

# NEC<sup>®</sup> Users' Group Annual Seminar 2014

*Dynamic Infrastructure and project delivery*

28 APRIL 2014 | ONE GREAT GEORGE STREET, LONDON



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Dear delegates,

It is often hard to believe that it is this time of the year again – the Users' Group Annual Seminar. It was only a year ago that we were celebrating the 20<sup>th</sup> Anniversary of the NEC.

The NEC team, led by Rekha Thawrani, continue to excel themselves by providing a programme for users that is cutting edge and highly informative.

Our keynote presenter is Lord Deighton, Commercial Secretary to the Treasury. Lord Deighton's brief includes government oversight of UK infrastructure planning and investment. In his March Budget the Chancellor of the Exchequer announced that £50 billion of public monies will be made available for infrastructure investment.

NEC usage continues to expand throughout the UK and abroad. One of our speakers, Mr Tsui Wai, will update us on progress to date of NEC within the Hong Kong public sector. For many years the Hong Kong public sector was firmly committed to using its own contract conditions but now views NEC as supporting its own efforts to improve the management of construction risks.

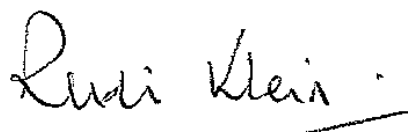
So, what has been the most significant development over the past 12 months? It has been, undoubtedly, the success of the Project Manager Accreditation initiative.

Over the years many have sought to criticise NEC documentation because the necessary project management skills were lacking in the industry. This would, therefore, act as a barrier to the development of NEC. In fact, this was not a criticism of NEC but, rather, a criticism of the industry.

NEC now offers accreditation to individuals wishing to acquire the skills of managing projects using the Engineering and Construction Contract. Those embarking on the programme are enabled to acquire practical skills and tools through scenario planning and working through real life case studies. On successful completion of the programme the individual will be named on the register of NEC3 Engineering and Construction Contract Project Managers held by the Institution of Civil Engineers.

As always users are invited to provide feedback and comment on NEC events and, indeed, on all matters relating to NEC.

Our thanks, again, are due to our chairman Steve Rowsell and Rob Gerrard, Users' Group Secretary. Finally I hope you have an enjoyable and productive day.

A handwritten signature in black ink, reading 'Rudi Klein', with a horizontal line extending from the end of the name.

**Rudi Klein**  
President, Users' Group

# Programme

8:00 - 8:45 **Registration**

8:45 - 8:55 **Rudi Klein, President, NEC Users' Group**

Welcome

8:55 - 9:00 **Nick Baveystock, Director General and Secretary, Institution of Civil Engineers**

Introductions

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9:00 - 9:30 **Lord Deighton, Commercial Secretary to the Treasury**

Keynote presentation

- Investing in UK Infrastructure
  - Using NEC to deliver projects across industry
  - Why NEC is endorsed by Government
  - Questions from the audience
- 

9:30 - 10:10 **Richard Mould, Head of Procurement, HS2**

Procuring projects successfully using NEC3

- HS2: An update
  - Adopting principles of mutual trust and cooperation
  - Working with NEC contracts
  - Looking to the future
  - Questions from the audience
- 

10:10 - 10:40 **Morning coffee**

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10:40 - 11:20 **Stephen Williamson, Commercial Manager, Manchester City Council**

Refurbishment of Town Hall Complex Programme

- Setting the scene
  - The challenge faced – a complex refurbishment project
  - Creating the environment to support and promote mutual trust and collaboration
  - No surprises!
  - Questions from the audience
- 

11:20 - 12:00 **Mr Tsui Wai, Deputy Director, Drainage Services Department Hong Kong**

NEC3 in Hong Kong: an update

- NEC contracts and consultancy in Hong Kong
- Commitment of the Hong Kong Government to NEC
- How NEC has been adapted for Hong Kong
- The future of NEC in Hong Kong



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12:00 - 12:40 **Phil Joyce, Director, The Orange Partnership**

Top commercial pitfalls and how NEC can help avoid them

- A failure to spot issues early and deal with them effectively
  - A lack of independent oversight
  - Contractor competence and behaviours
  - Weaknesses in reporting
  - Questions from the audience
- 

12:40 - 13:30 **Lunch**

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13:30 - 15:30 **Workshops**

**Soft landings and the implications for NEC**

**Simon Rawlinson**, Head of Strategic Planning and Insight, EC Harris

**Deborah Rowland**, Head of Facilities Management Policy & Strategy, Cabinet Office; Certified member of BIFM

**Mock adjudication workshop**

**Robert Gerrard**, NEC UK Users' Group Secretary

**Peter Higgins**, Director, PD Consult

**Matthew Garratt**, Commercial Director, London Bridge Station Redevelopment, Costain

**What is disallowed cost?**

**Simon Matthews**, Director, HLG Associates

**Peter Keegan**, Quantity Surveyor & Associate Director, Mace Limited

**Toby Holloway**, Director, Mytee Solutions Limited

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15:30 – 16:00 **Afternoon coffee**

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16:00 - 16:40 **Panel Session - Chair: Tiffany Kemp, Director, Devant Ltd**

Risk management throughout the Supply Chain.

A forum featuring experts from every stage of the supply chain

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16:40 - 17:00 **Steve Rowsell, Chairman, NEC UK Users' Group; Director, Rowsell Wright Limited**

Closing remarks

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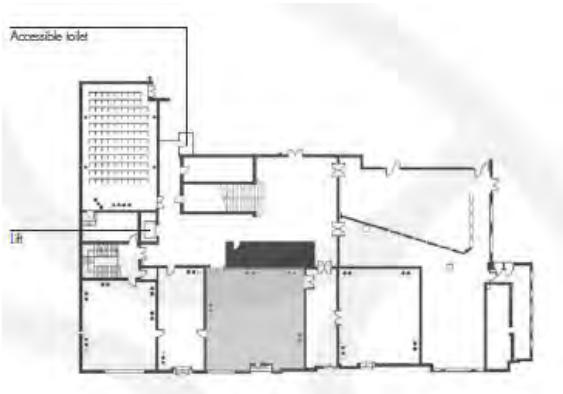
17.00 -18:00 **Drinks reception**

# NEC Annual Seminar Workshops – 13:30 – 15:30

## 1) Soft Landings & the Implications for NEC

Simon Rawlinson & Deborah Rowland

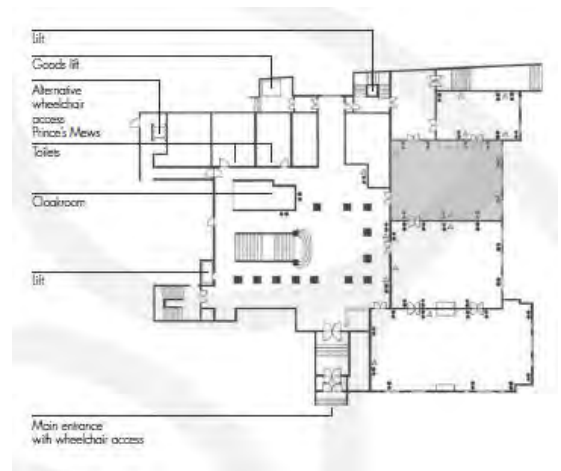
### Rennie Room – Lower Ground Floor



## 2) Mock Adjudication Workshop

Rob Gerrard, Peter Higgins, Matthew Garratt

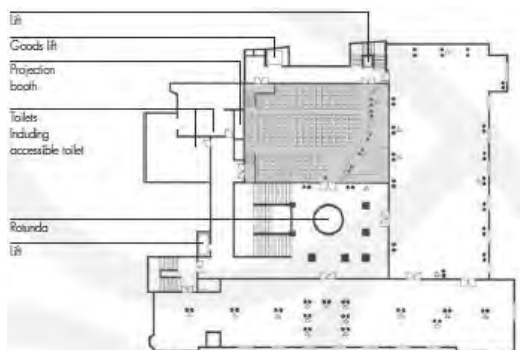
### Council Room – Ground Floor



## 3) What is Disallowed Cost?

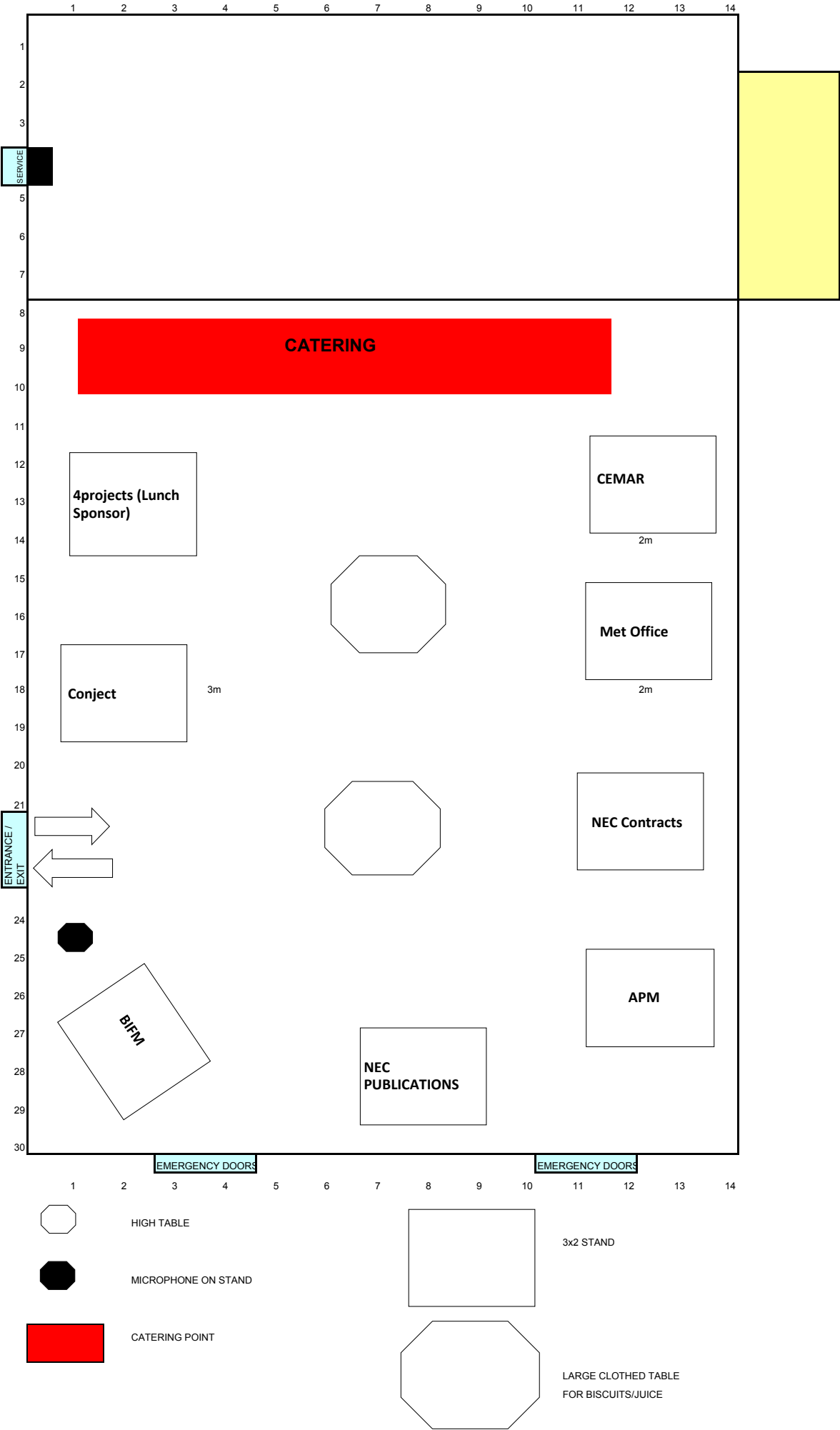
Simon Matthews, Peter Keegan, Toby Holloway

### Telford Theatre, First Floor



**\*Please be advised that all presentations and hand-outs will be available to download after the event\***

Exhibition Floor Plan



NEC Users' Group Annual Seminar, 28th April 2014

Delegate list by name and company

*Please note that this list was correct at time of going to press*

First Name	Last Name	Company Name
Austin	Addison-smyth	Health Facilities Scotland
Matt	Agar	CNS Planning Ltd
Frances	Alderson	Fladgate LLP
Tom	Allen	Vinci Construction UK Limited
Ahmed	Alrawi	Opus International
Andrew	Ash	Osborne Clarke
Darya	Bahram	NBS Services
Stephen	Baigrie	QinetiQ Ltd
Stephen	Bamforth	Griffiths & Armour
Will	Barfield	Cambridge City Council
Gurkripal	Bawa	Highways Agency
Rikard	Bergstrom	Dover Harbour Board
Daniel	Biggs	British Institute of Facilities Management
Simon	Birchmore	Interserve Support Services
Sue	Bishop	Interserve Support Services
Michael	Bootman	Liverpool Mutual Homes
Michael	Boulton	Jacobs Ltd
Alison	Bowen	Interserve Support Services
Chris	Brasier	RWE Innogy UK Ltd
Mark	Brew	Interserve Support Services
Richard	Brimmacombe	Opus International
Peter	Brooker	FTI Consulting
Jonathan	Brooks	Osborne Clarke
Jon	Broome	Leading Edge Projects Consulting Ltd
Desmond	Brown	South East Water Ltd.
Dom	Browne	Transport Network
Marc	Bryan	Eastern Solent Coastal Partnership
Roderic	Bunn	BSRIA Ltd
Tom	Burfitt-Williams	Salvation Army
Rob	Burgwin	Balfour Beatty Major Civil Engineering
Edward	Butler	Osborne Clarke
Thomas	Caldwell	SSE
Matt	Carr	Conject
Ivan	Cheung	EC Harris (Hong Kong) Ltd
Rupert	Chitty	Jackson Civil Engineering Group Ltd
Mike	Christmas	WYG Management Services
Patrick	Civil	Ministry of Justice
Robert	Cleary	SSE
John	Cole	SLR Consulting Ltd
Dan	Cooke	Highways Agency
Jonathan	Corrigan	RWE Technology UK Limited
Mike	Cotton	WSP UK Ltd
Ian	Cowling	BAM Nuttall Limited
Rhys	Coyles	LLW Repository Ltd
Emma	Crake	British Institute of Facilities Management
Zoe	Cranmer	Yorkshire Water Services Ltd
Hugh	Dannatt	Shropshire County Council



