International comparison of training practices for workplace health and safety experts (practitioners) in Austria (A), Belgium (B), Switzerland (CH), Germany (D), Spain (E), France (F), Great Britain (GB), Italy (I), The Netherlands (NL), and Portugal (P)

ISSA-Section on Education and Training for Prevention "Experts"
Working Group

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ISSA – The International Social Security Association

The association is a worldwide based grouping of social security organisations. For the 300-odd member organisations in 120 countries it constitutes an ideal forum for the joint sharing and implementation of acquired experience. The association compiles data, carries out research and publishes a broad range of literature material on current topics and developments in social security. The association also organises information events, international meetings and congresses. The ISSA covers numerous fields in its various Sections.

The ISSA Section "Training and Education for Prevention"

Address
ISSA International Section for Training and Education for Prevention
Institut National de Recherche et de Sécurité (INRS)
30, rue Olivier Noyer
F-75680 Paris Cedex 14
France

Structure
4 Working Groups:
- 1 "Youth"
- 2 "Decision makers"
- 3 "Experts"
- 4 "Vocational Training"

Tasks
Working Group 3 "Experts" addresses, in particular, the pre-conditions, objectives, contents and training approach for the different types of work safety experts.

Chairman of Working Group "Experts"

(until 31 May 2000)	(since 1 June 2000)
Grünewald, Otmar	Bratge, Dietmar
Head of Prevention	Leiter der Bildungsstätte der Süddeutschen Metall-BG
Süddeutsche Metall-BG	Spessartstrasse 18
Wilhelm-Theodor-Römheld-Strasse 15	D-97855 Lengfurt
D-55130 Mainz	Germany
Germany	

Contributors

Grünwald, Karl-H.	Berufsgenossenschaft Nahrungsmittel und Gaststätten –D
Kaida, Franz	Wiener Linien Gmbh & Co KG – A
Kaida, Gabriele	Bundesministerium für Verkehr, Innovation und Technologie –A
Lang, Robert	Schweizerische Unfallversichersicherungsanstalt – CH

Scientific Consultants

Andrew R. Hale	Technical University Delft, NL
Giesela Kiesau	Bundesanstalt für Arbeitschutz und Arbeitsmedizin, D

Data pertaining to the countries listed in the synopsis were provided by

Austria (A)	Gabriele KAIDA, Bundesministerium für und Technologie, Verkehrs-Arbeitsinspektion (VAI)
	Franz KAIDA, Wiener Linien Gmbh & Co KG
Belgium (B)	Willy IMBRECHTS, Ministry of Employment
Switzerland (CH)	Robert LANG, Schweizerische Unfallversicherungsanstalt (SUVA)
Germany (D)	Karl-Heinz GRÜNEWALD, Berufsgenossenschaft Nahrungsmittel und Gaststätten
Spain (E)	Alberto Sérgio MIGUEL, Universidade do Minho
France (F)	Paul GUENOUN, Institut National de Recherche et de Sécurité - (INRS)
Great Britain (GB)	Julia SOAVE, Health and Safety Executive (HSE)
Italy (I)	Maria PACCIANA, Istituto Nationale per l'Assicurazione contro gli Infortuni sul Lavoro (INAIL)
Netherlands (NL)	Andrew HALE, Technical University, Delft
Portugal (P)	Alberto Sérgio MIGUEL, Universidade do Minho

Welcoming speech by Otmar Grünewald (Chairman of the Working Group)

The aim and purpose of Working Group 3 of the ISSA Section “Training and education for prevention” is to bring together all relevant information on the latest developments in the field of accident prevention experts from various countries and to prepare the results for an exchange of information at international level.

Work safety experts, occupational health and hygiene doctors, co-ordinators for accident prevention on building sites, ergonomists and occupational psychologists are required, within a company, to advise management and workers on all matters concerning health and safety protection at work, and to encourage them to introduce safe working procedures. To do so, they must be capable of recognising hazards to health and safety, assess risks and propose preventive measures.

In the light of the most up-to-date findings, safety ‘experts’ need to possess, in addition to technical know-how and an ability to organise industrial work procedures, well-developed interpersonal skills. Inter-disciplinary work skills are also necessary. In European countries most experts have a sound technical background: they could be engineers, master craftsmen or technicians. The underlying training concepts for work safety experts in the various countries have a certain degree of commonality but also differences. In the final analysis, they all pursue the same goal; which is to provide work safety experts with qualifications commensurate with modern requirements.
The comparison highlights the common features as well as their differences, and points the way to optimising training in Europe.
Looking to the future, we must ensure that in every country of Europe we can count on having trained, qualified experts.

Introductory statement by Gisela Kiesau (Scientific Consultant)

The guiding principle of present-day occupational health and safety is based on a comprehensive conception of workers' safety and health. The main features of modern work-related accident prevention may be summed up through the following statements:

- Accident prevention is not an additional, bolt-on task for the company, but rather an *integral component of all company tasks and functions*. It is concerned with ethical, humanitarian, industrial management and ecological issues.

- Accident prevention safeguards health and safety conditions in the workplace. It embraces:
  - the protection from work-related injuries (occupational accidents) and work-related diseases (occupational diseases and 'other work-related illnesses')
  - active *health promotion* through influencing physical, spiritual and social well-being, i.e. through a people-adapted work structure and continuous enhancement of working conditions. This could include creating improved safety and healthy working environments commensurate with the physical performance demands made on workers.

- Comprehensive labour protection requires a full understanding and recognition of the whole range of factors which might lead to occupational accidents or industrial diseases. Instead of looking at single causes, account needs to be taken of many factors in the conditions, including the cause and effect of inter-related aspects. Multi-factorial observations call for detailed consideration of the work-related causes and productivity-demand including circumstantial causes, but also overcoming an inflexible natural-scientific-cum-technical approach and mindset.

- Occupational diseases have a decisive role in work organisation and the social conditions structure.

- The essence of any complex analysis of danger or stress is not the detailed technical evidence, but rather plausible proof that e.g. work-related diseases are possible.

- Specific one-off pin-pointing of individual isolated dangers has a markedly reduced degree of effect than taking a more global view of reciprocally influencing factors. Over and above the design of machinery, the structural lay-out of workshops, job sites, work procedures, as well as safety and health aspects when handling dangerous substances, the organisation of work should be devised in such a way as to take account of processing procedures, work structures, co-operation and communication, working time, breaks and shift working.

