

EUROPE

Keeping it personal in Europe

This month the ICE is running three Europe-related meetings in Portugal, Switzerland and the UK. Details of all will be published on the internet but **Diana Maxwell**, the ICE's European affairs manager, says face-to-face meetings are still vital to build cross-border relationships.

A recent advertisement for a management consultancy indicates that Chinese could become the number one web language by 2007 as the world's most populous country goes on-line. Certainly there is no doubt that the e-revolution has already transformed the way we do business in other parts of the world and, when you throw in already well-established telephone and video conferencing technologies, is there any real future for face-to-face meetings?

Tom Wolfe, author of *Bonfire of the vanities*, wrote some time ago

'the simple truth is that the web – the internet – does one thing. It speeds up the retrieval and dissemination of information – messages, images – partially eliminating such chores as having to go outdoors to the mailbox or the adult bookstore, or having to pick up a phone to get hold of your stockbroker, or some buddies to shoot the breeze with. That one thing the internet does and only that, the rest is Digibabble'.

Certainly the recent advances in electronic communications via the internet have done a tremendous amount to facilitate connections between civil engineers in different countries. Ideas and instructions can be relayed faster than ever before and the web has proved invaluable

in bridging the gap to professionals and projects in remote locations. But when it comes to building trust and sharing ideas, surely there can be no real substitute for the face-to-face meeting – particularly when it comes to developing closer relationships between European civil engineers.

Bringing European civil engineers together

The ICE's three European-related events in May 2001 are all based around face-to-face meetings, the first being the 33rd meeting of the European Council of Civil Engineers (ECCE) – for which the ICE provides the secretariat – on 11–12 May in Oporto, Portugal.

The council's twice-yearly meetings bring together representatives of professional civil engineering bodies from both EU and non-EU states with the common aim of ensuring the highest technical and ethical standards for civil engineering throughout Europe. The council operates largely through a number of task forces, current ones being

- education and training
- professional recognition
- research and development
- information technology
- environment
- public procurement.

Though every effort is made to ensure that work between meetings takes place electronically, the meetings provide an invaluable opportunity for debate and discussion by the various task forces as well as for the council as a whole. Personal contact ensures that intentions are made clear and potential misunderstandings, often resulting from linguistic differences, are smoothed over.

Like any other organisation, the European Council of Civil Engineers is only as good as the sum of its parts. Much of the input to its work must come from individuals who may never have the opportunity to attend one of ECCE's meetings, but whose expertise is

invaluable in drafting position papers and responses. To this end full details of the councils activities can be found at www.eccenet.org.

Meeting central and eastern Europe's biggest lender

The ICE annual European lecture is another event where personal contact can give added value. Efforts are made to communicate the content of the lecture to as wide an audience as possible. It is video-taped to be sent to interested ICE country representatives and local associations, some of whom will organise a video and discussion meeting. The text is transcribed and made available by e-mail and on the ICE website at www.ice.org.uk for interested parties.

Nonetheless, the importance of a live lecture cannot be underestimated. Questions may be asked on issues of deep concern. Members can network, meeting old friends and colleagues and becoming acquainted with invited guests from disciplines relating to the chosen subject.

For the 2001 lecture on Tuesday 15 May, Sir Brian Unwin will speak on *TENs for more than 20: constructing a wider Europe*. As chairman of the European Investment Bank (EIB) from 1993–2000, he is eager to clear up the anonymity surrounding Europe's role in infrastructure financing. In 2000, the EIB lent €36 billion, 30.6 billion of these in the EU. It is perhaps less well known that the EIB is by far the biggest lender in central and eastern Europe. Its lending has gradually increased to €13.5 billion on projects. In 2000 alone it lent €2.95 billion to projects in the accession states. By sector, lending was 39% for transport, 21% for telecommunications, 15% for water, 8% for industry and 7% for energy.

Forging closer links between the ICE European associations

Finally on 17–21 May, the ICE's 20-year-old Swiss branch will host the Institution's European local associations network meeting. This started off as an informal get-together between the volunteers who organise the ICE's activities in the various countries of Europe.

In 2000, this became slightly more formal, with the institution sending representatives to provide briefings on its activities and developments. A 'drop-in, drop-out' programme ensures that presentations on ICE activities are balanced with site visits, lectures and, that vital ingredient for a hectic weekend, relaxation!

Further details can be found on the ICE website at www.ice.org.uk and on the Swiss branch's own site at www.icenet.ch.

For further information please contact **Diana Maxwell** on +44 (0)20 7665 2155 or email diana.maxwell@ice.org.uk. She will also be happy to meet you!



Meeting of the European Council of Civil Engineers in England last year – such meetings are invaluable to build trust and share ideas.

