



Health and safety on construction sites – what future?

by Denis H. Camilleri

THE CONSTRUCTION sector accounts for 10% of the EU's gross domestic product. Of the over one million building firms in Europe more than 90% are small and medium-sized enterprises (SMEs). Ninety-five per cent employ fewer than 20 persons; 75% employ fewer than 10 persons, only 0.5% employ more than 100 persons, with one job in eight in the EU being in the construction sector. The sector has a multiplier effect of 1.5 to 2 on employment in the other sectors of the economy.

In Malta 95% of construction firms employ five employees or less, with only 0.065% of construction firms employing more than 50 employees. The contribution to the gross domestic product amounts to 3.15% (G. Baldacchino).

In the UK, the Health and Safety Executive (HSE) considers that construction workers are six times more likely to be killed at work than other workers. Roughly a third of all work fatalities happen in construction and the fatal injury rate of six per 100,000 workers (2000/01) is six times the all industry average. In the past ten years in the UK 900 construction workers and over 50 members of the public were killed as a result of construction work.

In the EU over 750,000 construction accidents and 1,400 fatalities occur annually. In Malta in 1998 there were 5,440 persons employed in this sector with 1,064 accidents occurring, giving an accident rate of 196/1,000 (COS). During the period 1988-1994, the construction sector had a fatal accident rate of 49/100,000 (Gauci & Vella).

This fatal accident rate is eight times higher than that quoted for the UK as above. Of the 6,901 employees in the construction sector in 1999, 1,400 accidents were reported (20/100 employees as compared to manufacturing at 8/100 – G. Baldacchino).

Again in the UK, the HSE notes that about a half of those killed at work are self-employed or work for a contractor employing 15 people or fewer but about a third of fatalities happen on sites with more than 15 workers. The employment of foreigners and marginalised persons is high in the construction sector. In Malta of the 6,901 construction employees 2,376 are working owners.

The construction industry is further characterised by low margins of profit/productivity at 1.5-3.5% of turnover, due to the practice of acceptance of the lowest tenders. This leaves little for expenditure on health and safety measures,

with accidents in the EU having been costed at around 3% of turnover.

This means the construction sector is at the highest risk with regard to safety compared to other sectors. There is much concern in Malta due to its great dependence on small construction firms on the health and safety measures being adopted in the construction sites.

EU directive 92/57 issued on June 24, 1992, regarding temporary or mobile construction sites deals with the minimum safety and health requirements. A health and safety plan must be drawn up before work starts at the site, when the site is expected to remain open for longer than 30 working days and it employs more than 20 workers at the same time, or if it will involve work in excess of 500 man hours.

On the other hand most small projects which involve fewer than five employees and are under 30 days in duration are exempt from this legislation.

EU directive 92/58 issued on the same day deals with safety and health signs at work. Its aim is to reduce the risks arising from linguistic and cultural differences resulting from the free movement of workers. This directive was introduced locally by Legal Notice 65 of 2000, coming into force on July 1, 2000.

EU directive 90/269 of May 29, 1990, on manual handling of loads deals with the minimum health and safety requirements for the manual handling of loads where there is a particular risk of back injury to workers. This is of particular interest to Malta, as 82% of masons complained of musculoskeletal disorders, followed by tile-layers (74%), plasterers (68%), and labourers (62%) (Gauci & Vella).

This directive would have an effect on the size of the local building stone, as its weight has to go down. This downsizing of our local *franka* building block could affect building prices negatively.

EU directive 89/656 of November 30, 1989, deals with the use of personal protective equipment. This equipment is intended for the protection of the head, hearing, the eyes and face, respiratory system, hands and arms, feet and legs together with skin.

The employer must provide the personal protective equipment and pay any expense and ensure that it is in good working and hygienic condition.

These directives do not apply if

work is carried out in a residence or to very minor works in occupied offices, shops or restaurants. Locally, the building safety regulations of 1968 are still in force. The code of practice for the building and construction industry in Malta was published in 1997, with more however needing to be undertaken.

The above EU directives encourage the setting up of minimum health and safety requirements applicable in all EU states. However nothing prevents these states from increasing these standards.

A pertinent point for Malta lies in regularising the small construction companies with fewer than five employees. The informal construction economy should not act as a brake on achieving the health and safety vision set out above and it is in this sector that concern abounds.

