WP3 - State of the art evaluation and collaboration with institution responsible for validation

Appendix 1 - EUSAFe interim report for Work Package 3

Programme Name: Leonardo Da Vinci
Project Number: 510362-2010-LLP-IT-LEONARDO-LMP
Grant Agreement Number: 2010-3541/001-001
Project Title: EUSAFe – European Qualification for Occupational Safety of Innovation
Start date of project: October 1st 2010
Duration: 24 Months

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This publication [communication] reflects the views only by the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.
1. Country – Austria

OSH Legislation
Responsibility for safety and health at work in Austria is shared between various bodies. On a nationwide level the legal basis is provided by the Safety and Protection of Health at Work Act [ArbeitnehmerInnenschutzgesetz] and the regulations which go with it. The Labour Inspectorate, the Labour Inspectorate for Transport (VAI), the provincial [Land] Agricultural and Forestry Inspectorates and organisations serving public sector employees are responsible for overseeing compliance with legislation to do with safety and health at work.

Employers must appoint safety officers (Sicherheitsvertrauenspersonen) in undertakings which regularly employ more than 10 workers. The appointment must be approved by the works council. In undertakings with fewer than 50 workers, a member of the works council may perform the role of safety officer. The safety officers must inform, advise and support both workers and the works council on all matters relating to health and safety.

In undertaking with over 100 employees a health and safety committee (Arbeitsschutzausschuss) must be set up. The committee’s role is to promote company-wide cooperation between preventive services.

<table>
<thead>
<tr>
<th>Qualification &amp; Training Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Safety Engineer (<em>Sicherheitsfachkraft</em> - SFK)</td>
</tr>
<tr>
<td>Occupational Physician (<em>Arbeitsmediziner/in</em> - AMED)</td>
</tr>
<tr>
<td>Safety Representative (<em>Sicherheitsvertrauensperson</em> - SVP)</td>
</tr>
</tbody>
</table>

Occupational Structure
**Sicherheitsfachkraft SFK (Safety Expert)**
Arbeitsmediziner/in AMED (Occupational Physician) __________ Sichersheitsvertrauensperson SVP (Safety Representative)
2. Country - Belgium

OSH Legislation

The code sur le bien-être au travail stipulates that all employers (including public and administrative services as well as small and medium sized companies) must appoint at least one conseiller en prévention/preventieadviseur (Safety Advisor). They must also establish a Service interne de Prévention et de Protection/Inteme Dienst voor Preventie en Bescherming (Company-internal Prevention and Protection Service), of which the conseiller en prevention/preventieadviseur (Safety Advisor) forms the main part. External safety services also exist and may be brought in to help the internal service depending on circumstances.

In order to perform the function of conseiller en prevention/preventieadviseur (Safety Advisor), it is necessary to have sufficient knowledge of the regulations and prevention techniques relating to Occupational Safety and Health (OSH). These must be acquired through recognised training, which is regulated by law. However, in companies with fewer than 20 workers, the employer may fulfil the role of conseiller en prevention/preventieadviseur (Safety Advisor) himself.

The employer determines how measures relating to the safety and health of workers are applied in their company. They also determine the competence and responsibilities of OSH professionals who are appointed to apply these safety and health measures. Employees are also expected, however, to take care of personal health and safety as far as possible.

OSH is also monitored by the Fonds des Accidents du Travail/Fonds voor Arbeidsongevallen (Occupational Accidents Fund), an organisation that was established by royal decree in 1967. It aims to ensure that employers comply with insurance obligations and accident declaration regulations, that their technical and medical provision is adequate and that agreements between insurance agencies and victims are ratified. Furthermore it is responsible for providing information on OSH to relevant parties as well as holding a databank of accidents in the public and private sectors. Financial compensation for occupational accidents is also administered by the Fund.

Qualification & Training Analysis

Level one and Level two complementary training

Formation complémentaire/aanvullende vorming (complementary training courses) are recognised by the Ministry of Employment and Labour on the advice of the commission of the Higher Council for Prevention and Protection at Work. Courses which are organised by non-university institutions are given recognition by a unanimous vote from the commission of the Higher Council. Courses are recognised when they are deemed to provide the student with the knowledge and skills to perform the function of safety advisor or lead safety advisor in an internal safety service. Content, entry requirements and other conditions for the courses are laid down in the royal decree of 10 August 1978.

Indeed the courses are devised and structured in such a way that upon completion, the individual is able to work as a lead safety advisor. The skills and knowledge that they gain during the course relate to the following topics:

- Common risks and occupational illnesses
- Sources of documentation relating to OSH problems
- Create annual plan of action for the protection of workers
- Prevention techniques, including psychological aspects
- Organisation of OSH in companies as well as its integration into decision-making processes and industrial relations systems
- Role of the safety service, hygiene and environmental improvements to the workplace
- Prevention methods of a technical nature, including fire prevention
- Forms, reports and statistics on occupational accidents and illnesses
- Ergonomics (in conjunction with an occupational doctor)
- Industrial relations – in general and field-specific
- Occupational Safety and Health (OSH) regulations in the company
- Risk detection and creation of a risk inventory

The following elements are covered in more detail:

- Safety, hygiene and amelioration of working conditions
- Ergonomics in a practical context
- Organisation of OSH in companies as well as its integration into decision-making processes and industrial relations systems
- The application of the laws and mechanisms which are taught in the course. This first level has a minimum duration of 400 hours, spread over one, two or three years.
- A further course also exists; the transition training course. This lasts at least 250 hours and is usually assimilated into the first level training. It is currently being removed completely from the training provision in Belgium.

Entry requirements for the different levels of courses are as follows:

First - Diplôme de fin d'études universitaires / de l’enseignement supérieur de niveau universitaire or conseiller en prevention/preventieadviseur (Safety Advisors) who benefit from special measures under Article 8 of the decree

Second - Certificat d’enseignement secondaire supérieur or de cours secondaires supérieurs or at least three years relevant professional experience

The level of complementary training that a conseiller en prevention/preventieadviseur (safety advisor) has undergone affects the type of company for which they can work. An outline of the requisite training for different types of company can be found below:

Overview of training required as a conseiller en prevention/preventieadviseur (Safety Advisor) – Internal Service

Minimum complementary training

<table>
<thead>
<tr>
<th>Group</th>
<th>Safety Advisor in charge of internal service</th>
<th>Other Safety Advisors</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Level I</td>
<td>Level II</td>
</tr>
<tr>
<td>B</td>
<td>Level II</td>
<td>(*)</td>
</tr>
<tr>
<td>C</td>
<td>(*)</td>
<td>(*)</td>
</tr>
</tbody>
</table>

(*) No complementary training course is required by law, although a certain amount of knowledge is expected in order to carry out the function appropriately

As stated above, the courses are divided into practical and theoretical parts. For the practical component candidates must complete a work placement in a company, which is supervised by the institution organising the course. The organising institution may choose how the course is delivered, provided that it conforms to the stipulations contained within the royal decree. It must also admit all applicants who meet the entry requirements.

The courses end with an examination. This exam comprises:

- One part designed to test the knowledge acquired and comprehension of the subject
- An essay
- Defense of the end of study project (in front of a jury)
In order to work in an external safety service, conseillers en prévention/preventieadviseurs (safety advisors) are required to have completed different training to those who work for internal services. The general regulations regarding external safety services can be found in the Arrêté royal du 27 mars 1998 relatif aux services externes pour la prévention et la protection au travail/koninklijk besluit van 27 maart 1998 betreffende de externe diensten voor preventie en bescherming op het werk (royal decree regarding external safety services), although certain modifications were made in the royal decree of 31st March 2003. All conseillers en prévention/preventieadviseurs (safety advisors) must complete a general training course of at least 120 hours spread over one year. This course is offered by the same institutions which provide complementary training for company-internal safety advisors and represents a similar type of training to that offered in levels I and II. This is followed by a specialisation module in ergonomics, industrial hygiene or psychological and sociological effects of work lasting at least 280 hours for those who wish to work in any of these fields. Conseillers en prévention/preventieadviseurs (safety advisors) usually specialise in one or more of the five areas listed below, however it is highly unusual for an individual to perform occupational medicine and any other duties simultaneously.

General basic training external service

Overview of prerequisites for Safety Advisors – External Service

- Specialisation
- Education/Training required

1. Occupational safety
   - Ingénieur (academic title) or industrial Engineer + level I training
2. Occupational medicine
   - Doctor of Medicine (academic and professional title) + Occupational Medicine specialisation
3. Ergonomics
   - University-level qualification in relevant discipline + basic training + specialisation module in ergonomics + 5 years professional experience
4. Industrial hygiene
   - University-level qualification in relevant discipline + basic training + specialisation module in industrial hygiene + 5 years professional experience
5. Psychological and sociological effects of work
   - University-level qualification in relevant discipline + basic training + specialisation module in psychological and sociological effects of work + 5 years professional experience

Indeed only individuals who have obtained the above qualifications are allowed to use the professional title of Safety Advisor in an external safety service.

The general basic training comprises the following topics:

- Competences: the ability to
  - Work as part of a team with a shared interdisciplinary approach to manage risks to health, safety and well-being of workers
  - Teach people to look after their own well-being and that of others
  - Apply knowledge and skills in practical situations
- Required knowledge:
  - Primary, secondary and tertiary prevention
  - That relating to multidisciplinary-interdisciplinary fields
  - Fundamentals of anatomy, physiology, psychology
  - Risk detection:
    - Global and participatory approaches to working systems
    - Techniques of risk analysis and epidemiology
    - Information gathering (complaints, absenteeism, stress, violence) and information processing (statistics, epidemiology)
    - Introduction to principles of analysis and prevention in specific disciplines, including fundamentals of:
      - Occupational hygiene and medicine
      - Environmental risks
      - Physical stress and mental activities
      - Management of prevention policy, including:
        - Structures: internal and external safety services, external technical services, etc
        - Detection, analysis and diagnostic methods
        - First, second and third line interventions
        - General application of legal framework
        - Fundamentals of legal and economic aspects of well-being at work
        - Analysis of work, study of working conditions
        - Occupational accidents and illnesses
        - Chemical, biological and physical agents
        - Equipment
        - Fire prevention and electrical dangers
        - Fitting-out of workstations, anthropometry and ergonomics
        - Information and training for workers and managers
        - Prevention activity coordination
        - Organisation of first aid provision to victims
        - Fundamentals of communication, consultation, cooperation and motivation techniques
- Emergency procedures
- Meeting and reporting techniques

Occupational Structure

Conseiller en prévention/preventieadviseur (Safety Advisor)

Expert en Matière d'examen d'accidents du travail graves /eskundige inzake het onderzoek van ernstige arbeidsongevallen (Specialist in examining serious occupational accidents)

Coordinateur de Sécurité /veiligheidscoördinator (Safety Co-ordinator)

Conseiller en prévention / preventieadviseur (Safety Advisor)

As part of the internal safety service, the Safety Advisor assists the employer, managers and employees in the application of legal requirements and regulations relating to the well-being of workers in the organisation and all other preventative measures. They may also undertake health surveillance activities.

Their main tasks are as follows:

- Identify and analyse risks
- Propose preventative measures action for identified risks, including an annual action plan
- Investigate accidents/incidents; occupational incapacitating accidents and occupational illnesses
- Develop techniques to prevent all types of fatigue at work and analyse psychological and social effects linked to work
- Advise on organisation of the workplace, work stations, environmental factors, dangerous agents and equipment used
- Advise on hygiene in the workplace
- Advise on employment of workplace equipment, fire protection and emergency procedures, amongst others and help to develop them
- Advise on training for workers at different stages in their career and in line with changes in role or relevant technology
- Advise on induction training
- Advise the employer and Committee on any project or measure that may have direct or indirect consequences on the well-being of the workers
- Participate in the provision of information on well-being of workers to external companies, other independent bodies and other institutions or organisations that are present on the same site (if appropriate)
- Be available to the employer, managers and workers to answer questions concerning the application of relevant OSH laws and refer them to an external service if necessary
- Organise first aid and emergency care when necessary

The external Safety Advisor fulfils a largely similar role, but is drafted in when the internal Safety Advisor is not able to fully deal with the situation in hand.

Expert en matière d'examen d'accidents du travail graves / eskundige inzake het onderzoek van ernstige arbeidsongevallen (Specialist in examining serious occupational accidents)

- Examine causes and circumstances of serious occupational accidents
- Recommend appropriate measures to prevent recurrence
- Draw together elements of the investigation, stated causes and recommendations in a written report
- Communicate said report to civil service, employer and other parties involved
- This is a highly specialised role, which is only required in the event of an occupational accident.
Coordinateur de sécurité / Veiligheidscoördinator (Safety Co-ordinator)
During the project planning phase this individual studies the variety of risks on the building site and draws up the health and safety plan for the company or organisation.
Equally during the execution of the project on-site, this individual ensures that health and safety measures are being adhered to and creates a subsequent intervention file.
3. COUNTRY – CYPRUS

OSH Legislation

There is a statutory obligation on every employer to ensure the safety, health and prosperity at work of all their employees. Furthermore, both employers and employees have specific statutory obligations in relation to health and safety in the workplace which must be followed. The obligation extends to the provision of information, directions, training and supervision to ensure the safety and health of employees. There is also a statutory obligation for employers to ensure that every employee is provided with the necessary and sufficient training on the matter of safety and health, especially in the form of information and instructions relating to the specific work position or duties.

For employers of more than 200 employees there is a legal obligation to employ a full-time safety officer.

The employer must apply preventative measures by following a number of general principles relating to health and safety, which include risk assessment, risk avoidance, eliminating risks at source, adjusting work to people, monitoring technological progress, replacement of dangerous things by non-dangerous or less dangerous etc.

The employer must have a written assessment of safety and health risks for its employees at work, including those risks relating to groups of employees which are exposed to specific risks e.g. chemical, biological or physical, and of persons who are not employed for reasons which relate to the operation or management of its business. Based on this assessment the employer must take all protective and preventative measures and means necessary.

Every employer must keep a record of accidents at work which resulted to employees’ incapacity to work for more than 3 continuous days and note the total number of working days lost by each injured employee.

Furthermore, every employer must keep a registry of reports of all lethal or serious accidents and dangerous occurrences at work on which the causes, the date, the persons involved and the preventative measures for the future which have been taken, must be noted.

Qualification & Training Analysis

Training for Labour Inspectors

Short Term Professional Courses

Postgraduate Program in Environmental Health, International Institute for the Environment and Public Health

The issue of health and safety at work is increasingly being included as a core module in programmes for training in "union affairs” for employer associations and trade union employees. Generally safety and health takes the form of one module within a specialised course in a different sector rather than as a qualification in its own right. It can be identified as health and safety or environmental management. It provides information and understanding of safety and health issues related to the particular sector the individual is studying. There is very little evidence to suggest that risk management is given the same emphasis.

However, more recently there have been developments at postgraduate level, and provision of short term private courses; there are more details regarding these developments below:

Training for Labour Inspectors

This training is specific to newly appointed inspectors and is prepared and organised by the Department of Labour Inspection. It is provided during the first six months of employment and includes theoretical courses and the development of skills whilst working. It includes the following:

| Organisation of the Ministry of Labour and Social Insurance and general aspects on the issues dealt with by the Ministry | Risk management in the workplace | Specific training on physical and chemical agents |
| Introduction to the organisation and working methods applied by the Department | Broad-based training on safety, health and welfare at work | Investigation of accidents and dangerous occurrences |
| Legislation enforced by the Department | Specific training on electrical, mechanical and construction safety | Inspection techniques and practices |
| Procedures to conduct legal proceedings | Specific training on ergonomics, occupational health and hygiene | Specific training for using the computerised information system of the Department |

On completion the newly appointed inspectors continue with on-the-job training in the relevant appointment. All newly appointed inspectors must undertake and pass a written examination on health and safety legislation within four years of their start date.

Training for established inspectors

The Department identifies the training needs of the individual inspectors, providing appropriate supplementary training for specific tasks or for the development of skills as required.

Short Term Professional Courses

- Principles of Occupational Health and Safety Management (40 hours) Intercollege
- Health and Safety (general) HRDA
- Hygiene HRDA
- Environmental Management HRDA

Currently there are few short term professional courses. To date it has not been possible to obtain any detailed information concerning the content and outcome of these courses; as a result no evaluations or comparisons have been made.

Postgraduate Program in Environmental Health, International Institute for the Environment and Public Health

Entry: Bachelor degree

This programme provides training over a 12-month period that will allow the graduates to acquire skills that prepare them for leadership positions in governmental and international organisations, in consulting, public services, private industry and research. As a result on completion of their studies the graduates will be proficient in the full range of environmental health and public health protection practices and research.

The programme includes the following courses:

| Biostatistics | Introduction to Epidemiology | European and International, Law and Policy |
| Physiology | Water Pollution | Sustainability, Trade and Environment |
| Toxicology | Exposure Assessment | Environmental Epidemiology |
| Air Pollution and Energy Processes | Risk Assessment | Indoor Air Quality |
| Occupational Health | | |
Occupational Structure

Labour Inspection Officers
Labour Inspectors
Safety Officers
Senior Labour Inspection Officers
Senior Labour Inspector

Labour Inspection Officers
Labour inspection officers work in the Department of Labour Inspection. The requirement for employment is a university degree in a specialist engineering area e.g. electrical, mechanical, civil and chemical; or occupational safety and health. The majority of labour inspection officers deal specifically with safety and health issues, however a small number deal with the administrative issues of running the department.

Labour Inspectors
Labour inspectors also work in the Department of Labour Inspection and are generally engineering technicians, with at least three years experience in industry. Inspectors are responsible for all fieldwork inspection activities and the investigation of accidents. Each are responsible for their own geographical area, however some inspectors are specifically trained to handle special issues e.g. construction, and chemical agents.

Inspectors are also required to provide information to employers, employees and other groups, providing lectures on occupational safety and health in collaboration with other stakeholders.

Safety Officers
Safety Officers must be approved by the Department of Labour Inspection who hold a register of all safety officers. Currently there are 38 safety officers on the register working for 33 different employers.

To obtain registration the safety officer must meet the following requirements:
- Very good knowledge of the Cyprus legislation on safety and health at work
- Training on risk assessment issues, of at least 16 hours duration, and experience in the preparation of such assessments
- Training and occupational experience on issues of safety and health at work, as these are prescribed in the following table, according to their academic education:

<table>
<thead>
<tr>
<th>Academic Education</th>
<th>Training Occupational Safety and Health (min hours)</th>
<th>Occupational Experience in issues of Safety and Health (min years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>University award in Occupational Safety and Health</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>University award in any Engineering field</td>
<td>75</td>
<td>3</td>
</tr>
<tr>
<td>University award in any Applied Sciences</td>
<td>100</td>
<td>4</td>
</tr>
<tr>
<td>University award in any Theoretical Sciences</td>
<td>150</td>
<td>5</td>
</tr>
<tr>
<td>Award from a 3 year post secondary college in any Engineering field</td>
<td>125</td>
<td>4</td>
</tr>
</tbody>
</table>

The department has also identified the training required in the issues of safety and health as the following:

<table>
<thead>
<tr>
<th>Principles of safety and health at work</th>
<th>Organisation and management of issues of safety and health – accident investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of risk prevention</td>
<td>Chemical agents, Biological agents, Carcinogens, Asbestos</td>
</tr>
<tr>
<td>Fire safety - explosions</td>
<td>Physical agents (noise, exposure to heat stress, vibration, lighting, environmental conditions, etc.)</td>
</tr>
<tr>
<td>Main principles of environmental pollution control</td>
<td>Electrical risks</td>
</tr>
<tr>
<td>Mechanical risks</td>
<td>Psychosomatic risks, human factor</td>
</tr>
<tr>
<td>Construction site safety and health</td>
<td>First aid</td>
</tr>
<tr>
<td>Main principles of workplaces inspection, sampling and measurement</td>
<td>Emergency action plans</td>
</tr>
<tr>
<td></td>
<td>Principles of occupational health</td>
</tr>
<tr>
<td></td>
<td>Storage and handling of loads</td>
</tr>
<tr>
<td></td>
<td>Personal protective equipment</td>
</tr>
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<td></td>
<td>People and vehicle transportation</td>
</tr>
</tbody>
</table>

Senior Labour Inspection Officer
The Senior Labour Inspection Officer works in the Department for Labour Inspection and is responsible for managing the field operations, the data regarding inspection standards, and for submitting a monthly report.

The Senior Labour Inspection Officer is also required to maintain good relationships with the social partners in the field of policy formulation, the setting of safety and health standards, and the operation of various programmes.

Senior Labour Inspectors work in the Department for Labour Inspection and undertake field works inspections as well as being responsible for more specific inspections of machinery such as boilers, lifts and cranes.
4. COUNTRY – THE CZECH REPUBLIC

OSH Legislation
Ministry of Labour and Social Affairs (Ministry of Labour and Social Affairs) is responsible for regulating occupational health and safety in the Czech Republic. Státní Úřad Inspekcí Práce (The Czech Occupational Safety Office and the Occupational Safety Inspectors) provides the state's labour inspection. They enforce and supervise occupational safety and work equipment safety. An important role is also played by The Technical Inspection Institute in Prague which provides the state's professional supervisory service in the field of safety of designated technical equipment.

There is no professional registration for health and safety experts in the Czech Republic.

Occupational Structure

Safety Specialist

Worker Representative

According to the Czech Labour Protection Act, the employer is obliged to ensure safety and health at work for their employees with respect to potential hazards and risks associated with the performance of the work. The employer's obligation to ensure safety and health in the working environment is applicable to all individuals who are present at the workplace with the employer's knowledge. The managers, within the scope of their competence, are responsible for the maintenance of safety and health at work. If there are employees of two more working together at one workplace, the employers are obliged to inform of the risks and co-operate in ensuring safety and health at work. Each of the employers is obliged to:

- ensure that their activities and their employee's work are organised and performed in such a manner that at the same time they protect the other employer's employees as well
- co-operate in ensuring a safe, secure and hazard-free work environment for all employees in the workplace

Occupational Responsibilities

Safety Specialists are experts in the field of occupational safety. They carry out research into safety in the workplace and use scientific methods in their approach to solving problems. They carry out risk assessments and are responsible for risk management.

Worker Representative

Every employer must recruit a worker representative to carry out health and safety activities in the workplace. They are responsible for assisting the safety specialists in their work.

Qualification & Training Analysis

Vysvedcení o Maturitní Zkoušce Požární ochrana Prumysloví Bezpečnost (Technical Vocational Award in Fire Protection and Industrial Safety)

Magistr - Masters in Industrial Safety Engineering

Bakalár - Bachelors Degree in Occupational and Manufacturing Processes Safety

Bakalár - Bachelor Degree in Technical Safety for Persons and Property

Magistr - Masters Degree in Fire Protection Engineering and Industrial Safety

Vysvedcení o Maturitní Zkoušce Požární ochrana Prumysloví Bezpečnost (Technical Vocational Award in Fire Protection and Industrial Safety)

The course is offered by SOU / SOŠ (Technical Vocational Schools) in the Czech Republic. Students must have completed nine years of basic school in order to enrol on this programme. It is four years in duration and consists of general education which accounts for 45% of the course content and the vocational element which accounts for the remaining 55%. Students study the following modules:

- Fire safety equipment
- Industrial machinery and safety
- Preventing industrial accidents

Upon completion of the course, the graduate is awarded a Vysvedcení o Maturitní Zkoušce (School Leaving Certificate). Individuals can then progress to a higher vocational qualification – the Diploma Specialist at VOŠs or Higher Education (Bakalár / Magister) in a related field. All of the following higher education courses are provided at Technická Univerzita Ostrava (The Technical University of Ostrava). The courses have been developed in line with CIVOP educational standards in occupational health and safety.

Magistr - Masters in Industrial Safety Engineering

Students must first pass the Matura (Maturity Examination) in order to be accepted for this course. The Masters is an integrated programme lasting five years. It comprises the following modules:

- Crisis management foundation
- Technology safety
- Industrial toxicology
- CAD systems
- Psychology of safety and catastrophes
- Accident prevention
- Investigation of causes of accidents and incidents
- Hazard and risk analysis
- Explosion prevention
- Industrial hygiene
- Basics of labour law and welfare law
- Enterprise safety management
- Ventilation, heating and air conditioning
- Environmental impacts of accidents
- Occupational safety and health
- Safety considerations when working at heights
- Building security
- Insurance sector
- Occupational risk analysis
- Transport and industrial occupational safety
- Economics and their effect on health and safety
- Fire protection and safety systems
- Sociology
- Interpersonal communication
- Pre-diploma thesis seminar
- Transport of dangerous substances & wastes
- Accident and disaster handling
- Administration law
- Physical education
- Fire protection system
- Applied ergonomics
- Quality management

Students must pass written examinations in each individual module and complete their practical training in order to obtain the degree.

Bakalár - Bachelors Degree in Occupational and Manufacturing Processes Safety

The Bachelors degree in Occupational and Manufacturing Processes Safety is three years in duration. Students are required to have passed the Matura (The Maturity Examination) in order to enrol on the course. The programme includes the following modules:

- Material science
- Electrical engineering
- Technical and legal regulations in occupational and process safety
- Psychology of safety and catastrophes
- Organic chemistry
- Quality management
- Management
- Organisation of occupational safety
Students must have passed the Maturita (Maturity Examination) in order to enrol on this course. This three-year bachelor degree programme focuses on the following subjects:

- Technical equipment safety
- Legislation in the civil service
- Protective and rescue equipment
- Technology safety
- Supervised practical training
- Industrial toxicology
- Crisis management
- Educational science
- Safety informatics
- Building security
- Physical measurement
- Supervised practical training
- Building constructions and fire safety
- Working environment
- Civil protection
- Applied fluid mechanics
- Bachelor thesis seminar
- Case studies
- Environmental foundation
- Personal protective equipment
- Occupational risks
- Interpersonal communication
- Quality management
- Administration law
- Labour inspection
- Prevention in occupational safety and health
- Supervised practical training
- Students must pass written examinations in each individual module.

**Bakalář - Bachelor Degree in Technical Safety for Persons and Property**

Students must pass the Maturita (Maturity Examination) in order to enrol on this course. This three-year bachelor degree programme focuses on the following subjects:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material science</td>
<td>Psychology of safety and catastrophes</td>
</tr>
<tr>
<td>Physical measurement</td>
<td>Electrical engineering</td>
</tr>
<tr>
<td>Management</td>
<td>Organic chemistry</td>
</tr>
<tr>
<td>Civil law</td>
<td>Administration law</td>
</tr>
<tr>
<td>Supervised practical training</td>
<td>Technical mechanics</td>
</tr>
<tr>
<td>Interpersonal communication</td>
<td>Security systems</td>
</tr>
<tr>
<td>Technologies and their risks</td>
<td>Physical education</td>
</tr>
<tr>
<td>Supervised practical training</td>
<td>Statistics</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>Testing and certification</td>
</tr>
<tr>
<td>Criminal law</td>
<td>Labour law and welfare law</td>
</tr>
<tr>
<td></td>
<td>Rescue systems</td>
</tr>
</tbody>
</table>

Students are expected to pass written examinations in each individual module.