MANAGEMENT

Getting better all the time

Improving performance is an issue that concerns every manager in every civil engineering organisation. Zara Lamont, director of the Construction Best Practice Programme, outlines the importance of doing it continuously – with a recent hospital project as an example.

In a business environment the word 'performance' can have many different meanings. For those on the accounting side it can mean profitability and return on investment, whereas for non-financial staff, client and employee satisfaction are uppermost. It is difficult to determine the exact importance of one over another but, crucial to the success of any continuous improvement, is the need for all improvement activities to operate within one overall business strategy. To facilitate this, 'buy-in' at board level becomes mandatory and requires objectives and methods of measuring their effectiveness to be clearly defined.

Any improvement activity is commendable but, in order to reap the rewards and add that extra bit of value, the need for cohesion is paramount. Continuous improvement is about building upon successes achieved and lessons learnt must not be replaced with hasty and fragmented follow-up initiatives.

Applying continuous improvement to site safety

Since the launch of *Rethinking construction* the Construction Best Practice Programme and the Movement for Innovation (M4i) have been actively assisting the industry in the arena of continuous performance. Initiatives throughout the industry vary but one which has noticeably attracted my attention focuses on the benefits of site safety performance, first developed and utilised by Skanska Construction (previously Kvaerner Construction) at the Queen Elizabeth Hospital PFI redevelopment in Woolwich.

With increased emphasis on the need for tougher health and safety standards, many contractors have been actively looking for ways to reduce accident rates. Initial research into safety behaviour was conducted in the early 1990s by the Health and Safety Executive and Umist with the support of Skanska. The study established for the first time that safety behaviour could be reliably measured, that goal setting and feedback

would help improve behaviour and that commitment of management could enhance performance. Having developed the first site-safety performance system six months into the construction phase at the £95 million Queen Elizabeth Hospital PFI redevelopment in Woolwich, Skanska subsequently achieved a 50% site reduction in accidents.

John Wood, senior planner at Skanska, is mindful that accident statistics across the industry remain too high. 'Regulations are all very well and the site-safety performance systems is an important part of our induction process but, until you are able to modify an individual's behaviour and get them to question their whole attitude towards health and safety, significant improvements will be very few and far between'.

How the system works in practice

The concept behind the site-safety performance system is quite straightforward. Observers are selected on the basis of their good communication skills from across the whole workforce. Those who then agree to champion the cause agree goals with the workforce, walk the site, examine accident potential, go through specific checklists, offer advice and encourage feedback. On-going analysis of the results then highlights trends and identifies specific targets for improvement.

At Woolwich the system cost Skanska just £20 000 out of the project's annual budget of £40 million and systems are now being operated at several site locations in central London, including at the prestigious Swiss Re city development.

In addition to reducing the number of accidents and the immeasurable human misery they cause, Skanska believes that a cost/benefit ratio of approximately 0.25 based on the value of the 50% reduction in accidents has been achieved compared to the cost of running the system. The knock-on effect of reduced accidents is still quite difficult to quantify but already Skanska has recorded a 42% reduction in lost time preliminaries.

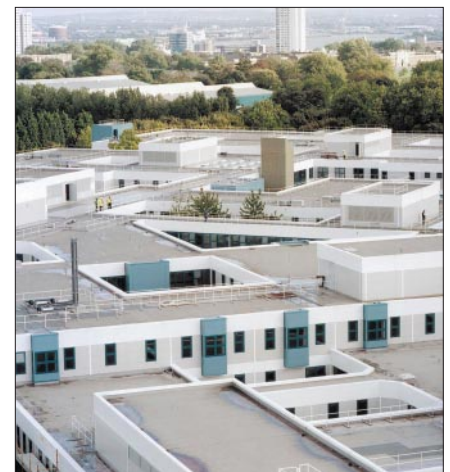
The importance of senior management buy-in

What benefited Skanska and the whole site-safety performance system was the early buy-in from senior management and their commitment with designated funding to pursue this innovative way of working. Extending these boundaries to include buy-in amongst subcontractors and their staff is also instrumental in the continuing success of the system. Meetings to discuss areas of weakness and the achievement of targets are held regularly between the observers and senior project members and observer swap days have begun to take place across many of their construction sites.

At the Construction Best Practice Programme we recognise how significant developments like that described here are crucial to the success and future of the entire construction industry. Quite apart from the inexcusable human tragedy caused by accidents, the financial elements of wasted time and increased costs demonstrate the degree of opportunity available to the industry.

Of course we recognise that all construction companies must already adhere to statutory health and safety requirements but, as an industry, we must really start to question how much more we can achieve. The outdated belief that 'it will never happen to me' cannot be upheld, especially in a political climate where proposals for reforms and harsher penalties relating to corporate manslaughter are now gathering speed.

For further information please contact the Construction Best Practice Programme on +44 (0)84 5605 5556 or visit the website at www.cbpp.org.uk.