Derrick	Davenport	Rugby Borough Council
Lord	Deighton	HM Treasury
Paul	Dickinson	Springfields Fuels Ltd
Bruce	Diffey	John F Hunt Demolition
Jeremy	Dixon	Mott Macdonald
Lorna	Dixon	Opus International
Jason	Dodd	SLR Consulting Ltd
Aidan	Dooley	AWE Plc
Mark	Drewe	South London & Maudsley NHS Trust
David	Drummond	John F Hunt Demolition
Richard	Dunn	Hertfordshire County Council
Patrick	Dunne	South London & Maudsley NHS Trust
Alan	Durell	Costain
Neil	Earnshaw	Constructing Solutions
Paul	Edwards	Gve Commercial Solutions
Andrew	Else	The Capita Group plc
John	Faragher	Met Office
Neil	Farmery	Ferrybridge MFE Ltd
Stuart	Farrell	WSP UK Ltd
Roland	Finch	NBS Services
Louise	Flynn	Faithful+gould
Paul	Ford	Rider Levett Bucknall
Owen	Fox	FTI Consulting
Annabel	Fry	Pyments
Alan	Garbutt	Manchester City Council
Neil	Gardiner	Health Facilities Scotland
Matthew	Garratt	Costain Limited
Kim	Gascoigne	RWE Innogy UK Ltd
Paul	Gibbs	Pick Everard
Rachel	Gibson	Muckle LLP
James	Golden	Quigg Golden Ltd
Mark	Goldsworthy	VHE Construction Plc
Ada	Gonzalez Albert	Atkins
David	Goodey	Canal and River Trust
Steve	Goodwin	Gve Commercial Solutions
Graham	Goold	RWE Innogy UK Ltd
Mark	Graham	LLW Repository Ltd
Mark	Grant	SSE
Mike	Grayson	Yorkshire Water Services Ltd
Michael	Greenslade	University of Greenwich
Joseph	Greevy	Wheeler Group Consultancy
Matthew	Griffiths	LLW Repository Ltd
Ian	Gunton	CNS Planning Ltd
Mei-Yee	Gurrin	Salvation Army
Simon	Haile	Rugby Borough Council
Steven	Hambleton	Faithful & Gould
Geoff	Hamilton	RPS Consulting Engineers
Matthew	Hardy	UK Power Networks Ltd
Paul	Harper	Rider Levett Bucknall
Robin	Hayler	East Sussex County Council
Peter	Higgins	pdConsult
John	Holburn	Bristol City Council
Peter	Hollis	Rider Levett Bucknall
Toby	Holloway	Mytee Solutions Ltd
John	Hooper	Leicestershire County Council
Robert	Horne	Trowers & Hamlin

Annie	Horsely	British Institute of Facilities Management
John	Horwood	Cambridge City Council
Matt	Hosey	Eastern Solent Coastal Partnership
Rachel	Hossle	CEMAR
Paul	Howard	Opus International
Christian	Hubbard	Management Process Systems Ltd
Robert	Hudson	Dyer & Butler Ltd
Malachy	Hughes	Lagan Construction Ltd
Joanne	Hughes	Ministry of Justice
Jonathan	Hughes	QinetiQ Ltd
Lesley	Hunt	CH2M HILL
Tim	Hunt	South West Water Services Ltd
Simon	Hunt	Sypro Management Ltd
Mark	Hurst	GHA Livigunn Ltd
Russell	Huxter	CNS Planning Ltd
Sam	Hyde	Met Office
Steve	Jackson	The Big Red Apple Company Ltd
Keith	Jarrett	Northumbrian Water Limited
Phil	Johnson	East Sussex County Council
Nick	Jones	APM (HK)
Don	Joyce	Mace Sustain
Phil	Joyce	The Orange Partnership
Ian	Kalra	Bournemouth Borough Council
Peter	Keegan	Mace Group
Joanne	Kelly	Taylor Wessing LLP
Tiffany	Kemp	Devant
Jacqui	Kennedy	Volker Rail Ltd
Ian	Kessel	Boskalis Westminster Ltd
Yousof	Khan	States of Guernsey
Anne	King	BSRIA Ltd
Edward	King	Jacobs Ltd
Anthony	Kirby	Bournemouth Borough Council
Kevin	Kirkland	Canal and River Trust
Rudi	Klein	Specialist Engineering Contractor's Group
Tim	Knee-Robinson	TKR Consultancy Ltd
Matthew	Knight	Ferrybridge MFE Ltd
Charlie	Kortens	Facilities Management Journal
Fiona	Lane	Beattie Communications
David	Lawrence	Prysmian Cables & Systems
Marie	Leaphard	Mace Sustain
Paul	Leddie	SSE
Lucy	Lee	Highways Agency
William	Lees	South Lanarkshire Council
Lucinda	Levy	Turner & Townsend
John	Lofty	JJL Consultancy Ltd
Chris	Love	South East Water Ltd.
Wai-Hung	Luk	Drainage Services Department
Ian	Mackay	CNS Planning Ltd
Mike	Magee	RWE Technology UK Limited
Paul	Malster	Laing O'Rourke
Dave	Manning	WYG Management Services
Frank	Manville	Management Process Systems Ltd
Dan	Matthews	Balfour Beatty
Simon	Matthews	HLG Associates Limited

Thomas	Mayne	CEMAR
Corinne	McCarthy	DLA Piper UK LLP
Helen	McCombe	SSE
Simon	McCormick	Quigg Golden Ltd
Geoff	McCullough	Carillion Plc
Dean	McGrenaghan	Balfour Beatty Major Civil Engineering
Robert	Meaney	P Meaney Management Limited
David	Meller	YGC
Stephen	Mercier	AWE Plc
Richard	Miles	Mace Group
Brendan	Mitchell	South West Water Services Ltd
David	Mitchell	Volker Rail Ltd
Emilio	Molinero	IPP Contracting Ltd
Stephen	Moorhouse	Carillion Plc
Colin	Moors	Borough of Poole
Matthew	Moreton	Moreton Hayward Limited
Rob	Morgan	South East Water Ltd.
Paul	Morgan	WYG Management Services
Richard	Mould	HS2 Ltd
Ken	Munday	Laing O'Rourke
Anywhere	Muriro	BAM Nuttall Limited
Liam	Murphy	Lagan Construction Ltd
Mike	Nayler	Laing O'Rourke
Issaka	Ndekugri	University Of Wolverhampton
Glenn	Neal	Hertfordshire County Council
Dennis	Newell	Carillion Plc
Gary	Newman	Ministry of Justice
Michelle	Nicholson	Springfields Fuels Ltd
Darren	Nolan	Interserve Support Services
Neil	O'Connell	Ramboll UK
Carole	O'Donnell	Magnox Ltd
Adam	Page	4Projects
Andy	Page	John F Hunt Demolition
May	Patel	Harrow Council
Richard	Patterson	Mott MacDonald
Luke	Pearson	Vinci Construction UK Limited
Jason	Prosser	Veale Wasbrough Vizards LLP
Simon	Rawlinson	EC Harris LLP
Robert	Raynes	Turner & Townsend
Davinder	Reehal	John F Hunt Demolition
Peter	Ritson	AWE Plc
Allan	Rogers	BAM Nuttall Limited
Brian	Rossiter	Management Process Systems Ltd
Steve	Rowsell	Rowsell Wright
Peter	Russell	RSK Group plc
Ross	Savin	Moreton Hayward Limited
Michael	Say	South London & Maudsley NHS Trust
Graham	Seage	Mace Sustain
Ian	Shaw	Pick Everard
Allan	Sim	Wardell Armstrong LLP
Nik	Simie-Clark	WSP UK Ltd
Neil	Smart	CH2M HILL Halcrow
David	Smith	Jackson Civil Engineering Group Ltd
Kyle	Stanion	Taylor Woodrow Ltd
Lars	Stapleton	Eurovia Group Ltd
Anthony	Steer	Dyer & Butler Ltd

Martin	Stocker	Highways Agency
Elizabeth	Stonebank	Veale Wasbrough Vizards LLP
Giles	Sudderick	Wheeler Group Consultancy
Nick	Sunderland	Knowles Ltd
Lesley	Tait	Driving Standards Agency
Christopher	Tarrant	Prysmian Cables & Systems
Michael	Taylor	Balfour Beatty
Nicola	Telcik	Atkins
Kevin	Terry	DGA (UK) Ltd
Liz	Tetley	Driving Standards Agency
Andrew	Tobin	Bevan Brittan
Rob	Todd	Interserve Support Services
Barry	Trebes	Franklin & Andrews
Jessica	Tuffin	Ramboll UK
Robin	Tulloch	Bristol City Council
Martin	Turner	Driving Standards Agency
Michael	Vickers	Liverpool Mutual Homes
Peter	Wade	Interserve Support Services
Mark	Waghorn	Eurovia Group Ltd
Tsui	Wai	Drainage Services Department
Harry	Wai Pong Yu	Drainage Services Department
Lynne	Wait	Borough of Poole
Ben	Walker	CEMAR
Helen	Walker	Knowles Ltd
Simon	Walsh	SLR Consulting Ltd
Jemma	Ward	Highways Agency
Darren	Ward	The Orange Partnership
Steve	Warrington	RWE Technology UK Limited
Tim	Watkins	Faithful & Gould
Kevin	Webber	Balfour Beatty Major Civil Engineering
Mandy	Wheeler	Boskalis Westminster Ltd
Robin	Wilkin	Jacobs Ltd
Kelly	Williams	Magnox Ltd
David	Williams	Management Process Systems Ltd
Stephen	Williamson	Manchester City Council
Justin	Wong	Construction Industry Council
Simon	Wood	Moreton Hayward Limited
Chris	Woodbridge	Conject
Peter	Wright	Magnox Ltd
Adam	Yates	AWE Plc
Anthony	Yates	Trowers & Hamlins
Nicola	Yeates	Cornwall Council
Joe	Yip	South East Water Ltd.





## **NICK BAVEYSTOCK**

### **Institution of Civil Engineers**

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From an engineering family, after schooling in England and France, Nick Baveystock joined the British Army in 1985 and was commissioned into the Royal Engineers. His early career was spent in Germany or on operations in Northern Ireland and the Balkans. After attending Staff College in Camberley, he commanded a Royal Engineer Squadron. He returned to the Ministry of Defence in 1999 as personal staff officer to the Assistant Chief of the Defence Staff (Operations), and on promotion as the personal staff officer to the Commander of NATO forces in Kosovo.

At the beginning of 2002 he assumed command of 35 Engineer Regiment in Germany and deployed in Kosovo, Bosnia, and Southern Iraq. Promoted Colonel in 2004 he served as Commander Royal Engineers 1<sup>st</sup> (UK) Armoured Division deploying to Iraq again, this time as Chief of Staff Multinational Division (South East) in 2005-6, and thereafter as Chief Engineer. Nick attended the Royal College of Defence Studies in 2007. On promotion to Brigadier he assumed command of the Royal School of Military Engineering, leading the £3.2B RSME Public Private Partnership.

He has wide experience of delivering engineering projects. After managing a raft of small scale civil engineering contracts as a junior officer he has, for the last 10 years, been increasingly involved in international post conflict reconstruction and development. Having cut his teeth on roads and power stations in the Balkans, he moved on to Southern Iraq where for a number of years he was intimately involved in the repair and management of regional utility infrastructure including water supply, irrigation, oil and gas, sewerage and transport. Published works include RCDS thesis which dealt with the challenges of post conflict reconstruction; and the history of the Royal Engineers in Iraq 2003-2010.

A Fellow of both the ICE and of the InstRE, Nick has been married to Chris for nearly 20 years. Widely travelled (which he still loves), he has a passion (but little talent) for golf, reads voraciously, shoots very badly a couple of times a year, and spends much of his limited spare time acting as deputy assistant under-groom to his wife's horses, or walking his increasingly spoiled and disobedient spaniel.



## **RUDI KLEIN**

### **NEC Users' Group President**

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Rudi Klein is Chief Executive of the Specialist Engineering Contractors' (SEC) Group, an umbrella body representing the interests of 60,000 firms in the specialist engineering sector. He is also a barrister specialising in construction law.

He was actively involved in the piloting of the "Construction Act" through Parliament and originated Section 112 of the Act dealing with the right of suspension of construction contracts for non-payment. He campaigned for amendments to the Act to overcome weaknesses in the legislation. When Part 8 of the Local Democracy, Economic Development and Construction Bill was introduced he drafted amendments which were debated in Parliament. An amendment on security for payment was lost by 69 votes in the House of Commons.

He is an adjudicator on the Adjudication Panel of the Chartered Institute of Building (**CIOB**). He has lectured extensively on legal and contractual matters and is a regular legal columnist to Building Magazine. He has written handbooks on tendering and contracting and a self-help legal handbook on retentions. He wrote the commentary on the "Construction Act" for Sweet & Maxwell's Current Law Statutes. His commentary on s.111 received House of Lords' approval in *Melville Dundas v. Wimpey* (2007) – the first case on the Act to go to the House of Lords.

He was appointed Visiting Professor of Construction Law at the University of Wolverhampton on 1 June 2000 where he taught on the MSc in Construction Law and Arbitration. In May 2007 he was also appointed Visiting Professor at the University of Northumbria where he is supporting the University's research priorities. He has taught the law relating to construction contracts at Hong Kong City University in Kowloon and has been a visiting lecturer at other universities including University College London, Kingston and London South Bank.