Health and safety provision must be guided by the hierarchy of goals and measures corresponding to the scope of prevention of danger.

Comprehensive structural approaches must be devised which include equipment safety (protection against machine failure), environmental protection and other aspects.

Health promotion must be incorporated into the overall concept of work system design as an integral component of work safety. Health promotion facilitates the creation of conditions conducive to positive thinking and feeling, ie. which allow motivation and a high degree of physical stressing and de-stressing.

The EU Framework Directive 89/391 states that the employer shall have a duty to ensure the safety and health of workers in every aspect related to work. Employers' obligations are thus extended in such way as to create a *duty to introduce and apply preventive measures under his own liability within the firm.* Guidelines for the creation of safe, and healthy work systems are not to be found exclusively in legislation, directives, regulations and other statutory texts.

The state of the art, as well as continually evolving labour studies, must be taken into consideration.

Accident prevention must be looked on as an on-going guiding principle in all sectors of the company and must be followed up by all persons in responsible positions.
This requires it to be firmly anchored in all company goal-setting objectives and strategies, the implementation of obligations by constant acknowledgement by line managers of their responsibilities, as well as by the integration of health and safety provisions in the company statement.
Comprehensive understanding of accident prevention principles implies that labour protection requirements be integrated into the company's structural and work procedure organisation.
By so doing foreseeable shortcomings in the work system may be avoided or limited. Labour protection management systems provide an effective instrument.

Employers are required to manage their health and safety systems. They can do this in various ways, and can be flexible in their approach to using management instruments. This also applies to the organisation of in-house accident prevention measures.

Occupational health and safety *is not the sole purview of safety specialists* but there are mergers and overlaps with managers' tasks.

A modern company work protection system should be *integrated into the work safety system.*

Put simply, that means that everyone, at their place of work and in everything that they do, must think in terms of safety and health protection and act accordingly. Safety and health protection in all of the areas concerned in a company, and which have an influence on the quality of accident prevention, must be regarded as a key matter for consideration.

Integrated work safety extends beyond mere instructions concerning formal tasks and skills, and should be part and parcel of the various components of management systems; for example, and in particular, in: technology management, human resources management, product management, but also in quality management and environmental management.
All sectors of the company must take on board work safety aspects. They must acknowledge the need to do something, and take measures on their own initiative. Safety precautions and health protection must become an integral part of the every day concern of the company.
Networking in matters related to work safety must be encouraged.
The range of tasks in work safety is so broad that, in principle, there are no areas that do not touch upon work safety. Safety and occupational health issues cannot be treated in isolation. They must be incorporated into the fabric of company objectives and tasks in comprehensive, relevant, technical overviews.
A company may, for many reasons, be required to fulfil a multitude of tasks. There are many possibilities in terms of organisational methodologies depending on the specialist field or scientific discipline. Using these different approaches tasks will be assigned within the company, procedures will be defined, processes sequenced and staff delegated. The different operational systems are not clearly delineated from each other a certain degree of overlap exists. Safety experts are obliged to look at situations from different perspectives using their own professional know-how. Work safety issues must be solved by taking into consideration the overall tasks of the company. Networked implementation means, on the one hand, making work safety aspects understandable and communicating them in a convincing manner throughout the company. On the other hand, it means bringing together specialist knowledge and responsibility for the structuring of working conditions through co-operation. The nature of professional requirements can only be mastered by adopting a co-operative approach.
This presentation demonstrates quite clearly why WG 3 of ISSA decided, in Luton on the 29 of September 1995, to draw up a synopsis on the in-house/external experts in Europe on the basis of, at the time, the existing legal requirements in Europe for EU member states. The synopsis was presented and discussed in Mainz at the ISSA meeting on ‘The training of work safety and health protection experts’ from 30th of June to the 2nd of July 1999.

Conception / Basic principles

Most activities, but especially work-related activities, involve inherent risks of accident or dangers to health and safety.
These may arise directly, or be caused by a knock-on effect from technical deficiencies (T), organisational shortcomings (O), wrongful manipulation or negligence on the part of operational persons (P).
For successful prevention intervention it is necessary to consider as a whole all causes and inter-related effects within the framework of a T-O-P system.
Accident prevention tasks must be the concern of everyone at their level of responsibility: decision-makers, planning managers, organisation managers, prevention experts, head of production engineers, and finally by all the staff.
Over and above mere information about accident prevention rules -laws, statutory rules, standards, etc.- training in safety and health awareness enhancement should aim at making people aware of the risks he/she runs or might contribute to.

The aim and purpose of training is:

- To make people aware, anticipate and assess risks
- To eliminate or reduce risks
- To control residual risk elements
- To minimise the extent and the seriousness of the consequences of events which cannot be avoided

Awareness of safety and health matters should begin in early childhood and should be a matter of lifelong concern. In particular, it is of the utmost importance to see to it that those persons who are in a position to influence accident prevention in companies be highly trained.

- Decision-makers in-house at all levels
- Planning engineers, design engineers, foremen, methods engineers
- Accident prevention experts (occupational doctors, Work safety experts)
- Workers' representatives (works councils)
- Trainers

Future-oriented requirements profile and understand of the role of safety experts

The range of tasks concerning safety and health at the workplace has greatly changed and a new type of work safety expert is called for.
Dynamic further development in all areas of relevance to the activities of work safety experts provides an opportunity to revise their previous role, tasks and training. In particular the technical, technological, medical, ergonomical, psychological, sociological and economic knowledge, requirements and constraints, as well as the new requirements set out in EEC legislation on workers' safety and health provide enough reasons to constantly discuss and update the demands on work safety experts.

The requirements profile for work safety experts must be based on the further expansion of the understanding of safety and health protection.
The tasks of work safety experts must be perceived as an integral component of the overall context of accident prevention and health protection. They are intimately tied in with the demands on and tasks of companies.
New dimensions are opening up for safety experts, but at the same time there are increased expectations in terms of the quality of their performance.
The task of promoting and encouraging accident prevention and health protection at all levels of the hierarchy, and to be in a position to provide management, as well as staff, with their expert knowledge requires the work safety expert to be both an all-rounder and a specialist.