Skanska Construction achieved a 50% reduction in site accidents on the £95 million Queen Elizabeth hospital project in Woolwich through a continuous safety improvement system

ENVIRONMENT

Energy and the environment the ICE view

In an attempt to clarify the complex issues surrounding energy generation and the environment, the ICE's energy board has produced a statement of where it stands. Secretary to the board **Andrew Tillbrook** reports.

Despite increasing energy efficiency and energy saving measures, the signs are that both the UK's and the world's demand for energy will continue to increase well into the 21st century.

The UK has a commitment to reducing 'greenhouse gas' emissions, following agreements at the United Nations Framework Convention on Climate Change (UNFCCC) at Kyoto in 1997, Buenos Aires in 1998, Bonn in 1999 and The Hague in 2000. The current government has agreed not only to reduce greenhouse gases by 12.5% by 2008 to 2012 from a 1990 baseline, but has also set itself a domestic goal to reduce CO₂ by 20% by 2010. An estimated 5 Mt of carbon emissions will be saved if this target is to be met. The Kyoto Protocol under UNFCCC provides for the trading of permits to allow countries to achieve their targets in a more effective way.

There is therefore a growing interest and support to develop renewable energy technologies, both from the UK government and internationally, recognising the influence of the series of conventions. Countries such as the UK however which have viable stocks of gas and coal are now developing technologies to use such fuels more efficiently and cleanly, utilising co-firing or flue gas desulphurisation (FGD) to reduce CO₂ and SO₂ emissions.

Some countries in Western Europe are also

reliant on nuclear power to generate electricity, notably France at 70% and the UK at 26%.

However, there has been increased concern with regard to the management and storage of radioactive waste and generation costs are considered to be less competitive compared to other sources such as combined cycle gas generation.

The position statement recently produced by the ICE's energy board thus covers the three main forms of energy generation: renewable, fossil fuel and nuclear power.

Renewable energy—building it in

The ICE supports the targets laid down at UNFCCC which provide a basis for controlling the UK's own level of 'greenhouse gases'. They enable the UK to demonstrate that such targets are possible and so lead by example, and they enable the country to develop its own technologies which may be of benefit to other countries and so promote the British R&D skills.

The ICE supports improved energy efficiency of new buildings and facilities through incorporating measures such as solar, photo-voltaics, embedded wind generation and heat pumps.

Fossil fuel—a continuing role

The ICE believes it is fundamental for the future of energy generation in the UK to ensure supply security and diversity as renewable technologies evolve and become more economically viable. Any approach must ensure that the residual life of fossil-fuel-fired plant is realised as a cost-effective option, and protects the economies of the remaining coalfield communities. Economic and social factors must be considered in the drive for sustainable development.

Grid stability is a critical issue in relation to renewables, in particular with

respect to their remoteness. A role for solid-fuel combustion will continue in the form of biomass and waste-to-energy power generation as well as in securing a role for coal in the medium term.

Nuclear power—not ruled out

The ICE supports consideration of nuclear generation as a possible part of a sustainable energy policy in the longer term. It is important to develop safe decommissioning programmes for Magnox, AGR and ultimately PWR generating stations and to determine secure long-term disposal facilities to store, and if necessary retrieve, contaminated material.

Changes in the energy market

The UK government has been keen to implement reforms to improve the operation of energy markets and enable renewables to compete more effectively. Consumers are able to choose their supplier and have the option to pay a small premium for 'green' electricity. In the DTI's March 1999 report *New and renewable energy — prospects for the 21st century*, the government states that an extra £50 million will be made available for promoting energy efficiency in small to medium enterprises and renewable schemes, including reference to combined heat and power, biomass and CO₂ sequestration.

Ultimately, it is planned that subsidies for renewable technologies would diminish, to coincide with commercially competitive schemes. For these forms of generation to compete, the high voltage transmission system used by large-scale coal, gas and nuclear generators would require some development and modification to allow the smaller scale embedded renewable generators to access the distribution system within a fair-trading framework.

The ICE's position

The ICE recognises the government's goal to meet or better the targets to restrict emissions and supports the development of renewable generation as a primary contribution. The ICE however recognises the importance of current fossil and nuclear sources, which will be required for some considerable time to come and therefore encourages environmental enhancement (such as the cleaner handling and burning of fossil fuels and treatment of nuclear wastes) wherever possible as renewable capacity is increased.

The full version of the ICE environmental position statement on energy can be read at www.icenet.org.uk/specialisms/rtf/envenergy.rtf. For further information contact the author at tel. +44 (0)20 7665 2241, email andrew.tillbrook@ice.org.uk



Building in renewable energy – this conference centre in Munich generates 1MW from its roof-mounted photovoltaic panels

UK construction disputes contravene human rights

Article 6 of the Human Rights Act entitles everyone to a fair and public hearing.