He is an honorary member of the Society of Construction Law.

He was nominated as construction personality of the year in the 2004 Building Awards. He was listed in Contract Journal's construction industry top 30 "*power players*" in 2006, 2007 and again, in 2008.

Rudi has given advice to both the New Zealand and Singaporean Governments in the development of their respective construction contracts legislation. He has worked with Senator Quinn in the Irish Senate on the drafting of the Construction Contracts Bill which was enacted in 2013. He was a

member of a European Commission working party drafting a harmonised code of contract law for the European Union.

He was appointed chairman of the NEC Users' Group in 2006 and is currently President of the Group. He has written articles on the NEC contract and spoken at international conferences on the subject.



## **LORD DEIGHTON**

### **Commercial Secretary to the Treasury**

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Lord Deighton joined the Treasury having successfully completed his role as Chief Executive of the London Organising Committee of the Olympic and Paralympic Games (LOCOG), which was responsible for preparing and staging the London 2012 Games. Over six and a half years as CEO he was in charge of the day-to-day operations of the company, overseeing recruitment of a workforce of around 6,000 paid staff, up to 70,000 volunteers and around 100,000 contractor roles as well as the procurement of £700m-worth of contracts to help deliver the hugely successful Games. He was also responsible for the annual budget and provided leadership in the development of a variety of Olympic and Paralympic programmes, from sponsorship and marketing to ticketing and the Torch Relay.

Prior to joining London 2012, Lord Deighton was the Chief Operating Officer of Goldman Sachs in Europe, and a member of its European Management Committee. At Goldman Sachs he worked in a variety of management and client-facing roles for over 22 years, and was appointed a partner of the firm in 1996.

Before joining Goldman Sachs in 1983, Lord Deighton worked for both Security Pacific National Bank and Bank of America.

Lord Deighton is married to Alison and has 2 sons. He is also a Board member of England Rugby 2015, the Organising Committee for Rugby World Cup 2015.





## **RICHARD MOULD**

### **HS2**

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Richard joined HS2 (High Speed Two) as Head of Corporate Procurement in April 2013. Richard is responsible for shaping the procurement strategy for the largest infrastructure project in Europe, ensuring HS2 delivers exceptional value for money, drives regional regeneration and creates jobs. The total cost of the project is £42.6 billion.

Prior to this he worked for the London Organising Committee of the Olympic Games and Paralympic Games (LOCOG) as Head of Procurement from April 2007 to late 2012.

LOCOG was responsible for promoting and staging the successful London 2012 Olympic Games. At LOCOG he established the Procurement Function which sourced, selected and managed £1.2bn of Goods and Services and then subsequently led a team which negotiated over 200 deals totalling in excess of £550m, helping to deliver the Olympic and Paralympic Games.

Working in the Aerospace and Defence industry, Richard developed and inspired outstanding teams whilst leveraging their strengths to deliver commercial advantage. As a senior member of the BAE Systems procurement council, he helped set policy and guidelines for an organisation which spent in excess of £4.1bn per annum with suppliers.

From 1989 to 1997 Richard worked in procurement, commercial, marketing and proposal management for Bombardier Aerospace, Cobham and Schlumberger, working in the UK, Italy, North America, Canada and the Middle East.

[richard.mould@hs2.org.uk](mailto:richard.mould@hs2.org.uk)



## **STEVE WILLIAMSON**

### **Manchester City Council**

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Steve has extensive hands on experience as a leader on large capital projects from inception to completion. Over the last 7 years he has been involved in the planning and directing project varying between £5m to £500m in a number of challenging sectors.

For the last 4 years Steve has worked as the Commercial Leader for the £170m refurbishment of 2 civic buildings of national and international heritage significance, and the redevelopment of the surrounding public realm including the installation of a district heating scheme. His key responsibilities in this role is to provide the overarching leadership, management and coordination of all commercial, procurement and legal matters relating to the programme scope.

Paramount to Steve's philosophy is to be part of and contribute to a cohesive project team environment in which all team members, including stakeholders, focus on shared common goals.



## **TSUI WAI**

### **Drainage Services Department, HKSAR**

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Mr Tsui graduated from the University of Hong Kong. After having worked in a consultancy firm for his training and obtained his professional qualification, he joined the Civil Engineering Department of the Government of Hong Kong in 1981. Since then, he worked in various positions, responsible mainly for the design and construction of major infrastructure projects, including marine structures, reclamation, new town development and highways. He also spent several years in the Works Bureau, in which policies of public works in Hong Kong were formulated and carried forward.

Mr Tsui is currently the Deputy Director of Drainage Services Department (DSD), responsible for the development and implementation of capital works projects, operation and maintenance of drainage and flood control facilities, sewerage system and sewage treatment plant. In the course of discharging his duties, he has also made substantial contributions in enhancing the sustainable development of the Department in areas such as green management, greening, site safety, and in particular NEC.

Having been involved in the delivery of many major infrastructural projects in Hong Kong, Mr. Tsui believes that NEC has good potential in substantially improving the relationship among the contracting parties, thus leading to more successful delivery of projects. In this regard, he took charge of the planning and implementation of the first Hong Kong Government NEC pilot contract – the Fuk Man Road Nullah Improvement in Sai Kung, which commenced construction in August 2009 and was successfully completed in May 2012 – 6 months ahead of programme and with a 5% cost saving. In an endeavor to further test the applicability of NEC in Hong Kong, DSD is now having 5 NEC contracts of different options, nature and scale under construction and over 20 more under planning.



## **PHIL JOYCE**

### **The Orange Partnership**

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In 2002, Phil joined the £4.2bn Terminal 5 programme at Heathrow Airport. Recognising that the existing teams did not have the appropriate skills to audit costs he worked with senior management to create a team made up of people with accounting experience to carry out risk based audits using forensic IT tools. That team went on to identify and recover in excess of £40million in overcharges.

Based on his experience at T5 Phil established a specialist chartered accountancy practice, The Orange Partnership, in 2003 to provide similar services to other clients. Working with fellow chartered accountant, Darren Ward, who had also been part of T5 as head of supply chain commercial management, he refined and produced services which provide clients with confidence that they are receiving value for their spend; not being exposed to unnecessary risks and not heading for avoidable disputes.

Over the last 10 years The Orange Partnership has, under Phil's guidance worked with numerous blue chip clients on construction projects ranging from £0.5million to £40bn. In that period Phil has audited £15bn in costs and identified and helped clients to recover over £100million in overcharges.

Phil now works only with clients and not contractors or other consultancies as he believes that this enables him to offer independent opinions free from any potential conflicts of interest. Being a passionate and committed auditor in construction means he has to be resilient. Contractors don't always react well to him finding things they don't want to be found. It helps that he is an equally committed and passionate Chelsea fan as he is already used to unpopularity.





## **SIMON RAWLINSON**

### **EC Harris LLP**

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Simon heads EC Harris' multi-disciplinary Strategic Research and Insight team. The team is tasked with delivering evidence-based insight and Thought Leadership as an integral part of the Built Asset Consultancy service.

Simon is a member of the core group of the Government-led BIM strategy group and leads the legal and commercial work stream. He led the delivery of the CIC suite of BIM documentation in 2013 and was involved in the production of a guide on BIM and laser scanning. Simon has recently produced commercial guidelines for the implementation of Government Soft Landings and is currently collating lessons learned from Government BIM Pilot projects. Simon is part of a team contributing to the early development of the BIM Level 3 agenda.



## **STUART THOMPSON**

### **Morgan Sindall Construction East**

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Stuart's career in the Construction industry spans more than 20 years. He has an exceptionally wide portfolio of experience including site management, engineering, professional services and for the past decade, design management and sustainability. He is a BREEAM AP and has a real interest in a low carbon approach to design. A recent 'Engineering, Technical Excellence & Innovation' award winner, Stuart embraces a 'do different' approach and enjoys a challenging environment. He is infectiously enthusiastic with very high standards, which has led him to adopt a Soft Landings approach to all his projects. Currently, Stuart is providing Soft Landings 'thought leadership' to the Morgan Sindall Group and is working on two key projects adopting a Soft Landings approach to project delivery.

Stuart can often be found presenting progress with Morgan Sindalls approach to Soft Landings, and comments as follows...

#### **The Enterprise Centre, University of East Anglia**

For this project, we adopted the full 5 Stages of Soft Landings from the outset. Stages 1&2 have proven to be invaluable in strengthening our understanding of the project brief and outcomes. We have facilitated several workshops, looking at the detail of certain aspects of the design (called reality checking) and also stepping back and looking at the scheme holistically ensuring that the many stakeholders to this project have a clear understanding of the scheme and that their expectations are met.

#### **Cambridge University, Department of Engineering**

The Estates department at Cambridge University have been using a version of Soft Landings for over 10years and have a robust 'University Workplan' in place. We are combining their existing workplan with the BSRIA Soft Landings Framework to further strengthen the approach. We have adopted all 5 Stages of Soft Landings and are currently in Stage 1. Following completion of the initial workshop, we have been able to gain a real understanding of how the Department of Engineering functions and what is important to them with respect to operation and design detail



## DAVID JOHN GALAVAN

### Prater Ltd

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David has worked with Prater Ltd since 2001 and currently holds the position of Commercial Director. Since 1990 David has worked with Bovis Construction Ltd, Bovis Lehrer McGovern and Bovis Asia-Pacific.

**Below is a list of all projects David has been involved under the Prater banner, including but not limited to:**

- Olympic Velodrome
- Media Hub
- Blackfriars Station
- Athletes Village (N26)
- Peterborough Hospital
- Westfield Shopping Centre, White City
- Albion Riverside
- All Canary Wharf Projects
- Olympic Stadium, Stratford
- RAF Wyton
- Wembley 05
- Arsenal Emirates Stadium
- Pembury Hospital
- GCHQ Cheltenham
- Colchester Garrison
- London Bridge Station
- Battersea Power Station
- Alder Hey Sick Children's Health Park
- Glasgow Adult & Children's Hospital
- Tesco Woolwich
- Glasgow Main Acute



## **GRAEME TAPPENDEN**

### **Cabinet Office BIM Task Group**

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Graeme is a chartered engineer with a long career working in information management across a broad spectrum of building & infrastructure consultancy environments large and small, UK and international.

As a consultant to the UK Cabinet Office BIM Task Group, Graeme is supporting the technical delivery of the HMG Construction Strategy & Building Information Modelling (BIM) across the UK. Graeme is assisting a number of Government Departments & Agencies, Local Authorities and other clients in their Project and Whole Life BIM and digital technology adoption strategies.

Graeme was a prime contributor to the recently published PAS1192 Part 3 Specification for information management for the operational phase of construction projects using building information modelling. This standard complements the project focussed PAS1192 Part 2 across the Whole Life of a built asset or asset estate.

“These are very exciting times with significant productivity, quality and economic improvements able to be delivered through the adoption of BIM and digital technologies across project and the whole life operation of built assets.”



## **DEBORAH ROWLAND**

### **Cabinet Office**

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Deborah Rowland is the Head of Facilities Management Policy & Strategy for Central Government within the Cabinet Office. She has reviewed the way FM is procured and managed across the central government to drive out efficiencies and developed the FM Strategy with the pan departmental FM Board that culminated in the FM Central Contract Model.

Deborah leads on Government Soft Landings (GSL) which is an objective of the Government Construction Strategy to align construction and design with those that use, operate and maintain them and has developed a policy for government which forms part of the Building Information Management (BIM) and is being implemented with departments in readiness for the mandate in 2016.

Deborah has 20 years experience in FM, and has worked as a client, supplier and consultant in both the private and public sectors.

She has an MSc in FM, is a Certified Member of BIFM, a Fellow of RICS and is on the Major Projects Leadership Programme for Government. Deborah was recently awarded BIFM FM of the Year 2013.



## **ROBERT GERRARD**

### **NEC Users' Group Secretary**

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Rob specialises in procurement and project management and is also involved in extensive NEC training and consultancy work. Rob is experienced in financial control, contract preparation and administration, including the consideration, evaluation and resolution of contractual claims mainly in civil engineering projects.

He is an Examiner for the ICE Law & Contract Procedure he has also held the position of NEC Users' Group Secretary from 2006 to date.

His publications include NEC2 and NEC3 Compared, 2005, as well as drafting the NEC3 Professional Services Short Contract guidance notes, some of the flow charts and 'How to...' guides along with being a part of the working group who drafted the NEC3 April 2013 suite of contracts.

Rob can be contacted on [robert.gerrard@neccontract.com](mailto:robert.gerrard@neccontract.com) or on +44(0)20 7664 2446.



## **PETER HIGGINS**

### **pdConsult**

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Peter Higgins is a director of pdConsult, a consultancy organisation established by him in 2000 to provide strategic advice, contract procurement, management and dispute resolution services to the construction industry. Before starting pdConsult in 2000, Peter was responsible for the worldwide civil engineering work of a major UK consultancy. He has a background in civil engineering, building and landscape with experience on a wide range of engineering projects in the UK, Africa, and in the Middle and Far East.

Since 1976, Peter has been involved in determining contract strategy, advising on contract preparation and procurement processes and advising on contract administration. Much of Peter's current work is advising major public sector clients on procurement policy and implementation. Working with legal teams, he has been closely involved with public sector clients in developing contracts based on the NEC system and developing procurement strategy. He has given lectures in many countries on contract issues and has published papers on contracts and on ethics in construction.

Peter is a trained mediator, and has had appointments as expert witness in arbitration and litigation cases, and acts as arbitrator, adjudicator or other dispute resolution expert. He has dispute resolution experience in engineering, building and landscape disputes, both as neutral deciding disputes and in advising clients. He is on various dispute resolution panels for the Institution of Civil Engineers and the Chartered Institute of Arbitrators.