This requires broad foundation and fully comprehensive overview knowledge and, at the same time, detailed knowledge of the specialist areas of work safety and health protection issues.
In addition, knowledge and understanding of the complex inter-relationships between work safety and environmental protection matters, including information about market regulatory aspects, applied economics, and sociological influences.
Work safety experts are expected, more than in the past, to professionally inform, counsel, and be supportive of employers and management.
This implies going far beyond pointing out problems and shortcomings in safety and health protection matters, and calls for the development of accident prevention concepts, proposing possible solutions, organisation, motivation etc.
The determining factor is the integration of work safety and health protection into the company concepts and strategies.
Work safety experts must actively, and on their own initiative, involve on a co-operative basis both in-house and external experts in finding solutions to problems.
The pre-requisite for achieving this is to be able to convince partners of one's own professional and social skills.
In addition to qualified, professional and methodological training, the acquisition of social skills will gain in importance in the future.

Safety and health protection management requires that work safety experts see to it that:

- Safety and health protection (S+H) be perceived as being an integral component of a company's goals
- S+H be firmly anchored in the various company sectors and levels of hierarchy
- They be included in the S+H planning and decision-making process
- S+H be on the agenda for on-going discussion amongst the staff, the work's council, managers and directors.
- Co-operative collaboration to be encouraged between work safety experts, occupational physicians, safety issues managers, managers responsible for fire protection, dangerous substances and environment protection matters, equipment failure, emissions protection, waste.

In order to achieve these objectives it is important for work safety experts to contribute positively to discussions in working parties, project groups and planning teams.
Work experts should use those occasions to glean knowledge, ideas, proposals as well as to harvest the practical experience of company workers and to put this potential to good use in safety and health circles.
By so doing the self-esteem, the physical and spiritual welfare of workers is enhanced.

An other task of the work safety expert involves the analysis of the quality of the level of S+H within the company and to present the outcome to the top managers.
With a view to preventive S+H working conditions the work safety expert should draw up and organise concrete safety programmes with priority lists of 'things to do'.
Co-operation with outside organisations such as the national work safety supervisory boards, statutory accident insurance bodies, statutory health insurance agencies and technical experts should be pursued, and their expertise used in devising company safety and health programmes.

The broad spectrum of tasks involved can only be covered by calling upon the expertise of highly skilled, well-trained work safety experts.
A comprehensive, preventive overview of work safety and health protection ought, therefore, to be the main concern of training work safety experts.

What is the current situation of training of work safety experts in Austria (A), Belgium (B), Switzerland (CH), Germany (D), Spain (E), France (F), Great Britain (GB), Italy (I), The Netherlands (NL) and Portugal (P)?
The following synopsis demonstrates the present situation.

Intention/ Aims of the synopsis

The aim and purpose of the EEC Framework Directive is to guarantee a high level of safety and health of workers at the work-place.
Earlier investigations have already demonstrated that transposition into member states' legislation has led to partially differing training approaches for work safety and health protection experts.

The synopsis, shown as tables, aims at providing a rapid means of comparison of training concepts in the different countries.

The aim of the synopsis is to:

- Enable and promote exchange of experience between countries by facilitating the pinpointing and comparison of differences and commonalities in the training of work safety experts:
- Provide assistance to those countries which do not yet dispose of a training concept
- Where appropriate, provide a basis for determining the requirements profile for work safety experts.

Note: For practical reasons, this comparative inquiry is restricted to the training of work safety experts with a technical training background

Legal basis

The EEC Framework Directive 89/391 dated 12 June 1989 provides the legal basis for the training of work safety experts in the member states of the European Union.

In accordance with Article 7 employers are obliged to designate in-house persons, or enlist external persons or services. Such persons must have the necessary capabilities or aptitudes.

Article 7,paragraph 8 states:
'Member States shall define the necessary capabilities and aptitudes'.

The EEC Framework Directive shall be transposed into Member States' statutory rules.
The synopsis indicates the corresponding Laws, Decrees, Orders in Council and Regulations for possible further study.

Overview of the questions addressed in the synopsis

- Is the EEC Framework Directive 89/391 respected in EU Member States?

- Which statutory rules transpose the Directive into national legislation?

- What other provisions detail national transposition provisions on training?

- What regulations exist for the enlistment of external work safety experts?

- Is the scope of external enlistment:
  a) legally binding
  b) risk-related
  c) dependent on the number of workers

- Do different qualifications requirements apply to work safety experts?

- What qualifications exist for admission to training as work safety experts?
  a) Educational background
  b) Industrial experience

- Is the training of work safety experts subject to a recognition procedure, and by whom?

- What are the different methods of training?
  a) Seminars
  b) Distance learning
  c) Distance learning with part-time tutorials
  d) Internet

- Duration of training?

- Is a practical (on the job) training period provided for?
  a) yes/no
  b) Duration

- Is a project study provided for?
  a) yes/no
  b) scope

- What type of success control is carried out?

- Is the practical course/ project study included in the success control process?

- Can the examination be repeated?

- Is there an examination?

- Who carries out the examination?

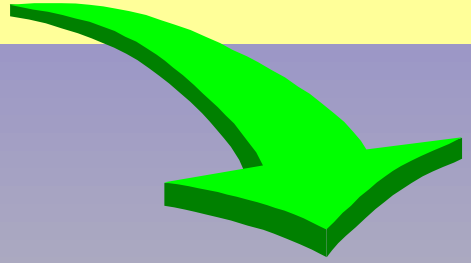
- What proof of success exists?

- Which agency approves/recognises the training body or training agency?

- How is further training handled?

Legal basis

Framework Directive 89/391/EEC



Transposition in Member States

Comparison of training of Work Safety Experts - Synopsis

Compliance with the EEC Framework Directive (89/391/EEC)

Austria (A)	*Belgium (B)*	*Switzerland (CH)*	*Germany (D)*	*Spain (E)*
Yes	Yes	Yes Takes account of EEC Directive but not statutory binding	Yes	Yes
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
No (Accordance with national provisions the occupational physician (Medical Officer) is the work safety and health protection expert	Yes	Yes	Yes	Yes

Which legislative provisions are used for transposing the Framework Directive into National Legislation?