Stephen Murfitt, head of litigation department at solicitor Blake Laphorn, believes that may put much of the UK's construction dispute procedures in doubt.

On 2 October 2000, the Human Rights Act 1998 came into force incorporating the European convention on human rights into English law. Whereas public comment has been centred on focus groups, minorities and defendants in criminal trials, the Act will also profoundly affect construction disputes and procedures.

Article 6 is likely to be the most significant in practice. It provides for everyone's right to a fair and public hearing in the determination of both civil and criminal rights and obligations. The hearing must be by an independent and impartial tribunal. There are a number of key areas this will affect.

English planning system incompatible

The Act has already had a dramatic impact on the current planning system. Four test cases went to the High Court in December 2000 challenging three aspects of planning law

- the Department of the Environment, Transport and the Regions' right to rule upon a scheme which involves the profit of another government department
- the secretary of state's right to call in projects over a certain size and at-will
- the secretary of state's power to make compulsory purchase of land for the benefit of the government.

In each case it was the decision-making process of the planning system that was criticised, not the substance of the planning application and in all cases the judge ruled that the English planning system is incompatible with article 6. If the High Court's decisions are upheld in the House of Lords, then changes in the planning system are inevitable.

Adjudication time limits may be too short

Adjudications will be subject to the Act because adjudication is a statutory process that is compulsory for the responding party and adjudicators and adjudicator-nominating organisations are public authorities within the meaning of the Act. The 28 day time limit on bringing an

adjudication may not comply with article 6 as it may be inadequate time for each party to prepare and present its case.

In addition, the adjudicator may not be required to provide reasons; the adjudicator may act impartially but may not be independent; and the adjudication may be on documents only and preclude any oral examination. All these issues may fall foul of article 6.

Alternative dispute resolution cannot be imposed

The Civil Procedure Rules introduced 'court-sponsored' mediation where the court imposes a stay for the purpose of mediation. There are two potential problems here.

Firstly, article 6 requires 'a public hearing within a reasonable time'. The courts must therefore ensure that the time allowed to attempt mediation must not delay the court proceedings for an unacceptable period. Secondly, there is authority that the courts should be allowed to penalise a party by way of costs orders for unreasonably refusing to participate in mediation. Such orders are, on the face of it, in breach of article 6 and so applications should be defended at all times.

Agreement to arbitrate

The position for arbitrations depends upon whether the parties have agreed to the arbitration or had it imposed upon them. A Dutch case has established that a voluntary reference to arbitration will be taken as an agreement to 'contract out' of the convention.

However, the position will be different where arbitration is imposed either by statute or possibly as a consequence of the relative strength of the bargaining position of the two parties. The position as regards compulsory arbitration is clear. Arbitration to which a party has no choice but to submit must comply fully with article 6. If the arbitration proceedings are compulsory then there cannot be said to have been any waiver of those rights.

There will be opportunities to challenge procedures particularly when the timetable of the proceedings leaves little time for parties to prepare. Similar considerations may apply to costs capping and applications for security for costs.

Litigation – sole experts could be contrary to human rights

The Civil Procedure Act of 1997 introduced a new procedural code which sought to enable courts to 'deal with cases justly'. The court may apply restrictions to any part of the procedure including pleadings, witnesses, timings and experts. Under the procedure there is provision for the court to appoint a sole expert in each field and not to allow expert evidence to be presented independently by the parties. Though the Technology and Construction Court has indicated that it will continue the status quo whereby both parties are allowed to call their own experts, this is not the position in other courts which deal with construction disputes. There is therefore likely to be a challenge in cases where orders are made for single joint experts on the basis that it is an unjustified restriction on the right of a party to present its case in the way it sees fit and therefore a breach of article 6.

Another area that may be subject to challenge under article 6 is the question of costs – particularly the English procedure whereby the court will make an order for payment of a particular sum as a condition of being allowed to proceed with the action, known as a 'security for costs order'. In certain circumstances a litigant can be prevented from bringing an action if they cannot comply with such an order. This may contravene human rights legislation as it prevents a fair trial. This will clearly be a sensitive area for English courts in the future and claimants should consider an article 6 challenge in appropriate cases.

Construction likely to see first human rights challenges

The construction industry will be affected in the same way as other participants in the English legal system by the introduction of the Human Rights Act. However, the construction industry has always been at the forefront of developments as to dispute procedures and therefore as the Act is tested in the courts it is likely that the construction industry will be at the centre of such challenges.

Though the current trend to resolve disputes quickly and efficiently through procedures such as adjudication will continue, there are bound to be challenges under the Act in the way described above. Whilst such challenges will cause a major disruption to dispute resolution, they should cause no difficulty to parties who are well advised from the commencement of the dispute.

