

Setting standards in health and safety

Raising performance through training and competence development



direction

08.5

IOSH publishes a two-tier range of free technical guidance. Our guidance literature is designed to support and inform members and motivate and influence health and safety stakeholders.

Direct info

Brief, focused information on health and safety topics, typically operation- or sector-specific.

Direction

Strategic corporate guidance on health and safety issues.

Revised February 2011

Setting standards in health and safety – raising performance through training and competence development

We've produced this guide on competence and training good practice for employers and health and safety professionals. Our aim is to help raise health and safety performance across all levels and sectors of employment by outlining the competences that staff need, and how these can be developed. The guide looks at the standards of training and levels of competence needed by:

- directors, managers and supervisors
- health and safety representatives
- non-supervisory staff
- health and safety professionals
- other professionals.

This guide is intended as an introductory text to health and safety training and competence, with references to further reading and information sources. It is not a definitive guide to the subject.

A PDF version of this guide can be downloaded from www.iosh.co.uk/standards.

Contents

1	What is competence?	02
2	Setting competence levels in health and safety	03
3	Training	05
4	Who needs training and competence?	06
5	Competence in health and safety	08
6	Developing and maintaining competence	09
7	Conclusion	10
	Information and resources	11
Appendices		
A	The Qualifications and Credit Framework	12
B	How the different qualification levels relate to each other	13
C	Case study: Competence in health and safety at a nuclear company	14

1 What is competence?

Competence is about being able to do something effectively and efficiently. It has three main building blocks – knowledge, skills and experience – all of which overlap.

Knowledge

Knowledge covers familiarity, awareness or understanding gained through experience or study. In health and safety, it includes knowing such things as:

- what hazards are
- the range of hazards and how they can affect people
- the difference between hazards and risks
- how to evaluate risks and decide on appropriate controls
- key elements of occupational safety and health management systems
- how to gather and analyse health and safety data
- how health and safety law applies to the workplace.

Skills

Skills are abilities that have been gained or developed through training or experience. In health and safety, this covers the ability to do practical things such as identify hazards, draft a risk assessment and implement control

measures. Personal skills are important too, such as the ability to communicate effectively. Skills support technical competence and help health and safety professionals do their jobs effectively.

Experience

Experience is the result of a process of observing, encountering or doing something. People gain experience when their knowledge and skills are tested in practice, and learn as a result of their actions.

People can also gain experience when they're supervised by someone who's already experienced. The experienced

person can give the learner feedback and point out mistakes that they can correct more easily. Experiential learning is increasingly part of qualification programmes. This helps learners 'hone' their knowledge and skills during their course, and gives them a higher level of competence once they've completed it.

Competence is also about knowing your limitations and when to call on advice from others who have more knowledge, skills or experience. A way of testing your own competence (and

that of others) is to ask three questions:

- what could go wrong?
- how could this be avoided?
- what would I do if things went wrong?

2 Setting competence levels in health and safety

In terms of knowledge and skills, the new Qualifications and Credit Framework (QCF) sets out the different levels of qualification needed by various groups. The QCF is replacing the existing framework in England, and similar frameworks will operate in Wales and Northern Ireland. The QCF is a system for recognising skills and qualifications. It does this by awarding credit for qualifications and units (small steps of learning). Each unit has a credit value, which specifies the number of credits gained by learners who can complete that unit. The flexibility of the system allows learners to gain qualifications at their own pace along routes that suit them best. The main categories are:

- level 1 – for all employees
- level 3 – for supervisors and line managers
- level 6 – for specialist advisers
- levels 7 and 8 – for senior managers.

For more information on the QCF level indicators, see Appendix A.

At a non-practitioner or 'awareness' level, it's possible for courses to cover the knowledge and skill content required without necessarily leading to a qualification on the QCF, although employers need to carefully assess the learning outcomes of such in-house or external courses. An example of these are the awareness training programmes certified by IOSH, the largest provider in the field.

There are also higher education qualifications awarded by universities and colleges. These are outlined in the frameworks for higher education qualifications (FHEQs).

To find out how the different qualification levels across the UK and Ireland relate to each other, have a look at Appendix B.

All UK countries have frameworks and share agreements with each other, although there are some minor differences between the various frameworks. Ofqual regulates the framework in England, in collaboration with other regulators in the UK. While the frameworks for England, Wales and Northern Ireland are very similar, the Scottish framework differs from the others in the level descriptors for vocational qualifications.

