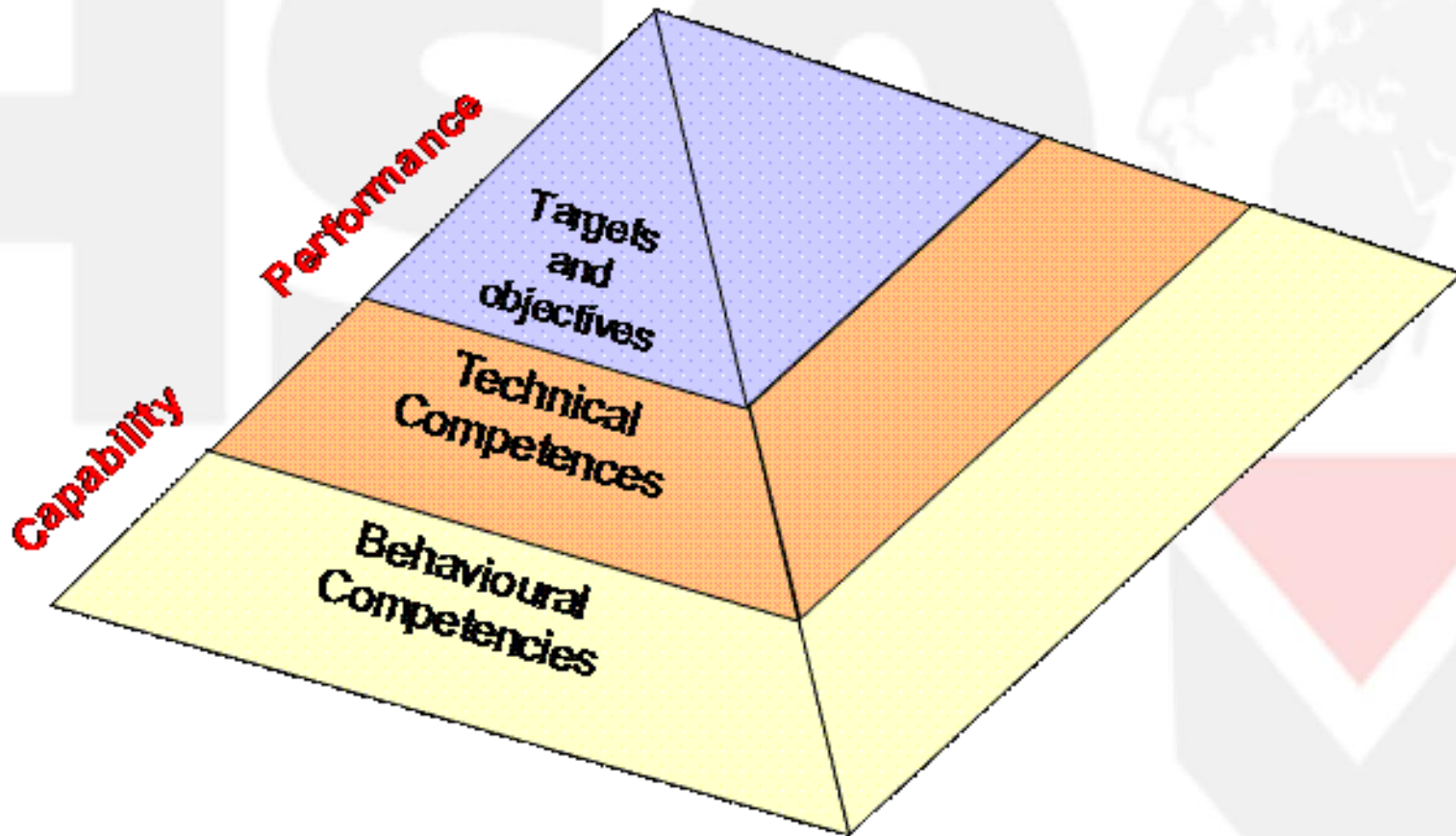
MoD Temporary Explosives Bulletin (TEB) (July 2009)

**What is “competence”?**

“Competence” or “competency”?