**Magistr - Masters Degree in Fire Protection Engineering and Industrial Safety**

Students must have passed the Maturita (Maturity Examination) before enrolling on this course. This integrated five year Masters degree places an emphasis on fire protection. It includes the following modules:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Course</th>
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<tbody>
<tr>
<td>Fire dynamics</td>
<td>Technology safety</td>
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<tr>
<td>Fire protection of buildings</td>
<td>Fire tactics</td>
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<tr>
<td>Ventilation of buildings</td>
<td>Fire and explosion hazard analysis</td>
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<tr>
<td>Fire safety equipment</td>
<td>Fire equipment</td>
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<tr>
<td>Fire cause determination</td>
<td>Geographic information systems</td>
</tr>
<tr>
<td>Explosion prevention</td>
<td>Technical equipment safety</td>
</tr>
<tr>
<td>Fire hazard assessment</td>
<td>Voluntary practical training with fire brigade</td>
</tr>
<tr>
<td>Pre-Diploma thesis seminar</td>
<td>Incident handling</td>
</tr>
<tr>
<td>Accident prevention</td>
<td>GIS systems in fire protection</td>
</tr>
<tr>
<td>Crisis management</td>
<td>Introduction to EU health and safety policy</td>
</tr>
<tr>
<td>Transport of dangerous substances and wastes</td>
<td>Management</td>
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<td></td>
<td>Computer aided control of technological processes</td>
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<td></td>
<td>Quality management</td>
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<td></td>
<td>Administration law</td>
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<td></td>
<td>Educational science</td>
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<td></td>
<td>Software for training in fire protection</td>
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<td></td>
<td>Design in fire protection</td>
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<td></td>
<td>Explosives and effects</td>
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<tr>
<td>Building constructions</td>
<td>Industrial toxicology</td>
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<td></td>
<td>Computing methods in fire safety in structure</td>
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<tr>
<td></td>
<td>Safety system reliability</td>
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<td></td>
<td>Crisis management system</td>
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<td>Fire protection in structures</td>
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<td></td>
<td>Organisation and management in fire protection</td>
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<td></td>
<td>Civil emergency planning</td>
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<tr>
<td></td>
<td>Civil protection</td>
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<tr>
<td></td>
<td>Risk management</td>
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</tbody>
</table>

Risk management Students are required to pass written examinations in each individual module.
## 5. COUNTRY – DENMARK

### OSH Legislation

The Danish Working Environment Authority coordinates cooperation with the European Agency for Safety and Health and Work and operates under the auspices of the Danish Ministry of Employment (Beskæftigelsesministeriet). It is responsible for ensuring compliance with occupational health and safety legislation which applies in respect of all occupations in Denmark. However, there are certain sectors for which regulation and enforcement thereof have been devolved to other authorities:

- The Danish Energy Agency is responsible for supervision of off-shore installations.
- The Danish Maritime Authority is responsible for supervision of shipping.
- The Danish Civil Aviation Administration is responsible for supervision in the aviation sector.

The Working Environment Authority (Arbejdsslægtynet) helps to ensure a safe, healthy and constantly improving working environment through effective supervision, appropriate regulation and information. If the Authority finds that occupational health and safety legislation is being flouted there are various sanctions it may impose. The Authority also drafts orders and instructions, in cooperation with labour market partners. Its headquarters are in Copenhagen, as are two of its six centres.

The former rule about a safety manager in companies with 20 or more employees has been repealed in 2010. There is no professional registration for occupational health and safety officers in Denmark. The skills and qualifications of required health and safety personnel are determined by the individual employers depending on the needs of the company.

### Qualification & Training Analysis

1. **Non-professionals** (safety representatives for the workers and supervisors or managers in the company internal OSH cooperation organization):
   - **Compulsory training** – 3 days training to be completed in the three months after election. Training provider must have an authorization
   - **Voluntary training** – the employer must offer these and he has to make a qualification plan:
     - 2 days training to be completed in the 12 months after election
     - 1 ½ days training per year through the election period.

2. **OSH-professionals** (safety managers and safety technicians, OSH consultants from preventative services, health and safety consultants etc):
   - **Compulsory Training** - The legislation has no general rules about training or competencies of the OSH professionals, but there are some rules regarding notices from the labour inspection ordering an enterprise to seek advice from an authorised health and safety consultant with a view to solving one or more of its health and safety problems and to assist the enterprise with a view to strengthening the preventative health and safety activities. These authorised health and safety consultant companies must have a professional staff that has either a technical or health education of at least 3 years and both educational streams must be represented. The staff should also have at least 1 years experience to carry out practical work with OSH prevention.
   - **Voluntary Training** – Master of Environmental Management at The Technical University of Denmark. This is a masters degree of 4 semesters each 400hrs
   - **Academy education OSH at Lo-skolen: Akademiuddannelse** in Working Environment, this is a short post degree programme with 6 modules each with 3 -4 seminars over 2 days
     - Consists of 6 modules. Each module consists of 3-4 seminars. - All modules conclude with an oral examination, which is based on a written project.
     - Akademiiuddannelse corresponds to a shorter higher education.
   - **Module 1 - Working environment and safety = Legislation, Working environment and security, psychology**
   - **Module 2 – Organization = Organisations structure, culture and processes, management and motivation, organizational change**
   - **Module 3 - Leadership in practice = Management practices, personal leadership and development, conflict management, communications (written, oral, digital), human resources**
   - **Module 4 -Arbejdsmiljøledelse = Systematic safety, standards, auditing and control, certification processes.**
   - **Module 5 – Special Project**
   - **Module 6 - Project**
   - **Safety Manager training** – at the Conference of Danish Employers (DA). Safety manager 1 week and Safety Manager 3 weeks: Ledelsa af arbejdsmiljøet – (Management of the working environment) - 1 week (former Sikkerhedslederen – 1 week)
     - The working environment training is the focus for leaders in private and public organisations who are required to advise, resolves and coordinates tasks within the working environment.
     - Participants - leaders in private and public undertakings who advise, resolve and coordinate tasks within working environment, health and welfare, and whose primary tasks are working environment.
     - If arbejdsmiljøfunktionen the entire, or a substantial part of the total function, it is recommended to participate in management of the working environment – 3 weeks management training”.

3. **Academic education** (Bachelor and candidate)
   - **Working Life - Roskilde University**
Occupational Structure

Safety Manager

Denmark has fixed by law that companies with 20 or more employees must have a daily manager of health and safety at work. This person ensures that the decisions taken by the safety committee, consisting of representatives from employers as well as employees, are carried out. There are no formal educational requirements for health and safety managers. However, most employers do provide on the job training as well as the DA accredited short course in safety management.

Occupational Responsibilities

Safety Manager

The safety manager is employed to carry out tasks to ensure the maintenance of health and safety in the workplace. The manager is responsible for the following tasks:

- Controlling and assessing the work environment conditions in the enterprise
- Advising improvements to be carried out by the management of the company to ensure the maintenance of health and safety

The safety managers report to the safety committee. The safety committee is composed of a chairman representing the employer and two representatives elected by the supervisors and two elected by the safety representatives. The task of the committee is to manage the work environment activities in the enterprise.
6. COUNTRY – ESTONIA

OSH Legislation
The Ministry of Social Affairs is the main political and administrative authority in the area of working environment. The Working Environment Unit answers directly to the Ministry of Social Affairs and as such is responsible for the regulation, co-ordination and management of the activities in the field of occupational health and safety. The regulation of training in the field of occupational health and safety focuses on working environment specialists, working environment representatives, working environment council and first aid specialists in enterprise. All companies with ten or more employees must have a working environment representative.

Although the Ministry of Social Affairs has introduced standardised professional training for working environment specialists, there is currently no formal procedure for the registration and licensing of this occupation in Estonia. There is however, a compulsory professional registration procedure for specialists in the field of occupational health according to the Health and Safety Act (1999). All individuals working as occupational health specialists (i.e. occupational health care nurses, physicians and psychologists) must apply to the Estonian Health Care Board for registration.

Qualification & Training Analysis
Professional Diploma in Occupational Health and Safety
Magistri kraad - Rakenduskeemia ja biotehnoloogia (Masters in Applied Chemistry and Biochemistry with Specialisation in Occupational Hygiene)
Magistri kraad - Ergonoomika (Masters in Occupational Ergonomics)
Diploma - Ergonoomika (Diploma in Ergonomics)

Professional Diploma in Occupational Health and Safety
A one-year professional training course in working environment safety is available at recognised Higher Education Institutions in Estonia. This training in occupational safety and health training is intended for working environment specialists. The programme is based on standards developed by the Ministry of Social Affairs. It provides a combination of classroom and on-the-job training to prepare prospective specialists to perform the necessary risk assessment at the company. It also focuses on hazard recognition, evaluation and control, equipment and facility design, standards and analysis of accident, injury, and illness data.

Given the practical nature of the course and the emphasis on the acquisition of skills rather than theoretical knowledge, the professional training course relates well to the NVQ level 4 in Occupational Health and Safety in the UK.

Magistri kraad - Rakenduskeemia ja biotehnoloogia (Masters in Applied Chemistry and Biochemistry with Specialisation in Occupational Hygiene)
Tallinn University of Technology, has been working on the development of a Masters programme in Occupational Hygiene which it will begin teaching in 2007. The course has been developed in collaboration with the Estonian Occupational Health Centre.

Magistri kraad - Ergonoomika (Masters in Occupational Ergonomics)
The Masters course in Occupational Ergonomics is a multidisciplinary subject which draws upon elements of mathematics, engineering and medicine and psychology. This broad based course covers many elements of health and safety and applies them to the workplace environment. The Masters programme has been developed in accordance with the Bologna structure. Accordingly, the programme includes assessment based upon a research project and written examinations on the topics covered. The course is therefore comparable in structure to a British Masters degree programme in Occupational Health and Safety Management. There is however, a much broader coverage of subjects which is reflected by the inclusion of optional subjects such as communication psychology. Psychology is not normally covered in Masters programmes in OSH in the UK.

<table>
<thead>
<tr>
<th>Core Subjects</th>
<th>General Course in Enterprise Management</th>
<th>Integrated Product Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Ethics</td>
<td>Ergonomics</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>Research Methodology</td>
<td>Occupational Health</td>
<td>Labour Law</td>
</tr>
<tr>
<td>Measurements and Data Analysis</td>
<td>Ventilation and Heating</td>
<td>Design of Working Environment</td>
</tr>
<tr>
<td>Practical Training in Work Safety</td>
<td>Industrial Toxicology and Hazardous Material Handling</td>
<td>Ergonomical Biomechanics</td>
</tr>
<tr>
<td>Noise and Vibration</td>
<td>Thermal Environment</td>
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<tr>
<td>Fundamentals of Experiment Planning</td>
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</tbody>
</table>

<table>
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<tr>
<th>Optional subjects</th>
<th>Design and Safety of Pressure and Lifting Equipments</th>
<th>General Course in Communication Psychology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Course in Reliability</td>
<td>Labour Economics</td>
<td>Participation in Scientific Conferences</td>
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</tbody>
</table>

Diploma - Ergonoomika (Diploma in Ergonomics)
This Diploma level course in ergonomics was established by the Estonian Agricultural University in 1998. The majority of candidates who take this course are mostly engineers of differing specialisations who have passed previous training courses in this area. The objectives of the study programme are to provide education and training at diploma level in the area of working environment safety and ergonomics. The course is aimed at prospective safety specialists in the engineering industry and in agriculture and construction industries. Entry to the diploma level programme is open to those who have graduated from high school or higher technical school.

The study programme aims to be interdisciplinary, reflecting both similarities and differences in the safety of working environment in the various engineering sectors e.g. industrial, agricultural, building etc. The programme can be taken full time or in correspondent form. Although the course places heavy emphasis on theory and on academic study, there is a small practical element which all students are required to complete. Candidates study the following subjects relating specifically to ergonomics and working environment safety:

- Safety in the Working Environment
- Risk Analysis of the Working Environment
- The Working Environment in Industry, Agriculture, Forestry and Water Management
- Electric Code
- Traffic Safety: Transportation and Storing Dangerous Materials
Occupational Structure

Working Environment Representatives
Working Environment Specialists
Occupational Health Care Specialists

In Estonia, occupational health and safety are treated as separate areas of expertise. Safety and risk management are primarily dealt with by the following personnel:

- Working environment representatives
- Working environment specialists

Occupational health activities such as treatment and prevention of occupational diseases are predominantly carried out by health care specialists such as:

- Occupational nurses
- Physicians
- Psychologists

These personnel often work alongside the working environment specialists and representatives.

Occupational Responsibilities

Working Environment Representative

A working environment representative is elected by workers to deal with issues arising in occupational health and safety, their term of authority is two years. The working representative is likely to be a company HR manager or facilities manager for whom health and safety is only a small part of the job. The employer is responsible for arranging training for the workers’ representative to ensure that they can fulfill their duties in the workplace. Training is usually carried out either informally by the employer or in external short term courses (e.g NIVA (Nordic Institute for Advanced Training in Occupational Health) accredited courses).

Working Environment Specialist

A working environment specialist deals mainly with safety management. There are no specific national training requirements for this occupation however, individual employers are likely to request a qualified engineer in the area of the working environment or an experienced specialist with appropriate professional training. A working environment specialist is responsible for monitoring and inspecting safety in the workplace. They take measures to reduce the effect of risk factors present in the working environment. This occupation can be an internal appointment for a specific organisation or be hired as an external consultant. Working environment specialists work in larger companies or companies where safety is a primary concern.

Occupational Health Care Specialist

An occupational health care specialist is primarily concerned with the prevention and treatment of occupational diseases. The Health Care Specialist may be an occupational physician, nurse or psychologist. These individuals may assist the Working Environment Specialist in activities such as the management of risk, investigating incidents and developing policy. However, the caring and treating employees for occupational diseases does not involve the Working Environment Specialist or the Working Environment Representative.
The Social och Hälsövårdsdepartementet (Ministry of Social Affairs and Health) is the main authority responsible for the regulation of occupational health and safety. The Ministry is principally responsible for inspection and monitoring of occupational health and safety.

There are four professional bodies which undertake research and training in occupational health and safety. Membership to a professional body is optional. Finsk Ergonomiförening (Finnish Ergonomics Society) and Suomen Työhygienian Sauru (Finnish Occupational Hygiene Society) cover occupational health. The Association of Finnish Safety Managers and Työturvallisuuskeskus (Finnish Institute for Occupational Safety) mainly concern occupational safety.

Personnel involved in safety are required to register with the Työturvallisuuskeskus Finnish Centre for Occupational Safety. The centre is responsible for keeping the records of safety personnel (managers and representatives) in Finland. It is important to note, however, that there are no educational requirements and that professional registration is strictly optional.

Mandatory registration is however required for occupational health care specialists including occupational physicians, nurses and physiotherapists. They must register with the Valtakunnallinen Terveydenhuollon Esittäjien Neuvottelukunta (National Board of Health) in order to obtain a license to practice. A licensed occupational physician must have a degree in medicine and have completed the four year specialised training in occupational health care. A licensed nurse must have a nursing diploma from a recognised polytechnic and have completed three years of specialisation training in occupational health studies.

### Qualification & Training Analysis

#### Specialist course in Occupational Safety and Health

Postgraduate training for occupational physicians

**Työterveyslaitos** (Finnish Institute of Occupational Health) Short term training courses

### Specialist Course in Occupational Safety and Health

The basic training course lasts for two weeks, with no formal entry requirements. The basic modules of the training programme cover the following elements:

- The operational environment of the Occupational Health and Safety (OSH) system and inspection/control system e.g. legislation and funding of OSH costs
- The scientific basis of OSH, how the work affects employees' health; occupational diseases, work-related illnesses and accidents
- The professional role of experts in OSH and readiness to develop their own role and the co-operation of the work team in the field of OSH
- Working environment, workplace survey and risk assessment, the role of the workplace survey in the process, what the OSH professionals assume from experts of different disciplines
- The organisational and management approaches for health and safety management
- Main methods in OSH used for work environment and in problem-solving in working conditions and organisation
- Main methods in OSH used for individuals, e.g. assessment of work ability or the need for rehabilitation, health examinations, diagnostics of occupational diseases

Given the short duration of the training course and lack of formal entry requirements, it is not possible to provide an accurate comparison to UK levels. It is important to note that only a minority of health and safety officers have completed this training course. As there are no formal educational requirements, health and safety officers in Finland are often employed without having completed any specialised training in the area.

#### Postgraduate Diploma for Occupational Physicians

The one year postgraduate degree for occupational physicians covers advanced topics in occupational health care. Entrants are required to hold a degree in Medicine before starting the course.

Työterveyslaitos (Finnish Institute of Occupational Health) Short Term Courses

A number of short term courses are organised by Työterveyslaitos (Finnish Institute for Occupational Health (FIÖH)). The courses generally range from one day to a week in duration. The courses include programmes in subjects such as ergonomics, toxicity, psychology, environmental safety, occupational hygiene, physiology chemical work. Given their short term nature, it is not possible to provide comparisons for these awards.

### Occupational Structure

#### Health and Safety Manager

- Occupational Nurse
- Occupational Physician

#### Health and Safety Manager

According to the new Act on the Supervision of Labour Protection (44/2006), the employer is responsible for appointing a health and safety manager for the workplace. The manager is responsible for cooperation between the employer and the employees. There are 15000 registered safety officers in Finland.

The most important tasks and duties carried out by the Safety Officer are to make themselves familiar with the following:

<table>
<thead>
<tr>
<th>The regulations concerning occupational safety</th>
<th>The working conditions and identification of safety and health hazards and risks</th>
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<tr>
<td>They are required to participate in:</td>
<td>Work ability activities</td>
</tr>
<tr>
<td>● Workplace inspections</td>
<td>● Provide information to employer and employees on occupational safety laws and regulations</td>
</tr>
<tr>
<td>● Preparation of workplace action plan and its implementation</td>
<td>● Maintain the cooperation between employer and employees</td>
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<tr>
<td>● Ensure that the necessary workplace inspections are held</td>
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</table>

Health and safety managers suggest activities to the employer concerning:

- Training and other educational activities in safety, health and working conditions
- First aid activities and training

- Measuring the working conditions and carrying out risk assessments on health and safety hazards
- Needs for the use of external occupational health and safety expertise if not available inside the workplace.

The employer is responsible for ensuring that the health and safety manager is capable of carrying out the above activities. They may arrange external training courses for the continuing professional development of staff. However, given the lack of formal educational requirements, many health and safety managers are taught the necessary skills on-the-job by the employer. Only a minority of health and safety managers have completed formalised education in OSH or related subjects.
8. COUNTRY – FRANCE

OSH Legislation
The Accidents du Travail et des Maladies Professionnelles (AT-MP) (Accidents at work and work related illnesses) is an organisation that manages the legal system and implementation of policy for accidents and illness at work in France. They ensure the equal treatment of all parties involved. The policy is determined by the Commission des accidents du travail et des maladies professionnelles (CAT/MP) de la Caisse nationale de l’assurance maladie des travailleurs salariés (CNAMTS) (the commission for accidents at work and work related illnesses (AT-MP) and the National health insurance funds (CNAMTS)). This commission is composed of equal representatives of social partners, employers and workers. Advice and services are available at three different levels with different partners responsible for different elements:

- At the national level the Caisse nationale de l’assurance maladie des travailleurs salariés (CNAMTS) is responsible for ensuring the following:
  - The management of risks in the workplace (Direction Risques Professionnels DRP), assisted by l’Institut national de recherche et de sécurité (INRS) (National institute for research into safety) and Eurogip (ensuring alignment with Europe);
  - The national medical service is equipped to deal with all the problems related to occupational safety and health

- At the regional level services for prevention of accidents in the workplace are provided by:
  - Caisse régionales d’assurance maladie (CRAM) (Regional health insurance fund)
  - Caisse générales de sécurité sociale (CGSS) (Social security organisation)
  - La direction régionale du Service médical (DRSM) (Regional management of the medical services)

- At the local level the following services are available:
  - Caisse primaires d’assurance maladie (CPAM) (Local health insurance fund) and the CGSS
  - L’échelon local du Service médical (ELS) (Local medical service)

The Institut National de Recherche et Sécurité (INRS) is the reference point for employers and workers with enquiries regarding occupational risk prevention: protecting workers’ health and safety and preventing occupational accidents or diseases. Its work involves: research into the future needs and requirements of Sécurité et Santé au travail (safety and health at work), raising awareness (via information products, prevention campaigns) and assistance (through technical guidance, information resources, training).

- Comités d’hygiène, de sécurité et des conditions de travail – CHSCTs – working conditions committee
  - Caisse régionales d’assurance maladie – CRAMs – Regional Health Insurance Funds

These regional organisations are responsible for the development and coordination of occupational safety and health and actively contribute to the implementation of the laws and regulations. The individual regional offices are managed by a board of directors who represent the employers and salaried employees. Their work focuses on the survey of potential occupational health and safety risks. The survey uses visits, regulations, the consideration of various sectors and statistics. The actions taken consider the regional features against the setting of the general regulations of occupational safety and health as elaborated by the national body which manages the health insurance of salaried workers.

For those departments overseas, the work of the CRAMS is exercised by the CGSS. This provides the companies with the authorisation and technical means through financial encouragement, to employ a safety engineer and security supervisor, to organise risk prevention, advice, training and monitoring of the overseas cases.

Qualification & Training Analysis
Agent CRAM/CGSS
In order to obtain the appropriate competencies and be able to practice their profession, engineers undertake several weeks of professional training. On successful completion of the initial training they continue professional development regularly in an INRS training centre. This training represents about 50% of the activity of the INRS training department. The practical elements included within the training are specific to the professionals who work with the CRAM and CGSS and as a result are not available to everyone.

They cover various elements including:
- Techniques
- Methodological approaches
- Communication
- Pedagogy
- Knowledge of the enterprise and the business environment
- Personal development.

Animateur-formateur prap (prevention des risques lies à l’activité physique)
All companies must implement a plan for the prevention of risks attached to physical activities in the workplace. This plan is adapted according to the size of the organisation and the number of workers. The animateur-formateur trains the internal staff to assist with the implementation of the prevention plan.

The training is divided into the following three parts:
- Initial Training
- Teaching Techniques
- Construction of training sessions
- Public Sanitation
- Industry and Commerce
- General Office
- Working in the home (specifically for at home carers)
- Working with elderly people

The course provides the animateur-formateur with the ability to analyse the risks and ergonomics within the workplace and then create a training session specific to that organisation and its requirements. A practical element is involved where the student has the opportunity to observe and then practice a training session. They are taught how to construct a training session as part of the implementation of the work plan and to inform the workers of the different things they can do to prevent accidents when carrying out physical activities in the workplace.

Chargé(e) de prevention
This training is aimed at those responsible for managing prevention e.g. health and safety workers, trainers in prevention, industrial hygienists. The main goal is to study more efficient ways in risk prevention for organisations. The training focuses on perfecting techniques and methodology and allows the participants to develop the following skills:
- Using methods of risk detection and evaluation on businesses
- Participating in research and putting in place prevention policies
Concepteur, Technicien
The training offered is specific to engineers, technicians, innovators, and ergonomists, it is designed to improve efficiency in the participants area of work. The training focuses on developing the following areas specific to their roles:

- Using methods of risk detection and evaluation on businesses
- Participating in research and putting in place prevention policies
- Specialist competences for attaining the overall objectives of prevention

Diplôme Universitaire (DU) TSS Environnement industriel, prevention des risques et qualité - Entry: Bac +2  Duration: 1 year

The content of the course involves the understanding of SME, SMQ, and SMS, a series of audits designed to independently analyse the risks and policies and procedures in place to ensure appropriate measures are being taken within organisations. The course aims to provide knowledge of techniques, regulations, risk prevention, and communication. This is provided through lectures, practical workshops and through a case study.

Graduates can find employment in positions of responsibility in safety and quality in the PME-PMI (small medium sized enterprises / Small medium sized businesses) or as an assistant in the field of Qualité, Hygiène, Sécurité, Environnement.

Diplôme Universitaire Technologie (DUT) Hygiène Sécurité, Environnement
Entry: Baccalauréat  Duration: 2 years

This course provides a basic knowledge of the field of safety, hygiene and the environment, as well as providing information on the disciplines that apply these principles in the work place (i.e. ergonomy; health and safety at work, analysis of working conditions). The course also covers the safety of installations and products, ensuring the safety of the working mechanics, as well as the system itself, and protection of the environment (ecology, public health).

Graduates can find employment within the area of health, safety and risk prevention in companies, consultancies or in the collective territories of the state.

DU - DAET Diplôme d'analyse ergonomique du travail - Entry: Bac + 3 or equivalent experience  Duration: 1 year

The training includes ergonomy; history, analysis of work, different models, knowledge of physiology, the global nature of the working environment, the physical environment and the transformation of the work environment.

Graduates are able to continue their studies in Ergonomics to Masters level or DFSEA.

DU - DFSEA Diplôme de Formation Supérieure en Ergonomie Appliquée
Entry: DU in ergonomy or the equivalent  Duration: 1 year

Is a monitored year in industry, it aims to put into practice the intervention in an organisation dealing with a demand concerning the conditions of production, work, quality, safety and prevention.

Graduates can work in an organisation specialising in ergonomics.

Enseignant
This is available in three areas:  ● Enseignement Professionnel  ● Ecoles d’Ingénieurs  ● Ecoles d’architecture

Enseignement Professionnel
This training has been put in place to provide orientation for the protocols for the teaching of risk prevention with the CNAMTS and the Ministry of National Education:

- Training the Trainers  ● Participation in the review and creating of training
- Put certificates in place  ● The use of different pedagogical tools
- Assist CRAM and the training institutes  ● Ensure harmonisation with Europe

Ecoles d’Ingénieurs
The aim of this course is to integrate the competences in health and safety at work within the global context of the subject of risks.

This concentrates on identifying three levels of intervention:

- Teaching of the general principles on health and safety at work
- The development of specialist modules in health and safety at work (management, creation)
- Training in research and the co-ordination and management of partnerships between the university laboratories and the schools

Ecoles d'architecture
This assists with the endorsement of the convention signed between the INRS and the Ministry of Culture and Communication. This convention is for the promotion and development, of the teaching in schools of architecture; it takes into account the criteria of health and safety.

This results in the consolidation of several types of intervention:

- Seminars delivered to teachers in the architecture schools
- The use of different pedagogical tools
- The collaboration required between laboratories of research in schools
- The participation and the elaboration of pedagogical programmes integrating the risk prevention in employment
- European partnerships
Formateur d'organisme de formation
A number of training agencies propose training in health and safety would be of benefit for workers in the organisations. As a result some of them provide training programmes and use the tools as directed by INRS.

As a result INRS provides training which allows the trainers of these agencies to acquire the capacity to put into place appropriate programmes with the correct pedagogical tools, for the field of risk prevention in the area of physical activity and first aid and safety.

Infirmier(e) en Santé du travail
The training is specifically for general nurses and occupational nurses, and those who assist in domestic situations. It allows them to develop the capacity to use more effective methods and techniques for detection and evaluation of risks, to participate in research and to put in place means of prevention and to organise training in the risk prevention for physical activities for the workers.

Ingénieur ESAIP en Sécurité - Environnement – Prévention
Entry: Bac +2 / 3 sciences or technology  Duration: 3 years
Training includes the sciences, safety information, risk sciences, natural risks, ergonomy, regulations, the working environment, application of a project in an organisation, analysis of production systems. The course involves 10 months of practical training over the 3 years; there is also a possibility to study 2 semesters in a partner foreign university. Graduates are able to find employment as a quality / safety manager, a safety co-ordinator, a safety and prevention manager, an EHS engineer, environment / safety councillor, or a hygiene / safety / working conditions consultant.

Institut d’Hygiène Industrielle et de l’Environnement
Entry: Maths, Biology and Physics with a good level of English  Duration: 1 year
The training includes methods of analysis, evaluation, and risk management. It also includes physics, biology, and chemistry prevention of risks for the workers, as well as for the environment. The legal aspects that it focuses on involve the techniques and scientific equipment used in physics and chemistry for the health and safety at work and the environment.

It also includes analysis into the methods of study and research into hygiene at work and the environment. The course is available through combinations of day and evening classes according to the learner's requirements. Graduates can obtain employment as hygienists, work hygiene and environment managers, science managers, research engineers, trainers, protection of the environment managers.

Licence Analyse des Risques Industriels et Management de la Qualité – ARIMQ  - Entry: Bac + 2 Science  Duration: 1 year
The training includes management of quality in the workplace, risk sciences, political and socioeconomics, communication and project management. Graduates can find employment as quality and safety moderators.

Licence Professionnelle Gestion de la Production Industrielle – Qualité, Hygiène, Sécurité, Environnement – GPI / QHSE  - Entry: Bac +2 in a science subject  Duration: 1 year.
This course involves 10 modules including general subjects on the management of the workplace; i.e. quality of life at work, quality of the environment and quality of products, and more specific modules concerning methodology and approaches to hygiene safety and the environment such as; continuing development, integrated approaches to Qualité, Hygiène, Sécurité, Environnement, judicial issues and risk sciences.