Peter was Chairman of the New Engineering Contract Panel for the Institution of Civil Engineers and now sits on their New Contract Board. He has been involved in the development and implementation of NEC contracts since the initial preparation of these contract forms, and has provided advice and training to many contract users. Peter was a council member and subsequently was awarded honorary membership of the Society of Construction Law, and has served as a branch chairman of the Chartered Institute of Arbitrators. He has recently stood down as chairman of the ICE Dispute Resolution Panel.





## **MATTHEW GARRATT**

### **Costain**

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Matthew is Commercial Director for the Costain group's redevelopment project at London Bridge Station. He is a chartered surveyor and a qualified arbitrator.

Matthew's experience includes a range of engineering projects across the UK, he specialises in commercial strategy and dispute avoidance and providing advice on NEC3. He is a former NEC panel member.



## **SIMON MATTHEWS**

### **HLG Associates**

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In a career spanning almost 25 years, Simon has worked on programs and projects across a wide range of sectors, for public and private sector clients, including the London 2012 Olympic Games, London Legacy Development Corporation, Parliamentary Estates Directorate, Ministry of Justice, and the States of Jersey.

Simon has substantial experience of working within complex multi-stakeholder environments, in the use of a wide-range of ICT solutions, and most forms of contract including NEC3 and JCT. Simon is also an experienced lecturer and training facilitator.

Simon set-up HLG Associates in 2010 to specialise in delivering procurement, project, commercial and supply-chain management solutions for public-sector clients involved in delivering complex capital and infrastructure projects and programs. HLG Associates are Bronze Members of the NEC3 Users Group.

More information about HLG Associates can be found at [www.hlgassociates.com](http://www.hlgassociates.com)



## **PETER KEEGAN**

### **MACE**

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Peter is an Associate Director within Mace's Infrastructure Consultancy Team with a background in commercial management and 20 years' experience working across a broad range of projects and sectors, including the London 2012 Olympic Games, London Legacy Development Corporation, the Wellcome Trust, and Grosvenor Properties.

Peter was responsible for the management, reporting and control of the budget for the whole of the transformation works programme for Queen Elizabeth Olympic Park, working in the central Programme team co-ordinating all aspects of Commercial Management across multiple projects ranging in size from £1m to £220m. Prior to the hosting of the Games, Peter worked as Commercial Manager on the £190m Landscaping & Public Realm project prior to the Games, covering all stages of the landscaping project from cost planning and procurement through to final accounting and close out.

Peter has extensive experience of working both pre- and post-contract with the NEC3 suite of contracts, and is regularly praised for his pragmatic and practical approach to applying the provisions of the contract, when working for his clients.

More information about Mace Group can be found at [www.macegroup.com](http://www.macegroup.com)



## **TOBY HOLLOWAY**

### **Mytee Ltd**

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Toby is a Director of Mytee Limited, an independent specialist commercial cost verification, forensic accounting and auditing company that provides services to major construction and infrastructure clients throughout the construction industry.

Toby has worked in the construction industry as a both Cost Verification Officer and as a senior Cost Manager for almost 15 years. During this period Toby has gained knowledge and experience in various fields working on many prestigious projects, including the London 2012 Olympic Games, Southern Water, London Development Agency and British Nuclear Fuels Limited.

Toby has successfully delivered schemes and is fully versed in audit compliance and management of work streams under cost reimbursable and the NEC3 suite. Strengths include final accounts including producing documentation for final audit to NAO Level of compliance, cost variations, tendering bids, cost comparisons, environmental and health and safety procedures.

More information about Mytee Solutions can be found at [www.myteesolutions.com](http://www.myteesolutions.com)



## **TIFFANY KEMP**

### **Author of 'Deal Makers' and 'Essential Contract Drafting Skills'**

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As director of Devant, the commercial contract consultancy she founded in 2003, Tiffany works with companies to help them establish the contract as a valuable tool in achieving their commercial aims. A professional deal-maker, she assists clients in the structuring and negotiation of new deals, and is a sought-after expert in resolving commercial disputes.

An engineer with a Masters Degree in Business Law, Tiffany's early project management career within Racal and Anite schooled her in the importance of relevant contracts to support the delivery of successful deals. In her work for leading US telecoms billing provider, Convergys, she led international bids for complex solutions, negotiating deals across Europe.

Tiffany speaks on the subject of how contracts can be used to build profitable and mutually beneficial commercial relationships. She has converted many business leaders, sales professionals and project managers to seeing contracts, and the contracting process, as an opportunity to add value rather than a barrier to sales. A member of the International Association for Contract and Commercial Management (IACCM) since 2005, she is a regular contributor to IACCM Ask the Expert sessions, and delivers stimulating and engaging workshops and master classes to IACCM members, executive groups and client teams.



## **PHILIP BENNETT**

### **Network Rail**

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Phil Bennett is the Finance & Commercial Director for the Infrastructure Projects Southern Region within Network Rail. Phil has been with Network Rail and its predecessors for 14 years and during this time has held a variety of commercial and programme management roles. He has been in his current role since April 2012 and has responsibility for the commercial, procurement, estimating, finance and business information activity within the regional team, most recently leading the regions introduction of its innovate collaborative delivery frameworks for CP5.

Phil has over 20 years' experience in the UK construction industry in a variety of business and market sectors at all levels of the supply chain, and has a technical background as a quantity surveyor



## **STEPHEN BAMFORTH**

### **Griffiths & Armour**

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Stephen Bamforth joined Griffiths & Armour in 1986 as a trainee after graduating in Natural Sciences from Churchill College, Cambridge. He qualified as a Fellow of the Chartered Insurance Institute in 1990, became a Partner in the firm in July 1994 and Senior Partner in 2003.

Stephen specialises in advising construction consultants on their professional indemnity insurance requirements and maintains an active involvement with both key clients and insurer partners. He represents G&A on a number of industry sector trade bodies and professional associations and works closely with government on proposed legislative changes and innovative approaches to the management and insurance of risk within construction.

# CASE STUDIES



## MANCHESTER CITY COUNCIL TOWN HALL COMPLEX TRANSFORMATION PROGRAMME



**Client:**  
**Manchester City Council**  
**Project partners:**  
**Ian Simpson Architects**  
**Ryder Architecture**  
**Value:**  
**£100m**  
**Duration:**  
**2011–2014**  
**Area:**  
**42,000m<sup>2</sup>**  
**Delivering:**  
A stunning juxtaposition  
of heritage and modern  
architecture

### The Result:

The £98m transformation of a historic landmark has successfully switched the public accessibility ratio within Central Library from 30% to 70%. Previously cramped and poorly utilised areas within the Town Hall Extension have now been converted into modern, naturally lit open plan offices and meeting rooms. Regeneration efforts have boosted the local economy by employing local SMEs and investing in 78 apprenticeships.

### Transforming Manchester's historic jewel in the crown into an open, multi-functional facility for all

Both the Central Library and Town Hall Extension are now completed following a challenging three year refurbishment programme. Contemporary architecture compliments heritage features whilst delivering new and improved facilities and connects the two buildings together for the first time. The installation of transparent glass facades has opened up a set of airy, naturally lit, welcoming spaces; offering an array of customer services - all accessible in a single visit.

### Breathing life into redundant space

A new prominent feature within the Central Library is the vertical circulation core; a steel and glass staircase and lift positioned in the heart of the building, making it more accessible for the public and improves way finding. Additional facilities include the ground floor exhibition space, along with a media hub and restored reading room. Within the Town Hall Extension, the former gas and electric showrooms have been converted into a customer service centre, cafe and multimedia library situated beside the stunning Rates Hall.

### OneTeam

Integration and collaborative working can be applied to any project that wishes to adopt a positive 'one team' culture. The creation of aligned behaviours stemmed shortly after project commencement where cultural changes were implemented across the wider team following the promotion of the 'One Team' ethos. Throughout the duration of the THCTP project, all parties shared the same collaborative vision across a number of headings, for example: BIM, H&S, procurement and commercial

processes, along with regeneration and communications in terms of community engagement events and site tours.

The THCTP displays the measured success as an exemplar collaboration project. Initial support from procurement and commercial departments went a long way when promoting the 'One Team' ethos and highlights how any project can benefit from integration and collaborative working through good communication, positive behaviour and a shared vision.

The concept of a 'One Team' approach was embedded in the client's philosophy. This project summed up the definition of integration and collaborative working through a shared project office which housed: MCC, LOR, NG Bailey, BDP, Ian Simpson Architects, Ryder Architecture and Aecom who all worked together in an open plan office. To emphasise the importance of the 'One Team' ethos, specific branding was produced, indicating affiliation and was signified on personal protective equipment and letterheads. Collaboration was further demonstrated with team photos that were displayed across the site hoardings.

Prior to commencement on site, LOR were involved on the project from early stages. This early engagement helped to develop design with MCC and architects, enabling fluid cost compilation and agreements at the head contract utilising the New Engineering Contract (NEC 3).

The team chose the NEC 3 framework which was then developed collectively to provide commitment, clarity and certainty. With this being a modern commercial arrangement, NEC 3 allowed target costs to be developed openly and honestly from the onset. The team were mindful that MCC wanted to develop the most equitable contract with appropriate allocation of risk in addition to fair payment terms for the supply chain and other project specific key performance indicators including sustainability and regeneration requirements.

The ability to work upfront and locally enabled all parties to solve any potential issues in advance, preventing potential claims from arising upon completion. Within the shared office, the entire project team used the same electronic systems and software for example: BIW and Building Information Modelling (BIM).

MCC together with LOR collaborated with local training providers to devise a regeneration, education and skills plan (RESP) for the citizens of Manchester Early into the project, all parties signed a pledge, agreeing that they were committed to the project's regeneration and sustainability key performance indicators.

The RESP was a good example of how the One Team approach benefited the organisations involved in the project and the wider community. By working together, sharing ideas, making use of different skill sets and by encouraging participation peer to peer, the One Team achieved more than they could have as separate organisations.

Success of the RESP led to:

- 78 apprentices were employed across 25 trades.

- The project accommodated 454 formal site tours to facilitate an understanding of what the project entailed for end users.
- Over 100 people from the 'One Team' volunteered for community engagement activities.
- Supported over 75 young people through short work experience placements.

#### Optimising Building Information Modelling (BIM)

Close liaison with English Heritage was required to ensure the new design complemented the building's original architecture. To enhance communication between the stakeholders and workforce, the in-house BIM team created a 3D model. By applying BIM to methodology, co-ordination and construction planning, it provided the team with clarity, the client with confidence that this approach would be successful and English Heritage with assurance that the building's heritage would be respected and protected. BIM saved money on unnecessary temporary works, saved nine months on programme and facilitated English Heritage approvals.

The temporary works and demolition phases were simulated prior to construction; this identified crucial workflows in great detail – previously overlooked in the original 2D plans. 5D modelling was also applied alongside the programme to provide an accurate bill of materials and greater cost certainty.

#### Up-skilling facilities management (FM)

The BIM team collaborated with the Council's FM team to continue to use the 3D model as an intelligent tool for surveying and commissioning post handover. This offered an unparalleled level of operation and maintenance (O&M) data compared to paper-based methods, and will vastly improve ongoing FM and energy performance monitoring.



## **HS2**

HS2 will be a Y-shaped rail network providing direct, high capacity, high speed links between London, Birmingham, Leeds and Manchester, with proposed intermediate stations in the East Midlands (Toton) and South Yorkshire (Sheffield Meadowhall). The Government gave the go-ahead for a UK High Speed Rail network – called High Speed Two (HS2) – on 10 January 2012.

HS2 will improve capacity across the rail network, shorten journey times between Britain's major population centres, boost the economy and create thousands of jobs.

High Speed 2 will be the backbone of a new transport system for the 21st century, offering the capacity Britain needs to compete and grow. It will transform the economic shape of the country by bringing cities closer together, driving regional regeneration and promoting growth and creating jobs.

Demand for long distance rail services has doubled in just 15 years, leading to overcrowding on many routes. This growth is continuing. By moving a significant proportion of our current inter-city services from the existing railway onto new HS2 lines, there will be space for additional commuter, regional and freight services, benefiting people and businesses up and down the country

Economic growth outside London and the South East will be underpinned by improved transport capacity and infrastructure. High Speed 2 will unlock the enormous potential and opportunities that cities including Birmingham, Manchester and Leeds have to offer – making them more attractive places to locate and do business, with people able to live in one of these cities and work in another.

HS2 will be built in two phases. The line between London and the West Midlands and a connection to High Speed 1 are expected to open in 2026 (HS2 Phase One), followed in 2032-33, by the onward legs to Manchester and Leeds.

The total cost for the route is £42.6 billion, including £14.4 billion of contingency. HS2 Ltd is a company wholly owned by the Department for Transport (DfT).

## FUK MAN ROAD NULLAH PROJECT



Location: Sai Kung, Hong Kong

Value: 6 million pounds

Contract used: ECC Option C

Start-finish: August 2009 – May 2012

Employer: Drainage Services Department, the Government of Hong Kong Special Administrative Region

Contractor: Chun Wo Construction & Engineering Co., Ltd

Project Manager: Chief Engineer/Drainage Projects, Drainage Services Department

The HK \$76 million Fuk Man Road nullah improvement project was designed to improve the local environment of Sai Kung town, known to many as the back garden of Hong Kong. It involved decking over an existing 180 m long 12 m wide open nullah, constructing a 4000 m<sup>2</sup> urban park over the top and upgrading an adjacent roundabout. The marine-themed park includes water-drop-shaped seating, a 30 m long play ship and an 8 m long brass and stainless steel dragon-boat sculpture weighing 3 t.