*The ability to perform consistently to occupational standards*

## A model of “competence”



# Standards



## Work of the SSB for EMSO (1)



2000 - SSB for EMSO established

2002 - National Occupational Standards (NOS) in Munition clearance and search completed

2003 – NOS & 6 vocational qualifications (VQ) in Munition clearance and search launched

## Work of the SSB for EMSO (2)



2003 - MoD UK asks SSB for explosives NOS and qualifications

2006 – About 260 NOS and 24 competence-based VQs

2007 - Review & revision of Munition clearance and search NOS & extra NOS & search VQ

## Work of the SSB for EMSO (3)



2008:

- Additional NOS and VQs in explosives safety management
- Additional NOS and VQ designs for the use of explosives in entertainment



## Explosives (ESA) coverage



Research, design & development

Test & evaluation

Maintenance

Storage

Facilities management

Disposal

Generic

Safety management

Manufacture

Procurement

Transport

Entertainment

Munition clearance & search

## Structure of standards

They contain:

- Criteria that describe the standard against which performance can be evaluated
- Descriptions of the contexts of the required performance
- Specifications of the knowledge underpinning competence

## Unit 13.11 Hand over explosive substances and/or articles

# HISQ



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## Unit 13.11 Hand over explosive substances and/or articles

### Performance Criteria

- a) work safely at all times, complying with health and safety, environmental and other relevant regulations, legislation and guidelines
- b) confirm the identity of explosive substances and/or articles against the specification/documentation
- c) confirm that the condition of the explosive substances and/or articles is in an acceptable handover condition
- d) ensure that the information exchanged at handover is accurate, up to date and complete
- e) obtain additional information if there are any areas of doubt or lack of clarity to complete the handover
- f) ensure that safety and quality requirements are met

.....& etc



## Unit 13.11 Hand over explosive substances and/or articles

### Contexts

- Hand over: issuing; receiving
- Hand over condition: when in an acceptable condition; when not in an acceptable condition

### Performance Criteria

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### Knowledge Requirements

- the health, safety and environmental legislation, regulations and safe working practices and procedures governing explosives, and their implications for your area of work
  - the relevance of personal protective equipment (PPE)
  - the nature, characteristics, hazards and risks of the explosive substances and/or articles
  - the actions to be taken in response to an unplanned event
  - any environmental considerations affecting or prohibiting handover
  - any operational considerations affecting or prohibiting handover
  - how to carry out a risk assessment
- .....& etc

## Who benefits?

- The business
- Managers
- Supervisors
- Individual users/candidates



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## Benefits to the business

- Appraisal against role profiles
- Proven, competent & safe workforce
- Formalization of common standards
- Improvements in performance
- Common standard & modus operandi

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## Benefits to supervisors & managers

- Technical issues understanding
- Increasing staff confidence
- Objective evidence of competence
- Focus



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## Benefits to the workers

- Empowered personal responsibility for career management
- Suggestions for process improvements
- Improved communications
- Wider reach of improvements
- Stable qualified workers

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## Beyond QinetiQ



### **Benefits to the business:**

- Importance of behaviours
- Rigour of assessment & verification
- Regulatory proof
- Unequivocal measure
- Tool for international partnership working
- Insurance requirements

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## Beyond QinetiQ



### **Benefits to supervisors and managers:**

- Recognizing workers' contributions
- Allocating people to tasks
- Clarity of expectations

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## Beyond QinetiQ



### Benefits to workers:

- Makes you think
- Helpful... brilliant ... ACE!
- A pleasure...
- Very worthwhile ... Excellent!
- Good for my future ... and civvy street
- Absolutely brilliant...

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## Hydropolymers case study

- 700 to 500 employees
- People-related initiatives introduced
- Savings of £7million in 5 years
- Productivity up: 175 tons per person to 450
- Reductions in charging time (1 hour – 25 mins)
- Reaction cycle time reduced by 25%
- Production increased: 10 tons resin per hr – 16
- £250K savings on one project alone

# HSQ

Questions?

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