The training combines lectures with an independent project and 2 months experience, within an organisation.

Graduates are able to work anywhere in the sector, assisting in the field of Qualité, Hygiène, Sécurité, Environnement either integrated within a company or as an independent consultant.

Management de la Sécurité des Systèmes Industriels et des Systèmes d'Information – MSSISI  - Entry: Licence in general sciences to year 1 and BAC+4 in every course for access to year 2  Duration: 2 years
Year 1 includes; risk sciences, communication and project management, and management of safety. Year 2 includes; administration systems, and foundation of current administration networks, safety information systems, safety logistics and an independent project to be submitted at the end of the course.

Graduates can find employment as managers of information systems for safety (RSSI) in any sector.

Management de la Sécurité et de l'Environnement des Systèmes Industriels – MSESI  - Entry: Licence in a science discipline  Duration: 2 years
Year 1 includes; risk sciences, communication and project management, and management of safety. Year 2 includes; environmental sciences, management of quality and safety, and an independent project on the environment.

Graduates can find employment as a risk manager.

Master d’Ergonomie, sécurité, prévention et changements technologiques  - Entry: Masters in another discipline with a minimum of 150 hours in ergonomy, or another equivalent DU or sufficient professional experience  Duration: 1 year
The training content includes the approaches to intervention in organisations, and the contribution of supporting disciplines such as:

- Hygiene
- Physiology of work
- Safety
- Handicap
- Prevention
- The physical surroundings. Training is divided into 6 modules of 4 seminars and a practical element each.

Graduates are entitled to the title of European Ergonomy, and can find work in the area of study and research of methods, or work within an association or as a consultant in the following areas; organisation management of human resources, health at work, psychology, safety and conditions at work or in an ergonomy laboratory.

Master PRNT (Prévention des Risques et Nuisances Technologiques)  - Entry: Licence / Maîtrise scientifique i.e. general chemistry / processes  Duration: 2 years
This postgraduate course focuses on the following areas of risk prevention:

- Chemical risks
- Fire prevention
- Nuclear risks
- Risk analysis
| Physical risks | Industrial risks | Air, water and light pollution | Practical management of Qualité, Hygiène, Sécurité, Environnement |
| Treatment of waste | Recognition of biotechnological risks | Regulations: Code of work and the environment | ICT |
| Research in English | Application of work plans and management of projects |

Graduates can find employment as a Qualité, Hygiène, Sécurité, Environnement engineer or manager and can be expected to take complete responsibility after 2 years experience.

**Mastère Spécialisé en Sécurité et Risques Industriels - Entry: Diplôme d'ingénieur or third cycle or bac +4 and 3 years experience in a related profession**  
Duration: 1 year  
Training includes knowledge and understanding of regulations, methods of analysis, risk analysis, risk management, organisation and safety management, tools of business. The course involves a practical element, including a period of time within a work placement. Graduates can find employment as a safety engineer, a safety manager, manager of prevention, councillor of prevention, safety and industrial risks consultant.

**Mâtrise IUP Maintenance – Fiabilité – Qualité, spécialité Ergonomie - Entry: Bac +1 / professional experience**  
Duration: 3 years  
The course focuses on biomechanics, understanding organisations, and how they work, as well as the different approaches, methods and techniques in ergonomy. Information technology, communication and expression are also included. Training involves a practical element as well as theoretical training within the institution. Graduates are able to find employment as ergonomic engineers, consultants, lecturers or project managers.

**Médecin du travail - The training available to occupational doctors provides further specialisation on medical practice in this area.**  
It is structured to cover three areas:

- Methods and tools  
- Disease at work  
- Prevention of biological and physical risks attached to the use of chemical agents

As a result the training aims to develop the abilities of the students to:

- Use methods of detection and evaluation of risks in the company  
- To appreciate and understand the efficiency of the different means of prevention  
- To ensure the appropriate medical follow-up to workers exposed to the risks

The programmes enable an exchange of experiences and provide the time to allow reflection on the different ways of preventing risks at work. It is also an opportunity for the Doctors to perfect their techniques and methodologies, working side by side with other colleagues working in this sector.

**Membre de CHSCT délégué de Personnel**  
This training is aimed at the members of the Comité d'Hygiène, de Sécurité et de Conditions de Travail (CHSCT) (Committee of hygiene, safety and conditions at work), and those individuals who carry out the same work in the absence of the CHSCT. It is designed to provide development of the following techniques and methodologies:

- To acquire minimal knowledge for independent intervention in the field of risk prevention  
- To participate in the research and to put in place measures for prevention  
- To consolidate the necessary competences and ensure the communal preventions objectives are maintained

**Personnel Soignant et Aidant**  
This training is to prevent risks for those carers and assistants who work in the hospitals, clinic, retirement homes and in the home. It provides training to nurses, care assistants, and physiotherapists, to enable them to train their colleagues in their area of work. By recognising the trainers’ prior knowledge of health and safety the training provided seeks to complement the individual students’ knowledge and requirements.

Students can choose from the following areas:

- General approaches, methods and tools  
- Risk prevention in areas where chemical, biological and physical agents are used  
- Risk prevention in areas where there is physical activity

**Occupational Structure**

**Aides-soignants**  
Care assistants provide help to the nurses and doctors in a variety of different situations, the hospital, clinics, retirement homes and personal homes. Within this role the assistants are expected to be aware of potential risks in physical activities and the working environment. Care assistants, with the appropriate training can take on the role of Animateur Formateur (Trainer) which enables them to provide training in health, safety and risk prevention in the work place to their colleagues.

**Chargé de prevention / Chargé sécurité**  
The Manager of Prevention / Safety is responsible for putting in place company procedures and policies in line with the national requirements for health, safety and risk prevention in the work place. The position is often available within larger organisations and is considered a full-time role.

**Conseiller en prévention / Conseiller Environnement/Sécurité**  
Advisors provide constructive advice for smaller organisations on drafting and implementing processes and policies for their areas of expertise in health, safety, and risk prevention.
Consultant Hygiène/Sécurité/Conditions de travail / Consultant sécurité et risques industriels

Consultants can undertake a similar role as the advisors, and highlight areas that need development within the field of health, safety and risk prevention. They can also be responsible for the implementation and maintenance of health, safety and risk management policies and processes within companies and organisations. Consultants generally work with an independent company specialising in health, safety and risk prevention, and provide a service to several different companies where a full-time health, safety and risk prevention manager is not required, alternatively the consultants can work full-time with just one organisation.

Coordinateur Sécurité

Safety co-ordinators can be found in much larger organisations where the manager requires assistance in co-ordinating training for the workers, implementing the policies and processes and promoting awareness amongst the workers within the organisation.

Infirmier(e) en Santé du travail

Occupational Nurses can work on site within larger organisations or be part of an independent organisation providing a service to several smaller companies. The role involves providing assistance to the Médecin du travail (Occupational Doctor) with accidents, injuries and illnesses related to the workplace. The role also includes promotion of risk prevention and assistance to the manager in risk evaluation and the drafting of policies and processes. Nurses can also take on the role of animateur-formateur (Trainer) to provide training to the workers on prevention of risks related to physical activities and the workplace. Nurses are also responsible for training and ensuring there are a number of appropriately trained sauveteurs (first-aiders) within the organisation.

Ingénieur Environnement, Hygiène et Sécurité (EHS) / Ingénieur Ergonome / Ingénieur Sécurité,

The role of the Engineer is concerned with the approaches and methodologies to risk analysis and prevention within their specific area of expertise. The role can be as part of a large organisation which practices in an industry or sector where health, safety and risk prevention is a very large concern e.g. petrochemical industry, construction etc. Or the role can be independent of a particular organisation and focus on research into more efficient practices and methods of health, safety and risk prevention.

Médecin du travail

Occupational Doctors specialise in dealing with work-based injuries and illnesses. They can work within large organisations or independently for smaller organisations. Doctors can undertake an advisory role with the development of policies, procedures and practices related to health, safety and risk prevention in the workplace.

Sauveteurs / Secourisme

It is a legal requirement for every organisation in France to have an available first aider / lifeguard in the workplace. These individuals are generally part of the workforce of a particular agency who have undertaken training to be able to carry out first aid in case of an accident.
OSH Legislation
The field of occupational safety and health (OSH) is overseen by the Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (Federal Institute for Occupational Safety and Health – BauA), which is affiliated to the Bundesministerium für Wirtschaft und Arbeit (Federal Ministry for Economics and Labour). The institute is responsible for a variety of functions and activities, such as:

- Monitoring and evaluating OSH conditions in the workplace
- Designing safer workplaces, workstations, equipment and installations
- Developing OSH solutions based on relevant knowledge
- Assisting with the design of prevention-oriented working environments
- Promoting the prevention of occupational accidents and illnesses

Additionally the institute undertakes research work in the field of OSH, provides education and training as well as developing good practice models in OSH.

Employers in Germany are required by law (in particular the Arbeitschutzgesetz – Occupational Safety Law (1974)) to equip and maintain their workplaces, machinery, systems, etc so that they do not pose a danger to the health and safety of their employees. They must take steps to prevent occupational accidents and illnesses and to design workplaces that are fit for purpose. This can be done by appointing or enlisting the services of one or more occupational safety and health professionals.

Current OSH training provision – which came into force in 2001 – has been developed jointly by the Bundesministerium für Arbeit und Sozialordnung (Federal Ministry of Labour and Social Affairs – BauA) and the Hauptverband der gewerblichen Berufsgenossenschaften (Central Federation of German Professional Associations – HVBG). The training focuses on the development of sector-specific knowledge, methods and competences including social and management competences. Its goal is to provide the future OSH professional with up-to-date knowledge and understanding of all aspects of health and safety at work.

The main OSH qualification in Germany is the Fachkraft für Arbeitssicherheit (Occupational Safety Expert). The study of OSH is also possible at university level, either through a Bachelor or Master’s course in Safety Engineering, specialising in occupational safety. Further courses specialising more in the security and safety of organisations and personnel are also available.

The tasks and responsibilities of the Occupational Safety Expert are stipulated in the Arbeitssicherheitsgesetz (Occupational Safety Law) of 1974. This law also outlines the legal position of the profession, the occupational safety responsibilities of employers and recognised qualifications in the field.

Indeed the initial training concept for skilled labour in the area of OSH was devised in the mid-1970s in accordance with the above Occupational Safety Law. It has undergone two radical conceptual changes since then, in 1979 and 2001, the result of which is the current situation where the basis of the training concept is the Anforderungsprofil (standards profile). Registration with a professional body or organisation is not required for OSH professionals. However, in order to work in the capacity of a safety expert, it is necessary to hold a recognised safety expert qualification. The training course must conform to the regulations stipulated by the BauA and the HVBG and take place in a training institution or be offered by a training provider that is recognised either by the state or the professional association.

For other professions, such as safety engineer, the situation is slightly different. University qualifications are designed to provide entry to a profession, therefore for example the holder of a Bachelor of Science in Safety Engineering is qualified to work in this capacity in Germany. In short the qualification title reflects the occupational title and outcome.

Qualification & Training Analysis

Fachkraft – Schutz und Sicherheit (Prevention and Safety Expert)
The Prevention and Safety Expert is a recognised occupation that requires training according to the Occupational Training Law (Berufsbildungsgesetz – BbiG). The training period lasts for three years and forms part of what is known as the Dual System in Germany. Students acquire skills and knowledge through the different learning environments and are able to apply newly learned skills in a practical context.

The in-company element of the training comprises areas such as:

- Which legal bases must be respected
- How to assess risk potential and introduce safety measures
- How the company undertaking the training is organised
- How occupational safety and accident prevention measures are applied in the company

In the vocational school different, yet complementary, fields are covered. These tend to be more theoretical in nature and include:

- Planning preventative measures to avoid dangerous situations
- Establishing safety-related issues, understanding and documenting them
- Choosing appropriate technical resources
- Organising business processes for security services

Holders of this award are able to work as a prevention and safety expert or a safety representative – works security service.

Fachkraft für Arbeitssicherheit (Safety Expert)
The Safety Expert training course is offered by state or professional association recognised providers and follows the guidelines laid down by the BauA and the HVBG. The Bundesverband der Unfallkassen (Federal Association of Health Insurance – BUK) also offers training courses, but via a televisions-based distance learning rather than the traditional institution-based learning. The SauA and HVBG approach comprises five full-time blocks of one-to-two weeks in duration. Blocks one to three constitute training level one, blocks three and four constitute training level two and the final block – number five – is the third training level. Added to this are four self-study periods and an eight-week placement. The aim of the self-study periods is to consolidate the knowledge acquired during the institution-based blocks and extend it further. In total, the study, theory and practical should be completed in no longer than three years. The BUK telecourse varies in length, but can be completed within a year and includes eleven seminar days.

Admission on to the course is available for individuals who hold an Ingenieur, Techniker or Meister qualification however legally speaking there are no specific academic entry requirements. Previous professional training is regulated under the Gesetz über Betriebsärzte, Sicherheitsingenieure und andere Fachkräfte für Arbeitssicherheit (Law on Occupational Physicians, Safety Engineers and other Occupational Safety Experts).

In the first training level, the following content is covered:
In order to successfully complete the course, the student must acquire 180 European Credit Transfer System (ECTS) points. 24 of these are obtained through free choice subjects, 3 for attending and participating in obligatory seminars and 12 for the thesis. The rest are

| Introduction to safety and health protection and the tasks of the Safety Expert | Fundamentals of the source of accidents and occupational illness | Basics of danger and health-endangering factors |
| Detection and assessment of dangers | Goal-setting procedures for OSH systems | Legal fundamentals |
| Solution finding and decision making | Enforcement and implementation of occupational safety measures | Basics of integration of OSH into management |
| Introduction to self-study |

The second training level comprises the following areas:

| Reconfiguration of workplaces through changes in technical environment | Occupational safety in building projects | Safety at work and business logistics |
| Integration of safety at work into company management concept |

Finally, the third training level covers more specific areas of OSH such as:

| Risks – falling, biological dangers, fire and explosions | Machines/instruments/installations – earth-moving machines, hoisting machines, control engineering | Working processes – blasting operations, construction, handling of electrolytic and chemical surfaces |
| Workplaces – laboratories, railways, tents, air construction | Personal issues – subcontracted labour, telecommuting |

For the BauA and HVBG courses four examinations must be successfully passed in order to become a safety expert. The first and fourth comprise written questions and tasks, the second involves solving practical tasks and the third is a presentation based on the placement. An oral examination must also be passed. However the BUK telecourse is examined via continuous assessment. At the end of the course students are still obliged to sit a written exam and give a presentation. At the end of course seminar the student must present once more and sit an oral examination.

Holders of this award are qualified to work as a safety expert in Germany.

Sicherheitsbeauftragte – Werkschutz (Safety Representative – Works Security Service)

In order to be able to work as a safety representative, it is necessary to hold one of the following:

- Vocational qualification in prevention and safety
- Training as a Prevention and Safety Expert
- Advanced training in occupational safety

As several qualifications exist which allow the holder to work as a safety representative (works security service), it is necessary to address them separately.

Geprüfte Schutz- und Sicherheitskraft / Geprüfte Sicherheitsdienstleistungskraft (Certified Security Officer)

This training course represents advanced occupational training and is undertaken in education institutions that are regulated by the Industrie- und Handelskammer (Chambers of Industry and Commerce). In total the course should last five to seven months if undertaken on a part-time basis and one to nine months full-time.

Course content is divided into three main modules, which in turn comprise smaller subject areas. An overview of the content can be found below:

1. Legal actions and occupation-oriented responsibilities
   - Legal training, with particular emphasis on industrial and environmental considerations
   - Service training, including the specific tasks of the occupation
2. Risk prevention and employment of prevention and safety engineering
   - Fire and specific emergency measures, including preventative measures and how to adhere to regulations
   - Work, health and environment protection, including how to distinguish dangerous materials and goods
   - Prevention and safety engineering, such as using structural, mechanical or electronic prevention provisions
3. Safety and service-oriented behaviour and actions
   - Assessment and management of situations, including fundamentals of human behaviour, impact of behaviour on others and conflict prevention techniques

Individuals are expected to study communication techniques and the appropriateness of different registers in various situations as well as covering the fundamentals of teamwork and cooperation. A period of practical training is also obligatory.

The training course ends with examinations based on the stipulations of the Berufsbildungsgesetz (Occupational Training Law). Students must sit both written and oral exams, based on the modules listed above. The decision to pass candidates is taken by the Chamber of Industry and Commerce. Successful candidates are able to assume the occupational title of Certified Security Officer.

Bachelor of Science – Sicherheitstechnik (Safety Engineer)

The Bachelor course can be followed at universities (Hochschulen) and universities of applied sciences (Fachhochschulen). The objectives of the course are to ensure that students acquire the necessary basic knowledge in the area of safety engineering, are able to apply this knowledge and can prioritise problems and solve them independently. Furthermore the course should provide the student with the necessary sectoral knowledge, skills and methods in order that s/he can undertake practical work, critically order specific knowledge and be able to take responsible actions. The legal duration of the course is six semesters. During this period the student must attend lectures and seminars, complete laboratory work, undertake a twelve-week work placement and complete a thesis in the final semester. Students are also expected to spend time preparing for and writing up all lectures and seminars. Teaching is divided into modules (Modulblöcke), at the end of which there is at least one written examination.

In terms of content, the student must cover the following:

- Fundamentals of mathematical, natural and engineering sciences, including:
  - Maths for engineers
  - Chemistry for engineers
  - Technology
  - Materials
- Fundamentals of safety engineering, including
  - Safety law
  - Quality assurance
  - Business economics
  - Disaster prevention & property protection
  - Safety engineering methods
  - Personal responsibility
- Applied safety engineering, including
  - Occupational safety
  - Fire prevention
  - Environmental safety
  - Road safety

In order to successfully complete the course, the student must acquire 180 European Credit Transfer System (ECTS) points. 24 of these are obtained through free choice subjects, 3 for attending and participating in obligatory seminars and 12 for the thesis. The rest are
Equally, they design manuals, plans and instructions for initial order offences. If necessary, they work in conjunction with works security managers and detectives in these cases. Furthermore, their role includes the codification of weak points. 

Safety representatives ensure that damage is minimised in a company or organisation and that inevitable damage is localised or isolated. They also develop danger and risk analyses with respect to safety as a whole in the company and further training of security service staff as well as working together with the personnel department to help choose candidates for vacant positions within the company.

**Occupational Responsibilities:**

**Fachkraft für Arbeitssicherheit (Safety Expert)**

The Safety Expert and Safety Engineer fulfill similar roles, in that they assess and analyse potential and actual risks in the workplace and subsequently develop preventative working systems to protect employees. In short, they ensure that the employers’ obligations relating to OSH are adhered to. The qualifications that these professionals hold have the same name as the occupation itself.

The Safety Representative forms part of the Works Security Service rather than undertaking OSH-related work individually on behalf of the employer. In order to operate in this function, individuals may hold a qualification as a prevention and safety expert or a certified security officer. They may also have undertaken a professional course as a safety representative.

**Occupational Structure**

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<tr>
<th>Courses</th>
<th>Content</th>
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<td>- Safety organisation</td>
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<td>- Ergonomics</td>
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<td></td>
<td>- Methods of safety engineering</td>
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<td>ii. Fundamentals for engineers</td>
<td>- Mechanics and thermodynamics &amp; fluid dynamics</td>
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<td>- Automation engineering</td>
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<td>- Chemistry</td>
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<td>- Dangerous materials</td>
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<td>- Ergonomics II</td>
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<tr>
<td>iii. Management systems for engineers</td>
<td>- Safety management</td>
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<td>- Fundamentals of management</td>
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<td>iv. Occupational safety</td>
<td>- Occupational safety</td>
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<td>- Applied occupational safety</td>
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<td>- Related specific fields, eg. Personal safety, environment</td>
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<tr>
<td>v. Final work</td>
<td>- Work experience placements</td>
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<tr>
<td></td>
<td>- Master thesis</td>
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At the end of the course, the student should have acquired 120 ECTS points.

Holders of this award may work as a safety engineer or a safety expert in Germany. Alternatively, they may wish to pursue further academic study, in the form of a PhD.

**Master of Science Sicherheitstechniker – Arbeitssicherheit (Safety Engineer – Occupational Safety)**

Entry onto this course requires a Bachelor degree or a Diplom in an engineering discipline, the student to pass an entrance examination and have acceptable references. The course lasts for four semesters (two years) and includes two work placements, one of four weeks and another of eight, which aim to provide students with extended sector-specific knowledge.

Content for this course is taught in modules. Two of the first three listed below are compulsory:

- **Fundamentals for engineers**
  - Mechanics and thermodynamics & fluid dynamics
  - Automation engineering
  - Chemistry
  - Dangerous materials
  - Ergonomics II

- **Management systems for engineers**
  - Safety management
  - Fundamentals of management

- **Fundamentals of safety engineering**
  - Safety organisation
  - Ergonomics
  - Methods of safety engineering

- **Occupational safety**
  - Occupational safety
  - Applied occupational safety
  - Related specific fields, eg. Personal safety, environment

- **Final work**
  - Work experience placements
  - Master thesis

**Holders of this award may work as a safety engineer or a safety expert in Germany. Alternatively, they may wish to pursue further academic study, in the form of a PhD.**
**OSH Legislation**

Yπουργείο Εργασίας και Κοινωνικών Ασφαλίσεων (Ministry of Labour and Social Affairs) has overall responsibility for occupational health and safety in Greece. Ελληνικό Ινστιτούτο Υγιείνης Και Ασφαλείας Της Εργασίας (Ελ.Ιν.Υ.Α.Ε.) (The Hellenic Institute for Occupational Health and Safety) provides training courses for occupational health and safety personnel.

Yπουργείο Εργασίας και Κοινωνικών Ασφαλίσεων (The Ministry of Labour and Social Affairs) is responsible for overseeing the regulation of occupational health and safety in Greece. The General Directorate of Working Conditions and Health operates under the auspices of the Ministry of Labour and Social Affairs, and is in control of implementing policies developed by the ministry. It also serves as the accreditor of training courses in the field of occupational health and safety.

Registration processes for occupational health and safety personnel have not yet been developed in Greece. However, the future implementation of licensing is a priority for the Hellenic Institute for Occupational Health and Safety.

**Qualification & Training Analysis**

Professional Course in Occupational Health and Safety (For graduates)

Professional Course in Occupational Health and Safety (For non-graduates)

Professional Course in Technical Safety

Professional Course in Occupational Health and Safety for Workers Representatives

Professional courses in occupational health and safety are provided by Ελληνικό Ινστιτούτο Υγιείνης Και Ασφαλείας Της Εργασίας (Ελ.Ιν.Υ.Α.Ε.) (The Hellenic Institute for Occupational Health and Safety) through four accredited centres.

Professional Course in Occupational Health and Safety (For graduates)

This professional course provides tuition on occupational health and safety for non-graduates. There are no set entry requirements for this course.

Students study the following modules:

- Health and safety (170 hours)
- Personal protection (10 hours)
- First aid (10 hours)
- Fire safety (20 hours)
- Evaluation of risk (20 hours)

Professional Course in Occupational Health and Safety (For non-graduates)

This professional course provides tuition on occupational health and safety for non-graduates. There are no set entry requirements for this course.

Students study the following modules:

- Health and safety (100 hours)
- Personal protection (10 hours)
- First aid (10 hours)
- Evaluation of risk (20 hours)
- Fire safety (20 hours)

Professional Course in Technical Safety

This course is more specialised as it concentrates solely on the safety of technical systems. Candidates are required to hold a degree in a technical subject in order to gain entry to the course. There is currently no available information about the modules which comprise this award. When the information is received this file will be updated accordingly.

Professional Course in Occupational Health and Safety for Workers Representatives

There is currently no available information about the modules which comprise this award. As such, it is not possible to provide an accurate comparison of this award. When the information is received this file will be updated accordingly.

**Occupational Structure**

Safety Officer

The Greek occupational health and safety legislation requires all employers to create a safe working environment by taking active measures to control risks and by having in place a suitable organisational structure for health and safety. In order to ensure occupational safety and health in Greek firms, Greek law specifies that employers of high-risk firms are required to either:

- Appoint a professionally competent person from the organization hierarchy, or
- Contract a safety consultant accredited by the Ministry of Labour and Social Affairs.

For medium-risk firms and low-risk firms, the employers can exercise the duties of safety officers provided that they are graduates of universities or technological institutes of education in an engineering faculty or other specified faculties according to the type of business. For medium-risk firms there is an additional requirement for employers to attend a training course of 35 teaching hours in occupational health and safety. Employers of medium-risk firms who do not have a background in engineering can still assume the role of safety officer but are required to appoint a qualified person to perform the risk assessments.

The duties of the professionally competent person in charge of OHS matters (i.e., the safety officer) can be assigned to persons who have the following qualifications:

- University graduates with a professional experience of at least two years,
- Graduates of Technological Institutes of Education (TEI) with at least 5 yrs professional experience,
- Graduates of foreign higher education institutions who have been certified as safety officers.
- Graduates of secondary or post-secondary education in technical colleges with 8 yrs experience, and,
Candidates for the post of safety officer who have attended a training course of 100 hours may be granted qualification even when their professional experience is a year less than the required one (for university graduates) or two years less than the required one (for TEI graduates).

An important area in occupational health and safety is the continuing education of safety officers appointed from the ranks of organization. Although these persons are allowed to exercise the duties of the safety officer, there is no guarantee that they have a complete knowledge of occupational health and safety and up-to-date with risks arising from modern technologies.

### Occupational Responsibilities

#### Safety Officers

The main occupational responsibilities for safety officers include:

| Stating the working environment and suggest measures for controlling hazards | Disseminating information to the workforce regarding accidents at work and occupational diseases |
| Participating in management discussions regarding safety at work | Liasing with the local OHS inspectors in cases where the employer does not respond to their needs for OHS. |
| Expressing the collective opinion of the workforce and to ask the employer to take risk prevention measures | |
11. COUNTRY – HUNGARY

OSH Legislation

Hungary has introduced new training requirements in occupational health and safety in the process of harmonising its laws with the EU. Accredited training in these areas is primarily provided at postgraduate level. In addition, a registration process for safety experts has been introduced by the Ministry of Economy.

The main bodies responsible for the regulation of occupational safety are the National Labour Inspectorate (OMMF) and the Ministry of Social and Family Affairs. The National Public Health Service (ÁNTSZ) is responsible for the professional registration of occupational health care professionals. Individuals must hold a degree in medicine and a postgraduate diploma in occupational medicine in order to receive a license to practice as an occupational physician. ÁNTSZ is also responsible for the licensing of occupational nurses who have completed the three year vocational degree in the field.

Qualification & Training Analysis

- **Postgraduate Diploma in Occupational Health and Safety Engineering**
  - The College Diploma in Occupational Health Nursing focuses on the medical skills required for the treatment and prevention of occupational diseases. The education of the Occupational Health Care Nurse is based on standards set by the Ministry of Education (Hungarian National Training Organisation). Undergraduates are trained in disease prevention, health conservation, health education, in recognition and treatment of occupational illnesses or occupationally related illnesses. They are also trained in prevention, control, and administration of occupational accidents. Students are expected to undertake practical as well as theoretical work in the field. All students are required to pass the written examination at the end of the course.

- **Postgraduate Diploma in Occupational Safety Engineering**
  - The Postgraduate Diploma in Occupational Safety Engineering is specifically intended to train safety specialists in the field. The course is provided by the Hungarian Labour Inspectorate (OMMF) in co-operation with the National Labour Inspectorate to ensure the relevance of the content. The programme includes training in professional activities that a safety expert is expected to carry out in the workplace. Students are expected to undertake practical as well as theoretical work in the field. All students are required to pass the written examination at the end of the course.