National Occupational Standards (NOSs) describe what an experienced, effective worker does in their job. There are NOSs for many different workplace sectors. They all have a similar format, and cover:

- key roles – the different areas in which people in the occupation work
- unit summary – what the unit is about, who it's for and explanations of terminology
- unit catalogue – the activities that workers have to carry out
- performance criteria – what effective workers do and the standards they need to achieve
- knowledge requirements – what workers need to know to meet the standards.

NOSs apply to most jobs and roles, and include sections on health and safety. They set outcomes that workers must demonstrate to show that they have the necessary knowledge and skills. These outcomes set a framework for achievement and improvement that supports many formal training programmes, such as Scottish

Vocational Qualifications (SVQs), apprenticeships, further and higher education courses, and professional development programmes. NOSs are developed by Sector Skills Councils and standard-setting bodies, through consultation with practitioners, employers, professional bodies and trade unions.

There are also specific NOSs for health and safety practice. These are set by Proskills, which is also responsible for setting standards in other areas, such as:

- prevention and management of work-related violence
- personnel, advice and guidance
- coaching and mentoring
- learning and development.

The NOSs for health and safety cover the main areas and key principles of practice that are common to the role of health and safety professionals, regardless of the industry or sector they work in. They include:

- promote a positive health and safety culture
- develop and implement a health and safety policy
- develop and implement effective communication systems for health and safety information
- identify and evaluate health and safety hazards
- develop and implement health and safety review systems
- influence and keep pace with improvements in health and safety practice.

For more information on the NOSs for health and safety, visit www.ukstandards.co.uk/Find_Occupational_Standards.aspx?NOSFindID=4&SuiteID=1287.

It's worth bearing in mind that if you have an academic qualification in health and safety – such as one from the higher education sector or nationally accredited awarding bodies such as the National Examination Board in Occupational Safety and Health (NEBOSH) – it doesn't make you competent to practise health and safety. What it demonstrates is that you've carried out a programme of academic work leading to the development of knowledge and some skills, and that they've been formally assessed in an examination and/or by

some other method. The knowledge you've gained can form the basis of competence, as long as you then acquire suitable experience and skills in the workplace.

Similarly, if you hold an NVQ/SVQ in occupational health and safety, while this demonstrates competence in the knowledge and skills needed in the workplace setting you took your qualification in, you still have to gain more work experience to become competent.

3 Training

Training is any activity that leads to skilled behaviour. Training also leads to knowledge and supports competence.

The Health and Safety Executive (HSE) defines health and safety training as covering all training and developmental activities that aim to provide workers, safety representatives and managers with:

- a greater awareness of health and safety issues
- skills in risk assessment and risk management
- skills relating to the hazards of particular tasks and occupations
- a range of other skills, including those relating to job specification and design, contract management, ergonomics and occupational health.

Refresher training can be useful to make sure that people maintain their competence in a specific area. Many occupational safety and health-related courses, such as first aid, passport schemes and fire warden training, have a prescribed frequency for retraining.

Retraining may not always be needed, and this is where a basic competence assessment can be useful, for example using a computer-based package for the knowledge element, with refresher training for those who haven't reached the required standard.

It's important to understand what specific competences are needed over and above those that may be provided by basic awareness training. A 'training needs analysis' will help identify any competency gaps, so that training can be tailored to fill them. This is a more professional approach than providing 'blanket' training on a topic, which can be unnecessary in some cases. For advice on how to carry out a training needs analysis, see www.cipd.co.uk/subjects/lrnanddev/trainingneeds/idthneeds.htm?lsrchr=1.

Remember that, on its own, attending training isn't enough. Delegates are often set learning objectives by course providers, and usually have to pass end-of-course assessments to successfully complete a course. More

importantly, learning needs to be transferred and applied to the workplace. To assess how successful training has been, managers can agree objectives with staff before they begin a course, for example a reduction in poor safety behaviours. At a suitable point after the course, staff and managers can then evaluate how far the training has helped to meet the objectives. For a background to training evaluation, see www.cipd.co.uk/subjects/lrnanddev/evaluation/evatrain.htm.

It's also important to be aware of and accommodate any individual requirements that staff might have before they begin training. These might include issues arising from:

- dyslexia
- mobility difficulties
- visual or hearing impairment
- mental health conditions
- language problems
- numeracy or literacy problems.

The regulator's training strategy

The need for competence – and for training and development systems that support competence – is recognised at the highest level in the health and safety sector in the HSE's 'Strategy on health and safety training'. The vision of the strategy is: "Everyone at work should be competent to fulfil their roles in controlling risk."