Austria (A)	*Belgium (B)*	*Switzerland (CH)*	*Germany (D)*	*Spain (E)*
Law on the Protection of Women Workers (AschG)	Welzijnswet: Law on Workers' Health	Accident Prevention Law (UVG) Working Hours Law (ArG)	Law on Workers' Protection (ArbSchG) Social Law Code (SGB VII)	Decreto Ley 31/1995 Law on the Prevention of Risks at Work
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
Law of 31.12.91 transposing various EEC Directives, in particular the Framework Directive on Health and Safety at Work	Management of Health and Safety at Work Regulations 1999 (MHSWR)	Decree 626/94: "Transposition of EEC Directive" Decree 242: Adaptation and Integration of the Decree-Law N°626/94	Arbeitsomstandigheden-wet 1998	Decreto-Lei 441/91 Law on Safety, Hygiene and Health at Work, supplemented by Decree-Law 133/99

Which other provisions supplement transposition into national legislation?

Austria (A)	*Belgium (B)*	*Switzerland (CH)*	*Germany (D)*	*Spain (E)*
Regulation on Vocational Training of Work Safety Experts (SFK-VO)	Royal Decree on In-house and External Accident Prevention Services Provisions governing Accident Prevention and Health Protection Code: Rules for the safety of workers	Regulation on Accident Prevention (VUV) Regulation on Qualifications (for Work Safety Specialists (in force as from 01.01.1997)	Work Safety Law (ASIG) + Rule A 6 of the Professional Association 'Work Safety Experts (BGV A 6) in its version applied by the Accident Insurance Institution	Real Decreto 39/1997 (Royal Decree) Provisions on Accident Prevention Services
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
Excepting occupational physicians (Medical Officer) there no provisions governing the status, role or tasks of experts	The associated Code of practice and guidance provide more information.	Ministerial Decree on minimum requirements for the training of staff, persons responsible for safety issues and employers who are empowered to exercise the role of safety expert. Ministerial Decree N°58	Besluit Arbeidsomstandigheden 1997 Afdeling 3Arbodiensten	Decreto-Lei 26/94 Lei 7/95 and Decreto-Lei 109/2000 Rules governing safety, hygiene and health at work.

What provisions exist for the enlistment (consultation) of work safety experts?

Austria (A)	***Belgium (B)***	***Switzerland (CH)***	***Germany (D)***	***Spain (E)***
AschG + SFK - VO Law on Safety at Work + Safety Experts Regulation	Royal Decrees dated 27 March 1998 on internal and external Accident Prevention Services. If in-house prevention services are not qualified, or the staff is not available, qualified external work safety and health services must be enlisted.	Directive on Obligation to consult external services ASA: 1/1/96	AsiG and BGV A6 Enlistment must be accompanied by recruitment letter	Ley 31/1995 and Decreto Real 39/1997
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
Company obliged to recruit (enlist the services of) occupational doctor. It may also enlist the services of a technical expert in work safety and hygiene	Governed by MHSWR	626/94 Art 4a: Obligation to appoint persons responsible for work safety and health. Obligation to appoint a person responsible for safety. Number of persons is not stipulated by law but is risk and activity dependent.	Arbeidsomstandigheden-regeling. Deskundigheidseisen Arbodiensten: Registration by Accreditation (Certifying) body	Decreto-Lei 441/91 and Decreto-Lei 133/99 and Decreto-Lei 26/94, Lei 7/95 and Decreto-Lei 109/2000

Enlistment of safety experts

legally binding in:

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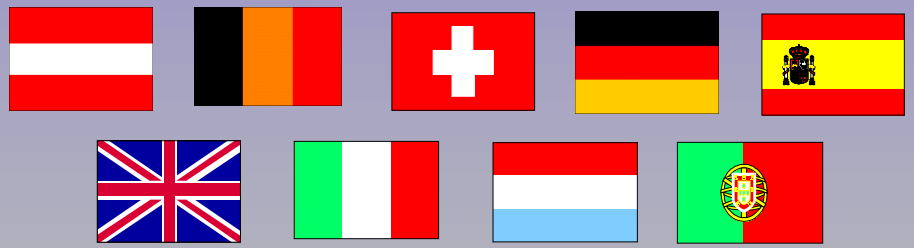


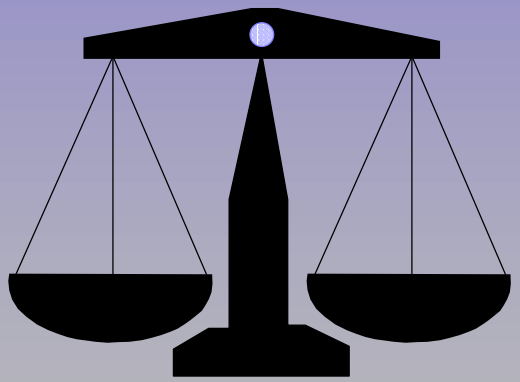
only for occupational physicians

Is the scope of enlistment of external services
a) legally binding

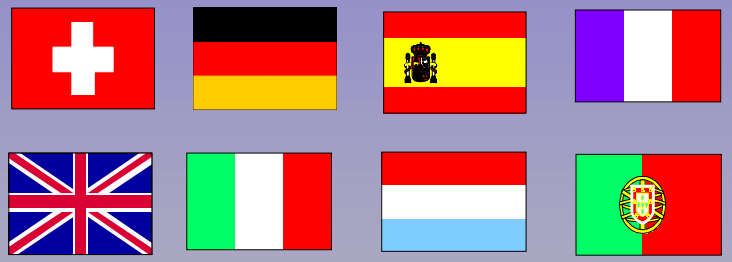
Austria (A)	***Belgium (B)***	***Switzerland (CH)***	***Germany (D)***	***Spain (E)***
Yes, stipulated in AschG Law on Safety at Work	Yes; Royal Decree 27 March 1998	Yes, ASA Enlistment Directive 1//1996 with transition period for complete implementation by 1/1/2000	Yes; BGV A6	Yes, Real Decreto 39/1997
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
Tasks of occupational doctor set out in legally binding provisions. The doctor must spend 1/3 of his period of enlistment on the company premises. The tasks of technical experts for safety and health are determined by the company.	Yes, by MHSWR	No. Determined by employer	Yes. Time to be spent determined by the list of tasks in legal provisions. Each company (organisation) must have a contractual relationship with the safety and health services.	Yes: determined by Decreto-Lei 109/2000