Occupational Structure

- Occupational Physicians and Nurses
- Occupational Safety Engineers
Workers Representatives
In Hungary, occupational health and safety are dealt with separately. Occupational health care is primarily concerned with the treatment and prevention of occupational illnesses whereas occupational safety focuses mainly on acute injury and damage in the workplace.

Occupational Health Care
There are two occupational levels in the occupational health care sector. The first level in occupational health care is that of the Occupational Health Nurse. The most relevant training course for this profession is a vocational degree in occupational health care. The second occupational level is that of the Occupational Physician. These individuals will have completed university training in medicine and postgraduate training in occupational health care. Occupational nurses work under the supervision of occupational physicians.

Occupational Safety
Safety management is carried out by worker representatives and safety experts. Worker representatives are not required to undertake any formal training in safety, they generally work in small enterprises which do not require specialist knowledge and expertise in the field. Safety experts predominantly work in larger organisations, especially those involved in industries where there are a lot of health and safety issues. Many employers require prospective safety experts to hold a professional license. In order to register as a safety expert, the individual is either required to hold an undergraduate degree in a relevant field or a postgraduate diploma in occupational safety. Many employers may require a safety expert with expertise in a specific area such as engineering or construction.

Occupational Physicians and Nurses
Occupational health care professionals (nurses and physicians) are mainly concerned with occupational illnesses, their treatment and prevention. They carry out the following activities in the workplace:

1. Provide examinations of occupational diseases and increased exposition cases
2. Examination of the health hazards of the work
3. Advice on personal protective equipment used to prevent diseases
4. Advice on the workplace environment
5. Detecting potential dangers in the workplace
6. Solving occupational health, physiologic, ergonomic and hygienic problems
7. Organising first aid and urgent medical supply and the training of the first aid personnel
8. Preparing employers’ plans on prevention, averting and eliminating catastrophes and on the rehabilitation of the damages

Occupational Safety Engineers
Occupational safety engineers are more concerned with acute physical injury and damage in the workplace and their prevention.

Workers’ Representatives
Worker representatives undertake routine tasks in occupational health and safety. They are entrusted with the responsibility of carrying out the policies and recommendations agreed by the safety specialists. According to the Hungarian Labour Protection Act these proposed responsibilities include:

- Ensuring the safe condition of workplaces, work equipment and personal safety equipment
- Implementing measures taken by the safety specialist in order to protect health and to prevent workplace accidents
- Informing employees of occupational safety and health prevention
- Reporting occupational accidents and disease
OSH Legislation
Occupational health and safety is regulated by Hafnarhusinu vid Tryggvagotu (The Ministry of Social Affairs). There are no nationally accredited qualifications in occupational health and safety. Training in the field is carried out informally by employers or through the associated trade union bodies.

The administration of occupational health and safety is a board appointed by the ministry to carry out the following activities:

- Give institutions, enterprises, companies and workers advice
- Give those workers who are involved in occupational safety and health within enterprises, cf. Articles 4–6, guidance in their work
- Acquire and maintain knowledge of technical and social developments in order to promote greater safety and health in the working environment
- Address safety issues in programmes on processing and manufacturing methods, workplaces and technical equipment
- Provide education and information on risks in workplaces, and also on new technology and skills that may contribute towards improved working conditions, health and safety in workplaces
- Promote preventative measures and health protection in workplaces,
- Work on research in the field of occupational health and safety
- Ensure that a register is maintained of diseases of all types, mental as well as physical, that may reasonably be assumed to arise from causes in the working environment, and of their frequency and extent
- Ensure that a register is maintained of the frequency of industrial accidents, broken down by occupations
- Carry out monitoring and market surveillance regarding machinery equipments and devices covered by the act
- Carry out other tasks in accordance with the aims and scope of the act, according to further decisions by the Minister

There is no professional registration for health and safety personnel in Iceland

Qualification & Training Analysis
Due to the lack of information currently available on available training in occupational safety and health in Iceland, it is not possible to provide further information at this time

Occupational Structure
Worker Representative

Worker representatives are responsible for carrying out the following tasks in the workplace:
- Representing workers in talks with the employer or the Administration of Occupational Health and Safety or other safety or environmental enforcement agencies
- Investigating complaints, possible hazards and dangerous incidents
- Carrying out regular inspections of the workplace
- Taking part in workplace risk assessments
Role and Functions of Safety and Health Advisers

Note that there are special provisions covering safety representation in the construction industry contained in the Safety, Health and Welfare at Work (Construction) Regulations.

Qualification & Training Analysis

Health and Safety Qualifications are offered from entry level (level 2 on the National Framework of Qualifications in Ireland (NFQ)) to post Graduate Certificates, Diplomas and Masters (Level 7 on the NFQ). These are recognised programmes accredited through the Further Education and Training Awards Council (FETAC – Levels 1 – 6 on the NFQ) or the Higher Education and Training Awards Council (HETAC – Levels 6 – 10 on the NFQ).

General objectives / outcomes of a Level 5 course (Technician Level):
- Understand the concept of workplace Health and Safety
- Be familiar with core legislation in the area of safety, health and Welfare
- Understand and gain basic competence in hazard identification and risk assessment
- Recognise the factors influencing workplace health, safety and welfare
- Apply Health & Safety principles and procedures in the workplace
- Promote a safety culture in the workplace

General objectives / outcomes of a Level 7 course (Senior Manager Level):
- Develop a multi-disciplinary perspective on issues arising in occupational health and safety, including occupational health risk, risks associated with work equipment, fire and emergency strategies, the control of chemical, physical and biological agents
- Develop an understanding of the economics of health and safety at work, and the relevant legal framework.
- Develop an understanding of the key concepts underpinning health and safety at work.
- Provide in-depth knowledge of how employers may achieve and maintain high standards of occupational health and safety.
- Understand the need to integrate the management of health and safety into all levels of responsibility in an organisation.
- Appreciate the need to approach occupational health and safety risks using preventative means.

Health and safety qualifications offered in the UK are also offered in Ireland.

Occupational Structure

Health and Safety Representatives

Under section 25 of the 2005 Act, employees are entitled to select a safety representative to represent them on safety and health matters with their employer. Section 26 sets out the arrangements for this consultation on a range of safety and health issues at the workplace.

These are key provisions of the 2005 Act and a central part of the preventive system of promoting safety and health at work.

Section 25 entitles employees to decide on, select and appoint a safety representative or, by agreement with their employer, more than one safety representative to represent them in consultation with the employer on matters of safety, health and welfare at the place of work.

The number of employees to be represented

the nature of the work and the relative degree of risk

the operation of shift systems

the constituency of the employees to be represented, including variations between different occupations and distinct locations within the place of work, e.g. a large hospital, where a wide variety of different work activities take place within a single workplace, or places of work where conditions and workforce change regularly, such as construction.

Also, in some situations, a single safety representative may be unable to perform all the functions as listed under the 2005 Act effectively. In these cases, the safety committee can also usefully assist in the consultation process. Agreement should be reached between the employer and the employees on how many safety representatives are necessary in particular circumstances, where more than one safety representative may be required.

Note that there are special provisions covering safety representation in the construction industry contained in the Safety, Health and Welfare at Work (Construction) Regulations.
Safety and health advisers should have the status and competence to advise management and employees with authority and independence. By virtue of the definition of 'competent person' under the 2005 Act, they must possess sufficient training, experience, and knowledge appropriate to the work to be done. They should be capable of advising on: • formulating and developing safety and health policies; • planning for safety and health; • reviewing performance and auditing the whole safety and health management system.

To do this properly, safety and health advisers should:
• be properly trained by reputable organisations or be individuals who are suitably qualified. They should also be undergoing a continuous professional development programme. Membership of recognised professional safety and health bodies or qualification to at least Diploma level in a recognised third-level safety and health course may offer routes for demonstrating competence;
• maintain adequate information systems on topics including safety and health law, safety and health management, and technical advances;
• demonstrate the ability to interpret the law in the context of the organisation;
• be involved in establishing organisational arrangements, systems, and risk- control

Occupational Health Physicians
• To provide an independent advisory service on any health related matter which is affecting work.
• To advise managers about the likely duration of absence of employees who may be off work owing to health problems.
• To advise managers and employees on an employees fitness to undertake modified or alternative duties.

Occupational Health Nurse
- working within a multidisciplinary team; - assessing the work environment for potential health and safety problems; - policy development;
- training programmes; - contributing to accident follow up; - maintaining employee health records;
- monitoring employee exposure to hazardous chemicals and undertaking statutory and non-statutory health surveillance; - developing return to work strategies following serious injury or a period of prolonged ill-health; - advising employers on how they can achieve compliance
- advising on disability issues in the workplace; with health and safety and employment legislation; - undertaking a role in attendance management
- keeping up to date with legal and professional changes associated with public health and occupational health and safety. - maintaining employee health records;

Occupational Hygienist
- occupational hygienists usually operate as part of a multi-disciplinary team that includes managers, safety practitioners, occupational physicians and employees. The routine work of a hygienist is to ensure that a workers' environment does not cause ill health from exposure to chemical, physical or biological agents by carrying out:
- assessing the hazards and risks associated with the handling of certain chemicals, physical agents or biological This would include a study of existing plant, equipment, materials used, products and by-products, production processes and general working conditions.
- identifying and put in place the most practicable controls.

Health and Safety Manager/Adviser/Officer
A health and safety Manager/Adviser offers expert knowledge and skills in order to generate and promote a positive health and safety culture. They are based in a range of small to medium organisations or form part of a safety team within larger organisations and will work in partnership with employers, employees, directors and trade unions. They are responsible for ensuring that all safety legislation is adhered to and policies and practices are adopted. They help to plan, implement, monitor and review the protective and preventative measures that companies are required or choose to follow, and work to minimise operational losses, occupational health problems, accidents and injuries.

Some typical work activities:
- carry out risk assessments and risk reduction
- preparing health and safety strategies and developing internal policy;
- providing in house training
- ensure safe working practices that comply with legislation
- carry out regular site inspections
- accident investigation and reporting
- develop health and safety strategies and policy
- keep records and produce reports, newsletters and bulletins

Health and Safety Practitioner
Should have a high level of competence and are likely to be in senior management positions. They should be competent to recognise and strategically manage the health and safety risks of the organisation. Have good leadership skills and be able to influence at Board level.
OSH Legislation
The Legislative Decree of 9 April 2008 n.81 Implementation of article 1 of Law n.123 of 3 August 2007 on protecting health and safety in the workplace (Italian official Journal n.101 of 30/04/2008) issued by the Ministro del Lavoro e della Previdenza Sociale (Ministry of Work and Social Welfare) lays down the measures for safeguarding the health and safety of employees whilst at work, in all sectors of public or private industry in Italy. It is the responsibility of the employer to adhere to the regulations stipulated in this decree. Occupational Health and Safety training courses are offered by the following:

- Regions,
- Autonomous Provinces
- Universities
- INAIL (National Institute for Insuring Against Accidents at Work)/ISPESL (Higher Institute for Prevention and Safety at Work)
- Istituto Italiano di Medicina Sociale (Italian Institute of Social Medicine)
- Dipartimento dei Vigili del Fuoco, Soccorsore Pubblico e Difesa Civile (Department of Firefighters, Public Aid and Civil Defence)
- Amministrazione della Difesa (Defence Administration)
- Scuola Superiore della Pubblica Amministrazione (Higher School of Public Administration)
- Associazioni Sindacali dei Datori di Lavoro o Lavoratori (Syndicate Associations of Employers or Workers) or similar organisations

These courses concentrate on risk prevention but also contain ergonomic, psycho-social, organisation and technical management and communications components.

Regulations regarding the provision of occupational health and safety, including the designation and function of the Health and Safety Manager within the workplace are laid down by the Ministry for Labour and Social Welfare in the Legislative Decree detailed in the previous section.

The employer is obliged to appoint one or more responsible for the provision of health and safety (Health and safety experts), who can either be external or internal to the company or organisation. This expert is required to have a level of education no lower than the diploma di istruzione secondaria superiore, which is considered comparable to the English overall ‘A’ level standard. Applicants for this position must also have a verified attendance certificate for health and safety courses which are relevant to the type of risks and nature of the work at the particular organisation. The minimum requirements of these extra courses differ slightly between Regions and autonomous provinces.

Health and safety professionals are required to attend a refresher course at least once every five years. However individuals who hold a three-year Laurea degree in the following subjects are exempt from the extra courses:

- Ingegneria della Sicurezza e Protezione (Safety and Security Engineering)
- Scienze della Sicurezza e Protezione (Safety and Security Sciences)
- Tecnico della Prevenzione nell’Ambiente e nei Luoghi di Lavoro (Protection of the Environment and Workplaces)

It is also necessary that the employer appoints a representing the company to the securitza (employee’s representative for safety). This individual, or individuals, represents the employees with regard to aspects of occupational health and safety. Employees may check that OSH standards are being adhered to through this representative. This representative is also consulted in the development process of the risk analysis document. The employer must also notify all the health and safety risks to which the employees are exposed, in relation to the nature of the activity which the company or organisation is undertaking. This assessment is carried out in collaboration with the Responsabile del Servizio di Prevenzione e Protezione (RSPP) (Health and Safety Manager) and the Medico Competente (Appointed Doctor). The outcome of this assessment is a risk analysis document, which all employers are required to have. Indeed the employer must adopt the necessary health and safety measures for the good of his or her employees.

It is not necessary for a health and safety professional to register in Italy. However, in order to work in this professional capacity it is necessary for the qualified individual to present to the prospective employer or company requiring their services, their academic credentials together with the certificate of attendance (or other proof of completion) of the Health and Safety course. In his or her professional capacity the Health and Safety professional is also obliged to participate in periodical meetings regarding the prevention of risks.

Qualification & Training Analysis
Corso di formazione – Responsabile del servizio di prevenzione e protezione (Health and Safety Manager training course)
Tecnico Superiore per l’Ambiente, l’Energia e la Sicurezza in Azienda (Higher Technician Certificate in Environment, Energy and Company Safety)
Laurea in Scienze della sicurezza e protezione (Degree in Safety and Health Sciences)
Laurea in Ingegneria della Sicurezza e Protezione (Degree in Safety and Health Engineering)

Corso di formazione – Responsabile del servizio di prevenzione e protezione (Health and Safety Manager training course)
This course is structured into three modules (A, B and C). It is available to individuals who have never practiced the profession of RSPP as well as those who have or currently do. For the former it is necessary to follow the whole course, whereas the latter are exempt from certain modules due to their prior learning and experience. It is delivered by a teacher with experience of at least two years in OSH, to a class of no more than 30. At the end of each module a test is taken to prove that the individual has acquired the requisite knowledge. At the end of the course the individual must also take an oral examination.

The teaching/learning is based on active methods, which means that there is a balance between traditional-style lessons, group work and discussions. Learning based on problem solving is also favoured, where it is applied to simulations and specific problems with particular emphasis on the evaluation process and communication linked to prevention.

Module A is considered a foundation course and is 28 hours in duration. The main aims of this module are to:

- Acquire knowledge relating to general and specific laws in the field of OSH and how to apply them, with reference to specific problems
- Acquire knowledge relating to various elements of the company safety policy, their duties and responsibilities and the functions performed by various companies in order to maintain the health of their workers
- Acquire knowledge of legal aspects relating to risks and hazards at work, measures to prevent or eliminate these risks, methodology for evaluating risks, the content of the risk analysis document and the management of emergencies
- Acquire knowledge relating to the way in which a company-internal prevention system should be organised and managed

"- 30 -"
In the second year the subjects studied are:

- Mathematical analysis
- Entry to this course is also via the Laurea in Ingegneria della Sicurezza e Protezione (Degree in Safety and Security Engineering) course in Chemistry or Industrial Chemistry.
  
  Holders of this award can gain direct access to a professional occupational health and safety role, in one of many sectors such as the chemical industry, pharmaceutical industry, or environmental sector. Holders may also gain access to a Laurea Specialistica (UK Master’s level) course in Chemistry or Industrial Chemistry.

Laurea in Ingegneria della Sicurezza e Protezione (Degree in Safety and Security Engineering)

Entry to this course is also via the Diploma di Scuola Secondaria Superiore. It is also a three-year course, which results in 180 CFU being awarded.

In the first year the student covers:

- Risk analysis
- Mathematical analysis
- Physics
- Geometry
- Chemistry
- Applied geology
- Safety at work law
- Industrial technical design
- IT
- Applied mechanics of machines and machines

In the second year the subjects studied are:

- Safety management systems
- Dynamics of relationships and communication
- Technical and administrative organisation of prevention
- Psycho-social and ergonomic risks
- Planning and management of company training processes
- Contribute to the identification of risk factors for which a health professional is required
- Identify and interpret risk factors
- Contribute to the identification of appropriate individual protection devices for different parts of the sector
In the third year the student specialises in one of three areas:

- Building Sites and Infrastructure
- Industry, Energy and the Environment
- Maritime Studies

Each of the specialisms has a strong health and safety emphasis and requires four exams to be taken in order to pass the year. Four further exams must also be passed in related subjects. Sound knowledge of scientific principles as well as the ability to apply them to real-life situations are expected of graduates.

Graduates may access a health and safety management occupation such as, Responsabile del Servizio di Prevenzione e Protezione directly or continue their academic studies and enrol on a Master's degree-level course.

### Occupational Structure

**Responsabile del Servizio di Prevenzione e Protezione (Health and Safety Manager)**

Holders of the RSPP qualification or a Laurea which exempts them from taking the RSPP work in the capacity of health and safety manager either company-externally or externally. The Health and Safety Manager works in conjunction with the company’s designated Safety Representative (Rappresentante dei Lavoratori per la Sicurezza) as well as the employer (and competent Doctor if required) to ensure that the workplace is as safe as possible for the employees and that the specific OSH legislation is adhered to. Both individuals are expected to attend an annual meeting organised by the employer, in which the risk analysis document, the personal safety measures and the training and information provision are discussed. The Safety Representative does not deal solely with OSH. He or she is an employee of the company who has been elected or designated to represent the corpus of workers on occupational safety and health issues. Through this individual the employees can access company information and documentation pertaining to OSH.

The Safety Representative must undertake a 32-hour training course in order to function in that capacity. As this is extremely short in academic terms it has not been benchmarked to a level in the UK, however, it would be useful to include the content of this course, which is as follows:

**Constitutional and civil principles**
**General and specific legislation in the area of accident prevention and occupational health**
**The respective core elements in the main relevant areas**
**Defining and locating potential hazards**
**Risk evaluation**
**Identifying prevention and protection measures (technical, organisational and procedural)**
**The legal aspects of the activities involved in the profession**
**Communication techniques**

Therefore, while the Safety Representative has a basic understanding of OSH, he or she does not possess the breadth or depth of knowledge expected of the Health and Safety Manager.

### Occupational Responsibilities

**Responsabile del Servizio di Prevenzione e Protezione (Health and Safety Manager)**

All of the qualifications listed allow the holder to work as a Responsabile del Servizio di Prevenzione e Protezione (Health and Safety Manager) in Italy. The main functions of this professional are to:

- Identify and evaluate risks
- Develop preventative and protective health and safety measures
- Propose information and training programmes for workers
- Control and optimise the time spent on managing health and safety issues in the organisation

It is clear that the activities and tasks undertaken by the RSPP should complement those of the Employer, Safety Representative and Competent Doctor, where appropriate. The aims of these activities and tasks are to reduce or eliminate the risk of accident or other damages to health, to improve the working conditions in the company, and to protect the health of the workers through the promotion of physical, social and psychological well-being. To undertake these activities it is necessary for the RSPP to possess many competences. He or she should have sound technical-scientific knowledge in the field of occupational health and safety; methodological and planning skills for the analysis and controlling of risks as well as the planning and delivery of training and information sessions for workers. Skills based on relationship building are also required for different communication techniques, group management, negotiation and problem solving.
It is not typical that occupational health and safety specialists specialize in specific topics or industrial branches. Construction might be named as an exception where slight specialisation can be observed.

15. COUNTRY – LATVIA

OSH Legislation
The Labklājības Ministrija (Ministry of Welfare) oversees the regulation of occupational health and safety in Latvia. Following the accession of Latvia to the EU, the legal framework for health and safety has been realigned with EU legislation. The framework directive is transposed through Labour Protection Law.

The Labklājības Ministrija (Ministry of Welfare) is the main regulatory body for occupational health and safety in Latvia. It is responsible for developing labour protection policy and facilitating its implementation. It is also responsible for the administration of health and safety in the workplace. Under the supervision and authority of the Ministry of Welfare, a number of institutions work together to ensure the smooth operation of occupational safety and health protection system. The key institution for the supervision and control of the occupational safety and health protection system is the Valsts Darba Inspekcija (State Labour Inspectorate).

There are several legal acts (Regulations of Cabinet of Ministers) setting requirements for education and training in occupational health and safety and the tasks of occupational health and safety experts. The most important are the following:

- Regulation No 749 “Regulations Regarding Training in Labour Protection Matters” (adopted 10 August 2010);
- Regulation No 723 “Regulations Regarding the Requirements for Competent Authorities and Competent Specialists in Labour Protection Issues and the Procedures for Evaluating Competence” (adopted 8 September 2008);
- Regulation No 99 “Regulation regarding the Types of Commercial Activities in which an Employer shall Involve a Competent Authority” (adopted 8 February 2005).

The term “labour protection” is also used historically in Latvia instead of the term “occupational health and safety”.

Qualification & Training Analysis
Regulation No 749 “Regulations Regarding Training in Labour Protection Matters” set several levels of professional qualifications in occupational health and safety. Adequate knowledge in the field of labour protection may be acquired by completing the following programmes:

- higher vocational education study programmes accredited by the Ministry of Education and Science, provided that the knowledge is acquired in conformity with the Professional Standard “Labour Protection Specialist” (PS 0100) – higher level knowledge; and
- vocational in-service education programmes licensed by the Ministry of Education and Science, which are implemented by accredited education institutions – basic knowledge.

The study programme for the acquisition of the first level higher vocational education shall amount to at least 80 credit points. This educations leads to obtaining the degree that corresponds to the professional standard PS 0094 (PS 0094 in Latvia is available here - http://visc.gov.lv/saturs/profizgl/standarti/ps0094.pdf). The following schools provide this education:

- Rigas Starptautiskās ekonomikas un bizness administrācijas augstskola (Riga International School of Economics and Business Administration);
- Rigas Pedagogijas un izglītības vadības akadēmija (Riga Teacher Training and Educational Management Academy).

The study programme for the acquisition of the second level higher vocational education shall amount to at least 40 credit points. The study programme shall be implemented on the basis of higher vocational or academic education acquired earlier. These educations lead to obtaining the degree that corresponds to the professional standard PS 0100 (PS 0100 in Latvia is available here - http://visc.gov.lv/saturs/profizgl/standarti/ps0100.pdf). The following schools provide this education:

- Degree of Senior Occupational Health and Safety Specialist and Professional Master’s degree - Latviajas Universitāte (Kimjās fakultāte (Faculty of Chemistry at the University of Latvia);
- Degree of Senior Occupational Health and Safety Specialist - Lauksaimniecības universitātes Meža fakultāte (Faculty of Forestry at the Latvia University of Agriculture);
- Degree of Senior Occupational Health and Safety Specialist and Professional Master’s degree - Daugavpils Universitāte (Dabažinātņu un matemātikas fakultāte (Faculty of Natural Sciences and Mathematics at the University of Daugavpils);
- Professional Master’s degree - Rīgas Tehniskā universitāte (Inženierekonomikas un vadības fakultāte (Faculty of Engineering economics and management at the Riga Technical University).

The persons who have at least basic education may acquire the basic knowledge in the field of labour protection, acquiring the labour protection basic knowledge education programme in the amount of 160 hours (50 hours theoretical classes), which has been developed by an educational institution in compliance with the model programme approved by the Ministry of Education and Science.

Occupational health and safety specialists with higher education come from a variety of different backgrounds and are generally educated to degree level in a technical subject, natural sciences (chemistry, biology etc.), medicine, public health etc.

Postgraduate up-grade training is carried out by different institution. In most cases seminars and conferences provided by Darba drošības un video veselības institūts (the Institute of Occupational Safety and Environmental Health) as well as Valsts darba inspekcija (the State Labour Inspectorate) are used. In order to be recertified each competent specialist needs to take courses or seminars to obtained knowledge regarding occupational health and safety issues for not less than 100 hours during five years (recertification is carried out once in 5 years).

Trusted representatives and occupational health and safety co-ordinators (in construction) have to acquire the necessary knowledge in occupational health and safety matters, acquiring the theoretical part of the occupational health and safety basic knowledge education programme in the amount of 50 hours or a licensed training programme in the amount of 50 hours, which has been developed in compliance with the model programme approved by the Ministry of Education and Science, except for the requirements for practical works.

Occupational Structure
Occupational health and safety are dealt with separately in Latvia. Mainly there are occupational health and safety specialists working in the companies, but no occupational physicians are involved in prevention. Physicians mainly work in out-patient departments or hospitals and are dealing with pre-employment and periodical medical examinations, as well as treating occupational diseases. The only exception is competent institutions in occupational health and safety which have to employ occupational physicians to perform workplace risk assessment in close collaboration with occupational health and safety specialists. System of occupational nurses is not developed in Latvia, there are a few of them working in some big companies as well as out-patient departments helping occupational physicians to organize pre-employment and periodical medical examinations.

It is not typical that occupational health and safety specialists specialize in specific topics or industrial branches.
Currently the system functions whereby the employer recruits or out-sources an occupational health and safety specialist (or several of them depending on the size of the company) or outsources an external service (a competent institution in occupational health and safety) to be in charge of occupational health and safety in enterprise. In small companies tasks of occupational health and safety specialists are typically employed in other roles (e.g. as HR or facilities managers) and carrying out occupational health and safety activities as a small part of their role.

Regulation No 99 “Regulation regarding the Types of Commercial Activities in which an Employer shall Involve a Competent Authority” defines the so-called high risk industries where it is compulsory to have external consulting done by competent institutions in occupational health and safety, but the legal requirements for such companies are set by the Regulation No 723 “Regulations Regarding the Requirements for Competent Authorities and Competent Specialists in Labour Protection Issues and the Procedures for Evaluating Competence”.

Worker representatives may also be elected on voluntary basis to assist the occupational health and safety specialist, but the number of the companies with elected trusted representatives is very low (according to the results of the survey “Work conditions and risks in Latvia” the number of companies with elected trusted representatives is around 9%).

Labour Inspectors are employed by Valsts Darba Inspekcija (the State Labour Inspectorate) to carry out inspections of workplaces across the country. They are required to assess the maintenance of health and safety in the workplace, as well as investigate severe and lethal accidents and register all accidents with at least 3 days off. The State Labour Inspectorate also writes evaluation reports for the Labklājības Ministrija (Ministry of Welfare). Inspectors come from a range of backgrounds (i.e. medical, engineering, law etc). Although most have experience in the field of occupational health and safety, entrants are expected to pass a preliminary training course in labour inspection which is taught by experts at the Valsts Darba Inspekcija (State Labour Inspectorate) as well as Darba drošības un vides veselības institūts (the Institute of Occupational Safety and Environmental Health).

The major differences in the tasks regarding educational level is related to workplace risk assessment and elaboration of preventive plan for risk reduction or elimination. This depends on the number of workers employed in the company, as well as the type of the industry (high risk industries are defined in an Annex to Regulations No 99 “Regulation regarding the Types of Commercial Activities in which an Employer shall Involve a Competent Authority”). Summary for minimal requirements is given in the next table.