For further information please contact Stephen Murfitt at Blake Laphorn on +44 (0)14 8957 9990 or email smurfitt@blake-laphorn.co.uk

Internet

Eu-supply claims procurement savings of 15%



European construction trading website Eu-supply claims that construction industry buyers are making average savings of 15% by buying materials, products and services through its site at www.eu-supply.com.

The site works by providing a real-time on-line bidding facility, where qualified suppliers can see the amount but not the identity of each other's bids. Bidding has to take place within a pre-determined time slot and there are claimed to be around 100 live transactions going on at all times with an average value of £100,000.

Formed in 1999 with \$24 million venture capital backing from Internet Capital Group, the Swedish-based business claims to work with half of Europe's top 30 contractors including at least 12 of the UK's top 30.

Transaction values range from around £10,000 to £1 million and the website takes a fee of 2 – 3% on each deal – which includes vetting bidders.

For further information please contact Neil Shaw at eu-supply.com's UK head office on +44 (0)20 7751 1770, email neil.shaw@eu-supply.com.

Guide to UK engineering libraries

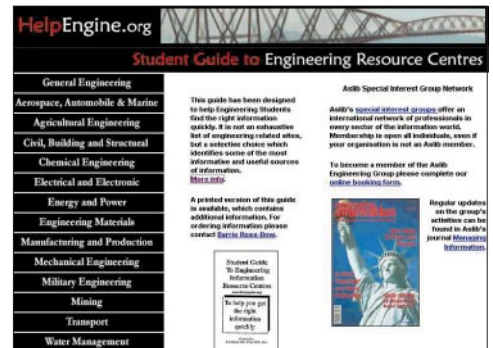
The engineering group of the Association for Information Management (Aslib) and the Engineering Institutions Librarians Committee have launched a new website for students on finding and benefiting from the UK's extensive number of engineering libraries.

The site at www.helpengine.org is aimed at any student, from sixth former to post-graduate, as well as practising engineers involved in professional development programmes. It places particular emphasis on how to approach each type of library when a project or PhD requires a personal visit.

Libraries are categorised under 14 main headings including building, civil and structural engineering, energy and power, engineering materials, transport and water management. In each section one or more centres are highlighted as a 'good first choice'.

Expanded contents of the website are also available as a free printed pocket-sized guide.

For further information please contact **Barrie Ross-Dow** at Aslib on +44 02 7905 0000 or at aslib@aslib.co.uk.



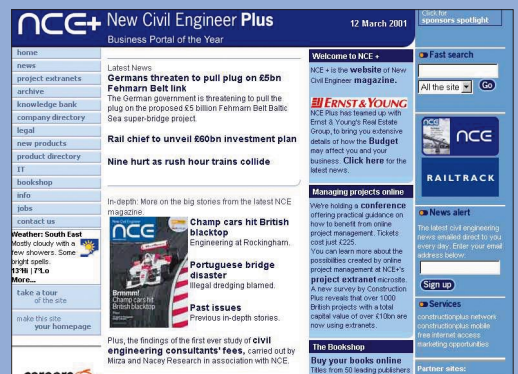
NCE+ gets quicker and bigger

The free on-line version of *New Civil Engineer* magazine now publishes new news articles from 7am every weekday. The new-look site also offers a free construction law service from solicitor Masons, which provides overviews on legal topics ranging from adjudication to recent developments in contract case law.

Other recent improvements to the site include a new and faster search facility. This covers all recent on-line news stories in addition to over 40 000 archived full-text articles from NCE and its sister Emap publications Construction News and The Architects' Journal plus information on 35 000 companies and products.

News of the latest jobs from the Careers-in-construction site is now posted on the NCE+ home page as well as a link to Emap subsidiary Glenigan for the latest project leads.

For further information please contact **Alistair McLellan** at *Construction Plus* on +44 (0)20 7505 8628 or email alistair.mclellan@construct.emap.com



Proceedings

EDITOR'S CHOICE



Comparing metro construction around the world

Many of the world's major cities are tackling their urban congestion problems by developing or expanding underground metro systems. Since the first underground railway opened in 1863 between Paddington and Faringdon Street in London, over 100 metro systems have now been built world-wide. Of these over 50% are undergoing further development or expansion and numerous other cities are actively planning new schemes. A team of international authors led by **Emma Hellawell** of Surrey University has reviewed metros currently under construction in Los Angeles, Toronto, Copenhagen and Bangkok and concluded that settlement and groundwater control are the common major design issues of such schemes.

(*Geotechnical Engineering*, Vol. 149 No. 1)



Regeneration and conservation: the engineer's role

Engineers involved with regeneration and conservation schemes need to look beyond bar-bending schedules and consider the social, political and financial influences on their work, according to **Peter Hallsworth** in his introduction to this dedicated issue on the topic. The issue contains a series of regeneration and conservation papers and case studies from throughout the UK. They illustrate the contribution engineers can make to achieving the best use of resources in such projects, report on innovative engineering solutions to conservation and reveal how funds and support can be obtained for regeneration.