Scope of enlistment

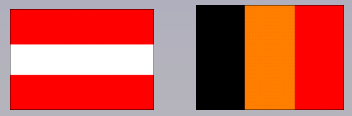
risk-dependent



yes



no

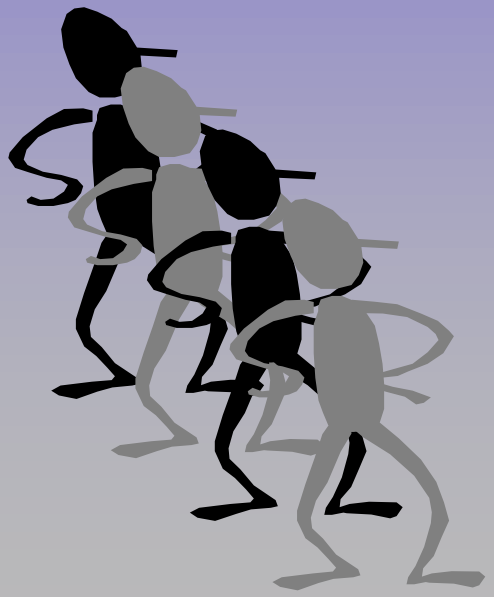


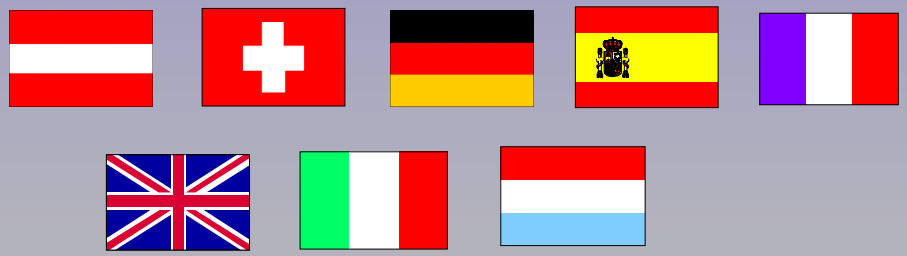
Is the scope of enlistment of external services
b) risk-dependent?

Austria (A)	*Belgium (B)*	*Switzerland (CH)*	*Germany (D)*	*Spain (E)*
No	No (decision is the responsibility of the employer)	Yes Depends on degree of risk in company	Trade and company specific dangers	Depends on company-specific dangers
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
Occupational doctor: yes Work safety experts: no	Yes	Yes	Yes	Depends on company-specific dangers

Scope of enlistment

dependent on number of employees





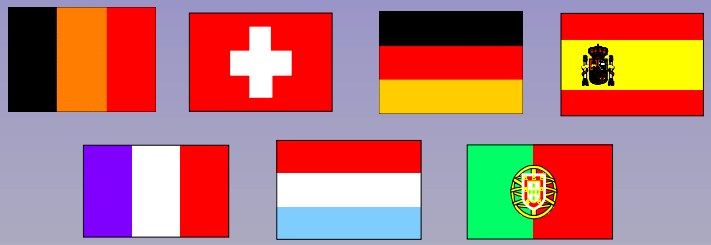
Is the scope of enlistment of external services
c) Dependent on number of workers

Austria (A) Yes	***Belgium (B)*** No (Decision the responsibility of employer	***Switzerland (CH)*** Yes	***Germany (D)*** Yes	***Spain (E)*** Yes
France (F) Occupational doctor: yes Work safety expert: no	***Great Britain (GB)*** Yes	***Italy (I)*** Yes	***Netherlands (NL)*** Yes	***Portugal (P)*** Occupational doctor : yes Technical safety experts no :

Types of safety experts

in line with entry qualifications:

engineers,
technicians,
master craftsmen,
others



no differentiation

Are there different qualifications standards for work safety experts?

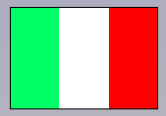
Austria (A)	*Belgium (B)*	*Switzerland (CH)*	*Germany (D)*	*Spain (E)*
No legal differentiation between: a) Engineers b) Technicians c) Master craftsmen d) Others	Yes	a) Safety engineers b) Safety specialists - Technicians - Master craftsmen - Special rules for others	a) Engineers b) Technicians c) Master craftsmen d) Others (special rules under BGV A6	a) Higher level: head technician for hygiene and safety with special qualifications b) Middle level: technicians for hygiene and safety with special qualifications Basic level: hygiene and safety technicians without special qualifications
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
- Hygiene and safety engineers - Hygiene and safety technicians - Safety manager - Specialists for industrial hygiene - Ergonomics engineers for special work situations	Some health and safety experts have a very high level of qualifications (e.g. post-graduate qualification) whereas other have none. Law requires employer to appoint "competent persons".	Person responsible for health and safety should have commensurate capabilities	a) Safety engineers b) Technicians (since 1994 by legislation) subsequently registered by certification body	a) Head technician for hygiene and safety b) Other technicians

Admission conditions - Educational level

Engineers ⇨ **Technical Uni., technical college, specialist vocational college**

Technicians ⇨ **e.g. polytechnic, secondary school-leaving exam**

Master craftsmen ⇨ **mastercraftsman certificate**



⇨ **Technical expertise**

⇨ **No requirements**

What are the admission conditions for training of work safety experts? a) Prior education

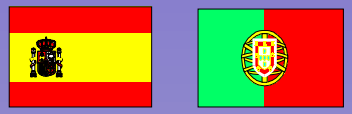
Austria (A)	*Belgium (B)*	*Switzerland (CH)*	*Germany (D)*	*Spain (E)*
a) University/Vocational College b) Higher Technical College c) Master craftsman certificate d) Others	a) training for Level 1 safety experts (secondary / vocational college required in companies employing more than 200 persons b) Higher training for Level II safety experts (Technical College / equivalent educational level) necessary for in companies employing 50 to 199 workers	a) University (Technical/Vocational/Higher technical College b) Technician diploma, relevant vocational certificate	a) University/Technical College/Vocational College b) Technicians Certificate c) Master craftsman's certificate d) Persons working in the company with in-house technician's or master's status	a) Higher level: university/ polytechnic b) Middle level: trained technician, special rules
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
a) Basic training as doctor (university, College) b) No pre-requirements for other training courses	No compulsory qualifications. MHSWR considers persons to be competent if they possess sufficient training, experience and other qualities allowing them to assist the employer comply with relevant statutory requirements. In more complex situations, a National/Scottish Vocational Qualification in health and safety practice to level 3 or level 4, or qualifications like the "National Examination Board in Occupational Safety and Health" Diploma might be appropriate.	626/94 Art. 2e,8,4,10,2 Specialist technical knowledge	a) University b) Higher vocational training Technical or scientific specialty	a) University/polytechnic b) EU Level 3 (middle level