### **Pilot project for government**

In 2001, the Hong Kong government's construction industry review committee recommended a wider adoption of partnering and the integration of a partnering approach in contractual relationships, with the aim of avoiding disputes and achieving better project delivery. In response the government's Development Bureau decided to try out non-contractual partnering in public works projects. In 2006, the Development Bureau chose to trial the NEC3 Engineering and Construction Contract as a form of contract embracing partnering spirit. The Fuk Man Road project was selected for the first NEC pilot project and the contract was awarded in 2009.

### **Partnering workshop and training**

According to senior engineer Anthony Tsang, the project team adopted a number of measures to make NEC work. *First, a partnering workshop and NEC practical training sessions were arranged for the Drainage Services Department, the consultants and the contractor at the beginning of the contract.*

He said these were designed to bring about a change in mindset, from a traditional adversarial to a partnering approach, and to ensure a common understanding of the NEC contract conditions.

*Secondly, the Drainage Services Department engaged an NEC adviser to guide the project team throughout the project to work with a partnering spirit and to comply with the contract requirements.*

### **Co-location of project team**

A common office was adopted for the project so that the project manager, the supervisor (the consultants) and the contractor could sit side by side to facilitate more effective daily communications. *This was an unusual arrangement for government contracts in Hong Kong, says Tsang. Throughout the project, regular meetings among senior management of the three parties were held to monitor performance and jointly solve problems as they arose. With such good relationship established, the project team arranged joint functions, such as public relations events, a joint charity team and even a dragon boat race team.*

### **Benefits of NEC3**

- Fostered the creation of a project team with a partnering spirit and collaborative working culture.
- Resulted in high job satisfaction of staff working on the project, which differed quite significantly to other government contracts in terms of working culture.
- Early warnings and pain / gain share promoted joint and prompt problem solving.
- Significant cost and time savings were achieved: the project was completed six months ahead of its 39 month programme and 5% below final target cost.

## Happy Valley underground stormwater storage scheme, Hong Kong

<b>Location:</b>	Happy Valley, Wan Chai, Hong Kong
<b>Value:</b>	£53 million
<b>NEC3 contract used:</b>	ECC, ECS
<b>Start-finish:</b>	2012 - 2018
<b>Employer:</b>	<u>Drainage Services Department, the Government of the Hong Kong Special Administrative Region (HKSAG)</u>
<b>Contractor:</b>	<u>Chun Wo Construction &amp; Engineering Co., Ltd</u>
<b>Project manager:</b>	<u>Chief Engineer/Drainage Projects, Drainage Services Department</u>



The HK\$678 million (£53 million) Happy Valley underground stormwater storage scheme is the largest NEC3 Engineering and Construction Contract (ECC) Option C contract awarded by the Hong Kong government to date. It is also the first in the HKSAR to have trial on the Engineering and Construction Subcontract (ECS).

Designed to alleviate flood risk in the Happy Valley area of Wan Chai, the scheme involves construction of a 60,000 m<sup>3</sup> underground stormwater storage tank, a pump house, a 650 m long twin-cell box culvert and associated works including reinstatement of sports pitches and landscaping areas.

Contractor, Chun Wo started works for the Drainage Services Department under an NEC3 ECC Option C (target contract with activity schedule) in September 2012. The first phase of the scheme is due for completion in early 2015 with the overall completion following in March 2018.

### Promoting partnering spirit

According to Chief Engineer/Drainage Projects Luk Wai-hung, a number of measures were implemented on the project to promote mutual trust and co-operation between contracting parties and stakeholders.

“We and cost audit consultant Mott MacDonald and NEC advisor EC Harris arranged a series of practical training workshops at the start of the contract and then on an annual basis to promote the NEC partnering spirit with contracting parties.”.

“This site is situated within the horse racing track of the Hong Kong Jockey Club with fourteen sports pitches for soccer, rugby and field hockey managed by our Leisure and Cultural Services Department and the Hong Kong Football Club, surrounded by several schools and is also a hotspot for jogging which incurs many constraints to construction programme and high expectation to mitigation measures to any potential environmental nuisance caused by the works. Further to partnership workshops within the project team, we arranged partnership workshops with all these stakeholders included the Hong Kong Jockey Club, Leisure and Cultural Services Department, Hong Kong Football Club, Wan Chai District Council and representatives from neighbouring

schools to show our concern and care on them, which build up trust and partnership spirit among our stakeholders to work with project team and contractor to minimize the impact to the public.”

A pain/gain share mechanism was then implemented to set common goals for the employer and contractor. ‘This ensured that the project manager and contractor collaborated closely to optimise progress, resources – including people, plant, equipment and materials – and ultimately reduce the cost of the contract,’ says Luk.

‘It also encouraged innovation and cost saving. For example, the contractor proposed an alternative design for the tank foundation that offered a cost saving of around HK\$70 million. We promptly accepted the proposal to reduce costs and the risk of delays.’

In addition, a risk register was established at the pre-contract stage and is being monitored and updated throughout the project. Both the project manager and contractor will issue early warnings to each other whenever there is likely a risk and arrange risk reduction meetings to identify mitigation measures for proper risk management. At the end of February 2014 for example, a total of 27 early warning notices had been raised of which 23 had been closed.

### **First trial of ECS**

Also, in a first for a Hong Kong government project, the contractor sub-contracted a 380 m long of box culvert under an NEC3 ECS Option B (priced contract with bill of quantities).

According to Luk, ‘The use of NEC3 terms for both main contract and subcontract provided a common platform for the project manager, contractor and subcontractor, especially in dealing with compensation events and risk management. With uniform use of the NEC3 risk management mechanism, all contracting parties could work collaboratively and have site problems resolved rapidly to ensure timely completion of the works.’

The success of the Happy Valley scheme and other NEC3 pilot projects led to the Hong Kong government deciding at the end of 2013 to extend the pilot use of NEC3 contract form generally for public sector projects tendered in 2015 and 2016.

### **Benefits of NEC3**

- The NEC3 contract suite promotes a spirit of mutual trust and co-operation between contracting parties and key stakeholders.
- The pain/gain share mechanism in the ECC sets common goals for employers and contractors, encouraging collaboration, innovation and cost saving.
- The ECC early warning and compensation event process ensures contract issues are speedily resolved and risks properly managed throughout.
- Use of the ECS extends NEC3 collaboration and risk management benefits through the entire supply chain.



#### Further information

**Contact:** Luk Wai-hung, Chief Engineer/Drainage Projects, Drainage Services Department

**Email:** [whluk@dsd.gov.hk](mailto:whluk@dsd.gov.hk)

**Web:** <http://www.dsd.gov.hk>

<http://hvusss.eksx.com/index.html>



## Delegate Pack Quiz

### **Engineering & Construction Contract:**

1) Works Information:

- ☐ Should state any constraints on how the Contractor Provides the Works
- ☐ Should not state any constraints on how the Contractor Provides the Works
- ☐ Includes Site Information

2) The Project Manager

- ☐ Approves any Contractor's design
- ☐ Accept any Contractor's design
- ☐ Consents to any Contractor's design

3) The Contractor must show on each programme

- ☐ The critical path
- ☐ Float
- ☐ Linkages between activities

4) Compensation events can only be notified if any early warning notices were given first

- ☐ True
- ☐ False

5) Acceleration is

- ☐ Needed where the Contractor is in delay
- ☐ A process aimed at achieving Completion before the Completion Date
- ☐ A compensation event

### **Term Service Contract:**

6) The Term Service Contract is applicable when:

- ☐ A new building is being built
- ☐ An asset requires a one-off substantial upgrade
- ☐ A Contractor is providing a service over a defined period of time

7) The Contractor submits a revised plan to the Service Manager

- ☐ Every month
- ☐ Every 4 weeks
- ☐ Clause 13.3 states that the period for reply applies unless otherwise stated in the contract

8) A minimum of 3 secondary Options must be included in any TSC contract

- ☐ True
- ☐ False

9) If the Contractor subcontracts work

- ☐ He is not responsible for the subcontracted work
- ☐ He shares responsibility with the Service Manager if the Service Manager has accepted the Subcontractor
- ☐ He is responsible for Providing the Service if he had not subcontracted

10) All tests and inspections should ideally be

- ☐ Notified to the Contractor at the beginning of the service period
- ☐ Detailed within the Service Information at tender stage
- ☐ Notified as and when they are required

**Professional Services Contract:**

11) There are 4 main Options in the PSC of which

- ☐ Up to 2 may be chosen by the Employer at tender stage
- ☐ Up to 2 may be chosen by the Consultant at tender stage
- ☐ 1 must be chosen by the Employer at tender stage

12) Scope

- ☐ Should state any constraints on how the Consultant Provides the Services
- ☐ Should not state any constraints on how the Consultant Provides the Services
- ☐ Include the Activity Schedule

13) The Consultants obligation is to

- ☐ Meet the requirements of fitness for purpose
- ☐ Use the skill and care normally used by professionals providing services similar to the services
- ☐ Use reasonable skill and care

14) Uncorrected Defects

- ☐ Will not be present on a PSC contract
- ☐ May occur and the contract requires that the Consultant pays the Employer such amounts that sub clause 41.2 details
- ☐ May occur and the contract requires and the Consultant pays the Employer the loss the Employer will suffer as a result



15) The frequency of assessments is made according only to the assessment interval stated in the contract

- ☐ True
- ☐ False

**Misc:**

16) When did the first NEC Users' Group Annual Seminar run?

- ☐ 1996
- ☐ 1999
- ☐ 2004

17) How many members does the UK Users' Group have?

- ☐ 350-400
- ☐ 400-450
- ☐ 450-500

18) Which other 2 regions does the Users' Group operate?

- ☐ Asia-Pacific – Africa
- ☐ America – Africa
- ☐ Australasia – Asia-Pacific

19) When was One Great George Street constructed?

- ☐ 1905 - 1908
- ☐ 1895 – 1898
- ☐ 1910 – 1913

20) Chionophobia is the phobia of

- ☐ Snow
- ☐ Colour
- ☐ Bats

Name:

Company:

Email address:

Please submit any comments / questions here:

**\*Please submit your completed form to the NEC Stand in the Great Hall by 16:00\***

**NEC Users' Group Annual Seminar**  
28<sup>th</sup> April 2014

**SPONSOR INFORMATION**



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*a Viewpoint Construction Software Company*

**Lunch Sponsor**

4Projects is an award winning provider of collaborative online software. Established in 2000, we are a market leading innovator in our field. We have a presence throughout the world, directly or indirectly through our partners, and continually strive to improve and add to the solutions we provide to the Architecture, Engineering and Construction (AEC) sectors.

Currently 18 of the top 20 UK construction contractors use 4Projects collaboration software and three of the top five companies use 4Projects as their sole provider of collaborative software as well as many businesses from other non-related sectors.

Our mission is to connect people, information and processes, helping our clients to save time, money and mitigate risk. Our solutions are low cost, easy to use and quick to deploy and help our clients to deliver tangible returns on investment.

Whether you are working on a single project, portfolio of assets or you need a solution to improve collaboration across your organisation - we can help.

**[4projects.com](http://4projects.com)**

**NEC Users' Group Annual Seminar**  
28<sup>th</sup> April 2014



**Sponsor**

Sypro Management Ltd provide collaborative, on-line project management solutions. Established in 2008, Sypro delivers a leading solution for the management of NEC3 contracts. As a web-based and a completely compliant system, Sypro has been implemented and used on projects with a total value in excess of £2.5bn. Offering tailored workflows designed for total contract transparency, live reporting, audit traceability and true project collaboration, Sypro is used extensively in the delivery of healthcare, energy, renewables, highways and local authority projects. To further support and enhance the benefits of Sypro NEC®3, all aspects of system compliance are approved by our Technical Director & NEC®3 Consultant, Dr. Stuart Kings. Sypro NEC®3 makes contract administration manageable, compliant and less time consuming.

**[sypro.co.uk](http://sypro.co.uk)**

# CEMAR<sup>®</sup>

**Sponsor**

CEMAR (Contract Event Management & Reporting) is an intuitive web-based tool that delivers consistent, compliant, auditable and accessible NEC®3 administration and programme level reporting. CEMAR's tailored workflow is used extensively to manage some of the UK's largest nuclear decommissioning, utility, airport and civil engineering contracts as well as housing, highways, rail, FM and local authority contracts.

**[cmtoolkit.co.uk](http://cmtoolkit.co.uk)**

**NEC Users' Group Annual Seminar**  
28<sup>th</sup> April 2014



**Sponsor**

NEC®3 Contract Management is a web-based application from CONJECT, Europe's leading provider of collaboration technologies to the AEC market. Used by over 50 UK clients to implement delivery strategies for works under all variations of the NEC contract, the benefits of the licensed software include

**[conject.co.uk](http://conject.co.uk)**



**Sponsor**

Devant Ltd is a commercial contract consultancy, which has been helping businesses structure, draft and negotiate better deals since 2003. Managing Director, Tiffany Kemp, is a professional speaker, author and negotiator. Her publications include Deal Makers and Essential Contract Drafting Skills. In her role as 'The Contractual Diplomat', she helps clients create mutually beneficial deal structures, distil order from chaos and resolve contractual disputes.

**[devant.co.uk](http://devant.co.uk)**



# Smarter

Helping the building and construction industry make decisions



## PROJECT PLANNING

Our climate data reports can help you identify potential downtime, enabling you to negotiate realistic contracts and draw up contingency plans.

### Monthly planning averages

This report is useful for New Engineering Contracts (NEC) as it provides one-in-ten year values based on climate data recorded between 1970 and 2010. Data includes monthly rainfall totals, days with more than 5 mm of rain, days with air frost, and days with snow lying. Long-term averages are also included, based on data between 1981 and 2010. Wind records can also be added, if required.

Price = £600 + VAT

### Downtime long-term averages

Data includes temperature, humidity, rainfall, snow, frost, mean wind-speed and gusts, recorded at climate stations across the UK.