The specific aims of the strategy are to:

- raise awareness of the importance of health and safety training
- bring about a substantial improvement in the quality and quantity of training
- promote an awareness of the importance of competence in controlling risk
- influence education providers so that they offer the necessary framework of basic knowledge and skills.

The HSE proposes to increase competence by:

- encouraging employers and trade unions to recognise the need to provide good quality health and safety training
- getting its own and local authority inspectors to assess the competence of workers and managers, and to examine whether the training provided by employers is adequate – this forms an important part of inspection, investigation and enforcement activities
- setting up partnerships to provide the right quality and quantity of training
- influencing other government departments so that they promote training in their areas of responsibility
- making sure that all parts of the education system provide a knowledge base on which training can be built.

4 Who needs training and competence?

Everyone who works needs at least some level of training and competence in health and safety – how much they need depends on their role and responsibilities. The

Health and Safety at Work Act and Management of Health and Safety at Work Regulations set out a framework for training and competence. There are also other

specific laws that cite competence requirements, for example the Control of Asbestos at Work Regulations and the Provision and Use of Work Equipment Regulations.

Young people

Risk awareness needs to be an important part of young people's education and training. The 'safe learner' concept, developed by the Learning and Skills Council (LSC) and promoted by colleges and training providers in England, helps integrate health and safety into the curriculum and working life.

The 'safe learner' is defined as someone who, through the quality of their learning experience:

- gains an understanding of the importance of health and safety
- understands how hazards are identified, risks are assessed, and control measures work
- develops a set of safe behaviours, so that they play an active part in the process and gain practical, transferable skills from their experience.

One of the key elements of the safe learner blueprint is a five-stage model. The stages are:

- pre-work briefing
- induction
- progression
- the safe learner and worker
- lifelong learning in health and safety.

The fifth stage emphasises that an individual's competence in health and safety must be maintained throughout their working life and as circumstances, environments, work and risks change.

You can get more information at www.safelearner.info.

Employees

Every employee should have a basic understanding of health and safety so that they aren't injured, killed or made ill by work, and so that they can comply with their organisation's health and safety policy.

For this group, courses such as IOSH's one-day training session, *Working safely*, cover the basics, focusing on health and safety hazards and risks, and improving performance. For more information, visit www.iosh.co.uk/workingsafely.

Supervisors and line managers

Supervisors and line managers need to have a much deeper understanding of their health and safety duties than non-supervisory staff. They need to know how health and safety law applies to them and what their organisation's health and safety policy expects of them. They should be able to apply their management skills in a health and safety context, know about the risks associated with the work they oversee, and be able to manage them on a day-to-day basis.

There are a number of courses that can help managers and supervisors handle health and safety in their teams. For example, IOSH's *Managing safely* course looks at a range of issues, including identifying hazards, assessing and controlling risks, investigating accidents and measuring performance. To find out more, visit www.iosh.co.uk/managingsafely.

Senior managers

Senior managers need to know their responsibilities and accountability within the law, especially their duties under the Health and Safety at Work Act and any specific regulations that apply to their sector. They should be able to recognise key health and safety risks related to the work their organisation carries out, understand how these impact on the business, be able to provide leadership, and plan strategically to minimise those risks.

Courses for senior managers include IOSH's *Directing safely* and *Safety for senior executives*. Both aim to provide directors and owners of small and medium-sized enterprises with an understanding of the moral, legal and business case for proactive health and safety management, and give guidance on effective risk management.

Employees' representatives

Although employees' representatives hold voluntary positions, they need to be competent to fulfil their roles. In recognition of this, they're allowed by law to take time off for training. This includes training in health and safety, as

well as personal communication and negotiation. Suitable health and safety courses for this group include IOSH's *Working safely* and *Managing safely*.

Health and safety professionals

Health and safety professionals should have a high level of competence. This should be proportionate to the work they do and the type of organisation they work for.

They can acquire competence in different ways – including graduate and postgraduate studies, NEBOSH and British

Safety Council Awards diploma courses, NVQs/SVQs – and by gaining skills and experience in different roles.

Generally, the higher the level of competence that a health and safety professional needs, the longer it will take them to acquire the necessary knowledge, skills and experience.