Admission conditions - Practical experience

Engineers

→ 2 years

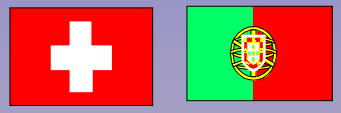
→ 3 years



Technicians
Master craftsmen

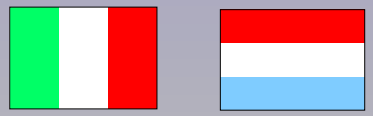
→ 2 years

→ 3 years



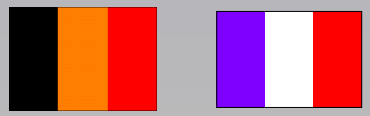
+ vocational training

→ 5 years



→ Duration ?

→ Several years experience



→ No practical experience required

What are the admission conditions for training of work safety experts?
b) Practical experience

Austria (A)	*Belgium (B)*	*Switzerland (CH)*	*Germany (D)*	*Spain (E)*
a) b) c) 2 years d) 4 years + admission examination	Not required	a) 2 years b) 3 years	a) 2 years, for engineers taking specialist subject work safety 1 year b) + c) 2 years c) 4 – 5 years	a) 3 years b) 2 years
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
For basic training, no practical experience required; For advanced training, several years	For qualified specialists an institution such as the Institution for Occupational Safety and Health or the Employment National Training Organisation set down what is required.	626/94 Art. 2e, 8, 4 practical experience in specialists field	Yes, practical experience at least	a) University 3 years Polytechnic colleges 5 years b 5 years or 3 years vocational training

Recognition of training courses

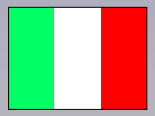
State

Workmen compensation board

Certification authority

planned

Not required

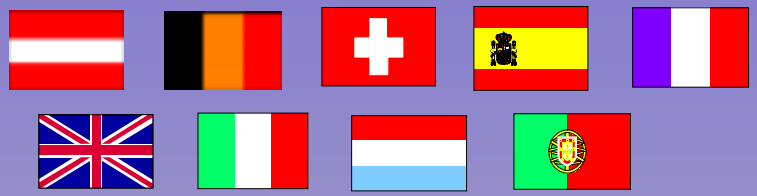


Is there an official recognition process for the training of safety experts and by whom?

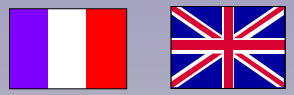
Austria (A)	*Belgium (B)*	*Switzerland (CH)*	*Germany (D)*	*Spain (E)*
Government-recognised training courses	Yes (government)	Government-recognised training courses (de-regulated market for qualified course suppliers, Institutions), approval by BSV – Federal Social Security Office	Government or professional association recognition of approved training courses	Government-recognised training courses
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
For basic university education of: - engineers - technicians for hygiene and safety in accordance with national curricula. For non-university based training and further education courses, the law of the market.	Courses set by the "National Examination Board in Occupational Safety and Health", Universities and Employment National Training Organisation allow safety practitioners to apply for membership of safety institutions, e.g. the Institution of Occupational Safety and Health. In more complex and highly technical situations qualified personnel will be required, often with membership of a relevant professional institution.	Not required.	Approved by SKO (Certification body)	Not yet open to certification.

Types of training courses

Seminars



Distance teaching (including tutorials on a part-time basis)

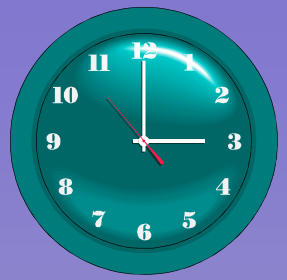


Combination of seminars and distance teaching

What types of training exist?
a) Seminars
b) Distance teaching
c) Distance teaching with part-time attendance (tutorials)
d) Internet

Austria (A)	***Belgium(B)***	***Switzerland (CH)***	***Germany(D)***	***Spain (E)***
a) yes b) no c) no d) no	a) yes b) no c) no d) no	a) yes b) no c) no, only tenderings on the Internet	Combination of a+b Teach Yourself with cbt (computer-based training)	a) yes b),c),d), no information
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
a) yes b) yes c) yes d) under preparation	a) – d) all possible. Provided by training institutions and not by HSE	a) yes b) no c) no d) yes	Engineer level a) yes b) no c) no d) no	a) yes b) no c) no d) no, only offerings on the Internet

Duration of training



40 days + exams

Level I ⇨ approx. 50 days - Level II ⇨ approx. 26 days

Safety engineers ⇨ 30 days + 5 days practical work and exam
Safety specialists ⇨ 20 days + 2 days exam

25 days + self teaching phases

Training level: high level ⇨ 12.5 days + 19 days
intermediate level ⇨ approx. 38 days

Safety engineers ⇨ approx. 70 days
Safety technicians ⇨ approx. 150 days

Safety engineers ⇨ approx. 31 days
Safety technicians ⇨ approx. 12,5 days

No set duration

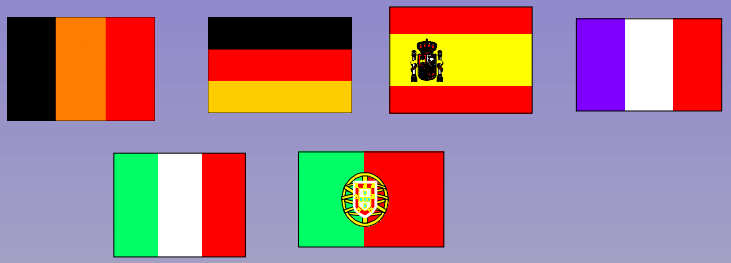
Varying, not regulated

How long does training last?