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<thead>
<tr>
<th>Types of industries</th>
<th>Number of employees</th>
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<tr>
<td></td>
<td>Up to 5</td>
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<tr>
<td>Low risk industries</td>
<td>Employer or his designated person, basic knowledge</td>
</tr>
<tr>
<td>High risk industries</td>
<td>Employer or his designated person, basic knowledge</td>
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</tbody>
</table>

*If the internal supervision of the work environment and risk assessment in the company is performed by an occupational health and safety specialist who has received higher vocational education in occupational health and safety, then it is allowed not to out-source an external competent institution.
OSH Legislation
Occupational safety is regulated by the Socialinės Apsaugos ir Darbo Ministerija (Ministry of Social Security and Labour) whilst the occupational health care is regulated by the Sveikatos Apsaugos Ministerija (Ministry of Health Care) in Lithuania. A number of courses are available in occupational safety at university level. Socialinės Apsaugos ir Darbo Ministerija (The Ministry of Social Security and Labour) is the main regulatory body in occupational safety. The State Labour Inspectorate is responsible for carrying out inspections and monitoring health and safety in the workplace.

There is no system for professional registration for safety specialists in Lithuania. Occupational health care experts, however, are required to register with Sveikatos Apsaugos Ministerija (The Ministry of Health Care).

Qualification & Training Analysis

Bakalauras – Gaisrinė Sauga / Bachelor Degree in Fire Protection
Darbų Sausa / Professional Course in Occupational Safety
Magistras – Saugos Inžinerija / Masters Degree in Safety Engineering

Bakalauras – Gaisrinė Sauga / Bachelor Degree in Fire Protection

This four year course is offered at the Vilniaus Gedimino Technikos Universitetas (Vilnius Gediminas Technical University). Candidates must have completed the Brandos Atestatas (Maturity Certificate) in order to - 35 - enrol on the course. Students must pass all the required modules including the project and practical training modules in order to obtain the degree.

Darbų Sausa / Professional Course in Occupational Safety

This one year full time professional course is offered by the Kauno Technologijos Universitetas (Kaunas University of Technology). All entrants are required to hold a bachelor degree. Students study the following general subjects:

- Economics in safety engineering
- Risk assessment in safety engineering
- Risk assessment in safety engineering
- Organization and management of health and safety at work
- Practical training courses for professional work
- Ergonomics
- Safety of mechanical equipment and technologies
- Safety of chemistry equipment and technologies
- Safety of textile and sewing equipment and technologies
- Information technology in safety engineering
- Fire protection
- Fire and rescue operation safety and management
- Fires, crashes and risk management
- Design of structures under fire conditions
- Hazardousness and harmfulness of materials
- Master’s thesis

Magistras – Saugos Inžinerija / Masters Degree in Safety Engineering

The Masters degree in Safety Engineering is offered by the Vilniaus Gedimino Technikos Universitetas (Vilnius Gediminas Technical University). Students must have a bachelor degree in order to gain entry to the course. Students study the following core modules:

- Fire and rescue operation safety and management
- Research work
- Theory of fire development (dynamics)
- Fire and rescue operation safety and management
- Rescue strategy and safety
- Scientific research fundamentals
- Ergonomics of safety works
- Information technology in safety engineering
- Fire protection
- Students must also choose one of the following six optional modules:
  - Safety in production processes
  - Fire safety of buildings and their technological equipment
  - Fire and rescue operation safety and management
  - Design of structures under fire conditions
  - Hazardousness and harmfulness of materials
  - Master’s thesis

Students are assessed via written examinations on each of the modules that comprise the award.

Occupational Structure

Occupational safety and health comprises all preventative measures aimed at protecting functional capacity, health and life of employees at work which are used or planned at all operational stages of the company to protect employees from occupational risks or minimise these risks.

Every employee must be provided with secure and healthy working environment irrespective of the activities of the company, type of employment contract, number of employees, profitability of the company, work place, working environment, nature of work, duration of the working day or shift, citizenship, race, nationality, gender, sexual orientation, age, social background, political or religious beliefs of the employee. Creation of secure and healthy working conditions in all work-related aspects is the duty of the employer. Occupational safety and health measures in the company are funded by the employer.

The state of occupational safety and health in companies is measured to the extent that work equipment and working conditions in the company and its units meet occupational safety and health requirements laid down in legal acts. Measurement of the state of occupational safety and health involves assessment of the occupational risks, i.e. the likelihood of injury or any other deterioration of the employee’s health due to the impact of the harmful and/or hazardous work environment factor(s). Occupational risks must be assessed in every company. The procedure for occupational risk assessment in companies is established in the Occupational Risk Assessment Regulations.
Occupational risk assessment is carried out with the help of the occupational safety and health service of the company, bodies measuring the risk factors certified by the State Public Health Service and licensed occupational safety and health experts. The assessment includes measurement of risks to employees posed by every factor (chemical, physic, biological, ergonomic, psychosocial, physical) of the work environment. When the risks are assessed, Occupational Risk Assessment Cards are completed for each risk assessment object. Information in the Occupational Risk Assessment Cards must be summarised and the Document of Occupational Safety and Health Status in the Company must be completed in the established form. When the occupational risks are assessed, the company has to draw up a risk elimination and mitigation action plan which is used for implementation of risk prevention measures.

There is a new draft Safety and health at work act (2003) and 13 new acts adapted by EU Directives. Effective implementation of new acts of safety and health at work require a change of culture in both the State labour inspectorate (SLI) and industry. Employers must realise that responsibility lies with them to control risks arising from their work activity. This will involve carrying out an assessment and evaluation of the risks at their workplace and putting in place the necessary measures. A self-regulating system is envisaged where enterprises are proactive in ensuring improvements in health and safety rather than taking action only when an accident has occurred or an inspector has visited. Development leading to improvements in working conditions is based on bipartite and tripartite working that is involving employers, employees and government. The enforcement of the new legislation has an effect on the working methods, practises and approach of the SLI and its individual staff members.
OSH Legislation
The occupational safety and health regulations are outlined in the Règlements grand-ducaux (Regulations of the Grand Duchy) of 9 June 2006 and 29 October 2004. The former determines what can be deemed a sufficient number of travailleurs désignés (designated health and safety representatives) for an organisation, categorises the organisations in which the employer can assume the role of Travailleur Désigné, details the competences of the Travailleur Désigné and the training that this individual must undertake in order to function in this capacity.

The latter regulation lays down the minimum health and safety requirements for temporary or mobile building sites, including the tasks and requisite training and professional experience for coordinateurs en matière de sécurité et de santé (health and safety coordinators). These coordinateurs are only employed in the construction sector, whereas the Travailleurs Désignés are able to work in all other sectors. It is the responsibility of the Inspection des Mines to ensure that this legislation is adhered to.

Recognised training courses in the health and safety sector are offered by the Chamber of Commerce, Chamber of Trades and the Insurance Association Against Accidents.

Employers in charge of an organisation of fifty or more employees must designate at least one travailleur désigné, who in turn must devote an appropriate amount of time to issues relating to the protection of workers and the prevention of risks. If an organisation undertakes its activities on more than one site, a travailleur désigné is required on each site. When the Travailleur Désigné leaves the organisation, another must be designated within a maximum of two months and must have fulfilled all the requirements laid down in the Règlement within twelve months.

On each building site where two or more organisations are working, the Maître d’Ouvrage (Head of Work) must designate at least one coordinateur en matière de sécurité et de santé for the project development phase and at least one for the building phase. While these coordinateurs are contracted to the Head of Work, they work on an independent basis. The level of education that they have affects the size and type of site on which they can work.

In order to practice as a coordinateur in Luxembourg, the individual must fulfill certain criteria, apply to the Ministre du Travail (Ministry of Labour) and receive an acceptance from the Ministry. The Travailleur Désigné is not obliged to undergo the same registration process, but must have completed appropriate training and professional experience for the type of organisation in which they wish to work.

However, employers and heads of work still have a responsibility to protect their workers. They are obliged to take measures (detailed in the Règlements) to maintain health and safety in the workplace. They must take into account the advice from the Coordinateur en Matière de Sécurité et de Santé. Furthermore the employer must submit the health and safety plan that the Coordinateur draws up to the Head of Work at least 15 days before the work is scheduled to begin.

Qualification & Training Analysis
Travailleur désigné
Coordinateur en matière de sécurité et de santé

Travailleur désigné
This award is aimed at individuals who have already trained as a travailleur désigné or for those who have not, but are interested in occupational safety and health. The course is ten weeks in length, with one lesson per week. Knowledge acquisition is tested through an end-of-course report and successful candidates are issued with a nationally recognised certificate.

The duration of the course is three months, based on attendance at two sessions per week. Knowledge is verified through the obligatory completion of an end-of-course report. Successful students are issued with a nationally recognised certificate.

Holders of this award should be able to apply legislation and regulations pertaining to the work of the Travailleur Désigné to the working environment as well as pre-empt and evaluate problems linked to the health and safety of workers. All students follow a common course, composed of:

- Legal issues
- Organisation of the travailleur désigné
- Fire prevention and building safety

Specific subjects relating to particular sectors are also covered:

- Ergonomics
- Climate and lighting
- Electric risks
- Safety using machines

- Accidents at work and whilst travelling
- Risk prevention tree [diagram]
- Working with a screen
- Chemical risks
- Personal protection measures
- Lock-out procedures / restricted space

- Health at work
- First aid organisation/provision
- Stress prevention
- Lifting and handling goods
- Noise at work

Currently no minimum level of education and training is required for individuals wishing to become a travailleur désigné.

Coordinateur de sécurité et de santé des projets de construction
The objective of this course is to produce a professional who is able to:

- Know and understand the legal regulations relating to temporary or mobile building sites
- Undertake a health and safety audit for both a project and a building site
- Ensure sound relations between the Head of Work, the designer offices and the organisations
- Evaluate risks and improve safety on building sites

The course is divided into two parts; general and technical. The former comprises the following subjects:

OSH situation in Luxembourg
Skills, abilities and role of the health and safety co-ordinator

Règlement grand-ducal of 17th June 1994 concerning the health and safety of employees at work
Legal responsibility
The technical part includes the following:

- Learning problems related to risk prevention
- Project management and maintenance of works
- Emergency plans for industrial installations and works of art
- Fire prevention for building sites and works
- Negotiation training
- Ergonomic approach to safety diagnosis
- Analysis of working conditions

Application of preventative measures on building sites, based on real projects

This course is aimed at architects, civil engineers and industrial engineers who hold a Bac + 3 or Bac + 5 qualification, which is considered comparable to a UK Bachelor degree or Master’s degree respectively. They must also have three years professional experience in the construction sector (at the project, site and maintenance levels).

It should be noted that the type of building site on which the Coordinateur can work is regulated according to the type of education that they have gained. There are three types of building site: levels A, B and C, which increase in difficulty. Holders of the Brevet de Maîtrise can only work on level A (niveau A) building sites, which includes all sites with fewer than 500 workers. Industrial Engineers (i.e. individuals holding a Diplôme d’Ingénieur Industriel) can work on level B sites, where fewer than 10,000 workers are employed. Construction Engineers (holders of a Diplôme d’Ingénieur Civil) can work on level C sites, which are sites covered by European Directive 92/57.

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### Occupational Structure

**Travailleur désigné**

- Coordinateur de sécurité et de santé Projet
- Coordinateur de sécurité et de santé Chantier

The travailleur désigné is appointed by an employer to deal with activities pertaining to the health and safety of employees at work. He or she must have fulfilled the stipulations laid out in the règlement grand-ducal of 09/06/06, which include having completed an appropriate training course. If the amount of time (in minutes) spent by the travailleur désigné on health and safety issues per day exceeds the following totals, extra travailleurs désignés are required.

- 480 – second travailleur désigné required
- 960 – third travailleur désigné required
- 1440 – fourth travailleur désigné required
- 1920 – fifth travailleur désigné required

The coordinateur de sécurité et de santé is appointed by the Head of Work of a construction site where two or more organisations are working. There are two types of health and safety coordinator:

- coordinateur en matière de sécurité et de santé pendant l’élaboration du projet de l’ouvrage (health and safety coordinator during the project development stage)
- coordinateur en matière de sécurité et de santé pendant la réalisation de l’ouvrage (health and safety coordinator during the building work).

Their responsibilities are detailed in the Occupational Responsibilities section.

### Occupational Responsibilities

#### Travailleur désigné

The necessary competences for this occupation are as follows:

- Knowledge of legislation relating to occupational safety and health, with particular emphasis on the sector in which the individual is working
- Taking responsibility for and organising the supervision of regulations relating to OSH in the workplace
- Developing an organisational strategy to maintain (and possibly improve) the health of workers
- Monitoring current working methods and measures, evaluating and analyzing the risks and respective arrangements for accident prevention
- Carrying out regular safety visits
- Managing safety registers and keeping the interview books
- Developing, maintaining and communicating to employees the health and safety, warning, alarm, intervention and evacuation plans
- Preparing, organising and managing evacuation exercises
- Evaluating the OSH situation of the organisation or establishment
- Maintaining relations with the Inspection des Mines and other appropriate organisations and agencies

#### Coordinateur de sécurité et de santé – projet

The tasks of this professional are as follows:

- Develop a health and safety plan (plan general de sécurité et de santé), specifying the exact rules applicable to the site in question
- Write a report adapted to the characteristics of the work undertaken on the site, including health and safety measures (plan particulier de sécurité et de santé)
<table>
<thead>
<tr>
<th>Coordinateur de sécurité et de santé – chantier</th>
</tr>
</thead>
<tbody>
<tr>
<td>This professional must:</td>
</tr>
<tr>
<td>• Coordinate the implementation of general health and safety principles on site</td>
</tr>
<tr>
<td>• Coordinate relevant arrangements to ensure the safety of workers</td>
</tr>
<tr>
<td>• Adapt and develop the health and safety plan and report where necessary as the work evolves</td>
</tr>
<tr>
<td>• Organise cooperation between the employers and coordinate activities relating to the protection of workers and prevention of accidents or professional health risks</td>
</tr>
<tr>
<td>• Coordinate monitoring of the correct application of working procedures</td>
</tr>
</tbody>
</table>

Ensure that only authorised persons are allowed on site
The Occupational Health and Safety Authority Board (OHSA) is responsible for organising, coordinating and managing the national network of occupational health and safety. It is the duty of the Authority to see that the level of occupational health and safety protection established by the OCCUPATIONAL HEALTH AND SAFETY AUTHORITY ACT ACT XXVIII of 2000, and by regulations made under the Act are maintained.

**Duties of the OHSA**

Under Act XXVII of 2000 the Authority has various functions, including to:

(a) apply the provisions of Act XXVII of 2000 and of any regulations or orders made there under;
(b) establish strategies in consultation with the Chief Executive Officer, by which the general national policy relating to occupational health and safety may be implemented;
(c) advise the Minister responsible for occupational health and safety regarding the making of regulations to promote, maintain and protect a high level of occupational health and safety,
(d) monitor compliance with relevant occupational health and safety legislation and to take enforcement action,
(e) prepare regulations or Codes of Practice required to promote, maintain and protect a high level of occupational health and safety,
(f) promote the dissemination of information regarding occupational health and safety, and the methods required to prevent occupational injury, ill health or death,
(g) promote education and training on occupational health and safety, and emergency and first aid response at work places,
(h) collate and analyse data and statistics on occupational injuries, ill health and deaths, and on matters ancillary to occupational health and safety,
(i) keep registers of such plant, installations, equipment, machinery, articles, substances, or chemicals and intended for use at work which in the opinion of the Authority provide a serious occupational health and safety risk,
(j) carry out any investigation on any matter concerning occupational health and safety, as well as investigations to ascertain the level of occupational health and safety provided at any work place,
(k) promote and carry out scientific research aimed at better methods of preventing occupational ill health, injury, or death;
(l) keep registers of persons competent to give advice on matters related to occupational health and safety.

Some professions in Malta are covered by specific codes of practice that provide a comprehensive approach to the method of operation, as is the case of (among others) engineering (electronics, electrical, mechanical, construction), medical and paramedical professionals, and laboratory technology roles. These codes of practice are presented to workers during their training in Malta’s institutions (University of Malta or Continued Vocational Training institutions – Institute of Health Care, MCAST, Technical Colleges).

## Qualification & Training Analysis

### Malta Qualifications Framework (MQF)

The Malta Qualifications Framework (MQF) is the responsibility of the Maltese Qualifications Council (MQC). The MQC are tasked with developing and maintaining the MQF and mapping all qualifications to a level within the framework.

The MQF consists of eight levels. Higher education awards cover levels 5-8; level 5 qualifications are short courses which are linked to or form part of first cycle awards, learning outcomes achieved upon the completion of MQF level 6-8 correspond to the Framework for Qualifications of the European Higher Education Area (FQ-EHEA) qualification descriptors for first, second and third cycle awards. The MQF also includes vocational qualifications which are placed at levels 1-5 in the framework.

### UNIVERSITY OF MALTA – Centre for Labour Studies

**Diploma in Social Studies (Occupational Health and Safety)**

**Programme of Studies:**

**Compulsory Units** (All students must register for these units.)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>People, Work and Industrial Relations</th>
<th>Business Management and Occupational Safety Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Psychology</td>
<td>Epidemiology, Statistics and Research Methods</td>
</tr>
<tr>
<td></td>
<td>The Legal Framework</td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>Elements of Toxicology and Management of First Aid</td>
<td>Business Management and Occupational Safety Principles</td>
</tr>
<tr>
<td></td>
<td>Health Promotion at Work and Ergonomics</td>
<td>Environmental Health Management and Supervisory Skills</td>
</tr>
<tr>
<td></td>
<td>Synoptic Study-Unit 3</td>
<td>Risk Assessment 4 credits</td>
</tr>
</tbody>
</table>

**List of courses organised by the OHSA:**

Occupational Health & Safety requires, amongst other factors, a change in culture. In order to help employers in this cultural change and to help them adhere to OHS legislation, the Occupational Health & Safety Authority is promotes awareness and education through training courses designed and delivered by its officers. All OHS officers have academic and hands-on experience in OHS:

<table>
<thead>
<tr>
<th>Course</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Occupational Health &amp; Safety.</td>
<td>3 half days (12 hr)</td>
</tr>
<tr>
<td>The Workers’ Health &amp; Safety Representative.</td>
<td>4 half days (16 hr)</td>
</tr>
<tr>
<td>Stress &amp; Workplace Well-being.</td>
<td>2 half days (8 hr)</td>
</tr>
<tr>
<td>Manual Handling.</td>
<td>4 hours</td>
</tr>
<tr>
<td>Principles of Risk Assessment 4 half days, (16 hr)</td>
<td></td>
</tr>
<tr>
<td>Radiation Protection for Industrial Applications, 20 hours</td>
<td></td>
</tr>
<tr>
<td>Ergonomics ... adapting Workplace to the Worker, (4 hr)</td>
<td></td>
</tr>
<tr>
<td>First Aid &amp; Safety At Work, 5 half days (20 hr)</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Safety in the Construction Section 10 hours</td>
<td></td>
</tr>
</tbody>
</table>
19. COUNTRY – THE NETHERLANDS

OSH Legislation

The Working Conditions Act (WCA) of 1998 outlines the main occupational health and safety principles, the risk inventory and assessment system and the expert health and safety services support system in the Netherlands. The Act was drawn up in conjunction with relevant mandatory EU regulations. As the Act is a so-called framework act, it consequently contains few specific provisions. The regulations are contained within the Health and Safety Decree and the Working Conditions Regulation. The WCA is administered by the Arbeidsinspectie (Labour Inspectorate), which is part of the Ministry of Social Affairs and Employment. The Inspectorate may impose administrative fines on employers who contravene the WCA.

The new Working Conditions Act (Arbowet) came into force on 1 January 2007. The act includes a lot of changes in relation to the previous Working Conditions Act of 1998. Instead of general regulations imposed from above, the new act makes provisions for tailor-made rules. Employers and employees can now consult with each other before laying down agreements to ensure a safer and healthier workplace. The Labour Inspectorate will trust in these agreements, but will take firmer action if the rules are abused.

In 2010 the law provided for the employer to appoint experts from his own staff to advise on OHS. One has to be a generalist ‘preventionist’ who is the internal adviser and coordinator – no specific requirements are given for this person’s qualifications, only that he must be competent and must be appointed in consultation with the works council or workers’ representatives. In addition the employer has to have qualified experts to do a minimum of 4 tasks:

- Advice on and approve the risk inventory and evaluation (RIE) including proposed control measures.
- Supervision of sickness absence (occupational physician)
- Periodic health assessment where mandated (occupational physician)
- Health checks by appointment where mandated (occupational physician)

The first task can be done by any expert with suitable qualifications and competence. The employer is free to decide for himself what expertise is needed for this task, in consultation with the Works Council or other workers’ representation. The expert has to be certified working conditions expert – one of the four described below. For the other three tasks it has to be a qualified occupational physician.

If the employer does not have suitable expertise in house he is required to hire that in from outside and must use a certified Working Conditions Service, which can be entirely internal, entirely external, or a collaboration between one or more internal experts and one or more external experts. To get a certificate the Service must, according to regulations, employ at least one each of four experts:

- Safety professional
- Occupational hygienist
- Occupational physician
- Work and organisation expert.

Each of these must have the specified training and certificate of qualification appropriate for the profession. The qualifications of the four experts and the Arbeidsdeskundige (labour expert) are certified under third party certification schemes under the auspices of the Dutch Accreditation Board (Raad voor de Accreditatie – RaA). Hobelon SKO is the certification body for the occupational hygienists, safety professionals and labour experts. Full information about the certification can be found on their website http://www.skocert.nl

Qualification & Training Analysis

Master of Occupational Health

Master of Safety, Health and Environment (SHE) Management

The academic admission requirement for each of these courses is the HBO (Hoger Beroepsonderwijs) which constitutes higher professional training and is considered comparable to British Bachelor degree standard. An amount of professional experience is also required.

Master of Occupational Health

This award constitutes training specifically for arboconsultant (OSH consultants) and contains units on training in advisory skills, legal aspects of work and health, work and organisation knowledge, policy advising, policy alteration and quality of OSH consulting. It is intended for professionals who are already working in the field of OSH.

The aim of the course is to produce an OSH consultant who has a strong analytical ability, sound sectoral knowledge as well as comprehensive advisory, investigative and communicative skills. The individual should be able to complete complex projects in the field of OSH and build and maintain relationships with clients as well as other OSH experts. The individual should also keep up-to-date with the ever-changing legislation relating to OSH, in order to best advise clients. The student is also expected to complete a project for submission at the end of the course.

Through the units covered in the course the individual will be able to review and subsequently develop the OSH policy and plan of action for an organisation or company. He or she will be able to evaluate health and safety risks in order to develop this plan. Furthermore he or she will be able to effectively inform the client of changes that need to be implemented to company policy as well as advise whether the services of a different OSH expert are required.

Though the Master of Occupational Health course is not recognised as a qualification for the certified safety professional, graduates from it do gain employment in comparable jobs to the certified safety professionals. It is a broad course at level 7 covering aspects of safety.

Master of Safety, Health and Environment (SHE) Management

This course aims to train safety experts, policy makers and policy advisors. As it also aims to bridge the gap between SHE and management, the curriculum is balanced between managerial skills and technical knowledge. Individuals learn how, and when, to change existing systems and methods as well as how to increase awareness of OSH at board-level in a company. They will be able to develop, implement and evaluate a SHE policy and integrate it into a company’s strategy. Emphasis is also placed on internal and external communication skills.

The course is divided into three segments:
The first segment provides students with an understanding of the impact of safety regulations and policy and teaches them how to draw up a risk analysis. Segment two offers an overview of techniques, methods and tools for accident prevention and risk reduction. The third segment provides management and organisational issue training, including an integrated project.

Unlike the previous qualifications, this is a more comprehensive award in terms of content. Individuals gain knowledge in the basic OSH disciplines of safety, occupational hygiene, environmental engineering and safety management and regulation. Indeed it covers the vast majority of the NOS, including environmental impact as individuals must complete a module in Environmental and Sustainable Strategy.

### Occupational Structure

The OSH sector in the Netherlands is dealt with by four occupations:

- Safety professional
- Occupational hygienist
- Occupational physician
- Work and organisation expert

The safety professional training and qualification exists at two levels, only the higher of which is required for the certification as one of the four designated experts. The higher, manager level is the Hogere Veiligheidskundige (HVK), the lower, technician level is the Middelbare Veiligheidskundige (MVK). The MVK is therefore not a protected, statutory qualification, but many of the generalist ‘preventionists’ required in all companies by statute do have the MVK qualification, but only because the employer has decided that is an appropriate one for their company, and not because the law requires it. Both levels are certified by Hobéon SKO.
### 20. COUNTRY – NORWAY

#### OSH Legislation
Occupational health and safety is regulated by the Arbeids- og inkluderingsministeren (Ministry of Labour and Social Inclusion) through the four main regulatory bodies. However, there is no centralised national standard for training in occupational health and safety in Norway. There are several courses arranged by universities, companies and other organisations which provide training in health and safety. Continuing education courses and external courses such as those accredited by NIVA offer alternative training in occupational health and safety in Norway.

There are four regulatory bodies in occupational health and safety in Norway:

- Arbeidstilsynet (Norwegian Labour Inspection Authority)
- Direktoratet for Samfunnssikkerhet og Beredskap (Directorate for Fire and Electrical Safety)
- Statsens Forurensningsstilsyn (Norwegian Pollution Control Authority)
- Næringssivils sikkerhetsorganisasjon (NSO) (Industrial Safety and Security Organisation)

The Norwegian system for the control of health and safety relies on a close interaction between the public safety control carried out by the four competent bodies and the internal safety work of the companies. Whilst in other European countries there appears to be a trend towards increasingly centralised regulation of training in safety, there are no certification schemes or formal requirements regarding the training of health and safety specialists in Norway. However, the role of the health and safety specialist is defined by law.

Norway has no single professional association of health and safety specialists. Moreover, there are no formal registration requirements for these personnel. However, in Norway, people who are interested in and work with health and safety can become members of various associations and participate in the different forums. It is important to note that in most of these organisations there are no criteria for participation or membership, thus being a member of an organisation does not necessarily imply that the person has attained a certain level of qualification or expertise in the field.

The recognised professional associations responsible for health and safety in Norway are:

- Norsk Brennbelts Landsforbund (NBLF) (the Federation of Norwegian Fire Officers),
- The European Safety and Reliability Association (ESRA)
- Værnepersonalets Samarbeidsforum (VSF) (The Society of Cooperation Between Safety Personnel)
- Tverrefilig Sikkerhetsforum (TSF) (Interdisciplinary Safety Society)
- Norske Sivilingeniørens Forening (NIF) (Norwegian association for Graduate Engineers)

Although there are no set criteria for membership, it is possible to identify trends in the level of skills and qualifications of members of these professional associations.

NBLF attracts members involved in the prevention and control of the hazards: fire, explosion and electricity, in addition to dealing with some health and ergonomic related hazards. Members are generally employed by the fire service.

ESRA members are higher level professionals that deal almost entirely with the safety and fire related hazards. The majority of members are specialists in their field and are qualified to degree level in the subject area of occupational health and safety. Safety is a full-time responsibility for most of the ESRA members.

VSF members tend to deal more with the “soft” hazards that involve ergonomic, health, and well-being. VSF members are typically worker representatives and HR/facilities managers who undertake some health and safety management as part of their job. Only 20% of the members have taken university credit courses in OSH.

#### Qualification & Training Analysis

**Videreutdanning i Helse, miljø og sikkerhet (Postgraduate Diploma in Occupational Health and Safety)**

- Bachelorstudium – Samfunnssikkerhet og miljø (Bachelor in Safety and Environment)
- Bachelorstudium i ingeniørfag, sikkerhet (Bachelor in Engineering Safety)
- Master i Arbeidsmedisin (Master of Philosophy in Health Sciences in Occupational Safety)
- Bachelorstudium i Samfunnsfag og Personalledelse (Sociology and Human Resource Bachelor degree programme)

**Videreutdanning i Helse, miljø og sikkerhet (Postgraduate Diploma in Occupational Health and Safety)**

The Postgraduate Diploma in Occupational Health and Safety is a one year professional study course. The programme is intended for graduates of technical subjects who wish to become specialists in workplace health and safety. The candidate must have completed higher education in order to - 43 -rol on the programme. Students are assessed by written examination at the end of each module. Students must also undertake a project which constitutes part of the overall assessment. The programme includes the following subjects:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Preparatory health work</th>
<th>Social security</th>
<th>Labour market and unemployment</th>
<th>Physical and chemical working environment</th>
<th>Social handling</th>
<th>Environmental health law</th>
<th>Organisation theory</th>
<th>Accident prevention</th>
<th>Occupational hygiene</th>
<th>Occupational injuries</th>
</tr>
</thead>
</table>
Master I Arbeidshelse (Masters in Occupational Health)
This three-year degree programme focuses on the prevention and treatment of occupational illnesses. The degree programme includes lectures, assignments as well as the submission of a thesis. It is structured in accordance with Bologna.

