## ILO CONSTRUCTION OS&H

## A free, comprehensive, international, digital training package in occupational safety and health for the construction industry

## AN OVERVIEW

Construction remains one of the industries with very high rates of accidents and ill-health, and many of the 'accidents' are not accidents at all, but occupational safety and health 'incidents', because they could have been avoided by good practices, procedures and equipment, together with appropriate knowledge and responsible attitudes. This is a problem at least partially related to lack of proper training. A worldwide analysis by the ILO in 2007 concluded that there was a shortage of comprehensive, internationally relevant training materials freely available in the public domain.

The overall aim of **Construction OS&H** is to provide an international Occupational Safety & Health (OS&H) training package, designed for all those who are involved in construction projects, and made freely available in the public domain by the ILO. It is designed specifically for the four main groups of participants in the industry (the 'industry groups') - clients, design and project management teams, construction companies ('contractors') and workers - but it will also be useful to other groups, such as government inspectors and company OS&H officers.

Construction OS&H provides trainers with a substantial digital resource, rather than set of four linear programmes. It is structured so that competent trainers can adapt the contents for the four sets of industry groups and perhaps other trainees within the construction industry, to offer a range of training events, ranging from half-day seminars to one-week or possibly two-week courses. The content of Construction OS&H may also be used in more formal education programmes, such as Bachelor's and Master's degrees in construction and more general built environment subjects.

**Construction OS&H** is made up of seven main components:

**Tutors' Guide**. This is the core of **Construction OS&H** because it explains the content of the package and how to use it.

**Knowledge Base**. This provides the sources of all the content of the package in a digital form. The **Knowledge Base** also includes **Downloads** of some of the main sources of information.

**Theme Summaries.** Construction OS&H is based of 15 Theme Summaries, in digital form, which provide the whole educational content of the programme.

**Theme PowerPoint Presentations (PPPs).** A PPP has been compiled from each Theme Summary, which provides the main means by which the information in the Themes will be presented.

**Model Courses.** Construction OS&H is a very flexible training resource and the content can be used in many ways, but in order to give Tutors some guidance on the use of the package, four Model Courses are provided, one each for clients, design & project management teams, construction companies ('contractors') and workers.

**Participants' Handbooks.** The content of Model Course has been summarised in a printed Participants' Handbook that can be given to the participants at the end of the course so that they may use it as a reference to use in practice what they have learned. The exception is the Workers' Model course, where it has been recommend that the 'Handbook' should comprise print-outs of the PowerPoint presentations, which, for the reasons given in the Model Course documentation, will be a more suitable reminder for the course participants.

Web site. All the above is available on a distinct ILO web site, for free downloading.

So, Construction OS&H offers a very flexible and comprehensive educational resource for tutors who wish to offer training programmes and events that will improve the occupational safety and health of all those involved in this major and socially important industry.

This structure should enable **Construction OS&H** to become a progressive and continually developing educational resource, making full use of contemporary digital media to become:

"A digital OS&H construction human resource development programme for the 21st century"

The ILO has made careful efforts to ensure that the contents of the package are applicable in most countries of the world, but feedback from the international OS&H training community that will enhance its global applicability will be very welcome.

## More details of the structure and content

|  | TUTORS' GUIDE   |  |  |
|--|---|--|--|
| Provides the tutor with comprehensive information and visual materials |   |  |  |
|  | from which a wide variety of training events can be produced                          |  |  |
| This is a 'comprehensive training resource for the digital age'        |   |  |  |
| Introduction   | Explains the aims, objectives, structure and content of the package and gives         |  |  |
|  | guidance on how to use it. 34 pages of text and graphics.                             |  |  |
| Theme  | The whole subject has been summarised in 15 Themes, typically 30 pages each,          |  |  |
| summaries  | totalling 424 pages. These provide the Tutor with an extensively illustrated,         |  |  |
|  | comprehensive body of information, from which training course materials can be        |  |  |
|  | selected and edited. Theme Summaries are numbered 1-15.                               |  |  |
| Theme  | A PowerPoint presentation has been derived directly from each Theme Summary,          |  |  |
| PowerPoint   | typically 50 slides each, totalling 802 slides. These can be selected and edited for  |  |  |
| presentations  | specific training events to match the selection from the Theme Summaries.             |  |  |
|  | PowerPoint presentations are the main medium for communicating the training           |  |  |
|  | content, so these presentations also include exercises and instructions to the course |  |  |
|  | participants. The PowerPoint Presentations are numbered 1-15, corresponding to        |  |  |
|  | the Theme Summaries.  |  |  |
| Knowledge Base   | A source of important and relevant sources of reference material, the Knowledge       |  |  |
|  | Base comprises 62 standardised descriptions and referencing data of texts, reports,   |  |  |
|  | papers, photo libraries, PowerPoint presentations and videos. The Knowledge           |  |  |
|  | Base acknowledges the source of the information used in the package, enables the      |  |  |
|  | Tutors to extend their own knowledge and understanding and also to access             |  |  |
|  | further useful training materials. Some of the key ILO and BWI sources have           |  |  |
|  | been downloaded.  |  |  |
| Additional   | Includes some suggested printed handouts, two "Toolbox Briefings" and other           |  |  |
| documents  | useful advice.  |  |  |

The following four Model Courses are examples of how the contents of the Tutors' Guide can be selected and edited to prepare courses for different groups within the construction industry.