Price = £400 + VAT



## PROJECT DELIVERY

To help you meet deadlines and allocate resources, the Met Office has a range of weather forecasts that can be delivered via email or fax, as a one-off or on a regular basis:

### Prices from £100 + VAT

**Tower crane forecast:** a site-specific forecast of mean and gust wind-speeds, at height and with wind direction, for 2–5 days ahead.

**Six-day forecast:** a site-specific forecast of rain, temperature and wind for six days ahead.

**10 day forecast:** includes maximum and minimum temperatures, sunshine hours, rainfall and wind.

**Warning services:** weather parameters include low/high temperatures, wind speed, lightning, snow and heavy rainfall that indicate when it's unsafe to carry out work.

**Monthly outlook:** a range of weather parameters out to 30 days for ten regions of the UK, available in text format or as a combination of visual maps and tables.

## POST PROJECT ISSUES

We offer a number of post-project reports that can help you to revise future procedures or settle contractual disputes:

### Monthly summary

This summary fulfils the NEC requirement that claims for extended contracts can only be considered when the weather has been 'exceptionally severe' — that is, worse than might be expected one year out of ten. Alongside one-in-ten year values (based on 1970–2010 data) and long-term averages (1981–2010 data) the summary contains: daily rainfall totals, days with more than 5 mm of rain, minimum air temperature, days with air frost, snow depth and days with snow lying.

### Prices from £140 + VAT

### General monthly summary

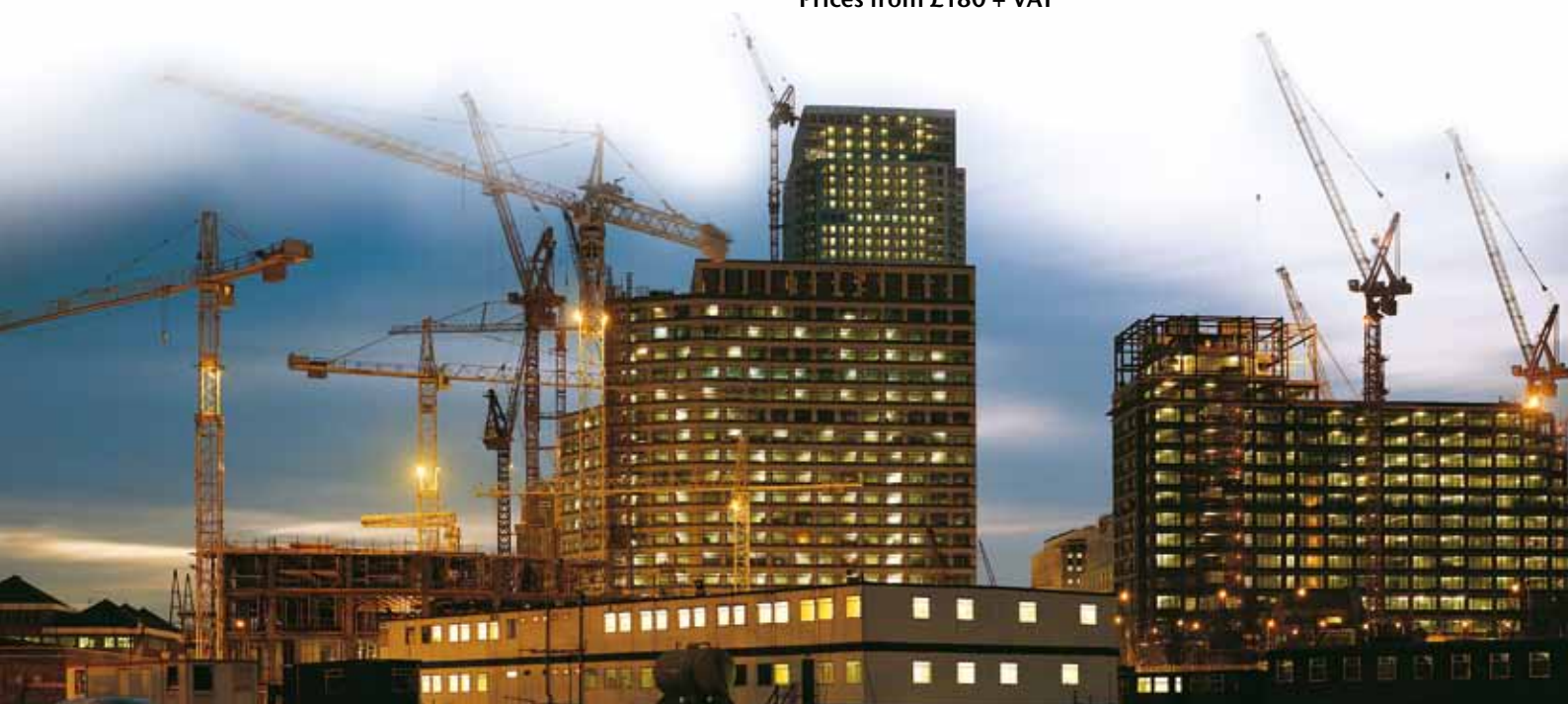
This weather report includes temperature, daily rainfall, daily mean wind-speed, daily maximum wind gust, and sunshine hours. Any significant weather is also indicated along with totals for the month and the long-term average.

### Prices from £110 + VAT

### Downtime summary

This report notes any element that exceeds operational thresholds, and for how long. Each figure can be compared with the long-term average at the same location. Elements include are rain, snow, temperature, mean wind-speed, maximum wind gusts and humidity.

### Prices from £180 + VAT



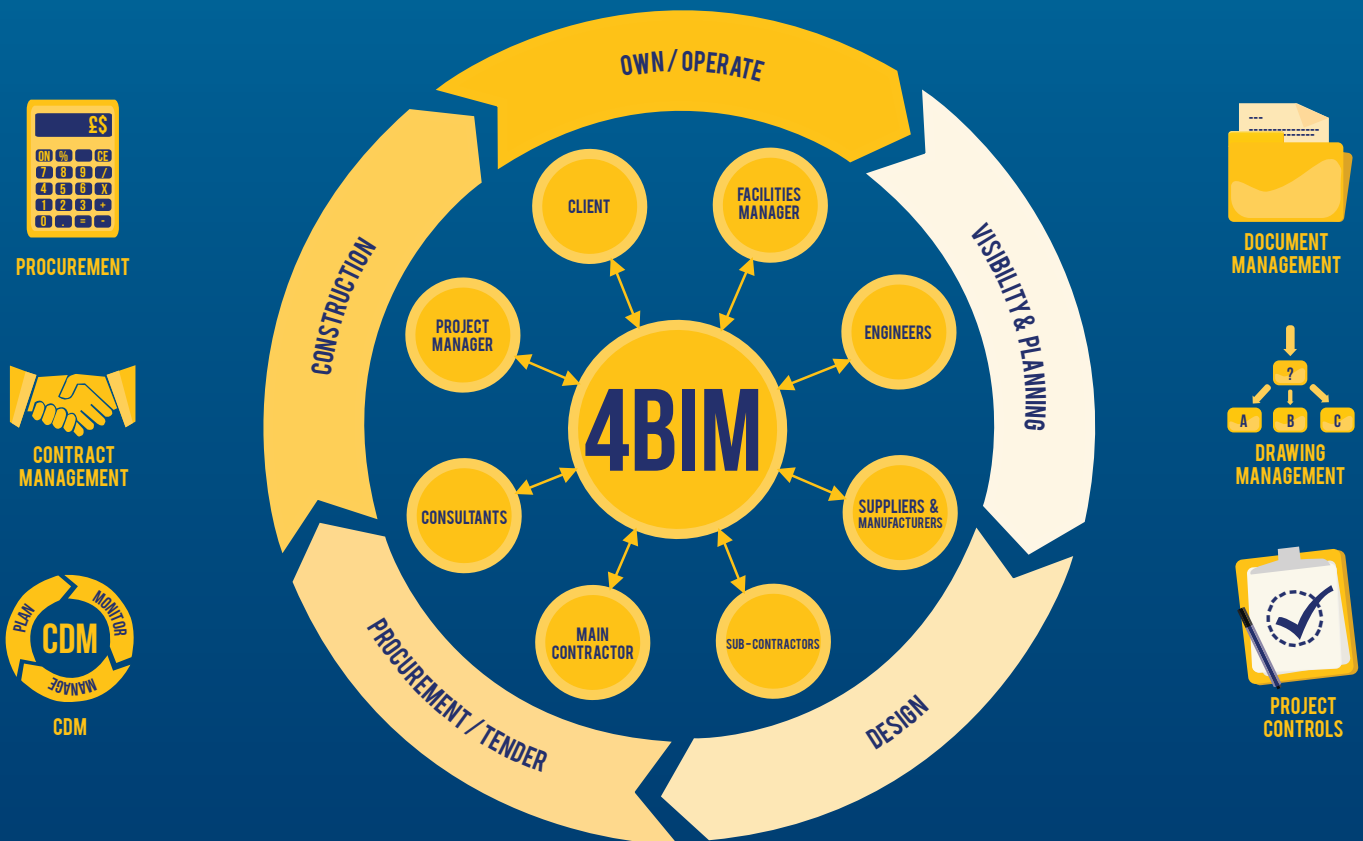
# 4BIM

## 'BIM IN A BROWSER'

Effective collaboration is essential to successful BIM projects.

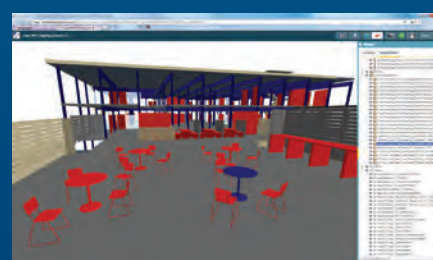
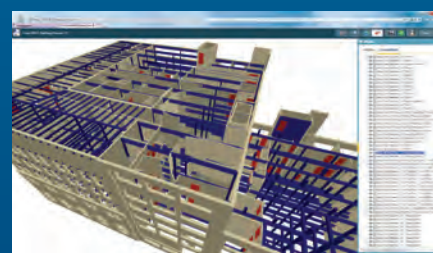
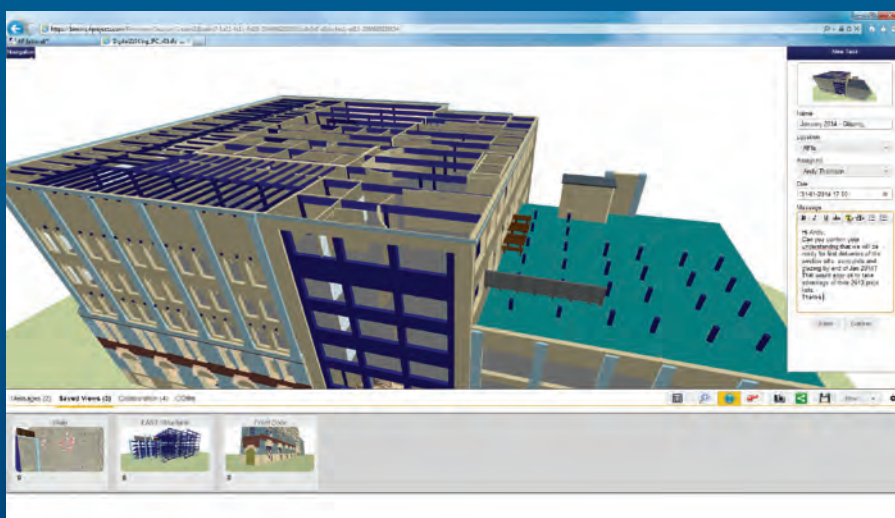
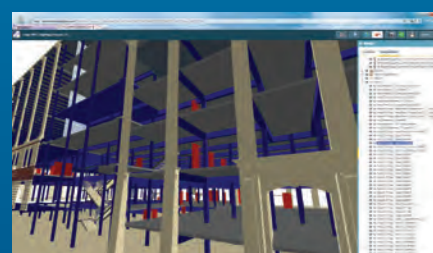
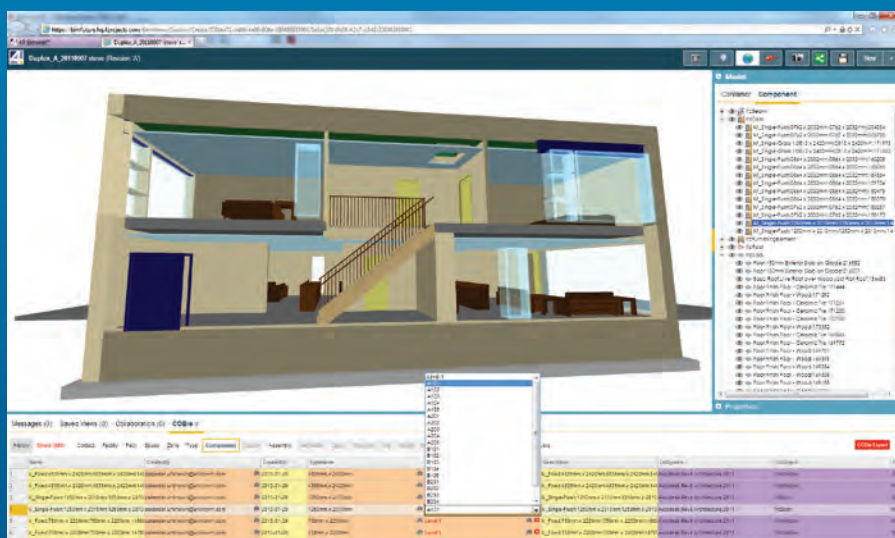
Project teams need to be able to share and control the very latest BIM models and key project information.

4Projects gives project teams the collaborative control they need to get the real benefits that BIM delivers without the financial and time restraints of using "self hosted" software.