Bachelorstudium – Samfunnssikkerhet og miljø (Bachelor in Safety and Environment)
This degree programme specifically relates to safety in an engineering context. It covers key areas of occupational health and safety with an additional emphasis placed on the environmental management. The degree programme includes lectures, assignments as well as the submission of a thesis. This is a course primarily taken by prospective engineers who want to work as safety specialists in the engineering industry.

Bachelorstudium i ingeniørfag, sikkirhet (Bachelor in Engineering Safety)
The three-year Bachelor degree programme in Engineering Safety provides a specialist knowledge of the principles of safety in an engineering environment. The core curriculum covers the basics of engineering. The safety element of the course includes the following subjects:

- Risk Analysis
- Systematic Health, Environment and Safety
- The Working Environment
- Technical Safety
- Fire Dynamics
- Quality, Risk and Safety

The emphasis is placed on safety including fire prevention and the use of technical apparatus. There is a small occupational health element, although this is mainly taught in an engineering context and does not include the full range of biological and chemical agents. Graduates in this specialism are likely to be employed as health and safety officers in the engineering and construction industries.

Master I Arbeidsmedisin (Master of Philosophy in Health Sciences – Occupational Hygiene)
The Masters of Philosophy in Occupational Hygiene takes a multidisciplinary approach, the study of workplace health and safety draws upon the disciplines of chemistry, physics, engineering, medicine and many others. It is therefore a much broader programme than the engineering related safety programmes. There is equal emphasis on both health and safety in this award. The programme covers the following main subject areas relating to health and safety in the working environment:

- Monitoring chemical factors in the working environment
- Biological factors in the working environment
- Ionizing and non-ionizing radiation – electromagnetic fields
- Safety and risk assessment
- Preventative measures for chemical factors
- Noise and vibrations
- Indoor climate
- Environmental pollution

Although the award covers a fairly broad curriculum, the main emphasis is placed on the treatment and control of biological and chemical agents and the health and safety implications of using such agents. As such, the training prepares individuals to become specialists in the field of occupational hygiene. Graduates can to be employed in a health and safety capacity in the chemical engineering and biotechnology industries.

Bachelorstudium i Samfunnsslag og Personaleløselse (Sociology and Human Resource Management – Bachelor's Degree Programme)
The Bachelor degree in Sociology and Human Resource Management contains a compulsory module on occupational health and safety. The module is assessed by written examination, there is no practical element. This element of the course includes tuition on the basic principles of health and safety management for the purposes of a facilities/HR manager. The main emphasis of the module is placed on routine activities such as: monitoring procedures, instructions and compliance checks in workplace safety; discussions with employees and supervisors; physical inspections and behaviour audits; accident statistics and emergency drills. However, the module also includes more specialist training in higher level activities such as risk assessment and policy development in the field of occupational health and safety.

Occupational Structure
Helse-, miljø- og sikerhetsspesialist (Health and Safety Specialist)
Helse-, miljø- og sikerhetspersonale (Health and Safety Worker Representatives)

In Norway the employer is required to employ health and safety personnel to assist and advise them in their management of safety and health. But whilst the law stipulates compulsory tasks for the health and safety personnel, the responsibility of ensuring the qualifications of the safety and health personnel are as required, lies with the employers.

Occupational Responsibilities
Helse-, miljø- og sikerhetsspesialist (Health and Safety Specialist)

The Norwegian regulations place responsibility for health and safety with the management. The management appoints safety representatives and safety committees to ensure worker participation in health and safety issues. Training for safety representatives is usually carried out through short term external courses and informal internal programmes organised by the employer. The representatives are responsible for many of the more basic tasks such as monitoring procedures, instructions and compliance checks in workplace safety, discussions with employers and supervisors, physical inspections and behaviour audits, accident statistics and emergency drills.

Helse-, miljø- og sikerhetsspesialist (Health and Safety Specialist)

Health and safety specialist is a generic term in Norway which encompasses many different related occupations including: safety officer, occupational hygienist, occupational psychologist, physician, nurse, and occupational physiotherapist. However, the competence and qualifications required for health and safety personnel are not defined; as a result the expertise required for specialists must be evaluated in terms of the specific needs of the organisation. It is the employers’ responsibility to ensure that the personnel can provide evidence of relevant education and competence and undertake necessary professional development in relation to the health, environment and safety issues that need to be monitored in the organisation.

Health and safety specialists are recruited to assist both the Management and the Worker Representative in organising safety work, providing expert knowledge in health and safety. In addition, the Worker Representative and the Health and Safety Specialist are required to

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co-operate with and assist the Arbeidstilsynet (Labour Inspection Authority).

The activities of the health and safety specialist are well defined by law, they are expected to carry out the following activities:

- Assisting with the planning and implementation of health and safety maintenance and modifications of workplaces, premises, equipment and production methods, and preparing guidelines for the use of chemicals, machines and equipment
- Assisting with a continuous assessment of the working environment, conducting workplace inspections and assessing possible risks of health damage and injuries
- Promoting suggestions on preventative measures and working actively on measures which remove the causes of sickness and accident risks
- Monitoring and controlling workers’ health with respect to the work environment and undertaking the necessary follow-up
- Assisting in the adjustment of the workplace environment for health and safety reasons
- Assisting with the provision of information and training in the areas of workers’ health, occupational hygiene, ergonomics, and general safety work
- Providing information on health, environment and safety risks to the employer and employees
- Assisting with internal occupational rehabilitation in companies

Also the employer must co-operate with health and safety personnel in the preparation of the following documentation:

- Periodic plans for the work of the health and safety personnel in the enterprise, which will be included in the enterprise’s complete work plan
- Periodic reports or annual reports, which include the presentation of risk assessment, risk evaluation, suggestions of preventive measures and results
- Reports, presenting results which describe working conditions and health problems
21. COUNTRY – POLAND

OSH Legislation
Poland has introduced new legislation in the area of occupational health and safety as part of the process of aligning its laws with the EU. The legislation is based on the European Framework Directive. As part of this process, a system of national educational standards in occupational health and safety has been developed by Centrały Instytut Ochrony Pracy (CIOP) (Central Institute for Labour Protection). This organisation is also the main provider of educational courses in the field, offering a range of training programmes. As well as the postgraduate degree, there are also a number of external continuing professional development courses available through universities and colleges.

The Ministerstwo Pracy i Polityki Społecznej (Ministry of Labour and Social Affairs) has overall responsibility for administering occupational health and safety in Poland. It plays a key role in developing an effective legal and organizational framework for the protection of workers’ health and safety. The institution responsible for the evaluation and monitoring of occupational health and safety in Poland is the Państwowa Inspekcja Pracy (National Labour Inspectorate). This organisation operates under the jurisdiction of the Ministerstwo Pracy i Polityki Społecznej (Ministry of Labour and Social Policy).

CIOP is responsible for setting educational standards in the field of health and safety training. CIOP is an educational institution and the main accreditation body of courses in occupational health and safety. It operates under the patronage of the Ministerstwo Pracy i Polityki Społecznej (Ministry of Labour and Social Policy), Ministerstwo Edukacji Narodowej (Ministry of National Education) and the Państwowa Inspekcja Pracy.

Although CIOP has recently designed and implemented educational standards and a system of accreditation in occupational health and safety training, there is no formal licensing or registration procedure for health and safety managers. It is the responsibility of the employer to stipulate the qualifications and expertise required to carry out activities in health and safety management in the workplace.

Qualification & Training Analysis

Studium Podyplomowe: Bezpieczeństwo i Higiena Pracy. Zarządzanie Zdrowiem i Bezpieczeństwem w Miejscu Pracy (CIOP Postgraduate Diploma in Occupational Health and Safety)

Szkolenia specjalistyczne pomiarowe (Specialist Training in Risk Measurement)

Szkolenia Specjalistyczne Służb (Specialist Training in Occupational Health and Safety)

This two year course is accredited by CIOP, the Central Institute for Labour Protection and was introduced in 1997. It was devised in line with the national standards for occupational health and safety. This ensures the relevance of the course content to the nature of the work carried out in the workplace in the field of health and safety. Candidates must have a degree, preferably in a technical subject in order to undertake the course. The programme of postgraduate studies consists of 20 modules composed of 240 hours of lectures, practical exercises and laboratory sessions. During six months each student has to pass all the modules and to write a final thesis concerning their professional practice. The course can be taken as a distance learning programme with lectures and assignments given via the internet. Graduates have gone on to find employment as school and university teachers, occupational safety and health specialists and state labour inspectors.

The course focuses on several key subject areas in the field of health and safety:

- Interpretation of data relating to accidents, diseases and emergencies in the workplace
- Industrial noise
- Occupational psychology
- Management of risk in the workplace
- Safety management
- Preparing the workplace for inspection
- Key chemical and biological agents and their effects on health
- Key safety issues including mechanical, electrical and fire risks
- Legal requirements related to health and safety
- Workplace health management
- Health and safety efficiency and effect on the business

Students must pass written examinations in each individual subject area and give an oral presentation. Students are also required to undertake a research project.

Although the course does place some emphasis on practical work, the main assessment is based on a theoretical examination. In addition there is a strong project work element. The course is therefore more academic than occupational, and is considered more comparable to a graduate diploma rather than an NVQ.

Szkolenia specjalistyczne pomiarowe (Special Training Course in Health and Safety Risk Measurement)

This specialised course, accredited by CIOP is primarily taken as a continuing professional development award and focuses on the assessment of risk in the workplace. There are no formal entry requirements, although it is expected that the prospective student has some relevant experience in occupational health and safety risk assessment.

The course content is based on the national standards in health and safety which were developed by CIOP in 1997. A number of variables relating to risk are covered, including illumination, chemical toxicity, temperature and industrial noise and vibration. The assessment comprises a written examination and a project. Upon completion of the course the graduate gains a Certyfikat Kompetencji (Certificate of Competence).

The mode of learning comprises of lectures and seminars, with a small practical element and the assessment constitutes a written examination. The strong theoretical element is indicative of a vocationally oriented course and therefore it is more appropriate to compare the award to a BTEC National Diploma.

Szkolenia Specjalistyczne Służb (Specialist Training Course in Occupational Health and Safety Services)

This is a CIOP accredited programme aimed at prospective health and safety managers. The course is based on national standards for health and safety specialist education. The programme of study aims to develop the skills required to carry out risk assessment and the management of risk and health and safety documentation. It lasts two years and is taught on a part time basis, all students must pass a written examination and give an oral presentation. Upon completion of the course, the student is awarded a Certyfikat Kompetencji (Certificate of Competence).
As with the other specialist course, the mode of learning is predominantly theoretical although there is a small practical component. Accordingly, the course is considered comparable to the BTEC National Diploma.

**Occupational Structure**

**Workers Representatives**

Health and Safety Managers

In Polish law, based on the 1989 European Framework Directive (European Commission 1989) all organisations with ten or more employees are required to appoint health and safety personnel including workers' representatives and health and safety managers.

In companies of ten or more workers, the employer is obliged to assign a worker representative to maintain health and safety in the workplace. Worker Representative employees recruited to carry out health and safety activities as part of their day to day jobs. They may receive training organised by the employer. The training for workers representatives are typically informal short courses organised by the employer.

All companies with 50 or more employees must employ a full time health and safety manager who is a specialist in their field. The vast majority of health and safety experts work for a specific organisation. The employer is responsible for stipulating the qualifications and skills required to undertake the role of a health and safety manager. They are responsible for the management and co-ordination of health and safety. In Poland, only a small minority act as self employed consultants.

Most health and safety managers are typically educated at postgraduate level in occupational health and safety management although it is important to point out that there are no formal educational requirements for the profession in Poland.

**Occupational Responsibilities**

**Workers Representatives**

Workers representatives undertake routine tasks in the management of health and safety in the workplace. These representatives assist the health and safety managers in their roles.

**Health and Safety Managers**

These managers are responsible for maintaining health and safety in the workplace. Their job includes:

- Developing and monitoring an organisation's health and safety policies and procedures
- Carrying out regular inspections and risk assessments
- Maintaining accident records
- Advising on protective clothing and equipment
- Arranging in-house and outside training for employees on safety issues
- Investigating accidents and advising on any improvements in safety standards that need to be made
- Writing reports
- Liasing with other professionals and agencies
- Keeping up-to-date with changes in the law
OSH Legislation

Occupational safety is regulated by Ministério do Trabalho e da Solidariedade (Ministry of Labour and Social Solidarity and Family) in Portugal. Education and training in the field of occupational health and safety is well developed in Portugal. A number of nationally accredited vocational programmes based on national standards are offered at secondary and tertiary level.

Ministério do Trabalho e da Solidariedade (The Ministry of Labour and Social Solidarity) has overall responsibility for overseeing occupational health and safety in Portugal.

Education and training is regulated through Instituto para a Segurança, Higiene e Saúde no Trabalho (ISHST) (National Institute for Occupational Health and Safety). The institute is responsible for developing educational standards for nationally accredited programmes in the field.

A registration process has not yet been developed in Portugal. It is the responsibility of employers to ensure that health and safety personnel have the appropriate qualifications and skills to do the job.

Qualification & Training Analysis

Certificado de Formação Nível III – Técnico/a de segurança e higiene do trabalho (Occupational Health and Safety Technician Award)

Certificado de Formação Nível V Técnico/a Superior de Segurança e Higiene do Trabalho (Occupational Health and Safety Higher Technician Award)

Conceitos Básicos De Segurança, Higiene E Saúde No Trabalho (Basic Award in Occupational Health and Safety)

Segurança Industrial (Industrial Safety Award)

Elementos Básicos De Gestão De Prevenção De Riscos (Basic Risk Management Award)

Implementação/Gestão De Sistemas De Segurança E Higiene Do Trabalho (Implementation of Health and Safety Systems in the Workplace Award)

The course is two years in duration and prepares students for work as a higher technician in occupational health and safety. The course is provided by Escolas Superiores (Higher Vocational Schools). In order to gain entry to the course, the student must first have completed 12 years of education and have passed an entrance examination.

Students study the following modules as part of their course:

- Health and safety regulations and standards
- Prevention management
- Communication and negotiation techniques
- Occupational hygiene
- Occupational safety
- Professional risks control
- Organisations management
- Occupational psychology
- Training design and management
- Ergonomics
- Risk evaluation
- Emergency responses

The practical training component takes place on-the-job. It is 120 hours in duration and the assessment comprises a presentation including a discussion of a theme developed in the organisation. At the end of the course, successful students obtain a Certificado de Formação Nível V.

Certificado de Formação Nível III – Técnico/a de segurança e - 48 -ygiene do trabalho (Occupational Health and Safety Technician Award)

The course is taught at Instituto do Emprego e Formação Profissional (IEFP) (Vocational Schools). The course is one year in duration and prepares students for work as a technician in occupational health and safety. In order to gain entry to the course, the student must first have completed 12 years of education.

- Basic ergonomics
- Probability and statistics
- Basic knowledge of teaching methods
- Evaluation of risk
- Legislation, regulations and norms on security, hygiene and health of the work
- Basic psychology at work

The practical work is carried out on-the-job and accounts for 25% of the overall course duration. At the end of the course the successful student gains a Certificado de Formação Nível III.

Conceitos Básicos De Segurança, Higiene E Saúde No Trabalho (Basic Award in Occupational Health and Safety)

This continuing professional development course covers the basics of occupational health and safety. It is intended for worker representatives who carry out routine activities in occupational health and safety as a small part of their job. Completion of six years of basic schooling is required for entrance. Information on the individual modules is not available for this award.
Despite the short duration of the training, the award has been formally benchmarked at level 2 in Portugal as the student must already be in employment and have experience in the field of occupational health and safety upon entry.

**Segurança Industrial (Industrial Safety Award)**

This continuing professional development course is highly specialised, focusing mainly on occupational safety in an industrial setting. Emphasis is placed on safety in the use of machinery, fire protection, transport of dangerous goods, serious industrial risks and risks in welding, civil construction and electrical engineering. In order to gain entry, the student must first have completed 12 years of secondary school. Information on the individual modules is not available for this award.

The theoretical aspects of the course are covered in the classroom whilst practical training, which accounts for 25% of the course content, takes place on-the-job. The course is assessed via written and practical examination.

**Elementos Básicos Da Gestão Da Prevenção Do**

This award is intended as continuing professional development for workers representatives who undertake occupational health and safety duties as part of their job. It focuses on basic risk assessment in the work environment. Completion of basic schooling (six years) is required for entrance. Information on the individual modules is not currently available for this award.

**Implementação/Gestão De Sistemas De Segurança E Higiene Do Trabalho (Implementation of Health and Safety Systems in the Workplace Award)**

The award is primarily intended as continuing professional development training for safety professionals. It is a higher technician level award which focuses on the development of health and safety systems in the workplace. Information on the individual modules is currently not available for this award. Completion of 12 years of schooling is required for entry on to this course.

**Occupational Structure**

Worker Representatives

Safety Specialist

In accordance with EU legislation, all companies with 20 or more employees must assign a health and safety representative. Most worker representatives carry out their health and safety duties as only a small part of their day job. Their training is organised by the employer. There are a number of nationally accredited continuing professional development courses which have been developed by colleges for worker representatives to increase their skill and knowledge base.

Larger employers which may place a greater emphasis on health and safety may recruit a full time safety specialist. These are generally two levels of safety specialist. The first is the safety technician who has completed vocational education at level 3 in occupational health and safety. The technicians generally work under the management of a higher technician. The higher technician has completed vocational education at tertiary level in occupational health and safety. Continuing professional development courses in a range of subjects are also available for specialists.

**Occupational Responsibilities**

Worker Representatives

Worker Representatives assist safety specialists in the following activities:

- Dealing with the concerns or workers
- Communicating with workers
- Helping to develop policies, plans and programs
- Helping to orientate new and inexperienced workers
- Helping the employer to plan worker training
- Helping the employer control chemical and biological hazards

Safety Specialists

Safety Specialists carry out the following activities in the workplace:

- Developing and monitoring an organisation’s health and safety policies and procedures
- Carrying out regular inspections and risk assessments
- Maintaining accident records
- Advising on protective clothing and equipment
- Arranging in-house and outside training for employees on safety issues
- Investigating accidents and advising on any improvements in safety standards that need to be made
- Writing reports
- Liaising with other professionals and agencies such as National Institute of Occupational Health and Safety
- Keeping up-to-date with changes in the law
### Qualification & Training Analysis

<table>
<thead>
<tr>
<th>Level</th>
<th>Duration</th>
<th>Credits per Year</th>
<th>Examination Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C.P.D</strong></td>
<td>40 – 80 hrs</td>
<td></td>
<td>theoretical exam plus practical exercise</td>
</tr>
<tr>
<td><strong>University</strong></td>
<td>4 yrs in duration (60 credits per yr)</td>
<td>theoretical exam + practical exercise + national examination</td>
<td></td>
</tr>
<tr>
<td><strong>Post University Courses</strong></td>
<td>240 hrs (60 credits) 3 + 1 paper exam + 1 practical exercise (Currently these courses are no longer organised by universities according to the new law for education. Before the end of 2011 these courses may become CPD courses of 240 hrs).</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Master degree</strong></td>
<td>2 yrs (180 credits)</td>
<td>paper and theoretical exam</td>
<td></td>
</tr>
<tr>
<td><strong>Doctorate degree</strong></td>
<td>minimum 3 yrs (240 credits)</td>
<td>paper and theoretical exam + doctorate theme</td>
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### Occupational Structure

<table>
<thead>
<tr>
<th>Role</th>
<th>Qualification &amp; Training Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OHS Technician</strong></td>
<td>theoretical exam + practical exercise</td>
</tr>
<tr>
<td><strong>OHS Engineer</strong></td>
<td>University, Vocational university - 4 yrs in duration (60 credits per yr) theoretical exam + practical exercise + national examination</td>
</tr>
<tr>
<td><strong>OHS Expert</strong></td>
<td>Post University Courses – 240 hrs (60 credits) 3 + 1 paper exam + 1 practical exercise</td>
</tr>
<tr>
<td></td>
<td>Master degree – 2 yrs (180 credits) paper and theoretical exam</td>
</tr>
<tr>
<td></td>
<td>Doctorate degree – minimum 3 yrs (240 credits) paper and theoretical exam + doctorate theme</td>
</tr>
</tbody>
</table>
QUALIFICATION & TRAINING ANALYSIS

Article 23 Safety Technician:

(1) The following natural persons may be safety technicians:

a) a person with completed secondary education or completed secondary technical education, who submits to professional preparation in the field of safety and health protection at work and, who upon successful completion of the pertinent test, acquires a safety technician's certificate from a person licensed to educate and train, who is a legal entity, or

b) a person who obtains professional preparation and professional education in the field of safety and health protection at work and a safety technician's certificate upon successful completion of the pertinent test within secondary school studies concluded with a final examination or within university studies at a licensed school (the "school") where the content and scope of study courses in the field of safety and health protection at work are defined in agreement with the National Labour Inspectorate, thereby acquiring the licence to educate and train safety technicians.

(2) The minimum content and scope of the professional preparation and professional education of the safety technician and the content of specific professional preparation of the employer pursuant to Article 22, paragraph 7, letter b) are laid down in separate legislation.

(3) A natural person submitting to the test must demonstrate professional knowledge, familiarity with, and ability to apply legal regulations and other regulations in the field of safety and health protection at work, and skills in the practical execution of safety and health protection requirements at work. The testing commission, established by a person who is a legal entity licensed to educate and train, shall have at least three members, at least one of whom must be an authorised safety engineer. A natural person who does not successfully complete the test may re-apply for testing upon the lapse of at least one month from the date of the unsuccessful test.

(4) The safety technician's certificate shall be issued within 15 days from the successful completion in the test before the commission, organised by the school or by the person licensed to educate and train, who is a legal entity, must maintain records of the issued safety technician's certificates.

(5) The safety technician's certificate shall contain:

a) the name of the school or the person - legal entity licensed to educate and train,

b) the number of the license to educate and train,

c) the reference number of the certificate,

d) the generally binding legal regulation under which the safety technician's certificate is issued,

e) the name, surname, date of birth and permanent address of the natural person to whom the safety technician's certificate is issued,

f) the study or professional preparation period,

g) the date of the test,

h) the date and place of the issuance of the safety technician's certificate,

i) the name, surname and signature of the chair of the testing commission,

j) the imprint of the seal of the school or person - legal entity licensed to educate and train, the name, surname and signature of the statutory representative of the school or person - legal entity licensed to educate and train.

(6) The safety technician's certificate is issued for an indefinite period. After five years, the safety technician must participate in professional re-training according to separate legislation, provided by a person – legal entity licensed to educate and train. The absence of the confirmation of participation in the professional re-training invalidates the safety technician's certificate.

(7) The safety technician shall notify in writing the school or legal entity having issued the safety technician's certificate on any change in the data specified in paragraph 5, letter e), and submit documentation thereof. Upon submitting the original safety technician's certificate, the school or the legal entity having issued the original safety technician's certificate shall, without charge, issue a new safety technician's certificate, showing the updated data.

(8) The safety technician whose safety technician's certificate is revoked may apply for re-testing no earlier than six months from the date of revocation.

Article 24 Authorised Safety Engineer:

(1) Pursuant to Article 23, an authorised safety engineer is a safety technician, who having at least two years of professional experience of safety technician after the issuance of his/her certificate of safety technician has successfully completed the exam before a commission appointed by the National Labour Inspectorate.
An authorised safety engineer is also a natural person to whom the National Labour Inspectorate shall issue an authorised safety engineer’s certificate based on a written application containing the name, surname, date of birth, address of permanent residence and documents showing the fulfillment of conditions presented in paragraph 3 letters a) and d) and at least five years long discharging of professional activities in the field of occupational safety and health protection in state law relationship or service relationship. The issuance of the authorised safety engineer’s certificate must be applied for in writing within two years from the termination of his/her performance of the aforementioned professional activities.

A candidate applying for the examination and issuance of the authorised safety engineer’s certificate (the “applicant”) must submit an application to the National Labour Inspectorate. This application must contain his/her name and surname, title, date of birth and permanent address and must be accompanied with the following:

a) a document proving his/her completion of secondary school, secondary technical school or university education,
b) the safety technician’s certificate,
c) a document proving his/her fulfillment of the condition of professional experience,
d) the administrative fee.

Pursuant to paragraph 1, professional experience shall be demonstrated by the employer’s written confirmation of the performance of professional activities, including its length and the title of economic activities pursuant to the statistical classification of economic activities of the employer. The professional experience of the safety technician, whose duties are discharged on the basis of contracted performance thereof, shall be demonstrated by presenting the applicable contract for the performance of professional activities, showing the length of services performed for the individual customers with the allocation of the code and the title of economic activities pursuant to the statistical classification of economic activities of the customer using its service.

The chair and members of the examining commission are appointed from among specialists in the field of safety and health protection at work. At least one appointed member of the commission must be an authorised safety engineer, and another member must be a labour inspector with at least three years of professional labour inspector’s experience. The exam consists of written and a verbal components. The National Labour Inspectorate shall notify the applicant at least three weeks in advance of the date of the examination.

During the professional exam, the applicant shall demonstrate knowledge of legal regulations and other regulations designed to ensure safety and health protection at work, as well as the ability to practically perform them; the range of these requirements is published by the usual methods by the National Labour Inspectorate.

The National Labour Inspectorate is obliged to issue the authorised safety engineer’s certificate to the applicant within 15 days from the successful examination or submission of the application pursuant to paragraph 2. The authorised safety engineer’s certificate is issued for an indefinite period and contains:

a) the name and site of the National Labour Inspectorate,
b) the generally binding legal regulation under which the authorised safety engineer’s certificate is issued,
c) the reference number of the authorised safety engineer’s certificate,
d) the name, surname, date of birth and permanent address,
e) the date of the exam – not applicable for the certificate pursuant to paragraph 2,
f) the date and place of issuance of the authorised safety engineer’s certificate,
g) the name, surname and signature of the chair of the examining commission - not applicable for the certificate pursuant to paragraph 2,
h) the imprint of seal, name, surname, position and signature of the representative of the National Labour Inspectorate.

The applicant who does not successfully complete the exam may apply for re-examination on the condition of demonstrating, in his written application, additional professional practice lasting at least three months from the date of the failed exam.

At least once every five years from the issuance of the authorised safety engineer’s certificate, the authorised safety engineer must participate in professional re-training with a person – legal entity licensed to educate and train pursuant to separate legislation.

The authorised safety engineer whose authorised safety engineer’s certificate is revoked may apply for a professional examination no earlier than six months from the date of the revocation of the certificate.

In the event that the authorised safety engineer notifies the National Labour Inspectorate in writing of a change of his/her name, surname or permanent address, and supplied documentation thereon accompanied with the original authorised safety engineer’s certificate, the National Labour Inspectorate shall issue a new authorised safety engineer’s certificate without charge.

The National Labour Inspectorate maintains records of the issued authorised safety engineer’s certificates, and publishes their lists. The National Labour Inspectorate removes from the records of the issued authorised safety engineer’s certificates, those certificates revoked pursuant to Article 25. Failure of the authorised safety engineer to participate in the professional re-training pursuant to paragraph 9 invalidates his/her authorised safety engineer’s certificate.