5 Competence in health and safety

General competence

IOSH is the Chartered body for occupational safety and health practitioners and the guardian of professional standards. Since NOSs were first introduced, we've taken an active role in their development, and we use them to underpin our membership structure. For example, Graduate Members must have a qualification based on the level 4 standards – which may be a degree, a Ofqual-accredited qualification or an NVQ/SVQ – while Technician Members need a qualification based on the level 3 standards.

In our view, effective health and safety management can only be achieved when employers, employees, employees' representatives and health and safety professionals work together in partnership.

Each of these groups needs a different level of competence so that they can take an active part in managing health and safety and comply with their duties under the law.

Competence for specific duties

As well as the general levels of competence that employees and managers need to have, there are also specific requirements for particular tasks, and work involving specific hazards.

These include:

- using certain types of work equipment
- driving forklift trucks
- handling and disposing of asbestos
- working with radiation
- advising on the transport of dangerous goods
- working with chemicals and other dangerous substances.

You can get more information on these and other tasks involving specific hazards in the relevant legislation, approved codes of practice and guidance documents, as well as on the HSE website at www.hse.gov.uk/aboutus/furtherinfo/policy/outline.htm and through industry and trade associations.

6 Developing and maintaining competence

As we noted earlier, competence is about having the right amount of knowledge, skills and experience to carry out a task to a set level. These levels may be prescribed by law, by national standards or by best practice. Regardless of how competence is set or developed, employees at all levels need to maintain their competence.

Competence has several distinct stages:

- **unconscious incompetence** – when you're unaware of what you need to do to act in a competent way
- **conscious incompetence** – when you begin training and become aware of what you don't know
- **conscious competence** – when you've completed enough training to complete a task in a competent way and you're aware of this
- **unconscious competence** – when you carry out tasks in a fully competent way and you're unaware of this because your behaviour has become habitual.

With 'unconscious competence', you could continue to perform competently. On the other hand, your performance could deteriorate if you:

- unconsciously develop bad habits
- don't keep up to date with best practice
- don't regularly use your skills or knowledge.

Your performance could also deteriorate if changes to the business mean you need new competences.

Employers need to check both their own competence and that of their employees regularly, to make sure that their organisation's health and safety performance is at the level they believe it to be. To make sure staff keep their competences up to date, employers need to:

- assess their level of competence
- produce a development plan that sets out the current position and the desired level
- list the development activities that will help staff achieve the desired level.

This may involve experience or supervised practice, not just standard training courses. Employers should review development plans on a regular basis.

Continuing Professional Development (CPD) is a part of every professional's working life. For those working in health and safety, IOSH offers its members a structured development plan throughout their career. All IOSH members (other than those in the Affiliate and Retired categories) register for online CPD, recognising that it is a mixture of maintaining and developing technical health and safety skills and associated management skills. CPD activities can take many forms and vary between individual practitioners, depending on their current level of competence and development needs. It is the reflection of what has been gained from activities that is important. For more information, see www.iosh.co.uk/professional.

IOSH also runs an Initial Professional Development (IPD) scheme for all members in the Graduate category. Under IPD, members have to demonstrate that they have enough knowledge, skills and experience before they can progress to Chartered membership. For more information, visit www.iosh.co.uk/ipd.

'Mentoring' is an effective way of providing support to professionals who are developing their competence. It can be beneficial at all stages of someone's career – from helping them choose which qualification to take, to applying for Chartered Fellowship of their professional body.

A mentor is an experienced person who is prepared to advise and guide a less experienced person to manage their own learning and develop their career. Mentoring can also be an effective development activity for the mentor, often leading to increased confidence and leadership skills. Using an Open University course, IOSH trains

a number of its members to carry out mentoring roles.

Where someone has to complete a training course as part of their development of competence, to make sure their knowledge and skills remain at the optimum level, some courses have expiry dates and voluntary or mandatory renewal programmes. For example, first aiders in the workplace have to renew their qualification every three years. Similarly, at IOSH, we recommend that, for some of our courses, learners should take a refresher course three years later.

Development plans and appraisal systems can help employers review their staff's key competences, identify any gaps, and plan activities to renew or add to them. It's also worth noting that gaps can be revealed after accidents, incidents or near misses in the workplace. In these cases, employers should take immediate action to fill the gap.

Employers should encourage all employees to take responsibility for their own competence. And if employees have any concerns about their competence, or suggestions for more development, employers should encourage them to raise them with their manager.

Employers must make sure that development plans evolve so that they remain relevant to the work that an employee does.