Local authorities involved in construction industry

The Malta Environment and Planning Authority (MEPA), the Occupational Health and Safety

A study in the EU has shown that the main types of accidents in construction sites are as follows:

Fall from heights and fall on same level	38%
Transport operations	19%
Cave-ins	14%
Falling objects	10%
Electricity	8%
Asphyxiation/drowning	4%
Fire/explosion	3%
Others	4%

Legislation on Health & Safety in the Construction Industry
(J. Zammit McKeon)

Authority (OHSA) and the Building Industry Consultative Council (BICC) are all involved in an aspect of the construction industry. The Malta Maritime Authority, on the other hand, is limited to marine works.

All these are authorities having regulatory powers except for the BICC, which is of a consultative nature. The MEPA on the other hand is based on planning matters issuing policies to safeguard, among others, the heritage environment and improve the Maltese quality of life. OHSA is then legislating on health and safety matters, but how is it on enforcement?

The BICC has to date organised various courses related to health

and safety matters, with its education and research unit publishing a booklet on health and safety guidelines, very pertinent to the Maltese construction industry.

Topics include sections on deep excavations, skills and techniques of demolition sites, demolition of old buildings and risk assessment of the workplace.

Who is responsible

Now consider this hypothetical scenario. MEPA has ordered a stop notice on a deep corner excavation site bounding an arterial road. This deep basement was necessary due to planning policies imposed by MEPA for the granting of this

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Regulatory vacuum

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development. It is not unknown that deep excavation sites had previously collapsed under the passage of traffic.

MEPA's committal is on planning grounds, so which authority is responsible for the stability of this open site pending the withdrawal of the stop notice? A building regulation unit has been in existence since 1995, but to date has not as yet been given any regulatory powers.

In this present vacuum should not the various authorities and the consultative body co-ordinate among themselves to ascertain that the required guidelines are being adhered to, in the general safety interest of workers and the public?

Due to the high construction risks involved which are greater than in all other industries, together with taking note of more elaborate challenging construction jobs for the future, it appears imperative that the authorities have to

liaise among themselves in collaboration with the Chamber of Architects and Civil Engineers together with the Chamber of Engineers, to aim for a much desired reduction of casualties/fatalities on construction sites. This liaison has to be combined with a much improved enforcement output, since regulations without enforcement and deterrent penalties are next to useless.

A risk assessment exercise via cost benefit analysis will immediately show up the economic gains reaped. A reduction in injuries and fatalities will make up for any added expenses required, and a more efficient construction sector will entice more workers to its fold, which is currently dwindling.

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Minister Galea launches ECDL Website

RECOGNISING THE importance of continued learning, the Ministry of Education through the Department of Technology in Education is offering a 25-hour ECDL Conversion Course for fifth form students wishing to undertake the ECDL exams.

Many state and non-state school students have this year been offered the opportunity to enroll for the five-week programme, which is primarily aimed to cover those units within the ECDL syllabus that were not previously covered during the secondary school years due to the recent introduction of this new ICT concept.

Ten schools have been chosen to act as ECDL training centres, which are catering for over 2,100 students. This is a 31% increase since last year, thus iterating the ever-growing increase in popularity of this new ICT benchmark. These ten centres are supporting students by offering their premises after normal school-opening hours not to disrupt the schools' timetable.

During this course students will receive tuition and carry out mock assessments in preparation for their final examination, which will lead them to the full ECDL certification.

To facilitate the students' learn-

ing experience, the Department of Technology in Education designed a new Website (<http://schoolnet.gov.mt/ictcecdl>) to cater for both the students' and the teachers' needs.

In this Website, one can find all the related material for teaching and learning as well as administrative information that is useful both for students as well as for teachers.

Of vital importance is the syllabus and sample test papers as well as the relevant forms that one will need during this course. Links to other ECDL Websites have also been created for an extended knowledge. Queries and FAQs also have a valid purpose that are most welcome.

This Website was designed by Joseph Micallef, a support teacher within the Department of Technology in Education.

Dr Louis Galea, Minister of Education, Youths and Work, launched the site at Margaret Mortimer Junior Lyceum, Sta Lucija, when he was paying a visit during the ECDL Conversion Course.

Lawrence Zammit, director of Technology, Charles Galea, education officer – Secondary Sector, Joan Micallef, head of school, and Marcelle Galea, ECDL co-ordinator, were also present.

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