Art. 26 Occupational Health Service: (4) Pursuant to paragraph 1, in the case of a healthcare provider, 28b) whose employees perform work included in the first or second category, the tasks of the Occupational Health Service might also be discharged by one or several professional healthcare workers designated by the employer and whom he/she employs or who are in a similar employment relationship; the healthcare provider – natural person may personally discharge the tasks of the Occupational Health Service.
OSH Legislation

Slovenia has introduced mandatory standardised training for health and safety personnel to be in accordance with recently introduced EU legislation for workplace health and safety. The increased responsibility of this area falls under the Ministrstvo za delo, družino in socialne zadeve (Ministry of Labour, Family and Social Affairs). The highlighted importance of health and safety in the workplace has also led to the introduction of a new professional degree programme at recognised state universities.

In Slovenia, the term occupational safety encompasses occupational health and fire protection. Occupational safety is regulated by the Varnost in zdravje pri delu (Health and Safety at Work) (HSW) department of the Ministrstvo za delo, družino in socialne zadeve (Ministry of Labour, Family and Social Affairs).

The individual has to acquire a professional licence to perform expert tasks in the field of occupational health and safety from the Ministrstvo za delo, družino in socialne zadeve (Ministry of Labour, Family and Social Affairs). The individual must have completed both the general and special parts of the expert examination in health and safety (see qualification analysis for details). The licence must be renewed every five years.

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The professional diploma is focussed on providing practical knowledge and is highly interdisciplinary. The students cover the following theoretical areas:

- Basic technical knowledge
- Occupational psychology
- Environmental protection
- Fire protection
- Socio-medical subjects
- Special knowledge in the field of safety techniques
- Economics
- Occupational medicine
- Fundamentals of Calculus

It also includes practically oriented subjects such as:

- Measurements
- Safety assessment analyses
- Safety measurements
- Safety control organisation

The course also emphasises environmental protection aspects (safety measures in accidents, legislation). There are three years of organised lectures and a practical workplace element within an organisation independent of the university. Students can choose between Occupational Safety or Fire Protection module in the third year.

The practical training takes place in various businesses, or companies which offer services in occupational safety. It is a five-month programme, starting in the third year, after lectures, seminars and exercises have been completed.

The study programme is available on a regular or part-time basis. The common academic title obtained from this study is Safety Engineer. The Diploma provides the technical grounding to become a specialist in the field. Upon completion of the degree, students are required to pass both parts of the expert examination to qualify as health and safety professionals.

Expert Examination

All prospective health and safety officers are required to pass the expert examination in order to become fully qualified. The training provided is split into two levels:

- General
- Specialist

Both levels focus on Health and Safety in the workplace and are largely theoretical in nature. There are no specific entry requirements for the general part of the examination.

General Exam

In the General Exam candidates study the following topics:

- Safety and health at work
- Social Security of workers
- Labour inspection
- Safety at work
- Employment relationship
- Performing of expert tasks
- Health protection of workers
- Advisory services
- Advising an employer on planning, selection, purchase and maintenance of means of work
- Advising an employer on arranging of the workplace and the working environment
- Developing instructions for safe working practice
- Advising an employer on performing of expert tasks
- Monitor the situation regarding work related injuries, occupational diseases and work related diseases as well as identify the causes of the same and prepare reports for the employer together with any proposed preventive measures

The qualification confers a range of expertise similar to those qualified with NVQ Level 3 in Occupational Health and Safety in the UK. As with the NVQ, the emphasis is placed on learning key skills in health and safety for the workplace. However, it is important to note that

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whilst the NVQ is primarily assessed on-the-job, the general expert examination is assessed solely by a 2 hour written examination.

Special Exam
In order to take the special expert examination, the candidate must have completed higher education in a technical field and have the professional title “Engineer”. A degree in any field of engineering, not only safety, is acceptable for entrance. The special part of the expert examination includes a written test on a range of subjects related to occupational safety and health and the preparation and presentation of a written essay on one of the following topics:

- Periodic assessment of chemical, physical and biological agents in the working environment
- Risk assessment
- Theoretical and practical training of workers in the field of health and safety at work

Upon completion of the special part of the expert examination the individual may become a specialist in the field and is able to undertake the following professional activities:

- Set out the professional basis for the safety statement (risk assessment)
- Conduct periodic inspections of the chemical, physical or biological risks in the working environment
- Conduct the internal supervision of the implementation of the measures for the safe working practice
- Prepare programmes and carry out employee training in safe working practice

The occupational structure focuses on higher level activities in the field of health and safety such as those included in the UK at NVQ Level 4 and 5.

Occupational Structure
Safety Officer
Safety / Specialist / Professional
Health and Safety at Work Inspectors

There are two distinct occupational levels in the field of occupational health and safety in Slovenia. Those who may work as company representatives or facilities managers who undertake health and safety only as a small part of their job are generally only required to pass the general part of the expert examination. The occupational title most often used is Safety Officer; there are no formal registration requirements for officers at this level.

The Safety Specialist/Professional, in contrast, is fully engaged in occupational health and safety activities. Most professionals work internally for an organisation although some work as external consultants. In order to become a fully qualified professional, candidates are required to obtain a degree in engineering in their specialist area as well as passing both elements of the Expert Qualification.

Occupational Responsibilities
Safety Officer
In Slovenia, the Safety Officer undertakes work relating to both occupational health and safety as well as including the prevention of occupational diseases. Essentially the safety officer is not a full time role; the individual in this position would have been initially employed to carry out another occupation. In effect the safety officer acts as a working environment representative who deals with basic health and safety issues as part of their full-time role. Safety Officers are not required to have completed higher education, but are only required to pass the general part of the expert examination in health and safety.

Safety Specialist / Professional
The Safety Specialist/Professional is responsible for the management of health and safety. These specialists either work internally for an organisation or externally as consultants or inspectors in the field of health and safety. All specialists must be fully qualified engineers and are required to pass both the general and special parts of the expert examination in health and safety. Those qualified at the very highest level with considerable experience in the field may become qualified as inspectors within the Varnost in zdravje pri delu (Health Safety at work) department of the Ministrstvo za delo, družino in socialne zadeve (Ministry of Labour, Family and Social Affairs).

Health and Safety at Work Inspectors
Health and Safety at Work Inspectors are responsible for ensuring the policy is implemented accordingly, as well as assisting in the development of new policy within the area of occupational safety and health. Inspectors on appointment will have completed both the general and specialist elements of the expert examination and will have obtained several years of experience in this sector.
OSH Legislation

National regulations regarding the prevention of occupational risks are contained within the Ley 31/1995, de 8 de noviembre de prevención de riesgos laborales (Law 31/1995, of the 8th November on the prevention of occupational risks). The objective of this law is to promote the safety and health of workers through the application of preventative measures and the development of appropriate activities, in order to avoid risks stemming from work.

The organisation responsible for ensuring that the regulations are adhered to is the Inspección de Trabajo y Seguridad Social (Work and Social Security Inspectorate). It also provides advice and information to companies and workers on how best to comply with the law. Furthermore it informs the labour authorities of any fatal, very serious or serious occupational injuries or illnesses that have occurred and their likely causes. Equally the Inspección may order the immediate closure of a workplace where a serious risk exists. Risks are detected by inspectores de Trabajo (Work Inspectors), who visit companies and organisations on behalf of the Inspección.

Public Administrations with competence on occupational issues perform the following tasks: promotions of prevention, technical advise, surveillance and control of implementation of the occupational risks legislation and sanctioning infractions against the law. The National Institute for Safety and Health at Work (INSHT) is the scientific and technical body of the State General Administration.

Employers are required to exercise certain responsibilities in their capacity as head of an organisation or company, including:

- Develop an initial risk evaluation of the safety and health of employees
- Draw up a risk prevention plan, which includes organisational structure, responsibilities, procedures and processes, necessary resources to undertake prevention
- Undertake investigation if an accident or illness occurs
- Adopt all necessary preventative measures to protect employees
- Provide adequate safety and health training to employees
- Develop and maintain certain documentation, in accordance with relevant laws

Also, employers must ensure that only workers who have received adequate information may access areas of high and specific risk. The professional ability of employees must therefore be taken into consideration.

Employees also have a certain amount of responsibility for their own safety. They are obliged to undertake work in compliance with the training that they have been given and according to the instructions provided by their employer.

Additionally, in accordance with requirements to prevent occupational risks, employers must appoint one or more workers to deal with OSH. These workers are known as trabajadores designados (appointed workers) and in this capacity form a company-intern prevention service. Alternatively employers may arrange for prevention activities to be carried out by an external service. In either case, the responsibilities of the prevention service are as follows:

- Design, implement and apply occupational risk prevention plan
- Evaluate risks which could affect the health of workers
- Plan preventative activities and prioritise preventative measures
- Inform and train employees
- Provide first aid and emergency plans
- Monitor health of employees

Qualification requirements are set out in our OHS Regulations (Real Decreto 39/1997) that expand the OHS Act

Qualification & Training Analysis

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Trabajador Designado (Appointed worker)
Three levels of training are available for trabajadores designados – basic, intermediate and higher. These reflect the level at which the appointed worker can carry out activities and functions. The minimum training requirements for each level are stipulated in the Royal Decree 39/1997.

Basic level
A 30, 50 or 60 hour long course offered by in house OHS managers and consultants, accredited OHS external consultants and trade unions. Studied by supervisors and safety representatives, it is not regarded as a practitioner course certificate.
Intermediate Level
At this level courses may be taken in the classroom or via distance learning, both of which are updated annually. They provide further training for professionals who currently occupy basic-level roles and last 300 hours in total. A breakdown of the minimum content and how these hours are spread can be found below:

- Basic concepts in occupational safety and health, including occupational risks, risk factors, damages, occupational accidents and illnesses, fundamentals of relevant laws/regulations and working conditions (20 hours)
- Prevention methodology I: general analysis techniques, evaluation and risk control, including risks related to safety conditions and risks related to working environment (170 hours)
- Prevention methodology II: specific monitoring techniques and risk control (40 hours)
- Prevention methodology III: Promotion of prevention, including training and communication techniques (20 hours)
- Organisation and management of prevention, including external resources, organizational models, prevention and emergency plans (50 hours)

Técnico en Prevención de Riesgos Laborales de Nivel Intermedio – After the enactment of the OHS Act a 300hr long course was on offer by endorsed training establishments. It was soon discontinued because no particular pre-entry requirements were set and those just able to read and write were entitled to study it.

Intermediate level at International Standard Classification of Education. 1997 (ISCED) Level 3

Prevencionista de Riesgos Laborales – Incorporated in 1997 (Real Decreto 949/1997) also a short lived initiative but the statutory instrument regulating the certificate has not as yet been repulsed. A 320 hour long course, credited as secondary education (NVQ path)
Pre-entry requirements, the Spanish counterpart to the British GCSEs Grades A* - D or BTEC certificate level 2.
Prevencionista de Riesgos Laborales de Nivel Intermedio – Incorporated in 2005 (Real Decreto 1087/2005) – A 810 hour long course that can be studied in modules in occupational schools credited as secondary education (NCVQ path). Pre entry requirements, the Spanish counterpart to the British GCSEs Grades D - G

Intermediate Level, at ISCED Level 5B:

Technico Superior en Prevencion de Riesgos Profesionales
From 2001 – 2003 the intermediate level training was incorporated into the mainstream primary secondary education – NVQ and made a 2yr long NVQ College course. Governing statutory requirements Real Decreto 2771/2003 (Diploma and allocation into the framework of secondary and post-secondary education) & Real Decreto 2771/2003 (course syllabus). Pre-entry requirements are our counterpart to the British A levels or BTEC Nationals. In the 2 years the course lasts students study OHS as well as general subjects and spend last 3 months training in a company. They in total complete 2,000 hours learning. Successful candidates get a BTEC Professional Diploma (NVQ Level 5). This qualification allows practice at Technician level.

N.B: Any Intermediate Level certificate or diploma allows professional practice but the difference among those ISCED level 3 and the one ISCED Level 5 is that the latter allows progression into university and also to teach at secondary education – NVQ level and to sit examinations for the civil service and governmental agencies for which a minimum of educational level is a pre-requisite but no particular certificate or diploma is required.

Higher Level. At ISCED Level 5A:

Master Official Universario en Prevencion de Riesgos Laborales
From 2010 a Bologna process Masters degree is being offered at a University in Spain and is presently the only training path available for those wishing to practice at a professional level. Pre-entry requirements: 240 ETCS Bologna process degree or the recently discontinued BSc/BA degrees.

This 60 ECTS Masters equates to a British Framework of Higher Education Qualification (FHEQ) Level 7 which equates to a Level 7 on the EQF.

Technico en Prevencion de Riesgos Laborales de Nivel Superior
Until 2010 a number of training establishments having the endorsement of the Labour Authorities offered professional courses at PGCPGD level for university graduates (BSc/BA) willing to become OHS Practitioners. The training started by studying a 600 hr long course completed with a final dissertation or project that provided overall training in OHS plus specific training in one of the so called technical specialities (Safety at Work; Industrial Hygiene; Ergonomics and Applied Psychosociology also called Human Factors). Those wishing to complete all 3 specialties study two further courses each 250hour long and each complete with a final dissertation or project. The PGCPGD is a professional qualification at level 7 on the EQF but it is not a degree as it is not studied at a university it is studied at the universities own degree rather than an official or national degree.

CDMCo-ordinators. ISCED level 5A – a 200 hour long course studied by Graduate civil engineers and architects to practice as Construction, Design and Management co-ordinators.

OHS Auditors - The newly 60 ECTS Masters degree covers auditing – For graduates of the discontinued PGCPGD Technico en Prevencion de Riesgos Laborales de Nivel Superior a short course in auditing (100 hours long) is available. Spanish companies required to arrange their own inhouse OHS services or those doing so on a voluntary basis need to have their OHS management systems periodically audited by a statutory auditor.

Delegado de Prevencion (Prevention Expert)
The INSHT also offers course material in the form of texts for this training course, although does not provide any teaching. Interested companies and organisations can use the material directly or use distance-learning methods. Courses are also offered by other accredited organisations and schools, which combine classroom-based and distance learning but also total 100 hours. The content of the course, as well as the required competences to work in the capacity of Prevention Expert, is laid out in article 36 of the Ley de Prevención de Riesgos Laborales (Law on the Prevention of Occupational Risks). It is aimed primarily at individuals currently in work who have been appointed, or wish to be appointed as the Prevention Expert in their organisation. The course has specific objectives for the student, namely:

- To acquire integrated and comprehensive training in the field of occupational risk prevention in order to be able to work as a Prevention Expert in accordance with national law
- To acquire knowledge and develop skills required to adequately fulfill the requirements of the prevention role and promote health in the workplace
- To know the conceptual and legal framework related to occupational risks
- To identify the different risk factors which are present in the workplace and the principle prevention techniques specific to the different risk types
- To analyse the essential points of a prevention plan and its implementation in the workplace
- To know how to manage and organise prevention in the workplace
- To know the criteria relating to trade union action in the field of occupational safety and health The course is divided into two modules, each lasting 50 hours. The first module aims to cover the necessary basic knowledge and concepts that the Delegado will need to carry out preventative activities in the workplace. In the second module, the student extends this basic knowledge by incorporating technical aspects of the planning and management of occupational risks. Indeed the content strongly reflects the objectives listed above.

Inspector de Trabajo (Work Inspector)
Entry onto the Work Inspector course requires the individual to have the academic qualification of Licenciatura or Doctorado and to have successfully passed the national selection process. This process comprises five exercises (three written, two oral, including one language), all of which are eliminatory. Successful candidates become Inspectores de Trabajo en prácticas and must also pass a training course of variable duration (depending on the regulations laid down by the Autonomous Community), which includes practicals in Provincial Inspections under the supervision of an Inspector-Tutor. There are currently 837 Inspectors working in Spain, with a further 65 places available for this year.

**Subinspector de Trabajo (Work Subinspector)**

Individuals wishing to undertake the Work Subinspector course must hold a Diplomado Universitario, Ingeniero Tecnico or Arquitecto Tecnico qualification and be successful in the selection process, which comprises two parts. The first is three (unseen) written exercises which, if completed successfully, lead to a selective course lasting a maximum of two months. Currently there are 875 Subinspectors in Spain and this year 45 places are available. Both the Inspectors and Subinspectors are required to take updating, specialising or refresher courses throughout their careers.

**Prevencionista de Riesgos Laborales (Prevention Expert in Occupational Risks)**

This course typically lasts 320 hours, divided up in the following manner:
- Practical content – 120 hours
- Theoretical content – 180 hours
- Assessment – 20 hours It is modular in nature, consisting of four modules of slightly differing lengths:
  - Management of occupational risk prevention (90 hours)
  - Prevention of safety risks (70 hours)
  - Prevention of risks relating to exposure to environmental contaminating agents (70 hours)
  - Prevention of risks relating to workload and organisation of work (70 hours)
Admission to the course requires an academic level of the BUP, or equivalent, adequate technical knowledge or two years work experience and have a suitable physical condition.

**Occupational Structure**

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Occupational safety and health professionals can be separated into two main groups: company-internal and company-external. The former group comprises the trabajador designado and the delegado de prevención, both of which are appointed by the employer. Furthermore organisations employing more than fifty workers are required to establish a Comité de Seguridad y Salud (Security and Safety Committee), on which these two professionals sit when the committee meets every quarter.

The latter group consists of the Inspector and Subinspector de Empleo, both of whom work for the Work Inspectorate and the Prevencionista de Riesgos Laborales (Occupational Risk Prevention Expert). Qualified Inspectors form part of the Cuerpo Superior de Inspectores de Trabajo y Seguridad (Higher Corps of Occupational Safety Inspectors).

**Occupational Responsibilities**

| Trabajador Designado (Appointed worker) | |
|-----------------------------------------| |
| Delegado de Prevención (Prevention Expert) | Evaluate risks which could affect the health of workers |
| Inspector de Trabajo/Subinspector de Empleo (Work Inspector / Subinspector) | Provide access to information and documentation in accordance with law |

The main function of the Work (Sub)Inspector is to visit workplaces to ensure that employers are adhering to the relevant occupational safety and health regulations. The Spanish system of inspection is characterised by its integrated and global character, which in practical terms means that it covers:

| Contracts | Working day (number of hours) |
| Salary | Syndicate relations |
| Prevention of occupational risks | Legal aspects |
| Social security contributions | Benefits |
| Unemployment | Professional training |
| Employing foreigners | Discrimination and inequality |
The Inspector has greater responsibility in the field than the Subinspector and is required to have a higher academic level to undertake the role.

**Prevencionista de Riesgos Laborales** (Occupational Risks Prevention Expert)
- Establish control and correction measures to avoid/reduce occupational risks
- Aim to achieve the safest and healthiest workplace possible
- Collaborate in management of occupational risk prevention in goods and service production processes
- Coordinate occupational risk prevention tasks relating to premises, facilities and equipment
- Coordinate occupational risk prevention tasks relating to exposure to environmental contaminating agents
- Coordinate occupational risk prevention tasks relating to risks stemming from workload and organisation of work

**Labour Inspectors**
*Inspector de Trabajo y Seguridad Social* – These are civil servants having the rank of authorities. Until 2010 they were all LLB graduates that sit examinations in front of the Labour Authorities to claim one of the few vacancies available. As of 2011 they are setting up two branches, one LLB graduate and the other for BSc and MSc graduates. The examinations remain but successful candidates will attend a course newly set by the Labour Inspectorate. Labour Inspectors have powers far beyond UK HSE Inspectors and they include dealing with industrial disputes.
OSH Legislation

Occupational health and safety is regulated under the auspices of Arbetsmiljöverket (The Working Environment Council). However, there are no national requirements for training in occupational health and safety in Sweden. The competence and qualifications of health and safety personnel are decided by the employers. The main awarding body for training in occupational health and safety is Arbetslivsinstitutet (The Swedish National Institute for Working Life), the courses are provided in co-operation with regional colleges and universities.

Arbetsmiljöverket (The Working Environment Council) is the main regulatory body for occupational health and safety in Sweden. The organisation acts both as the Labour Inspectorate and the National Board of Occupational Safety and Health. It is tasked by the Government with supplementing and articulating the stipulations of the Work Environment Act, as well as integrating appropriate EU legislation. In this role, the council publishes regulatory amendments and new policies for the working environment.

It is important to note, however, that health and safety professions are not nationally regulated in Sweden. There is currently no requirement for registration or licensing of personnel involved in health and safety in the workplace. As a result, there are no national qualification requirements or certification procedures currently in place for representatives and specialists in the field. The employer is responsible for ensuring that health and safety personnel are suitably trained and qualified for the job.

Qualification & Training Analysis

Företagssköterskeutbildning (Diploma in Occupational Health Nursing)

The course comprises 40 study weeks. In order to enrol on the course, the applicant must already hold an undergraduate degree in nursing. The course aims to increase the expertise of occupational nurses, so that they can be employed as a professional independent occupational nurse.

The main focus of the course is health care, specialising in public health and the work environment. The work environment element comprises the prevention of ill health caused by chemical, physical, ergonomic, psychological, organisational and social conditions in the workplace.

The course includes the following subjects:

- Occupational health, internal control and quality assurance
- Occupational physiology, ergonomics and occupational medicine
- Public health
- Project methodology
- Occupational psychology and the organisation of work

Throughout the programme theory and practice are combined. The course includes the following assignments:

- Literature study on a problem
- Survey in a specific workplace
- Description of a case of rehabilitation

The following assessments are included:

- Individual written examinations for the different modules
- Homework assignments
- Project-work

Upon completion of the course, the graduate receives a Diploma in Occupational Health Nursing.

Företagsläkarutbildning (Specialist Diploma for Occupational Health Physicians)

The course is organised by Arbetslivsinstitutet (The Swedish National Institute for Working Life). It comprises nine weeks of scheduled theory classes (approximately 320 hours) and a supervised individual project. The classes are spread over one and a half years. The course provides the participants with theory classes and practical exercises in subject areas relevant to the work of an occupational health physician. The course trains the participants in the following:

- People in the work environment and the potential health risks at work and in the work environment
- Medical, organisational and technical assessment of issues regarding the relationship between employees, the organisation and the environment and measures aimed at maintaining a good work environment for all
The training course offers theoretical as well as practical knowledge on a number of topics including:

- How to set up and carry out projects
- The role and purpose of occupational health care
- Project methodology
- Occupational medicine I (epidemiology, lung physiology, vibrations, etc.)
- Health economics, ethics and management
- Psychological and social issues in the work environment
- Occupational medicine II (occupational dermatology, occupational neurology and audiology)
- Ergonomics and physical strain
- Rehabilitation
- Final week (project presentation, drug misuse, immigrant medicine, insurance medicine)

Under supervision, each participant is to plan, carry out and present an individual project. This is documented in a project report which forms the basis for the unseen written examination at the end of the course.

**Magisterutbildning i Ergonomi (Masters degree in Ergonomics)**

The Master’s degree in Ergonomics provides a broad insight into ergonomics with regard to systems involving people, technology and organisations and the interplay between them. It also provides tuition on the fundamentals of workplace safety. The course is therefore particularly relevant to prospective work environment engineers.

The Masters in Ergonomics trains students in the skills required to carry out surveys and evaluations, and in partnership with others to plan and implement changes in the workplace. The course also addresses planning, managing, implementing and evaluating development projects.

Students cover subjects in basic ergonomics including:

- Biomechanics
- Anatomy and physiology
- Behavioural science (psychology/sociology/teaching)

**Technology Course in musculo-skeletal ergonomics including the following subjects:**

- Anthropometry
- Musculo-skeletal injuries
- Designing workplaces and aids

**Philosophy of science, theory of science, ethics of science**

The Methodology course includes the following elements:

- Setting up experiments
- Qualitative methods
- Methods of evaluating changes in workplace conditions
- Cognitive ergonomics
- Information processing
- Financial management

The course also includes a compulsory dissertation. The dissertation is based on a topic which is closely related to a workplace.

The course comprises five terms and is divided into five smaller courses of five credits each and a dissertation of 20 credits. The course is run on a part-time basis equivalent to 20 working hours per week, with 20 working weeks per term. Three day course meetings take place about once a month and include lectures, seminars, discussions on applications and group work. The student may work on the course and the dissertation simultaneously on a full-time basis.

To pass the course students are also required to attend compulsory elements, practical experiments and lab work. A pass in all the written examinations and the dissertation is required to receive the Master’s degree.

**arbetsmiljöingenjör (Specialist Diploma in Work Environment Engineering)**

The training takes place at Arbetslivsinstitutet (The Swedish National Institute for Working Life) in Stockholm. The course runs for a two-year period with 40 weeks of full-time study. It is intended for engineers who are employed as work environment engineers, but have not completed a previous training course in health and safety engineering.

The standard entry requirements are at least 80 university credits from a natural science faculty (at least one of chemistry, physics, biology or environmental science should be included) and two years of work experience. Practicing safety engineers/work environment engineers with alternative qualifications may also be accepted if they can demonstrate sufficient experience in the field.

The training course offers theoretical as well as practical knowledge on a number of topics including:

- Personal, machine and product safety
- Evaluation and control of the occupational environment
- Ergonomics and rehabilitation
- Environmental auditing
- Training staff, presentation and communication skills
- Risk analysis
- Handling of technical test equipment
- The relationship between industrial production and external environment
- The work environment, production and economic relationships
The Work Environment Engineer training course consists of courses in occupational health and safety and a research project. Under supervision, each participant is to plan, carry out and present an individual project. This is documented in a project report which forms the basis for the examination at the end of the course.

Students study the following subjects in safety management:

- Accident theories and models
- Technical, organisational and individual risk factors
- Methods for preventing accidents
- Problem solving
- Laws, regulations and standards

Students study the following subjects in occupational health:

- Chemical and biological health risks
- Product and management control
- Ventilation systems, air flow in rooms, contaminant generation and transport, air filtration
- The effect of production on the external environment
- Environmental management system

The course also covers the following psychological and social aspects of the work environment:

- Dialogue methods, role playing, and other methods to develop cooperation and organisation
- Work environment pedagogy: methods for learning and communication, including risk communication
- Quality groups and other interaction methods.
- Project management
- Quality assurance
- Economic consequences of a poor work environment
- Economic consequences for society

Every unit is assessed through a written examination. In order to be approved as a trained work environment engineer, participants are required to pass written examinations in all courses and to complete the project work to a sufficient standard.

Arbetsorganisation och förändringsarbete (Work Environment Certificate for Workers’ Representatives)

The course is aimed at workers’ representatives who are employed to undertake routine work, environment health and safety tasks. The course is primarily intended for continuing professional development. In order to enrol on the course, the candidate must have been working full-time as a safety representative for at least three years.

The course aims to provide a deeper understanding of various factors affecting the work environment. The emphasis of the course is placed on safety management. There is however, some limited coverage of occupational hygiene. Students study the following elements:

- Occupational psychology (psychology of the workforce, management of stress and rehabilitation)
- Evaluation techniques (forms of project work, systematics in evaluation work)
- Legislation in the work environment, work environment economics (occupational healthcare and supervisory functions)
- New technology and plant safety (risk assessment, technical and organisational conditions)
- The opportunities and application of IT in safety work
- Ergonomic workplace assessment and design (elements of occupational physiology, anatomy of movement, visual ergonomics, etc.)
- Physical and chemical environmental factors (accident prevention, occupational medicine, occupational toxicology and neurotoxicology)

The course runs for a year with six and a half weeks of full-time study. The assessment comprises a written examination and a project.

Given the relatively short duration of the course and lack of formal entry requirements, it is not possible to provide a UK comparison for this award.

Occupational Structure

Verneombud (Workers Representative)
sikkerhetsingeniør (Work Environment Engineer)
Bedriftslege (Occupational Health Physicians)
bedriftshelsesøster (Occupational Nurses)

Every employer with more than ten employees is required to assign a workers’ representative to carry out basic procedures with regard to health and safety. Workers’ representatives are generally only required to undertake basic training in health and safety in order to carry
In larger enterprises, the employer may be required to assign a work environment engineer to manage health and safety in the workplace. Work environment engineers are specialists in the field of health and safety. They are typically educated to degree level in the skills required to manage health and safety in the workplace. They can work either for an employer or independently as consultants. The role of the Occupational Health Physician is closely related to that of the Work Environment Engineer. Occupational health physicians are educated to degree level in medicine and often have postgraduate training specifically in occupational health care. They are typically employed in large enterprises and are responsible for supervising occupational health nurses in the workplace. Occupational nurses are generally educated to degree level and may have additional training in occupational health care.