Austria (A)	***Belgium (B)***	***Switzerland CH)***	***Germany (D)***	***Spain (E)***
40 days + success control (at least 288 teaching units)	Level I: 400 hours Level II: 210 hours	a) Safety engineers: 30 days + 5 days practical work and examination	25 days + teach yourself periods	a) Higher level: Specialisation in safety, hygiene and ergonomics – 100 hours (12.5 days) + practical work (19 days) b) Middle level: 300 hours
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
Basic (foundation) training - for engineers: 5 years after A-levels -f or technicians: 2 years after A-levels Further education: - variable from one to several weeks	No pre-determined fixed time to achieve specialist training or qualification. Duration of training and continuing professional development requirements differ from one institution to another.	Open to choice; no rules	Safety engineers: 250 hours + project work Safety technicians 100 hours + project work	a) Safety –560 hours (70 days) training + practical work) b) 1200 hours (150 days)

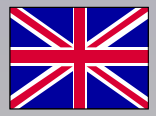
Practical training period

planned



not planned

depends on training institution

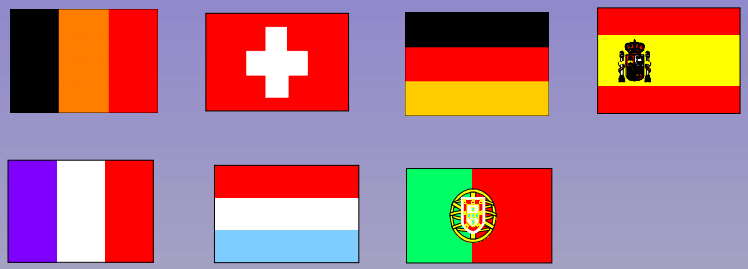


Is a practical course study provided for?
a) Yes/no
b) Duration

Austria (A)	***Belgium (B)***	***Switzerland (CH)***	***Germany (D)***	***Spain (E)***
a) no	a) yes	a) no	a) yes	a) yes
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
a) yes b) variable, depends on curriculum	Depends on requirements of the institution.. The National/Scottish Vocational Qualifications are practical and work-based.	a) yes, depends on training course b) not stipulated	a) no	a) yes

Project work

planned



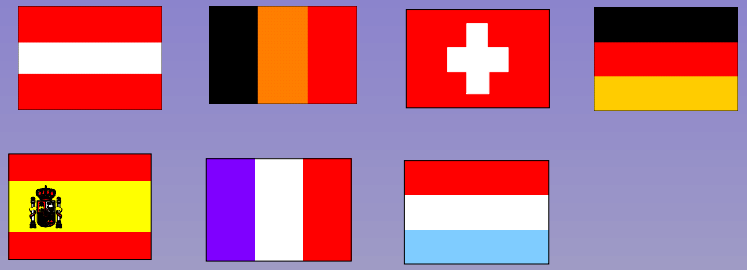
depends on training institution

Is a project provided for?
a) yes/no
b) scope

Austria (A) a) yes b) not stipulated	***Belgium(B)*** a) yes	***Switzerland(CH)*** a) yes b) at least 5 days with proof of practical work studies	***Germany(D)*** a) yes 3 case studies in Level II	***Spain (E)*** a) yes b) not stipulated
France (F) a) yes b) variable	***Great Britain (GB)*** Depends on the requirements of the institution. For the NEBOSH diploma, projects are required.	***Italy (I)*** a) yes, depends on training course, no rules	***Netherlands (NL)*** Engineer level a) yes b) 300 hours + final exam Technician level: a) yes b) 100 hours + final examination	***Portugal (P)*** a) yes b) not determined

Exams

yes



not required

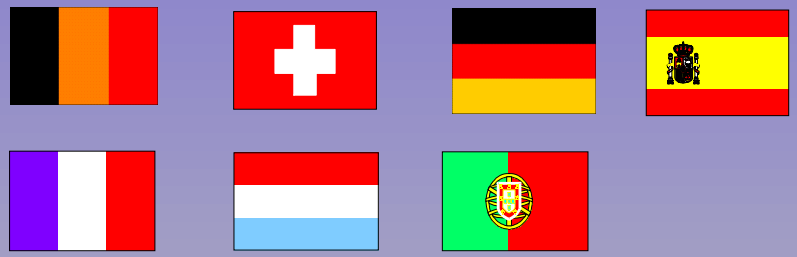
to be decided

What type of examination?

Austria (A) Written and oral examination	***Belgium (B)*** Written and oral examination. Practical study report	***Switzerland (CH)*** For a) and b): Examination and for a) submission of at least a 5 - day practical study report	***Germany (D)*** Written examination and practical study report	***Spain (E)*** Written examination
France (F) University finals for required qualification Success control not systematically provided for in further education	***Great Britain (GB)*** Depends on requirements of the institution.	***Italy (I)*** None	***Netherlands (NL)*** Written examination and practical study report, plus end of studies examination which includes end of studies report	***Portugal (P)*** Not yet defined

Practical training period part of exams ?

yes

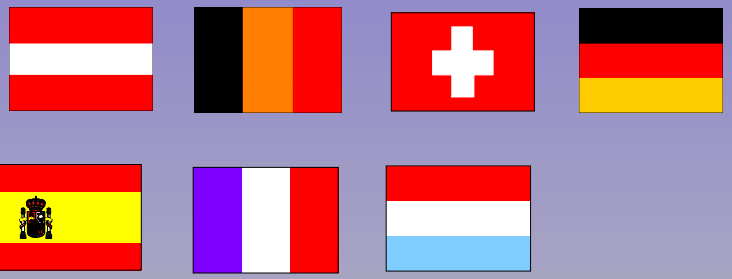


depends on institution

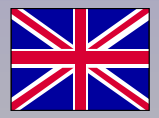
Is the practical study period/ project study included in the examination/qualification?

Austria (A)	***Belgium (B)***	***Switzerland (CH)***	***Germany (D)***	***Spain (E)***
Project study may be part of the success control	Yes	Yes	Practical study: yes Project study may be part of the success control	Yes
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
Yes	Depends on requirements of the institution.	No information	Yes	Yes

Exams:
Re-take possible



depends on institution



still to be decided

Can the examination be re-taken ?