In sectors that have a transitory workforce, some schemes capture information about competence so that it can easily be transferred from one employer to another. These are often known as 'passport' schemes. You can get more information on these schemes from industry associations and trade unions.

7 Conclusion

Effectively defining and managing competence is an essential part of a good health and safety management system. For most employees, requirements for competence in health and safety are integrated in the NOSs relevant to their specific job, trade or skill base. For employees who take an active role in the management of health and safety at work – such as employees' representatives and specialist health and safety advisers – competence should be achieved through the NOSs specific to health and safety.

The key to defining, achieving and maintaining competence is to take a partnership approach, where each employee understands their role and responsibilities for health and safety at work and the associated competence requirements, and agrees a development plan with their employer that will allow them to achieve their desired level of competence. This process will differ for each employee as well as for each job, task and role. It's important to work to the established framework and keep the process as clear and simple as possible.

Whatever the process, all organisations should aim to make sure every employee achieves a level of competence in health and safety that's suitable for them.

A good competence and development programme will help support an effective health and safety management process. And while competence helps keep employees safe and healthy, organisations benefit too in terms of keeping the cost of absenteeism down – including the associated costs of replacing staff, loss of productivity and profits, and possibly harming the business's reputation.

Information and resources

More information

You can get more information from the following organisations:

Alliance of Sector Skills Councils
www.sscalliance.org

Chartered Institute of Personnel and Development
www.cipd.co.uk/subjects/lrnanddev

Department for Business, Innovation and Skills
www.bis.gov.uk

Proskills
www.proskills.co.uk

Health and Safety Executive
www.hse.gov.uk/aboutus/furtherinfo/policy/outline.htm

Institution of Occupational Safety and Health
www.iosh.co.uk/training

Ofqual
www.ofqual.gov.uk
Scottish Qualifications Authority
www.sqa.org.uk/sqa/4596.557.html

UK Commission for Employment and Skills
www.ukces.org.uk

Trades Union Congress
www.tuc.org.uk

Further reading

Essex County Council. *Health and safety: competence and capability – code of practice*. Human resources department PF/06.23, September 2004.

Harvey H N. Training and competence in occupational safety and health. *Tolley's health and safety at work handbook*. 18th edition. Croydon: LexisNexis UK, 2007: T700/1–T70/22.

Health and Safety Commission. *Strategy on health and safety training*. LAC 84/3. 2005.

Health and Safety Executive. 'Competent health and safety advice' webpages. www.hse.gov.uk/business/competent-advice.htm.

Health and Safety Executive. *HSE statement to the external providers of health and safety assistance*. www.hse.gov.uk/pubns/externalproviders.pdf.

Health and Safety Executive. *Human factors briefing note no. 2: competence*. www.hse.gov.uk/humanfactors/topics/02competency.pdf.

IOSH. *Consultancy – good practice guide: practical guidance on working as a competent health and safety consultant*. Wigston: IOSH, 2008. www.iosh.co.uk/consultantguide.

IOSH. *Getting help with health and safety: practical guidance on working with a consultant*. Wigston: IOSH, 2008. www.iosh.co.uk/consultanthelp.

Kerrin M, Silverman M and Thomson L. *'The safe learner' – exploring the concept*. Brighton: Institute for Employment Studies, 2002. www.employment-studies.co.uk/pdflibrary/1486lsc.pdf.

Appendix A – Level descriptors for the Qualifications and Credit Framework for England

