PR GUIDANCE NOTE 1
HEALTH AND SAFETY AT WORK

Legislation

The 1974 Health and Safety at Work Act (HASWA) imposes wide ranging duties and responsibilities on all employers and employees and on suppliers of equipment and materials.

As a result of the 1989 European Framework Directive (89/392/EC), six significant Regulations were added to the UK legislation:

- Management of Health & Safety at Work (MHSW)
- Provision and Use of Work Equipment
- Manual Handling Operations
- Personal Protective Equipment
- Display Screen Equipment
- Workplace (health, safety and welfare)

The Construction, Design and Management Regulations Implementing Directive (92/57/EC) were introduced in 1995. The CDM Regulations require safety planning and supervision from design to demolition and disposal and cover temporary or mobile sites. Revised Regulations http://www.hse.gov.uk/construction/cdm/legal.htm were implemented on 7 April 2007. They are available on http://www.opsi.gov.uk/si/si2007/20070320.htm and the ACoP can be purchased at http://www.hse.gov.uk/pubns/books/l144.htm.

In 1996 the Construction (Health, Safety and Welfare) Regulations came into force.

Codes of Practice accompany several of these Regulations. All are available from the Stationary Office.

Other relevant legislation or regulations includes: the Control of Substances Hazardous to Health (COSHH), Noise at Work, Eye Protection and Head Protection, Electricity at Work (1989), the IEE Wiring Regulations (16th Edition) and the Confined Spaces Regulations (1997).

The New Roads and Street Works Act and Chapter 8 of the Traffic Signs Regulations cover safety at roadworks. The Chapter 8 was revised in June 2006.

There is also a swathe of British Standards, memos, regulations, codes etc designed to ensure safe practices and enhance road safety. There are also various Sector Schemes under DMRB, in particular SS 12D covers designer responsibilities.

Applicants in relevant disciplines are expected to be familiar with accident investigation, safety audits, road safety and the New Roads and Street Works Act.

Code of Professional Conduct

As professionals, engineers and technicians have a duty to safeguard the public in matters of safety and health. When you join IHIE you agree to abide by such a code of conduct enforced by the Institute and the Engineering Council (see www.ihie.org.uk).

At Professional Review

Applicants' reports must explicitly demonstrate these attributes in the text of their Review Reports and in the supporting documents and all must achieve 'Practice' standard in Role E.2.

All engineers and engineering technicians should, in relation to health and safety:

- Know their employer's Safety Policy and its application to their workplace
- Know and comply with all relevant legislation, standards etc
- Recognise their professional and personal responsibilities
- Adopt a systematic approach to health and safety
- Keep up to date by seeking relevant education and training

Applicants are expected to demonstrate in their submission a general appreciation of the HASWA and CDM and their responsibilities under it and knowledge of all regulations and safety practices relevant in their work.

Engineering technicians should know the safe practices in their field and, within it, be able to:

- Refer to the legislation, regulations, standards etc applicable to themselves and their work
- Identify potential hazards at the investigation or feasibility stage (eg in storage, ground conditions, signing)
- Design or plan a safe system to deal with identified hazards
- Select appropriate equipment etc as defined under HASWA

Chartered and Incorporated engineers exercise independent technical judgement and may supervise or manage others; they may carry specific responsibilities under HASWA and the CDM Regulations to assess risk and manage health and safety to safeguard staff and the public. Designers are required by the CDM Regulations to be Chartered for large projects.

Engineers should show in their reports and at the interview a greater knowledge of legislation etc than is normally expected of technicians and should demonstrate that they are able to:

- Manage health and safety
- Use their judgement; not invest blind reliance on codes of practice etc
- Analyse, assess and control risk within their field

In addition, applicants must attend two CPD days on health and safety in the two years before submitting their incorporated review report. Technician applicants need one day. Safety audit, accident investigation, Chapter 8, NRSW and road safety events can all count towards these CPD days.

Further Information

Health and Safety Executive National Infoline, HSE Information Services, Caerphilly Business Park, Caerphilly, CF83 3GG (tel 0845 345 0055)
www.hse.gov.uk

PR GUIDANCE NOTE 2

SUSTAINABILITY AND ENVIRONMENTAL ISSUES

As an Institute, IHIE is committed to working towards an accountable, sustainable, well maintained transport network accessible to all by 2020. Policy Statements backing up the Institutes intentions are available on the website "Technical Gateway".