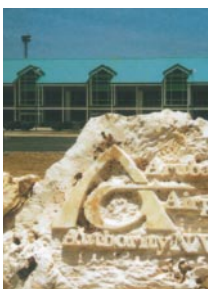
(*Municipal Engineer*, Vol. 139 No. 4)



Flute to brute: 100 years of reinforced water towers

Over the past 100 years, reinforced concrete water towers have provided some of the best and worst examples of civil engineering design—ranging from stunning wine-glass forms to brutal boxes on legs. But whether you love them or loathe them, water towers are an increasingly rare sight in Britain as more are now being pulled down than built. **David Cleland**, civil engineering professor at Queen's University of Belfast, and **Michael Gould** of the ICE panel for historic engineering works document the changing shape of water towers in the UK and Ireland, starting with the first designs by Mouchel at the beginning of the century.

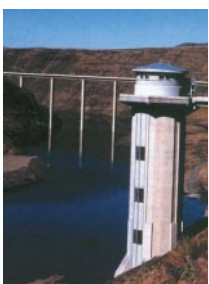
(*Structures and Buildings*, Vol. 146, No. 1)



Aruba airport—a new model for bond funding

The recent successful redevelopment of Aruba airport in the Caribbean using bond funding could be adopted as a standard model for managing future privately financed infrastructure projects world-wide. Government-owned client Aruba Airport Authority NV funded the project by issuing a series of revenue bonds to selected US institutional investors at an average interest rate of 7.84%. **Richard Harries**, project manager of Parsons Aviation in Aruba, says that regular independent evaluations of the project's existing and potential financial performance enabled investors to manage their risks more effectively, thus increasing their confidence.

(*Transport*, Vol. 147 No. 1)



Guidance on designing reservoir outlet works

Water supply reservoirs tend to be characterized by their dam structures but of equal importance—and of much greater variety—are their outlet systems. A review of the principal types of reservoir outlet structures built in the UK during the past 50 years has thus been undertaken to serve as a future design reference. Written by **Chris Scott**, technical director of Binnie Black & Veatch, the review covers the main options which have been adopted for outlet components in British reservoirs since 1950. Typically the components include an inlet structure within the reservoir, a conduit, a downstream outlet structure and various flow control and system isolation devices.

(*Water and Maritime Engineering*, Vol. 142 No. 4)

Summaries of all papers published in ICE Proceedings journals since 1998 can be read free of charge at the ICE web site (www.ice.org.uk/jol). To subscribe to one or more journals call +44 (0)20 7665 2135 (members) or +44 (0)20 7665 2460 (non-members).

Central and eastern Europe special issue

A special issue of Civil Engineering is published this month on the civil engineering market and opportunities in central and eastern Europe. Contents are as follows.

Introduction. *I. Whyte and A. Gale*

Central and eastern Europe—more discontinuity than change. *N. Holden*

EU enlargement policy: civil engineering opportunities in central and eastern Europe. *T. Glover and P. Nowak*

Financing infrastructure in central and eastern Europe. *D. Maxwell*

Poland: the last 10 years. *A. Minasowicz, I. Whyte and P. Nowak*

Civil engineering market and needs in Poland—transport infrastructure. *A. Minasowicz, I. Whyte and P. Nowak*

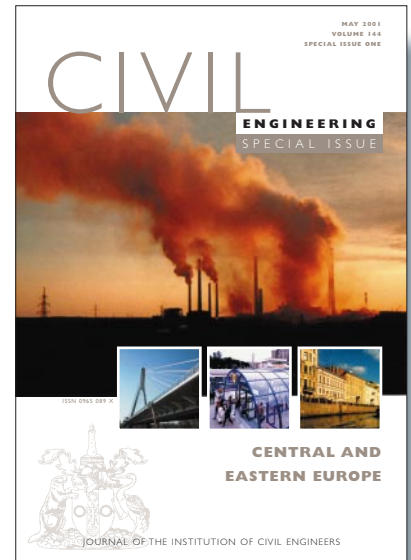
Environmental issues in central and eastern Europe. *J. Palmer*

Corporate development support for St Petersburg water services—a case study. *G. Lawn, M. Wilkes, V. Tovinen and M. Rystedt*

An overview of central and eastern European countries. *A. Gale, N. Chang, I. Whyte and A. Thomas*

Poland—a young engineer's perspective. *V. Edmondson and B. Hargreaves*

The rate to ICE members for both special issues is £7 and for non-subscribers is £20 a copy. Please contact journals market manager Mandy Rice on +44 20 7665 2450.