## 4BIM Benefits

- **OpenBIM** - Open Standards approach
- **Improve** project team integration, decision making and communication
- **Reduce** project risk, errors, litigation and traditional project costs
- **SaaS** - No technical infrastructure required
- **No limits** - users, organisations, data storage
- **Works across** all browsers and platforms
- **Low cost**
- **Secure : ISO27001**



## Features

- Collaborative BIM control for the full project team through the entire project lifecycle. (client, consultants and contractors)
- Secure storage and distribution of IFC models. 4P revision control, audit history and project controls guarantee everyone has the very latest project information
- COBie data conversion, validation, editing and extraction - for easy integration with manufacturing and FM software
- Simple reporting tool to enable you to extract the data you need when you need it - bills of quantities
- Integrated 3D IFC viewer making it easy for project teams to collaboratively review, navigate and interrogate IFC models in REAL TIME. Helps teams visualise geometric design and key model data down to component level
- Merge different design discipline IFC models - overlay differences and identify live conflicts/clash while creating saved views for use at a later stage
- Seamless integration with document and project controls letting you easily link schedules and specifications to model components while creating RFI's or design discussions within model

For more information call:

**0845 330 9007**

[www.4projects.com](http://www.4projects.com) | [info@4projects.com](mailto:info@4projects.com)

4BIM partners:





## Need help with BIM compliance requirements?

**4Projects offer a simple, quick and low cost route to give your business and project teams the tools they need to achieve BIM compliance - we call it 4BIM.**

**With 4BIM you have no technology requirements as the system runs in a web browser. In addition there are no limits on users or data and it's all paid for in one low cost monthly fee.**

**Read our checklists below which outline the suggested requirements from both a client/owner and contractor perspective and find out what you can do today to assist you in achieving BIM compliance.**

### Main Contractor/ Design manager

1. Create or join a Common Data Environment and enforce its use through documented standards.
2. Create or choose a standard BIM Execution Plan (including file naming, project processes etc.)
3. Implement a PAS 1192 style workflow for the sharing of documents as part of a standard PIP (Project Implementation Plan)
4. Be able to populate, validate and export valid COBie data.
5. Make model viewing software available to all relevant team members.
6. Make clash detection software available for use by project managers.
7. Make Project Planning software available for use by project managers.
8. Define the standard file formats required from consultants (IFC, BCF, Native, etc.)
9. Have a clear understanding of what you can offer to customers in terms of the Project Information Model (PIM)
10. Assist the downstream supply chain in the creation of BIM blocks of their products.

### Client/Owner

1. Define EIR (Employers Information Requirements). This is what information is required from a PIM (Project Information Model).
2. Create or join a Common Data Environment for CAPEX and OPEX information.
3. Involve FM teams from the early stages of design.
4. Make model viewing software available to project managers during CAPEX projects.
5. Create or join a Common Data Environment for CAPEX and OPEX information.
6. Define how delivered PIMs will be used for FM and future planning.
7. Make model viewing software available to Facilities management team.
8. Implement a process to keep the PIM up to date.
9. Identify added value from BIM projects such as interactive guides for visitors.
10. Implement a building management system to record actual building performance and use, to be compared with the model.





# **EFFECTIVE, TRANSPARENT** **ONLINE NEC** **PROJECT MANAGEMENT**

## **USE IT FOR FREE...**

- ✓ **NO SUBSCRIPTIONS**
- ✓ **NO HIDDEN COSTS**
- ✓ **ALL THE BENEFITS**

**Sypro is an online NEC3 Project Management System.**

As a web-based and a completely compliant system, Sypro provides a live and instantaneous overview of the project, while making the administration manageable, simple and less time consuming.



### **Details of offer:**

- ✓ **One Years Use**
- ✓ **One Project**
- ✓ **10 Users**
- ✓ **Full Support & Maintenance Service**
- ✓ **100% of Actual Product**
- ✓ **No Catch!**

#### **Terms & Conditions**

- Excludes all current contracts
- Set-up - £995
- Training fees - £995 Exc. OPE's (only one off payment)
- Data at end of project will be transferred to a USB drive.
- Excludes non-NEC user members
- Redemption code must be stated.

## **REDEMPTION CODE: NECUG14**





## **SYPRO GIVES YOU:**

**NEC3**

**Total compliance to the full suite of NEC3 contracts – enabling all parties to work collaboratively.**



**Project dashboard with immediate and live status reports on the project. Also incorporated into this are user specific actions for the Project Manager, Supervisor or Contractor.**



**Easy to use and implement.**



**Full visibility of the project risks via the Early Warning Risk Register.**



**Transparency of contract alerts providing a robust audit trail of user specific actions and their status.**



**Sypro can be used on any device with internet access to aid response times to emailed event alerts.**

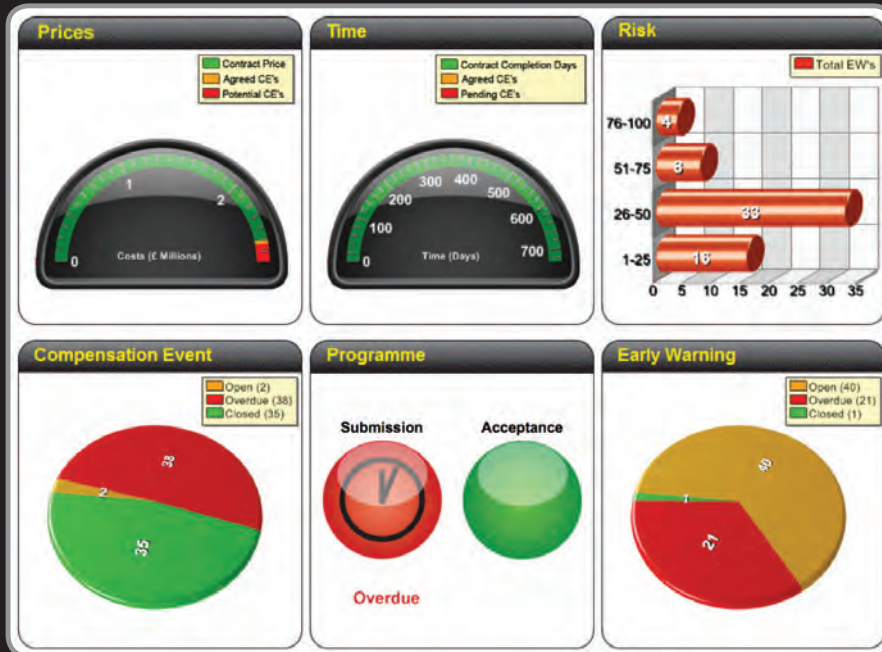


**A fully supported and maintained service.**



**SSL encrypted secure UK hosting.**

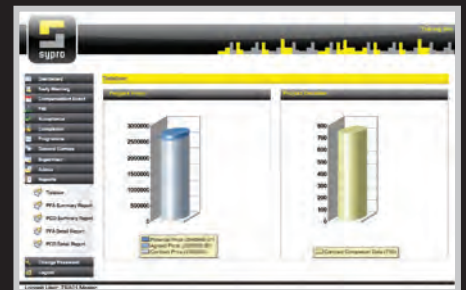
# Sypro Management Ltd provides collaborative, on-line project management solutions.



Project "health check" dashboard



Clear, colour coded project risk register



Live and instant project reports

**Sypro delivers an easy to implement, simple to use and cost-effective solution to the management of the NEC3 suite of contracts. As a web-based and a completely compliant system, Sypro has been implemented and used on projects with a total value in excess of £2.5bn.**

Managing Risk, Time and Cost impacts, as well as the key aspects of the NEC3 contract, the project management tool creates total contract transparency, live reporting, audit traceability and true project collaboration.

The development of Sypro has been developed around the ethos of absolute contract compliance, but more importantly the solution has to be simple to use by users of varying degrees of technical ability. This is why we have adopted a very clear, user focused, and colour coded project dashboard.

To further support and enhance the benefits of Sypro NEC3, all aspects of system compliance are approved by our Technical Director & NEC3 Consultant, Dr. Stuart Kings.

Sypro NEC3 makes contract administration manageable, compliant and less time consuming.

**FIND OUT  
MORE:**

**Call us on: 01482 638152**

**Email us at: [Victoria.smith@sypro.co.uk](mailto:Victoria.smith@sypro.co.uk)**

**Or visit: [sypro.co.uk](http://sypro.co.uk)**





# Case Studies & Testimonials

## SSE – Ferrybridge Multifuel Site 1 & 2

Sypro Management is being used on the £300 million multi-fuel energy plant at Ferrybridge Power Station in West Yorkshire. The energy plant is being built by Multifuel Energy Ltd – a joint venture between SSE and Wheelabrator Technologies, with the main contractor being Zurich-based Hitachi Zosen Inova. Through its renewable energy projects, SSE is developing many renewable energy projects using wind, wave, tide and hydro- electricity.



**“Sypro keeps everything in one place so the contractor and the client can see a live project on one database. The dashboards are really high level. My director and senior managers can look at the dashboard and can get a good idea of where the project is up to just from that. It definitely makes life easier”**

**Neil Farmery**  
*Commercial Manager*

## NHS Greater Glasgow and Clyde – New Southern General Hospital

The new South Glasgow Hospital campus will hold a children's, adult's and maternity acute hospitals alongside a lab facility. Brookfield Multiplex are the contractors for the 1350 bedded hospital, as well as the Critical Care Complex and Facilities Management buildings that are being built on site. The location will also house one of Scotland's largest A&E Departments, 3 new multi-story car parks and a 1200+ workspace car park.

**“The introduction of Sypro has provided the entire project team with the immediate ability to respond to risks which may impact on the delivery of our scheme. This quick response time is essential on a project of this scale.”**

**Peter Moir**  
*Deputy Project Director*

## NEC3 Overseas – Hong Kong

Sypro has secured a major deal on the £70 million Happy Valley Underground Storm water Storage Scheme (HVUSSS) that is being carried out by the HK Government Drainage Services Department. The water storage scheme is part of a comprehensive plan by the DSD, to alleviate the flooding problems in Happy Valley and Wan Chai areas. The water storage tank accommodates a 50 year flood event – with a volume of 60,000m<sup>3</sup>, associated drains and a pump station with a capacity of 5,400m<sup>3</sup> per hour.

Alongside this, Sypro has signed three major contracts with China Light and Power, one of the largest power companies in the Asia-Pacific Region. CLP has businesses in a number of Asian markets, as well as Australasia and India. Sypro Management is being used to help build a network of substations in Hong Kong. For over 100 years, CLP has helped the growth and diversity of Asia's economy, becoming an integral part of the market – serving millions of communities with day to day energy. The construction of these substations will eventually power the massive data network needed by businesses in the region.

The substation construction scheme is only the second time the NEC suite of contracts has been used in Hong Kong, and the first time collaborative, software as a solution, contract management system has been used in the region.



## BENEFITS

- Reduced administrative workload
- Ensures compliance with all variations of the NEC3
- Comprehensive control over NEC3 workflows
- Better risk management
- Improved visibility of cost, change & time



## KEY FUNCTIONALITIES

- Enables production and management of NEC3 risk register
- Comprehensive management of all contract communications
- Seamless integration & administration of all NEC3 variations
- Project, programme and portfolio level management dashboards
- Structured access to the contract data and works information
- Integration with leading planning applications
- Built-in licensed content inc. guidance notes, glossaries

CONJECT NEC Contract Management is a NEC3 licensed software application which drastically reduces the amount of resource required to administer and manage projects under the NEC suite of contracts. The configurable software integrates the project supply chain with all NEC tasks, processes and communication workflows within a robust, secure and fully auditable online environment. The software simultaneously manages the upstream and downstream relationships under the NEC3, helping clients, contractors, project managers and sub-contractors to comply with the exact timescales, terms and conditions of the contract.

## Commercial Management of the NEC3

The application provides real-time visibility on the potential consequences of change at a project, programme or portfolio level within a configurable management dashboard. Powerful bespoke or standard reports can be set up to highlight areas of risk and to monitor performance and progress, improving business intelligence and ultimately helping to reduce risk.

Home
 Dashboard
 Find & View
 Batch Publisher
 File Publisher
 Publish
 Weekly Labour Return
 Reports

Building - ECC/ECS  
Your Current Project

Commercial Manager  
Money Matters

Administration  
Site Settings

Project Global  
Global Actions

Dashboard

NEC Contract Management

Process	For Action	For Information	All
(ECC) Compensation Event	21	1	66
(ECC) Compensation Event Quotation			41
(ECC) Contractors Communication			12
(ECC) Early Warning	7	1	100
(ECC) Forecast of Total Defined Cost			2
(ECC) Notification of Comp Event			8
(ECC) Notification of Defective Works			2
(ECC) PM Assessment of Amount Due			1

Works Information

Register Name	For Action
Drawings	23
Minutes	
Photographs	
Programmes	
Specifications	

### **Governance over all NEC3 activities**

NEC Contract Management isn't only of value to teams working on large complex construction projects. The software is particularly effective on programmes or portfolios of maintenance works under the Term Service Contract (TSC) where dozens or hundreds of smaller projects can be effectively administered without additional resource.

The application also integrates back-to-back variations of NEC3 such as Professional Services Contract (PSC) and Engineering and Construction Contract (ECC). So that an instruction or change in one form of the contract is correctly coordinated with the other contract, in-line with the specified timescales and conditions.

### **A holistic approach to the NEC3**

CONJECT NEC Contract Management can be seamlessly integrated with other CONJECT Project Control applications, such as Document Control, which can be especially useful when it's difficult to associate processes (e.g. an early warning notice) with particular items of works information (e.g. drawings). Having all NEC3 project communications managed within one resource helps to improve compliance with regulatory legislation and supports corporate governance.

CONJECT has been working with customers to implement methodologies to manage the NEC3 since 2006. In 2011, NEC3 authors Thomas Telford reviewed the market and appointed CONJECT as a licensed content partner, enriching NEC Contract Management with official workflow diagrams, glossaries & guidance notes. To date, CONJECT NEC Contract Management has helped over 100 customer organisations to deliver over £2bn of works including several key projects at the London 2012 Summer Olympics.