Framework Level	Level Descriptors
Entry	<p>Entry 1 recognises progress along a continuum that ranges from the most elementary of achievements to beginning to make use of skills, knowledge or understanding that relate to the immediate environment.</p> <p>Achievement at Entry 2 reflects the ability to make use of skills, knowledge and understanding to carry out simple, familiar tasks and activities with guidance.</p> <p>Achievement at Entry 3 reflects the ability to make use of skills, knowledge and understanding to carry out structured tasks and activities in familiar contexts, with appropriate guidance where needed</p>
Level 1	Achievement at level 1 reflects the ability to use relevant knowledge, skills and procedures to complete routine tasks. It includes responsibility for completing tasks and procedures subject to direction or guidance.
Level 2	Achievement at level 2 reflects the ability to select and use relevant knowledge, ideas, skills and procedures to complete well-defined tasks and address straightforward problems. It includes taking responsibility for completing tasks and procedures and exercising autonomy and judgement subject to overall direction or guidance.
Level 3	Achievement at level 3 reflects the ability to identify and use relevant understanding, methods and skills to complete tasks and address problems that, while well defined, have a measure of complexity. It includes taking responsibility for initiating and completing tasks and procedures as well as exercising autonomy and judgment within limited parameters. It also reflects awareness of different perspectives or approaches within an area of study or work.
Level 4	Achievement at level 4 reflects the ability to identify and use relevant understanding, methods and skills to address problems that are well defined but complex and non-routine. It includes taking responsibility for overall courses of action as well as exercising autonomy and judgment within fairly broad parameters. It also reflects understanding of different perspectives or approaches within an area of study or work.
Level 5	Achievement at level 5 reflects the ability to identify and use relevant understanding, methods and skills to address broadly defined, complex problems. It includes taking responsibility for planning and developing courses of action as well as exercising autonomy and judgment within broad parameters. It also reflects understanding of different perspectives, approaches or schools of thought and the reasoning behind them.
Level 6	Achievement at level 6 reflects the ability to refine and use relevant understanding, methods and skills to address complex problems that have limited definition. It includes taking responsibility for planning and developing courses of action that are able to underpin substantial change or development, as well as exercising broad autonomy and judgment. It also reflects an understanding of different perspectives, approaches or schools of thought and the theories that underpin them.
Level 7	Achievement at level 7 reflects the ability to reformulate and use relevant understanding, methodologies and approaches to address problematic situations that involve many interacting factors. It includes taking responsibility for planning and developing courses of action that initiate or underpin substantial change or development, as well as exercising broad autonomy and judgment. It also reflects an understanding of relevant theoretical and methodological perspectives, and how they affect their area of study or work.
Level 8	Achievement at level 8 reflects the ability to develop original understanding and extend an area of knowledge or professional practice. It reflects the ability to address problematic situations that involve many complex, interacting factors through initiating, designing and undertaking research, development or strategic activities. It involves the exercise of broad autonomy, judgment and leadership in sharing responsibility for the development of a field of work or knowledge or for creating substantial professional or organisational change. It also reflects a critical understanding of relevant theoretical and methodological perspectives and how they affect the field of knowledge or work.

Table adapted from www.rewardinglearning.org.uk/docs/regulation/eqf/qcf_level_descriptors.pdf. The frameworks for Wales and Northern Ireland are similar to this. For information on the Scottish framework, visit www.sqcf.org.uk/TheFramework/sqcf-Level-Descriptors.aspx.

Appendix B – How the different qualification levels relate to each other

QCF for England, Wales and Northern Ireland		Scottish Credit and Qualifications Framework		National Framework of Qualifications for Ireland		Framework for HE qualifications in England, Wales and Northern Ireland	
Level		Level		Level		Level	
8	Vocational Qualification Level 8	12	Professional Development Award (PDA), Doctoral Degree	10	Doctoral Degree, Higher Doctorate	8	Doctoral Degree
7	Fellowship, NVQ Level 5, Vocational Qualification Level 7	11	SVQ Level 5, PDA, Postgraduate Diploma, Master's Degree, Integrated Master's Degree, Postgraduate Certificate	9	Master's Degree, Postgraduate Diploma	7	Master's Degree, Integrated Master's Degrees Postgraduate Diploma, PGCE, Postgraduate Certificate
6	Vocational Qualification Level 6	10	Bachelor's Degree with honours, PDA, Graduate Diploma and Certificate	8	Honours Bachelor's Degree, Higher Diploma	6	Bachelor's Degree with honours, Bachelor's Degree, PGCE, Graduate Diploma and Certificate
5	NVQ Level 4, HND, HNC, Vocational Qualification Level 5	9	Bachelor's/Ordinary Degree, PDA, SVQ Level 4, Graduate Diploma and Certificate	7	Ordinary Bachelor's Degree	5	Foundation Degree, Diploma of Higher Education, HND
		8	HND, SVQ Level 4, PDA, Diploma of Higher Education	6	Advanced Certificate, Higher Certificate		
4	Vocational Qualification Level 4	7	PDA, HNC, Certificate of Higher Education	5	Level 5 Certificate, Leaving Certificate	4	HNC, Certificate of Higher Education
3	NVQ Level 3, Vocational Qualification Level 3, GCE AS and A Level, Advanced Diploma	6	Highers, SVQ Level 3, PDA, National Progression Award, National Certificate	4	Level 4 Certificate, Leaving Certificate		
2	NVQ Level 2, Vocational Qualification Level 2, GCSE at grade A*-C, ESOL skills for life, Higher Diploma, functional skills Level 2 (English, mathematics, ICT)	5	Intermediate 2, Credit Standard Grade, SVQ Level 2, National Progression Award, National Certificate	3	Level 3 Certificate, Junior Certificate		
1	NVQ Level 1, Vocational Qualification Level 1, GCSE at grade D-G, ESOL skills for life, Higher Diploma, functional skills Level 1 (English, mathematics, ICT)	4	Intermediate 1, General Standard Grade, SVQ Level 1, National Progression Award, National Certificate	2	Level 2 Certificate		
Entry Level	Entry Level Certificate (sub-levels 1-3), ESOL skills for life, Higher Diploma, functional skills Entry Level (English, mathematics, ICT)	3	Access 3, Foundation Standard Grades, National Progression Award, National Certificate	1	Level 1 Certificate		
		2	Access 2, National Progression Award, National Certificate				
		1	Access 1				