Verneombud (Workers Representative)

The Worker Representative carries out basic routine tasks in the management of occupational health and safety. These mainly include:
- Disseminating information about health and safety legislation
- Collating data relating to injuries and incidents in the workplace
- Raising awareness of health and safety issues among employees

sikkerhetsingeniør (Work Environment Engineer)

A work environment engineer is generally considered to be a specialist in the field of occupational safety. The role focuses on the prevention of injury and physical damage caused in the workplace. The responsibilities include managing safety and carrying out risk assessments. However, the role may vary depending on the requirements of the individual company. As such, the qualifications and expertise may also vary.

Bedriftslege (Occupational Health Physicians)

Whilst work environment engineering mainly concerns acute injury and damage, the role of occupational health physicians places more emphasis on the prevention and treatment of chronic occupational illnesses. However, in addition to this, physicians may contribute to the activities carried out by the Work Environment Engineer by assisting in risk assessments and briefing staff on health issues.

Bedrifthelsesester (Occupational Nurses)

Occupational nurses assist occupational health physicians in preventing and treating occupational illnesses.
OSH Legislation

Since 1984 safety at work in Switzerland has been regulated by the loi fédérale sur l’assurance-accidents/Bundesgesetz über die Unfallversicherung/Legge federale sull’assicurazione contro gli infortuni (Federal Law on Accident Insurance). In more specific terms, the Ordonnance sur la prévention des accidents et des maladies professionnelles/Verordnung über die Verhütung von Unfällen und Berufskrankheiten/Ordinanza sulla prevenzione degli infortuni e delle malattie professionali (OPA – Ordinance on the prevention of accidents and occupational illnesses) concentrates on occupational safety and health. Based upon this ordinance is the directive relative à l’appel à des médecins du travail et autres spécialistes de la sécurité au travail/Richtlinie über den Bezug von Arbeitsärzten und anderen Spezialisten der Arbeits sicherheit/Direttiva concernente l’appello ai medici del lavoro e agli altri specialisti della sicurezza sul lavoro (Directive concerning the appeal to occupational doctors and other occupational safety specialists - frequently abbreviated to directive MSST), to which all firms and organisations have been obliged to adhere since January 1st 2000. This directive regulates the function and responsibilities of OSH professionals in accordance with articles 11a to 11f of the ordinance. The application of this directive is a legal requirement for employers, who must finance it themselves.

The Conseil Fédéral/Bundesrat/Consiglio federale (Swiss Cabinet) appoints a central agency to deal with the prevention of accidents and professional illness. This agency is known as the Commission fédérale de coordination pour la sécurité au travail/Eidgenössische Koordinationskommission für Arbeits sicherheit/Commissione Federale di coordinamento per la sicurezza sul lavoro (CFST – Federal Commission for the Coordination of Occupational Safety). Its principal competences and obligations are as follows:

- To organise safety programmes emphasising the prevention of certain types of professional accidents or illness
- To provide instructions/advice to competent bodies
- To organise safety programmes emphasising the prevention of certain types of professional accidents or illness
- To coordinate the funding for the work of the appointed OSH organisations
- To provide instructions/advice to insurers
- To develop technical regulations (known as directives) to prevent occupational accidents and illness
- To organise safety programmes emphasising the prevention of certain types of professional accidents or illness
- To provide information and advice relating to occupational safety at all levels

Responsibility for issues relating to occupational health and safety falls to four different types of organisation:

- 26 cantonal work inspectorates
- 2 federal work inspectorates (under the Secretary of State for the Economy)
- 6 specialised organisations
- Suva – Swiss Accident Insurance Agency

The loi fédérale sur l’assurance-accidents/Bundesgesetz über die Unfallversicherung/Legge federale sull’assicurazione contro gli infortuni regulates the competences of the appointed organisations in principle, however it is the responsibility of the CFST to monitor the way in which these competences are carried out.

The CFST – the Federal Commission for the Coordination of Occupational Safety – is responsible for:

- To provide information and advice relating to occupational safety at all levels
- To develop technical regulations (known as directives) to prevent occupational accidents and illness
- To develop technical regulations (known as directives) to prevent occupational accidents and illness
- To organise safety programmes emphasising the prevention of certain types of professional accidents or illness
- To coordinate the funding for the work of the appointed OSH organisations
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- To develop technical regulations (known as directives) to prevent occupational accidents and illness
- To organise safety programmes emphasising the prevention of certain types of professional accidents or illness
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- To develop technical regulations (known as directives) to prevent occupational accidents and illness
- To organise safety programmes emphasising the prevention of certain types of professional accidents or illness
- To coordinate the funding for the work of the appointed OSH organisations
- To provide instructions/advice to insurers
- To develop technical regulations (known as directives) to prevent occupational accidents and illness
- To organise safety programmes emphasising the prevention of certain types of professional accidents or illness
- To coordinate the funding for the work of the appointed OSH organisations

The ordinance from the Office fédérale des assurances sociales/Bundesamt für Sozialversicherungen/Ufficio federale delle assicurazioni sociali (national diploma) in a relevant field, although no qualification with the title ‘Specialist in Occupational Safety and Health’ actually exists. Institutions or training courses gain recognition from the Office fédérale des assurances sociales/Bundesamt für Sozialversicherungen/Ufficio federale delle assicurazioni sociali (Federal office of social insurance). OSH professionals must hold a recognised qualification in order to be able to practise their profession. The ordonnance sur les qualifications des spécialistes de la sécurité au travail/Verordnung über die Eignung der Spezialisten der Arbeits sicherheit/Ordinanza sulle qualificazioni dei specialisti della sicurezza sul lavoro (ordinance on occupational health and safety specialist qualifications) drawn up by the CFST determines the minimum requirements for OSH training programmes. The content of these courses is also specified in the annexes of this ordinance.

In order to practice as an OSH expert, individuals must fulfil the following criteria with respect to training:

- Have completed initial training (Diplôme/Diplom/Diploma or Certificat de Capacité/Fähigkeitszeugnis/Attestato di Capacità)
- Have a certain amount of professional experience, depending on the specialism
- Have completed complementary training specific to the area of OSH

Qualification & Training Analysis

Chargé de sécurité/Sicherheitsfachleute/Esperto nell’ambito della sicurezza (Safety Manager)

Ingénieur de sécurité/Sicherheitsingenier/Ingegnere della Sicurezza (Safety Engineer)

Hygiéniste du travail/Arbeitshygieniker/Igieneista del Lavoro (Occupational Hygienist)

Médecin du travail/Arbeitsarzt/Medico del Lavoro (Occupational Doctor)

Training in the field of occupational safety and health is undertaken by individuals who already hold a nationally recognised qualification in a different area, such as engineering or science. Consequently it is termed formation complémentaire or postgraduée/Weiterbildungskurse/formazione complementare (complementary or postgraduate training). This type of training aims to provide the individual with specific knowledge in the field of OSH.

Individuals wishing to become an OSH expert must complete their training in a state-recognised institution or follow a course which is recognised by the state. The agency whose mandate it is to provide recognition to institutions and courses is the Office fédérale des assurances sociales/Bundesamt für Sozialversicherungen/Ufficio federale delle assicurazioni sociali (OFAS). The appointed organisations which ensure that occupational health and safety regulations are applied also monitor OSH expert qualifications, through consultation with OFAS and the Fédération de l’industrie, des arts et des métiers/Bundesverband für Gewerbe, Kultur und Handeln/Federazione dell’industria, delle arti e mestieri (Federation of industry, arts and trades).
All recognised complementary training will conclude with an examination and successful participants are issued with a certificate from the institution where the training took place.

Once employed as an OSH expert, the individual must undertake at least one relevant formation continue/Weiterbildungskurs/corso di formazione permanente (continuing education course), especially if the work takes place in an organisation where "specific risks" are present. Formation continue allows OSH experts to both deepen their professional knowledge and keep it up-to-date.

Chargé de sécurité/Sicherheitsfachleute/Esperto nell’ambito della sicurezza (Safety Manager)

The objective of this course is to train participants to become Safety Managers, in order that on completion they may perform this function in an organisation, in accordance with the Ordonnance sur la prevention des accidents. It is aimed primarily at professionals and engineers who have been named ‘Safety Manager’ by their employer and are in need of the requisite training. Equally engineers and scientists who wish to undertake the ‘Safety Engineer’ training course subsequent to this one are also eligible.

The entry requirements for this course are either:

- Recognised vocational training corresponding to the federal certificate de capacité/Maturitätsszeugnis/Attestato di Maturità and at least three years professional experience

Or:

- Diplôme d’ingénieur/Diplom – Ingenieur/Diploma di Ingegniere or scientific/technic/scientifica from a university or other HEI and at least two years work experience as an engineer or scientist

Applicants for this course are also required to have some basic knowledge in the field of occupational safety and health, an analytical mind and good communication skills. However a general observation is that most individuals who undertake the role of Safety Manager do not hold a university qualification. As a result they do not possess as high a methodological base as those who have attended university and undertaken an OSH training course in a different specialisation.

At the end of the training course, participants should:

- Understand how safety at work and health protection fits into national legislation
- Know how to find information regarding occupational health and safety
- Know how to interpret safety regulations, identify and apply concrete measures
- Be aware of the importance of an organisation which respects its employees in terms of work, workstations and environment and know how to provide a secure working environment
- Understand how first aid and fire prevention procedures work
- Know how to conduct interviews with members of an organisation with relation to advice, accident investigation and safety at work
- Know how to effectively present ideas, concepts, experiences, etc, in relation to occupational safety
- Be able to interpret safety regulations, identify and apply concrete measures
- Be able to organise and manage a security service, in accordance with the terms laid out by CFST in the directive sur l’appel à des MSST
- Know how to effectively present ideas, concepts, experiences, etc, in relation to occupational safety

Examinations take place at the end of the course over two days. They are divided into three parts, which test the participant’s knowledge, ability to apply that knowledge and presentation skills. Courses must have a duration of at least twenty days.

Ingénieur de sécurité/Sicherheitsingenieur/Ingegniere della Sicurezza (Safety Engineer)

Individuals who complete a recognised ingénieur de sécurité/Sicherheitsingenieur/Ingegniere di Sicurezza training course are qualified to work as a Safety Engineer in Switzerland. The course is aimed at engineers or scientists who will become Safety Engineers and Safety Engineers working for the appointed organisations. To gain admission to the course, the individual must hold the following:

- Technical or scientific diploma from a Swiss university, polytechnic school or higher technical school
- At least two years of professional experience as an engineer/scientist

The Safety Engineer course run by CFST also stipulates that the individual must also hold the Safety Manager qualification.

The content of the training course is laid out in annex 2 of the ordinance on occupational health and safety specialist qualifications and is as follows:

- Fundamentals of law (laws and ordinances) as well as directives, conventions, etc in the field of occupational safety and health at the workstation as well as related areas
- Identification of dangers
- Cause of accidents and basic knowledge of safety techniques to prevent accidents
- Social, economic and legal aspects of occupational accidents and illnesses due to work; their consequences
- Aspects of OSH at a managerial level within an organisation
- Prevention (including disease prevention) of professional illnesses
- Organisation of safety at work, including first aid and fire prevention
- Basic teaching and communication skills required for imparting OSH information to employees
- Organisation-internal OSH statistics
- Basic interdisciplinary knowledge (occupational medicine, occupational hygiene, general hygiene)
- Integration of occupational safety and health into company policy
- Budgeting, reporting and monitoring occupational safety and health
- Communication and publicity of OSH
- OSH as managerial tasks, motivational classes
- Risk analysis

At the end of the course individuals should know how to use and select the appropriate methods and tools to adhere to the measures laid down in the MSST, notably for:

- Identification of dangers and risk analysis
Evaluation of safety measures
Development of a safety culture within an organisation

Training to become a Safety Engineer must last for a minimum of 35 days. The individual is obliged to complete, over a minimum of five days, a project at the end of the course. This project should deal with a real problem in the field of occupational safety and health. Overall it should demonstrate that the individual has obtained an understanding of the tools and methods taught throughout the course, which will be necessary to apply in their role as a Safety Engineer.

Hygiéniste du travail/Arbeitshygieniker/Igienista del Lavoro (Occupational Hygienist)

In order to undertake a complementary course in Occupational Hygiene, candidates must hold a technical or scientific diploma from a Swiss university, polytechnic school or higher technical school. They must also have at least two years of professional experience. The recognised complementary course qualifies the holder to practice as an Occupational Hygienist in Switzerland.

The course is divided into two parts: general subjects and specific subjects and competences in the field of occupational health. As with the Safety Engineer qualification, the content for this course is regulated by the ordinance on occupational health and safety specialist qualifications and comprises:

General Subjects

- Fundamentals of law (laws and ordinances) as well as directives, conventions, etc in the field of occupational safety and health at the workstation as well as related areas
- Organisation of work and organisational management
- Organisation of safety at work, including first aid and fire prevention
- Organisation-internal OSH statistics
- Basic teaching and communication skills required for imparting OSH information to employees
- Social, economic and legal aspects of occupational accidents and illnesses due to work; their consequences
- Fundamentals of safety methods, investigations into accidents and their causes

Specific subjects and competences in the field of occupational health:

- Risk identification:
  - Understanding of professional responsibilities, occupational procedures and processes
  - Understanding of factors which are harmful to health at the workstation (chemical, physical or biological factors)
- Examination and evaluation of risks
  - Investigation methods in the field of OSH (measuring techniques, sampling strategy, etc)
  - Implementation of biological monitoring in the workplace in conjunction with Occupational Doctors
  - Risk analysis. Evaluation of results from the perspective of how the health of employees is endangered in the workplace. Understanding of the effects on health of physical, biological and chemical factors (toxicology). Dose-effect relationship.
- Control and elimination of risks
  - Elimination of danger at its source. Modification of working procedures and behaviours
  - Danger limitation, such as an effective localised suction machine which removes dangerous vapours and dust from the air
  - Personal health protection
  - Planning integrated health protection programmes (occupational hygiene, occupational medicine, accident prevention)

Fundamentals in areas related to occupational hygiene:

- Occupational medicine
- Accident prevention
- Epidemiology

- Ergonomics and occupational psychology
- General topics in health, social medicine and preventive treatment
- Environment protection

Médecin du travail/Arbeitsarzt/Medico del Lavoro (Occupational Doctor)

Postgraduate training in all medical specialisations is regulated and monitored by the Swiss Medical Association (Foederatio Medicorum Helveticorum - FMH). Occupational medicine is one of the many medical specialisations at this level. The FMH outlines conditions that training courses must meet with regard to objectives, content, learning methods, structure, length, examination regulations and examination methods as well as offering its own courses.

In order to work as an Occupational Doctor in Switzerland, individuals must:

- Hold a national diploma in medicine (diplôme fédéral de médecine/Medizindiplom/Diploma federale in medicina)
- Have at least five years of professional experience
- Have completed at least two years complementary training in the field of OSH

However postgraduate, or complementary, training in occupational medicine usually lasts for at least five years, following an undergraduate course in medicine. The student must complete two and a half years general training as well as two and a half years of specific training in the field of OSH. The latter is divided into work experience in a training institution and an academic course.
The learning objectives of the course are fulfilled through the acquisition of knowledge and abilities in the following areas:

- Swiss laws and ordinances related to protecting health at work and preventing accidents and occupational illnesses
- Physiological structure of work and the workstation, including psychological aspects, work organisation problems, food, physical differences of men, women and young people (in terms of occupational physiology and psychology, ergonomics)
- Identification and assessment of physical, chemical and biological agents which are harmful to health (occupational hygiene)
- Health and environment: strains on the environment caused by industrial protection; differential diagnosis of health risks linked to the environment and the working environment
- Disease prevention, identification and designation of occupational illnesses, including preventive health exams
- Systematic treatment of occupational illnesses
- Prevention of occupational accidents
- First aid and primary care following accidents, poisoning and acute diseases/infections
- Integration or reinsertion of employees who are handicapped or have reduced working ability
- Prevention of illnesses caused by dependence-inducing products
- Reporting and insurance
- Fundamentals of occupational health management, including economic aspects

At the conclusion of the course, the student must take two oral examinations, which test whether the above knowledge and abilities have been acquired. This is necessary to ascertain whether the candidate is ready to practice the profession of Occupational Doctor. The examinations are organised and carried out by the Société Suisse de médecine du travail, which holds the title (and the right to convey this title) of Spécialiste en médecine de travail (occupational medicine expert).

### Occupational Structure

| Médecin du travail/Arbeitsarzt/Medico del Lavoro (Occupational Doctor) |
| Hygiéniste du travail/Arbeitshygieniker/Igienista del Lavoro (Occupational Hygienist) |
| Ingénieur de sécurité/Sicherheitsingenier/Ingegniere della Sicurezza (Safety Engineer) |
| Chargé de sécurité/Sicherheitsfachleute/Esperto nell’ambito della sicurezza (Safety Manager) |

The main tasks of OSH professionals are fixed by law and are ultimately the same for each profession. The difference is in the perspective from which the experts approach their tasks. The principal occupational responsibilities are as follows:

- Identify dangers in the workplace
- Evaluate risks in the workplace in a systematic way
- Identify and introduce measures to reduce risks (risk reduction process)
- Work closely with employers and employees to ensure a safer working environment
- Provide information and training to employees in the field of OSH in order to increase awareness and knowledge

### Occupational Doctors

Occupational Doctors concentrate on the health consequences of an occupational exposure

### Occupational Hygienists

Occupational Hygienists concentrate on the chemical, physical or biological agents that are present in the workplace.

### Safety Engineers

Safety Engineers focus on technical factors, such as dangers radiating from machines, fixtures, production methods and processes and working techniques.

### Safety Managers

The Safety Manager’s responsibilities are slightly different to those of other OSH experts. This profession does not require the same level of training and their responsibilities are primarily twofold. Firstly they ensure the smooth-running of occupational health and safety procedures in small to medium-sized companies. Secondly they complete the OSH service in large companies, where they perform an essential coordinating role at the heart of the organisation.

### Safety Coordinator

KOPAS Kontaktperson Arbeitssicherheit/SIKO/Perco personne de contact/Cosi coordinateur de sécurité/adetto di sicurezza (up to level 2 – 3, education 2 -3 days)
OSH Legislation

In the UK, The Health and Safety at Work Act 1974 (HASAW) is the primary piece of legislation covering occupational health and safety. The Health and Safety Executive (HSE) is the UK government body responsible for enforcing health and safety at work legislation and also plays a major role in producing advice on health and safety issues and guidelines on relevant legislation. The role of enforcement is divided between the HSE and Local authorities depending on the business sector.

The HASAW 1974 places duties on all employers ‘to ensure, so far as reasonably practicable, the health, safety and welfare at work’ of all their employees. Among other provisions the Act also requires:

- safe operation and maintenance of the working environment, plant and systems
- maintenance of safe access and egress to the workplace
- safe use, handling and storage of dangerous substances
- adequate training of staff to ensure health and safety
- adequate welfare provisions for staff at work.

Employers must also keep and revise a written record of health and safety policy and consult with employees or their representatives on such policies (this only applies to those employing five or more).

Increasingly in the UK the regulatory trend is away from prescriptive rules and towards risk assessment. The Management of Health and Safety at Work Regulations 1999 places a duty on employers to assess and manage risks to their employees and others arising from work activities. Employers must also make arrangements to ensure the health and safety of the workplace, including making arrangements for emergencies, adequate information and training for employees, and for health surveillance where appropriate.

Employees must work safely in accordance with their training and instructions given to them. Employees must also notify the employer or the person responsible for health and safety of any serious or immediate danger to health and safety or any shortcoming in health and safety arrangements.

Qualification & Training Analysis

There are two types of occupational safety and health (OSH) qualification available in the UK:

1. The more traditional type that requires the attendance of a course of study with a formal teaching style. These courses can also be offered as distance learning or blended learning combining attendance with distance learning. Assessment is through formal examination, work based assignments or work based learning portfolios.

   There is a wide array of OSH and OSH related qualifications available, ranging from a Level 3 on the UK Qualifications and Credit Framework to Diplomas and Bachelors degrees (Level 6) and post-graduate degrees at Masters level (Level 7).

2. The National or Scottish Vocational Qualifications (N/SVQ). These types of qualification are based in the students workplace and require the development of a portfolio of evidence based on tasks completed at a specific level. There are no formal examinations; the portfolio is independently assessed to determine that the student can demonstrate the skills required to undertake the competence based tasks laid out in the National Occupational Standards.

National Occupational Standards (NOS) are industry specific standards and qualifications developed in response to industry needs. NOS are developed in collaboration with employers, awarding bodies, professional bodies and training providers. The NOS describe in detail what someone should know and be able to do in order to carry out their duties to the industry specific standards. The NOS 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. These standards are used in the development of qualifications and provide the basis of most health and safety qualifications.

| The following units should be included in a qualification designed to recognise the competencies of a person who is not a professional but whose role includes the general area of health and safety practice. |
|---------------------------------|-------------------------------------------------|-------------------------------------------------|
| HSS1 | Manage and review health and safety information | HSS2 | Develop procedures to safely control work operations | HSS3 | Safely control work operations |
| HSS4 | Incorporating into HSS2 | HSS5 | Promote a healthy and safe culture in the workplace | HSS6 | Conduct a health and safety risk assessment of a workplace |
| HSS7 | Make your own actions within the workplace aim to protect the environment | HSS8 | Review health & safety procedures in workplaces | HSS9 | Improve work related health and safety through promotional activities |

| The following units should be included in a qualification designed to recognise the competencies of a person whose role is to provide health and safety services and support to organisations where there are significant hazards and complex risks. |
|---------------------------------|-------------------------------------------------|-------------------------------------------------|
| HSP1 | Develop, implement and review the organisation’s health and safety strategy | HSP2 | Promote a positive health and safety culture | HSP3 | Develop and implement the health and safety policy |
| HSP4 | Develop and implement effective communication systems for health and safety information | HSP5 | Develop and maintain individual and organisational competence in health and safety matters | HSP6 | Control health and safety risks |
| HSP7 | Develop, implement and review proactive monitoring systems for health and safety | HSP8 | Develop, implement and review reactive monitoring systems for health and safety | HSP9 | Develop and implement a health and safety audit |
| HSP10 | Develop and implement health and safety emergency response systems and procedures | HSP11 | Develop and implement health and safety review systems and procedures | HSP12 | Contribute to health and safety legal actions |
| HSP 13 | Influence and keep pace with improvements in health and safety practice |

The following units should be included in a qualification designed for those employed either in the Health and Safety Executive or Local Authority who enforce the
Health and Safety at Work Act 1974

| HSR1 Identify the plans and priorities of the regulatory authority for work related health and safety, and contribute to them effectively | HSR2 Inspect duty holders, worksites and activities for the purposes of work related health and safety regulation | HSR3 Investigate work-related accidents, incidents, ill-health reports and complaints for the purposes of health and safety regulation. |
| HSR4 Plan and gather evidence for the purposes of work related health and safety regulation | HSR 5: Enforce statutory provisions and brief a prosecutor for the purposes of work related health and safety regulation | HSR 6: Enforce statutory provisions and present guilty pleas in Magistrates’ Courts for the purposes of work related health and safety regulation v2 |
| HSR 7: Draft and serve notices or other statutory enforceable documents for the purposes of work related health and safety regulation v2 | HSR 8: Influence health and safety duty holders and others for the purposes of work related health and safety regulation | HSR 9: Improve work related health and safety through promotional activities |

**Occupational Structure**

**Occupational Health Physicians**
- To provide an independent advisory service on any health related matter which is affecting work.
- To advise managers about the fitness of employees to undertake work activities at a pre-employment stage, following sickness absence and at other times where health issues may be involved.
- To advise managers about the likely duration of absence of employees who may be off work owing to health problems.
- To advise managers and employees on an employees fitness to undertake modified or alternative duties.

**Occupational Health Nurse**
- Working within a multidisciplinary team;
- Designing, developing and delivering new health promotion initiatives;
- Monitoring employee exposure to hazardous chemicals and undertaking statutory and non-statutory health surveillance;
- Advising on disability issues in the workplace;
- With health and safety and employment legislation;
- Keeping up to date with legal and professional changes associated with public health and occupational health and safety.

**Occupational Hygienist**
- Occupational hygienists usually operate as part of a multi-disciplinary team that includes managers, safety practitioners, occupational physicians and employees. The routine work of a hygienist is to ensure that a workers’ environment does not cause ill health from exposure to chemical, physical or biological agents by carrying out:
  - Assessing the hazards and risks associated with the handling of certain chemicals, physical agents or biological. This would include a study of existing plant, equipment, materials used, products and by-products, production processes and general working conditions.
  - Identify and put in place the most practicable controls.

**Health and Safety Representatives**

**Health and safety representatives have functions given by law.**

**There are two types of Health and Safety Representative:**
- A trade union-appointed health and safety representative whose functions are set out in the Safety Representatives and Safety Committees Regulations 1977
- Workforce elected representatives

1. **Trade Union Health and Safety Representatives**
- The law makes it clear that they can:
  - Represent employees generally and when you consult them about specific matters that will affect the health, safety and welfare of the employees;
  - Represent employees when Health and Safety Inspectors from HSE or local authorities consult them;
  - Investigate accidents, near misses, and other potential hazards and dangerous occurrences in the workplace;
  - Investigate complaints made by an employee they represent about their health, safety or welfare in the workplace;
  - Present the findings of investigations to you;
  - Inspect the workplace;
  - With at least one other appointed representative, request in writing that you set up a health and safety committee; and
  - Attend Health and Safety Committee

2. **Workforce-elected representatives**
- Represent
- Attend training courses
- Contact with Health and Safety Inspectors from HSE or Local Authority

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2. **Workforce-elected representatives**
- Represent
- Attend training courses
- Contact with Health and Safety Inspectors from HSE or Local Authority
The role of the health and safety representative is independent of management. Representatives are there to represent the interests and concerns of their co-workers and respond on their behalf.

The law sets out what functions representatives have. All representatives can:
- represent the workforce on health and safety generally, or make representations on potential hazards and dangers;
- attend training courses; and
- have contact with health and safety inspectors from HSE or the local authority.

However, by law, only representatives appointed by trade unions can examine the causes of accidents, investigate potential hazards and dangers, inspect the workplace, and request that you set up a safety committee.

Functions of health and safety representatives elected by your workforce
The law makes it clear that they can:
- take up concerns with you about potential hazards and dangerous events in the workplace that may affect the employees they represent;
- take up general matters affecting the health, safety and welfare of the employees they represent; and
- represent employees when consulted by health and safety inspectors.

Health and Safety Manager/Adviser/Officer
A health and safety Manager/Adviser offers expert knowledge and skills in order to generate and promote a positive health and safety culture. They are based in a range of small to medium organisations or form part of a safety team within larger organisations and will work in partnership with employers, employees, directors and trade unions.

They are responsible for ensuring that all safety legislation is adhered to and policies and practices are adopted. They help to plan, implement, monitor and review the protective and preventative measures that companies are required or choose to follow, and work to minimise operational losses, occupational health problems, accidents and injuries.

Some typical work activities:
- carry out risk assessments and risk reduction
- preparing health and safety strategies and developing internal policy;
- provide in house training
- ensure safe working practices that comply with legislation
- carry out regular site inspections
- accident investigation and reporting
- develop health and safety strategies and policy
- keep records and produce reports, newsletters and bulletins

Health and Safety Practitioner
Should have a high level of competence and are likely to be in senior management positions. They should be competent to recognise and strategically manage the health and safety risks of the organisation. Have good leadership skills and be able to influence at Board level.

Chartered Health and Safety Practitioner
This is someone who is a member of the Institution of Occupational Safety and Health and who has acquired the appropriate qualification, completed a prescribed programme of Initial Professional Development and who continues to maintain their competence through a mandatory programme of Continuing Professional Development