| Model course for Construction Clients   |  |  |
|---|--|--|
| A five-day course, each day has four two-hour sessions plus some evening work.          |  |  |
| Has a modular structure so it could also be delivered one day a week or in the evening. |  |  |
| Introduction  | Explains the course in a five-page document.                                       |  |
| Course Handbook   | Summarises the whole course in a 221-page book, structured as summaries of the     |  |
|   | course Modules A-J. Designed for course participants to take away to assist in     |  |
|   | implementing what they have learned. The content has been selected from the        |  |
|   | Theme Summaries to suit the Clients, with emphasis on fundamental principles,      |  |
|   | contract, good management, workers' perspectives, safety through design, project   |  |
|   | site and some technical content. Can also be used as individual module handouts.   |  |
| PowerPoint  | Selected from the Theme PowerPoint presentations to match the Module               |  |
| presentations   | Summaries, designated A-J. Includes assignments and instructions to course         |  |
|   | participants.  |  |
| Additional  | Includes the Introduction, a quiz, some detailed contract documents and evaluation |  |
| documents   | forms.   |  |

| Model Course for Design & Project Management Teams                                      |  |  |
|---|--|--|
| A five-day course, each day has four two-hour sessions plus some evening work.          |  |  |
| Has a modular structure so it could also be delivered one day a week or in the evening. |  |  |
| Introduction  | Explains the course in a five-page document.                                       |  |
| Course Handbook   | Summarises the whole course in a 321-page book, structured as summaries of the     |  |
|   | course Modules A-N. Designed for course participants to take away to assist in     |  |
|   | implementing what they have learned. The content has been selected and edited      |  |
|   | from the Theme Summaries to suit the participants, with emphasis on fundamental    |  |
|   | principles, contract, good management, workers' perspectives, safety through       |  |
|   | design, project site and substantial technical content. Can also be used as        |  |
|   | individual module handouts.  |  |
| PowerPoint  | Selected and edited from the Theme PowerPoint presentations to match the           |  |
| presentations   | Module summaries, designated A-N. Includes assignments and instructions to         |  |
|   | course participants.   |  |
| Additional  | Includes the Introduction, a quiz, some detailed contract documents and evaluation |  |
| documents   | forms.   |  |

|  | <b>Model Course for Construction Companies ('Contractors')</b>                  |  |  |
|--|---|--|--|
| A series of half-day four-hour sessions, scheduled once a week, for 17 weeks. This is a major and      |   |  |  |
| extensive course. All substantial construction companies ['contractors'] need all of this, but not all |   |  |  |
| their staff need all of it, so it has been arranged in four sets of modules – fundamental, management, |   |  |  |
| technical and integration – so that different staff may participate in relevant parts of it.           |   |  |  |
| Introduction   | Explains the course in a five-page document.                                    |  |  |
| Course Handbook  | Summarises the whole course in a 387-page book, structured as summaries of the  |  |  |
|  | course Modules A-P. Designed for course participants to take away to assist in  |  |  |
|  | implementing what they have learned. The content has been selected and edited   |  |  |
|  | from the Theme Summaries to suit the participants, with emphasis on fundamental |  |  |
|  | principles, contract, good management, workers' perspectives and trade union    |  |  |
|  | involvement, some safety through design, project site, welfare and a very       |  |  |
|  | substantial technical content. Can also be used as individual module handouts.  |  |  |
| PowerPoint   | Selected and edited from the Theme PowerPoint presentations to match the        |  |  |
| presentations  | Module summaries. Includes assignments and instructions to course participants. |  |  |
| Additional   | Includes the Introduction, a quiz, some detailed contract documents, 'Toolbox   |  |  |
| documents  | briefings' and evaluation forms.  |  |  |

|   | Model Course for Construction Workers  |  |  |
|---|--|--|--|
| A programme of 15 modules, each designed for a two to three hour session, timed to suit the workers |  |  |  |
| This is mainly a visual programme, with printed material kept to a minimum                          |  |  |  |
| Introduction  | This is in the form of a Tutors' Guide as a four-page document, with introductory          |  |  |
|   | material in an introductory PowerPoint presentation. Participation is emphasised.          |  |  |
| Course Handbook   | The whole of 'Edition 2' of <b>Construction OS&amp;H</b> is in the English language, so it |  |  |
|   | designed for those who will conduct the training - professional tutors, TU                 |  |  |
|   | representatives, etc. It is hoped that the tutors can use this material to conduct         |  |  |
|   | courses in the trainees' natural languages (if they do not use English of course).         |  |  |
|   | While there is no specific Course Handbook for this industry group, the tutors             |  |  |
|   | should give workers something meaningful, useful and attractive to take away,              |  |  |
|   | possibly based on the PPPs.  |  |  |
| PowerPoint  | Selected to suit the participants (but there is an obvious issue about the English         |  |  |
| presentations   | language) from the Theme PowerPoint presentations to match the Modules,                    |  |  |
|   | designated A-O. These presentations are in fact the actual course content, because         |  |  |
|   | there will be very few handouts. There has been a large input from BWI.                    |  |  |
|   | Emphasis on principles, duties, detailed technical practices and equipment,                |  |  |
|   | welfare, personal safety, trades union perspectives and procedures. Includes               |  |  |
|   | assignments and instructions to course participants. The concluding presentation           |  |  |
|   | contains all the images from the ILO's pictorial 'wordless cartoon book'.                  |  |  |
| Additional  | Includes the Introduction, a quiz, 'Toolbox briefings' and evaluation forms, but all       |  |  |
| documents   | to be issued by the Tutor and not directly by the course participants.                     |  |  |