Appendix C – Case study: Competence in health and safety at a nuclear company

These extracts are adapted from a booklet that outlines the role definitions and profiles of safety managers and practitioners at a UK nuclear company, as well as the

competence levels that people in each category need to do their jobs. We've included only three areas of competence that are listed in the booklet.

Role definitions

Safety manager
<p>Role description To provide advice on the implementation of and improvement in safety performance to facilities or operational units.</p>
<p>Role responsibilities Provide authoritative advice on an ad hoc basis and as part of formal systems and structures, such as change control, safety committees, work planning and risk assessments.</p> <p>Manage the provision of safety support and advisory services to the organisation unit, including the appointment of specialists.</p> <p>Advise on implementation of systems, such as incident investigations, auditing, emergency planning, safety training and promoting culture change (eg using behavioural safety methods).</p> <p>Directly contribute to complex assurance (audit) tasks, such as safety cases and analysis.</p>

Safety practitioner
<p>Role description To provide advice on the implementation of and improvement in safety performance.</p>
<p>Role responsibilities Provide advice at the point of work and personally carry out workplace inspections, audits and investigations.</p> <p>Deliver instruction and training in health, safety and related subjects, and facilitate safety improvement and problem resolution with groups and individuals.</p> <p>Generate safety reports, incident and investigation reports, and present information in writing and in formal safety committees.</p> <p>Provide advice across a wide range of safety specialisms within own competence and provide additional subject matter depth in one or more specialism (eg COSHH, electrical safety, asbestos).</p>

Role profiles

Core competences	Safety manager	Safety practitioner
Assurance function	Level B	–
Interpreting legislation and standards	Level D	Level B
Hazard identification and risk control	Level C	Level C

Assurance function

Definition

Knowledge of and ability to manage the major responsibilities, accountabilities, processes and organisation of the assurance (audit) function.

Level A: Basic understanding

- Explains the role and contribution of the assurance function
- Describes the major tasks and responsibilities of the assurance function
- Identifies the core assurance processes, such as event reporting, measurement and review
- Discusses the role of line and operational management in assurance

Level B: Working experience

- Outlines the assurance regulatory context of working with contractors
- Describes the major assurance programmes, initiatives and issues currently being addressed
- Works with corporate- and directorate-based resources to contribute to assurance objectives
- Participates in meetings regarding relevant regulatory considerations and agencies
- Implements locally the basic assurance procedures used within the organisation

Level C: Extensive experience

- Contributes to the development and communication of assurance strategies and plans
- Participates in defining assurance mission, vision and objectives at a corporate or directorate level
- Facilitates assurance-related business process implementation or improvement initiatives
- Contributes to the establishment of best practices for assurance, including the use of benchmarking
- Improves key relationships and dependencies between assurance specialists and operators
- Interacts with external regulators regularly, representing the organisation

Level D: Subject matter depth and breadth

- Leads and architects major assurance projects or process change across the organisation
- Integrates assurance processes and activities with other processes such as human resources
- Defines financial, staffing and competency requirements for assurance
- Promotes and justifies organisational assurance strategies in the broader business context
- Initiates communications campaigns to promote awareness of key assurance issues
- Analyses, influences and interprets the changing regulatory context for its impact on the organisation

Note

This competence is about assurance as a professional function and is likely to be applied to all assurance roles as a basic foundation. Level B should relate to junior professionals, level C to senior technical specialists or people who directly manage assurance professionals, and level D to the senior standard setters, typically 'heads of' or 'heads of profession'.