Proceedings journals relaunched

The ICE and its publishing subsidiary Thomas Telford have relaunched their highly respected suite of *Proceedings* journals with a new look and functionality both in print and on-line. The changes are aimed at increasing the readability and accessibility of the journals to a world-wide audience.

Following the redesign of the general *Civil Engineering* journal last year, all five specialist journals have now been given a fresh new look for their 2001 issues. The previous award-winning design was introduced 10 years ago when the original *Proceedings* – which dates back to 1857 – was divided into subject-specific titles.

Page layouts in particular have been improved to make better use of space and allow greater flexibility with figures sizes. On-line accessibility is also much quicker and easier as each specialist journal now has its own web address and a much faster and more powerful search facility.

The home pages are as follows:

Geotechnical Engineering –
www.geotechnicaljournal.com

Municipal Engineer –
www.municipalengineer.com

Structures and Buildings –
www.structuresandbuildings.com

Transport – www.transport-ice.com

Water and Maritime Engineering – www.waterandmaritime.com

Each home page provides free access to paper summaries for the current and previous two years, has an area for on-line discussion and includes links to relevant subject pages on the ICE and Thomas Telford web sites. Subscribers can download full texts of all papers in the current and previous two years as pdf files. A new on-line pay-per-view service, providing full text access to the past 50 years



of *Proceedings* papers, will be launched in the summer.

The role of certain journals has also now changed. *Water and Maritime Engineering* – formerly called *Water, Maritime and Energy* – is now published in association with the International Association of Hydraulic Engineering and Research in The Netherlands, giving it a wider international spread of both readers and authors. *Geotechnical Engineering* is now the journal of the British Geotechnical Association, following the merger of the ICE Ground Board with the British Geotechnical Society, and each issue of *Municipal Engineer* is now dedicated to a specific topic – the June issue will focus on community involvement and the politician's role.

For further information please contact the journal publisher Leon Heward-Mills on +44 (0)20 7665 2450, email leon.heward-mills@thomastelford.com.

EVENTS

The following meetings, seminars and social events have been organized by ICE headquarters staff on behalf of ICE Boards and Associated Societies. All are free to attend unless indicated by (£). Before travelling, please contact the organizer or visit the ICE web site at www.ice.org.uk to confirm details.