You should consult the IHIE Statement on Sustainability (2009) and the Engineering Council Guidance Note.

To encourage greater awareness and commitment among IHIE members, environmental awareness is embedded in the Professional Review at all levels.

Review applicants need to include one CPD day on environmental issues in the 'CPD days' required in the two years before applying for the Review, and need to demonstrate awareness of and to implement sustainable practices (Role E.3 in Documents CE3,IE3 and ET3).

The CPD training day can be in general awareness of environmental issues and/or in specialist areas.

Suitable topics include:

- Green transport initiatives
- LTP bids
- Park and Ride
- Waste Management
- Verge Maintenance
- First Time Reinstatements
- Pedestrian and Cycle Planning
- Sustainability
- Public realm, street design
- Travel Planning
- Recycling
- Whole Life Planning
- Planned Maintenance
- Trees
- Use of Non-Temporary Materials
- Travelwise
- Integrated Transport Strategies
- Engaging the community

If you have difficulty identifying a suitable event, you may submit a two page statement demonstrating how your other CPD days cover the equivalent of one day on sustainability issues.

Reviewers will expect you to demonstrate in your report and at the interview awareness of the environmental impact of your work. Evidence can be found in committee reports, specifications, evaluation procedures, public consultations and promotions.

IPR GUIDANCE NOTE 3

TRANSPORTATION

IHIE welcomes engineers and planners in transportation and allied disciplines.

Entry Qualifications

If you want to be registered as an Engineer with the Engineering Council you need engineering qualifications. If your qualifications are more broadly based you may need a top-up with further learning. Recent successes include members with MSc Transport Engineering and Planning, MSc Highway and Traffic Engineering and combinations of HNDs and cognate degrees with the Nottingham Trent University Diploma.

You can still take the Professional Review to demonstrate equivalence with an IEng or CEng and gain Fellowship of IHIE if your qualifications are outside engineering. The same standards and procedures apply, but you will not be able to register as an IEng or CEng.

Safety audits, accident investigation and road safety events can all count towards meeting your CPD days on safety.

IHIE Coverage

Many IHIE members work in:

- Traffic and environmental management by traffic engineering
- Traffic management
- Traffic control
- Driver information
- Network management
- Demand management
- Transport impact assessment
- Traffic calming
- Road safety and accident prevention
- Signing, cycling and/or pedestrian provision
- Promotion of sustainable transport
- Safety/road audits and parking control

Also transport policy planning including environmental impact, modal choice, integrated transport, LTPs, evaluation of transport projects and policies.

Transportation planning applicants might typically advise on the commissioning of surveys, analyse and present the survey results, use the findings to identify future transport requirements. You should be able to develop and apply transport models and use them in evaluating alternate transport policies, strategies and plans. Further, you should be able to undertake and advise on preparing and evaluating estimate, bids and tenders for project work. You will understand the importance of project control, budgeting and use of resources, work in teams and ensure effective working relations and understand the ethical and professional framework in which you operate.

PR GUIDANCE NOTE 4

BRIDGE MAINTENANCE (IEng only)

Incorporated engineers should be able to:

- examine structures (using specialist access equipment)
- record inspection details
- interpret inspection information
- prepare and present assessments and recommendations
- prepare designs
- detail requirements
- prepare estimates and/or tenders
- let tenders
- supervise and manage repair and strengthening contracts

In order to carry out the above, engineers will need to apply their knowledge of:

(i) **Engineering:**

structural behaviour

soil mechanics

strength and behaviour of materials

current design methods

current codes, standards and specifications

repair and strengthening methods

monitoring and measuring equipment

destructive and non destructive materials

(ii) **General:**

health and safety

temporary traffic management/ control

CDM Regulations

contracts and procedures

relevant computer applications

environmental issues

The **Client** engineer tends to the management of the process, the **Consultant** towards inspection, design and/or supervision.

In the **Client** role, the incorporated engineer is likely to:

- assess inspection reports
- control budgets
- programme work
- prepare and let tenders
- brief consultants
- approve work done

The Client may not prepare designs but s/he needs sufficient experience to assess the consultants' work hence the analysis of inspections and proposals is a key element.

In the **Consultant role**, the incorporated engineer is likely to:

- prepare estimates
- prepare detailed designs
- undertake surveys
- analyse survey results
- supervise on site