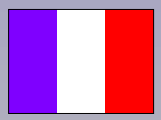
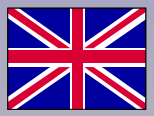
Austria (A)	***Belgium (B)***	***Switzerland (CH)***	***Germany (D)***	***Spain (E)***
Yes	Yes	Yes (once)	Yes	Yes
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
Yes	Depends on requirements of the institution.	No information	Yes	Not yet defined

Standardised exams

yes




no

Is there a standard examination procedure?

Austria (A)	*Belgium (B)*	*Switzerland (CH)*	*Germany (D)*	*Spain (E)*
No	Yes	Yes	Yes, in accordance with uniform Federal criteria	Yes
France (F)	***Great Britain (GB)***	***Italy (I)***	***Netherlands (NL)***	***Portugal (P)***
no	Varies from institution to institution.	No information	Engineers: no Technicians: varies	No

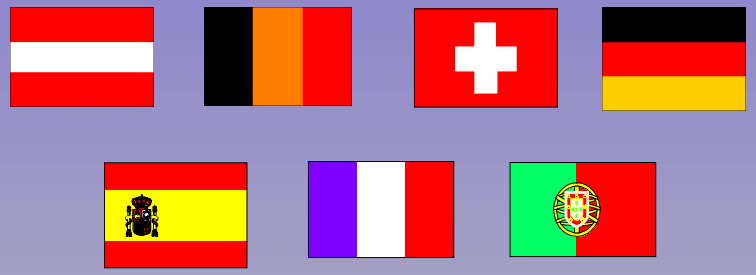
Who is responsible for the examination?

Austria (A) Training establishment; authorities may participate	***Belgium (B)*** Scientific Examination Board for the contents of theoretical training curricula; joint (theoretical and practical) Examination Board for Practical Studies	***Switzerland (CH)*** Training establishment: external, independent examiners participate	***Germany (D)*** Training establishment	***Spain (E)*** Training establishment: Centro formativo autorizdo por la autoridad laboral
France (F) University for preliminary qualifications Training establishment (for further education if there is an examination)	***Great Britain (GB)*** State or private sector training establishments	***Italy (I)*** No information	***Netherlands (NL)*** Training establishment	***Portugal (P)*** Training establishment (planned)

Proof of successful completion of studies?

Austria (A) Certificate	***Belgium (B)*** Certificate awarded by certified training establishment	***Switzerland (CH)*** State-recognised final diploma awarded by training establishment (may also be certified by an accredited certifying body in accordance with EN 45013	***Germany (D)*** Final certificate + certificates for corresponding training modules	***Spain (E)*** Final diploma
France (F) Final certificate for pre-training Certification of attendance for further education	***Great Britain (GB)*** Certificates/diplomas may be awarded by previously mentioned institutions.	***Italy (I)*** As a rule: certificates	***Netherlands (NL)*** Final diploma, certification by certification bodies	***Portugal (P)*** Final diplomas

State recognition of training establishment:



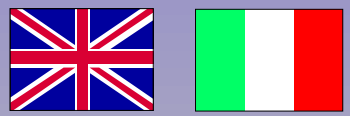
Who accredits the training establishment?

Austria (A) The State	***Belgium (B)*** Competent Commission in the Ministry for Employment	***Switzerland (CH)*** The State through the Federal Office for Social Security	***German y(D)*** The State/ Federal Länder or Professional Associations	***Spain (E)*** The State/ Authorities of the Autonomous Regions
France (F) The State for preliminary qualifications No accreditation required for further education	***Great Britain (GB)*** The Employment National Training Organisation is part of a network of training organisations approved by the Department for Education and Employ-ment. The Qualifications and Curriculum Authority and the Scottish Qualifications Agency may approve qualifications (eg National Vocational Qualifications or other awards).	***Italy (I)*** No information	***Netherlands (NL)*** SKO Certifying body	***Portugal (P)*** The State

Further training

required

recommended



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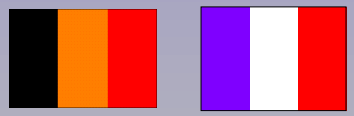

not stipulated

How is further training governed?

Austria (A) Governed by the rules in the Work Safety Law. The employer has to take the requisite measures.	***Belgium (B)*** Specialisation is always possible	***Switzerland (CH)*** Governed by provisions in the Qualifications Regulation. There is, however, no minimum duration (for non legally required re-certification every 4 years, at least 2 days further training per year is required)	***Germany (D)*** Stipulated in BGV A6 + SGB VII § 23. To be allowed by the employer in so far as the further training course corresponds to company requirements: e.g. specialist seminars	***Spain (E)*** Covered by Real Decreto 39/1997
France (F) Numerous further education courses on offer from universities, INRS (Institut national de recherche et de sécurité) CRAM (Caisse régionale d'assurance maladie) or private training bodies	***Great Britain (GB)*** MHSWR requires refresher training. Many professional associations require health and safety experts to up-date their knowledge at regular intervals. This is known as continual professional development.	***Italy (I)*** Recommended	***Netherlands (NL)*** Required for renewal of certification, where appropriate. Updating of qualifications. (Attendance at courses, publications allows points to be won for re-qualification)	***Portugal (P)*** Not yet determined.

Theme priorities in training curricula

The following list of the minimum training curriculum has been drawn up, reflectingthe responses to the questionnaire

- Legal basis
- Assessment of hazards and risks
- Risk assessment/risk evaluation
- Analysis of the causes of accidents and occupational diseases
- Organisation of accident occupational disease investigations
- Consequences of work and negligence-induced accidents, occupational diseases
- Economic aspects of accident prevention (cost-benefit analysis)
- Organisation of work safety……..(Fire protection, First aid, etc.
- Methodologies for in-house worker protection
- Prevention measures (Methods, Organisation/People)
- Factory accident statistics
- Industrial psychological and social basis
- Learning processes and communication
- Ergonomics
- Dangerous/harmful substances

Comité AISS Education et formation
INRS
30 rue Olivier Noyer
F-75680 Paris Cedex 14 (France)
Tél : +33 (0) 1 40 44 30 00
Fax : +33 (0) 1 40 44 30 99

http://www.education.prevention.issa.int

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