Title	Date (dd/mm) and time	Organizer	Telephone (+44 outside UK)	Email	Venue
MAY 2001					
Latest developments in lock and dock gates technology (£)	01/05/01 14.00	Maritime Board	020 7665 2213	anita.ashley@ice.org.uk	ICE
Millennium water lecture	01/05/01 17.30	Water Board	020 7665 2234	tim.fuller@ice.org.uk	Exeter
Urban hydrology	02/05/01 14.00	British Hydrological Society	020 7665 2234	tim.fuller@ice.org.uk	Exeter
AGM and monitoring of full scale structures	09/05/01 17.30	Wind Engineering Society	020 7665 2238	liz.marwood@ice.org.uk	ICE
Advanced institution and laboratory testing	09/05/01 17.30	British Geotechnical Association	020 7665 2233	dionne.jacobs@ice.org.uk	ICE
PPG13/ Sustainability	10/05/01 09.30	ICE	020 7665 2314	rachel.coninx@ice.org.uk	JJB Stadium, Wigan
13th annual dinner (£)	11/05/01 19.00	British Tunnelling Society	020 7665 2233	dionne.jacobs@ice.org.uk	The Brewery, Chiswell St, London
ECCE meeting	11/05/01 - 12/05/01	N/A	020 7665 2155	diana.maxwell@ice.org.uk	Oporto
Radiation dose management in the industry (£)	13/05/01 17.00	British Nuclear & Energy Society	020 7665 2315	sue.frye@ice.org.uk	Low Wood Hotel and nuclear Conference Centre, Windermere, Cumbria
ICE annual European lecture - financing of major projects in Europe	15/05/01	N/A	020 7665 2155	diana.maxwell@ice.org.uk	ICE
Global design of structures	16/05/01 17.30	Structural and Building Board	020 7665 2238	liz.marwood@ice.org.uk	ICE
Hydroecology of managed rivers (£)	16/05/01 09.00	British Hydrological Society	020 7665 2234	tim.fuller@ice.org.uk	Birmingham University
AGM and Gerald Lacey lecture	16/05/01 09.00	International Commission for Irrigation and Drainage	020 7665 2234	tim.fuller@ice.org.uk	ICE
Adeco approach to design & construction	17/05/01 17.30	British Tunneling Society	020 7665 2233	bts@ice.org.uk	ICE
ICE European local associations network	17/05/01 - 21/05/01	N/A	020 7665 2154	ruth.dennett@ice.org.uk	Switzerland
Environmental and engineering feasibility studies for a large reservoir in the Fens	21/05/01 17.30	British Dam Society	020 7665 2234	tim.fuller@ice.org.uk	ICE
The 8th Mallet-Milne lecture: living with earthquakes: know your faults	23/05/01 17.30	Society for Earthquake and Civil Engineering Dynamics	020 7665 2238	liz.marwood@ice.org.uk	ICE
Coastal engineering (£)	23/05/01 09.30	International Association for Hydraulic Research	020 7665 2234	tim.fuller@ice.org.uk	Southampton
Approach channels - planning and construction	23/05/01 - 01/01/01 14.00	International Navigation Association (PIANC) & Maritime Board	020 7665 2232	pianc@ice.org.uk	ICE
Michael Meacher: health and safety - is it high enough on the political agenda?	23/05/01 15.00	Health & Safety Board	020 7665 2213	adora.xavier@ice.org.uk	ICE
Hydrodynamics methods	23/05/01 17.30	British Hydrological Society	020 7665 2234	tim.fuller@ice.org.uk	Yorkshire Museum, York
Hands on for development	24/05/01 18.00	Appropriate Development Panel	020 7665 2158	darlene.torey@ice.org.uk	ICE
The surveying and mapping revolution and its impact on civil engineering	29/05/01 14.00	Geospatial Engineering Board	020 7665 2213	adora.xavier@ice.org.uk	ICE
How do we know we are adding value today?	30/05/01 18.30	Association of London Graduates and Students	020 7665 2159	joanna.holland@ice.org.uk	ICE
JUNE 2001					
Storminess/sea level rise	05/06/01 09.30	Maritime Board	020 7665 2232	anne-marie.ferguson@ice.org.uk	ICE
Wind tunnel techniques	06/06/01 17.30	Wind Engineering Society	020 7665 2238	liz.marwood@ice.org.uk	ICE
The London Eye	07/06/01 14.00	Association of London Graduates and Students	020 7665 2159	joanna.holland@ice.org.uk	ICE
Partnering	11/06/01 14.00	Commercial Management Board	020 7665 2213	adora.xavier@ice.org.uk	ICE
Critical chain project management	13/06/01 18.30	Association of London Graduates and Students	020 7665 2159	joanna.holland@ice.org.uk	ICE
BGA AGM followed by how geotechnics is seen in government	13/06/01 17.30	British Geotechnical Association	020 7665 2233	dionne.jacobs@ice.org.uk	ICE
Flood management (£)	14/06/01 09.30	ICE	020 7665 2314	rachel.coninx@ice.org.uk	JJB Stadium, Wigan
Groundwater quality 2001 IAHS conference	18/06/01 - 21/06/01 09.00	British Hydrological Society	020 7665 2234	tim.fuller@ice.org.uk	Sheffield
Control and instrumentation equipment obsolescence in nuclear power industry	19/06/01 09.00	British Nuclear Energy Society	020 7665 2241	andrew.tillbrook@ice.org.uk	Risley, Warrington
AME conference	20/06/01 - 22/06/01 09.30	ICE	020 7665 2314	rachel.coninx@ice.org.uk	Bath University
Small ports - opportunities and challenges	20/06/01 09.30	Maritime Board, Central Dredging Association & International Navigation Association (PIANC)	020 7665 2232	anne-marie.ferguson@ice.org.uk	Southampton
Debate - this house believes that trenchless technology is always economic in urban areas	21/06/01 17.00	British Tunneling Society	020 7665 2233	dionne.jacobs@ice.org.uk	ICE
European symposium	25/06/01 - 27/06/01 09.00	British Dam Society	020 7665 2234	tim.fuller@ice.org.uk	Bergen, Norway
JULY 2001					
How to pass the chartered professional review!	04/07/01 14.00	Association of London Graduates and Students	020 7665 2159	joanna.holland@ice.org.uk	ICE
Continuous river flow stimulation: methods, applicants and uncertainties	05/07/01 09.00	British Hydrological Society	020 7665 2234	tim.fuller@ice.org.uk	CEH Wallingford
Association for Structural and Multidisciplinary Optimization in the UK	09/07/01 - 10/07/01 09.00	N/A	0113 233 2218	ozz@mech-eng.leeds.ac.uk	Harrogate, North Yorkshire
Non-metallic reinforcement for concrete structures (£)	16/07/01 - 18/07/01 09.00	N/A	020 7665 2238	liz.marwood@ice.org.uk	University of Cambridge
6th scientific assembly of the IAHS	18/07/01 - 27/07/01 09.00	British Hydrological Society	020 7665 2234	tim.fuller@ice.org.uk	Maastricht
Smeaton lecture - the development of the BSI	24/07/01 18.00	N/A	020 7665 2250	mike.chrimes@ice.org.uk	ICE