Interpreting legislation and standards

Definition

Knowledge of and ability to influence and interpret statutory legislation and accepted best practice into standards for the organisation and to advise and guide others on compliance with such standards.

Level A: Basic understanding

- Describes company standards and links with legislation, contract or best practice
- Explains the statutory powers of regulators, such as the HSE
- States the statutory instruments and authorities relating to an area of law
- Describes the relationship and structure of the organisation's management systems with respect to legislation

Level B: Working experience

- Participates in developing company standards that satisfy legislation, contract or best practice requirements
- Advises others in the routine interpretation of company standards
- Explains how statutory and enforcement notices work and the obligations on the organisation
- Summarises the key features and requirements of a specific statutory instrument
- Assesses compliance issues associated with legislation or contractual requirements in routine circumstances

Level C: Extensive experience

- Is a subject expert for translating legislation, contract or best practice into a company standard
- Advises others on the interpretation and application of company standards
- Recalls pivotal case law examples
- Interacts with enforcement agencies on routine matters
- Develops pragmatic solutions and advice for compliance in line with business requirements
- Evaluates levels of compliance with legislation, contract or best practice at an organisational level

Level D: Subject matter depth and breadth

- Influences the development of legislative or other standards through lobbying and consultation processes
- Acts as the principal point of contact for the organisation on a specific legislative or contractual requirement
- Elaborates in depth on best practice, contract requirements or case law in a specific area of legislation
- Evaluates changes to legislation in terms of organisation impact and risk
- Advises the executive on interpretation and compliance issues
- Assesses the impact of company standards on business performance

Note

This competence does not imply someone knows everything about every law. Rather, it is to be applied to experts within a field of legislation – such as employment law, health and safety or environment, finance, property and so on.

Hazard identification and risk control

Definition

Knowledge of tools, techniques and company requirements for identifying, understanding, quantifying and controlling hazards and risks.

Level A: Basic understanding

- Lists basic concepts of hazard identification, analysis and risk control
- Identifies key factors to consider in risk control
- Recognises types of risk relevant to the task and work area
- Locates company standards and guidance relating to hazard identification and risk control

Level B: Working experience

- Participates effectively in routine hazard identification inspections and audits
- Contributes to workplace risk assessments using established methodologies
- Describes risk categorisation system and its implications for risk control and facility operations
- Explains the concept of ALARP ('as low as reasonably practicable') and cites examples of its application
- Identifies key risk control and mitigation mechanisms underpinning risk assessments

Level C: Extensive experience

- Works with both routine workplace risk assessment and major hazard assessment approaches
- Selects risk assessment techniques appropriate to the need, based on hazard categorisation
- Compares risk analyses with standards relating to tolerability of risk
- Advises facility users of facility safety case envelope and risk constraints
- Monitors standards and implements improvements to risk assessment and control
- Evaluates, records and reports on risk control performance

Level D: Subject matter depth and breadth

- Demonstrates experience with designing and implementing various types of risk management processes
- Defines policy, strategy and best practices for analysis, measurement and management of risk
- Compares and contrasts alternative risk and effectiveness measurement approaches
- Stays abreast of industry experiences with new risk analysis, management approaches and tools
- Analyses industry-specific and state-of-the-art risk management methods and models
- Elaborates on the historical and future perspectives of risk assessment and management
- Knowledge of and ability to influence and interpret statutory legislation and accepted best practice into standards for the organisation, and to advise and guide others on compliance with such standards

Acknowledgments

The IOSH Technical and Professional Committees would like to thank Gary Booton and Del Basi for their valuable voluntary work on this guide, and everyone else who contributed to it, particularly AWE for its kind permission to reproduce its health and safety competence model.

We welcome all comments aimed at improving the quality of our guidance, including details of non-UK references and good practices. Please send your feedback to Luise Vassie, Executive Director – Policy, at luise.vassie@iosh.co.uk.

IOSH
The Grange
Highfield Drive
Wigston
Leicestershire
LE18 1NN
UK

t +44 (0)116 257 3100
f +44 (0)116 257 3101
www.iosh.co.uk

IOSH is the Chartered body for health and safety professionals. With more than 38,000 members in 85 countries, we're the world's largest professional health and safety organisation.

We set standards, and support, develop and connect our members with resources, guidance, events and training. We're the voice of the profession, and campaign on issues that affect millions of working people.

IOSH was founded in 1945 and is a registered charity with international NGO status.

Institution of Occupational Safety and Health
Founded 1945
Incorporated by Royal Charter 2003
Registered charity 1096790