### **CONTACT DETAILS:**

CONJECT LIMITED  
21 – 25 CHURCH STREET WEST  
WOKING | SURREY  
GU21 6DJ | UK

PHONE+44 (0)1483 712620  
FAX +44 (0)1483 756325

ENQUIRIES@CONJECT.COM  
WWW.CONJECT.COM



# CONJECT NEC3 application chosen to support new high-tech production facility

## COMPANY AND BACKGROUND

*AkzoNobel is a leading global paints and coatings company and a major producer of specialty chemicals. We supply industries and consumers worldwide with innovative products and are passionate about developing sustainable answers for our customers. Our portfolio includes well-known brands such as Dulux, Sikkens, International and Eka. Headquartered in Amsterdam, the Netherlands, we are consistently ranked as one of the leaders in the area of sustainability. With operations in more than 80 countries, our 50,000 people around the world are committed to excellence and delivering Tomorrow's Answers Today™.*

AkzoNobel has invested over £100m to build a new high-tech production facility in Ashington, Northumbria to ensure that some of its most recognisable brands continue to be manufactured within the UK.

## USING A COLLABORATIVE CONTRACT

AkzoNobel had specified that the NEC3 (New Engineering Contract – third edition) family of contracts was to be used on this scheme. The NEC was created by the Institute of Civil Engineers as the formalised system to guide engineering and construction contracts for the purpose of obtaining tenders, awarding works and administering contracts. The NEC3 defines the legal responsibilities and duties of the client, contractor and all project sub-contractors and suppliers.

## RECOGNISING THAT RESOURCE IS THE KEY TO SUCCESS WHEN USING THE NEC3

In early 2011, AkzoNobel appointed Cheshire based engineering project management experts Projen to oversee the delivery of this complex project. Projen has considerable expertise in helping blue-chip clients with projects in the chemical manufacturing sector and quickly identified that the management and administration of the contract would impose significant demands on not only themselves as project managers, but for the entire supply chain.

Projen Senior Project Manager Stephen Campbell said, "For this scheme, the PSC and ECC contracts from the NEC3 would be used. This meant we would need to apply a great deal of project management resource to administer and manage the contract throughout the project lifecycle."

In the summer of 2011, Projen approached a number of construction collaboration software providers to see if their products could help them with their NEC3 requirements. One of these providers was CONJECT, an international company with vast expertise and experience with the NEC3. During this competitive engagement, CONJECT demonstrated how their robust NEC Contract Management application could integrate all project members with the specific NEC3 conditions, clauses and timescales. CONJECT is a licensed provider of NEC3 software and includes enhanced content within their application. Official NEC3 guidance notes, flow charts and glossaries are embedded within the application to further user's understanding and familiarity with the contract and its specific clauses and options. In addition, CONJECT showed how they could integrate all design and construction documents, tasks and

*"The ability to view the status of the scheme in real-time is a tremendous asset. We can quickly identify areas of risk and get on with managing the project."*

Stephen Campbell  
Senior Project Manager  
Projen





To date, over 32 different companies have been involved with the project delivery, with 300 project members frequently logging into this cloud application. The project is due for completion in late 2014 when the factory will begin to manufacture products for the UK market.



instructions with the NEC3 communications, providing the project with a comprehensive collaboration platform to manage all project information exchanges.

Projen detailed the results of their findings to AkzoNobel who selected CONJECT's Project Control tool to underpin all project communications for the project at Ashington.

### MANAGING THE PROFESSIONAL SERVICES CONTRACT

In January 2012, the CONJECT software application was configured and launched to manage the contractual communications between the client, project manager and consultants under the NEC3 Professional Services Contract (PSC). CONJECT ensured that the key aspects of the PSC were ingrained into their software workflows so that all parties were notified of their obligations in conjunction with the specified timelines, processes and procedures. This approach streamlined and automated the communication process for all project stakeholders. As project managers, Projen could report on the the real-time status of the contractual engagements to monitor outstanding issues and change events. From this reporting dashboard they could quickly ascertain when decisions needed to be made and see the potential consequences of agreed and unagreed costs.

The NEC3 PSC contract continues to be used on the project and to date over 293 change events have been instigated and managed by CONJECT's NEC3 Contract Management application.

### CONSTRUCTION UNDERWAY WITH THE ENGINEERING AND CONSTRUCTION CONTRACT

Use of the NEC3 Engineering and Construction Contract (ECC) began in June 2012 when the main contractor was appointed. The ECC differs from the PSC in that it has been developed for engineering and construction project work, including a level of design responsibility. To cater for the different workflows, options and procedures involved, CONJECT's NEC3 Contract Manager was configured to administer the contract, integrating the contractor and client with the ECC and enabling work to get underway in earnest. To date, over 821 NEC3 ECC change events have taken place during the construction phase. During main construction the software platform received over 1,600 logins per month.

### INTEGRATION OF NEC3 CONTRACT VARIATIONS

CONJECT has seamlessly integrated both the PSC and ECC contract within the application, enabling a change event instigated in one contract to ripple to the other in-line with the defined legal procedures, processes and timescales. This means that when a change event takes place involving a party using another NEC3 contract, the legal procedures, processes and timescales of both variations are entwined. This "back-to-back" approach ensures all parties are compliant with the conditions of both variations of the contract without the need for manual administration. By having one centralised source for all contract related communications and providing a structured methodology for project collaboration, enriched with licenced content, the CONJECT application has helped ensure compliance and governance over all NEC related project communications.

### INTEGRATION OF NEC3 CONTRACT VARIATIONS

The system's management reporting dashboard shows a real-time status of both the ECC and PSC contracts, so that the potential effect of change can be viewed on a time and cost basis. Such business intelligence enables the project managers to forecast the consequence of all agreed and unagreed costs, helping with decision making and reducing the commercial risks involved with the project.

Please contact us if you would like more information:

+44 (0)1483 712620 | [enquiries@conject.com](mailto:enquiries@conject.com) | [www.conject.com](http://www.conject.com)



D E V A N T

## Driving Commercial Contract Negotiation Success

Successful contract negotiation can be measured in a number of ways.

Deal cycle time, or the length of time between the client saying 'yes' to your offer and actually getting to a signed contract, is one useful metric. Another is the number of variations to your standard negotiating position that are agreed on any one occasion. Successful contract negotiation can also be assessed by the examining the number and scale of disputes that arise during the course of project delivery, or post sign-off.

### Success should be repeatable.

Devant's view of contract negotiation is that it should not be down to the 'soft skills' of a selected few. Instead, measurable, repeatable success can only be achieved by examining the way the business conducts its negotiations and equipping it with the tools, processes and skills to do better.

All of our consultants have earned their stripes not just in structuring, drafting and negotiating commercial contracts with companies like the Bank of America, Vodafone, ABN Amro, Canal+ and many other global blue-chip organisations. They have all experienced contracts from the sharp end – having to deliver against and manage contracts from both buyer and seller perspectives over months or years of complex projects.

### Focus on your objectives.

Our negotiation training is focussed on helping delegates negotiate contracts that meet their business's objectives. But this won't happen through training alone, which is where Devant's extensive commercial management expertise really adds value.

We start by working with you to identify what contract negotiation success looks like in your business, before we even put together a training agenda.

Part of this process may involve defining your department's service description – working out what it should deliver to the organisation, where its points of contact with other specialisms should be, and how its successful contribution can be measured.

By defining your service description in terms of how you will help the business meet a defined set of objectives, you establish a clear vision of what success looks like for your team, and your organisation. In turn, we know what you require us to deliver in terms of business outcomes.

### Find the best way.

We then look at the environment in which you are negotiating. What resources are available to you? What limitations and controls? How can you manage



D E V A N T

## Driving Commercial Contract Negotiation Success

negotiations effectively in the context of your corporate governance?

By examining all of these areas, we work with you to determine the most effective way for you to contribute to successful contract negotiation outcomes, as measured against your own success criteria.

### Create tools.

Templates, processes, checklists, document automation – all of these are tools that can help you establish contract negotiation success as a repeatable activity.

They reduce reliance on talented individuals, and instead encourage shared learning and constant improvement and development within the organisation.

Devant will work with you to create the tools that you need to enable your team to meet its objectives in your business context.

### Develop skills.

Your team must be able to make the most of the tools you put in place, and use them effectively to deliver contract negotiation success.

Only when we have clearly defined what successful contract negotiation looks like in your business, how your team will contribute to this success through a defined service description, and what tools and processes can support successful negotiations, will we begin considering the training needs of your team.

Working with you to identify skills gaps, we will structure a tailored learning and development programme that equips each member of your team to use the tools and processes we have developed, to contribute effectively towards successful contract negotiations in line with your service description.

### Why Devant?

Because we are not just a negotiation training company. We are commercial contract and negotiation specialists who live, breathe, draft, negotiate and manage commercial contracts every day.

Our role as accredited training partner to the Institute of Commercial and Contract Managers, and our frequent participation as Negotiation 'Ask the Expert' panellists, both reflect Devant's position as a leading specialist in our field.

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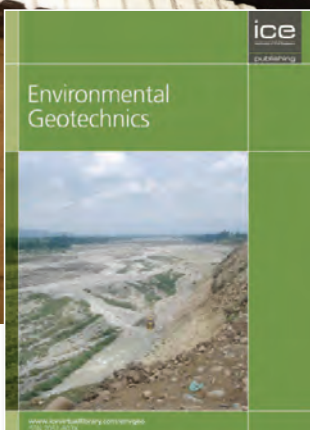
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**Editor:** Devendra Narain Singh, India  
Institute of Technology, Bombay, India

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Nottingham Ningbo, China

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# ICE Rail 2014

One Great George Street, London  
**1 July** [ice-railways.com](http://ice-railways.com)

## Speakers

The UK's rail sector is experiencing a period of rapid growth and investment, including completion of the first high speed line from London to the Channel Tunnel, planned construction of a second high speed line and the Crossrail project.

Many challenges exist for railway engineers adapting a network never designed to cope with the number of passengers who now use it every day. Increased services, lack of track capacity and the limited number of platforms at stations are just some of the issues that regularly cause congestion and delays for 1000's of passengers. Civil engineers need to be prepared as Government invests billions on the railways.

ICE Rail 2014 will bring together all the major stakeholders in the rail sector, allowing for in-depth analysis and best practice case studies from the UK and abroad. It will discuss the current challenges and offer practical solutions to help equip civil engineers with the knowledge they need to deliver a transport network fit for the 21st century.

- **Stephen Abraham**, Chief Operating Officer, Port of Felixstowe
- **Rob Brighouse**, Managing Director, Chiltern Railways
- **Mike Brown**, Managing Director, London Underground
- **TC Chew**, Projects Director, MTR
- **Stephen Hammond**, Parliamentary Under Secretary of State for Transport
- **Rod Hulse**, Head of Development Engineering, Gatwick Airport
- **Wayne Jenner**, Engineering Director, Southeastern
- **Jeremy Long**, Chief Executive Officer, MTR Corporation – European Business
- **Terry Morgan**, Chairman, Crossrail
- **Patrick O'Sullivan**, Railway Consultant, East West Rail Consortium
- **Clive Pennington**, Head of Engineering, Manchester Metrolink
- **Colin Robey**, Managing Director, UK Tram
- **Christian Roth**, Engineering Director, South West Trains
- **Nicola Shaw**, Chief Executive, HS1
- **Tim Smart**, Chief Engineer, HS2
- **Graham Smith**, Chair, ICE Rail 2014

## Key Topics

- Running HS1 and engineering HS2
- Expanding a city's transport network
- An update on Crossrail
- A view from Government
- Engineering the Underground

## Why attend?

- Forward-looking and highly relevant knowledge sharing event
- Government is spending £16bn on the railways and civil engineers need to be ready. Along with network upgrades, several high profile new projects are being planned and built. ICE Rail explores how these simultaneous patterns of work offer engineers a myriad of challenges and opportunities
- Learn from successful projects and plans for future development with presentations from TfL, Centro and Manchester Metrolink
- Executive networking - meet senior rail managers, developers, engineers and planners, and forge profitable and meaningful business and professional relationships

# ICE Flooding 2014

Central London

**13 May**

[ice-flooding.com](http://ice-flooding.com)

## Speakers

**The flood risk management community now includes asset owners, communities, homeowners and local authorities. Alongside national policymakers, they are making decisions and implementing strategies which will hopefully lead to a flood resilient country.**

The Institution of Civil Engineers (ICE) annual Flooding Conference will connect this wider flood community with engineers, risk analysts and flood professionals - bringing together technical engineering experts with those at the coal face of community defence and resilience - in order to share best practice on a sustainable and integrated approach to managing flood risk.

The ICE Flooding 2014 programme will focus on take-aways from practitioners who have been battling to protect our communities and critical infrastructure in the recent floods, as well as showcasing innovative solutions and creative engineering from those at the forefront of flood risk management.

## Key Topics

- Planning, design and construction: placing flood resilience at the heart of the new built environment
- Beyond local communities; protecting infrastructure and farmland - local resilience strategies of national importance to ensure problems don't cascade
- Maintenance and retrofitting to manage risk
- Sustainable Urban Drainage Systems (SUDs) - addressing the questions of training, maintenance and funding

- **David Balmforth**,  
Vice President,  
Institution of Civil Engineers
- **Dr. Paul Leinster CBE**,  
Chief Executive,  
Environment Agency
- **Thomas Mynors**,  
Asset Engineer,  
Network Rail (Western Route)
- **Cor Beekmans**,  
Programme Director,  
Rijkswaterstaat,  
Dutch Ministry of Infrastructure  
and the Environment
- **Mark Bottomley**,  
Strategy and Stakeholder Manager,  
Thames Water
- **Kate Marks**,  
Deputy for Mapping, Modelling  
and Data, Flood and Coastal Risk  
Management, Environment Agency
- **Robert Barker**,  
Director,  
Baca Architects