-necusers' group NEWSLETTER

Introducing the NEC4 contract suite

ELIZABETH BROOKFIELD NEC PRODUCT DEVELOPMENT

The new NEC4 contract suite will be published in June 2017. It builds upon the success of NEC3 contracts, which have had a transformative effect on the construction industry since their introduction 12 years ago.

The launch of NEC4 reflects continuing evolution of industry practice while retaining the proven and unique NEC processes for collaboration, fair dealing and good project management. The contracts have been updated and streamlined following feedback from the industry, evolving government priorities and emerging best practice.

Two brand new contracts have been added to the suite – the NEC4 Design, Build and Operate Contract (DBO) and the consultative NEC4 Alliance Contract (ALC). The result is a contract suite with improved flexibility, clarity and ease of use. Whether supplying high-value goods or low-risk items, NEC4 enables users to deliver projects on time, on budget and to the highest standards.

Potential benefits of NEC4

Key benefits of NEC4 include

- streamlined processes and updated definitionsimproved contract administration and reduced
- administration costs
- greater clarity and reduced potential for problems
- provision for building information modelling and early contractor involvement
- improved risk opportunity and risk management.

According to Matthew Garratt, NEC consultant and Costain commercial director for Thames Tideway Tunnel project, 'It has been 12 years since NEC3 was published, and the publication of NEC4 responds to demand from users to continue to improve the way that their projects and work programmes are delivered.

'NEC4 supports the on-going drive towards further collaboration and integration of teams, use of modern work methods, avoidance of disputes, and identification and management of both risk and opportunity for a successful outcome.'

Beth West, commercial director of High Speed Two and chair of the NEC Users' Group comments, 'Procurement methods need to keep evolving NEC4's key potential benefits



and improving to support the ways in which the construction industry itself is developing. The extended and streamlined NEC4 suite is a perfect example of this.

'It puts the core NEC principles of collaboration and open communication into a wider range of contractual structures, helping to achieve consistent positive behaviours across an even bigger variety of projects and programmes.'

NEC4 contract suite

The NEC4 contract suite consists of the following new and updated contracts.

- NEC4 Dispute Resolution Service Contract (DRSC) (previously NEC3 Adjudicator's Contract)
- NEC4 Design, Build and Operate Contract (DBO)
- NEC4 Engineering and Construction Contract (ECC)
- NEC4 Engineering and Construction Short Contract (ECSC)
- NEC4 Engineering and Construction Subcontract (ECS)
- NEC4 Engineering and Construction Short Subcontract (ECSS)
- NEC4 Framework Contract (FC)
- NEC4 Professional Service Contract (PSC)
- NEC4 Professional Service Short Contract (PSSC)
- NEC4 Supply Contract (SC)

■ NEC4 Supply Short Contract (SSC)

Provision for BIM and

- NEC4 Term Service Contract (TSC)
- NEC4 Term Service Short Contract (TSSC)
- NEC4 Alliance Contract (ALC) (consultative version, not included in the June 2017 suite).

Management

This special issue of the NEC Users' Group newsletter introduces the new contracts as well as the guidance documents that will accompany them. It also reviews the legal and insurance issues of NEC4 and provides details of the forthcoming NEC4 launch webinar and seminar.

For further information please visit the NEC website neccontract.com/nec4-products. A 10% discount on paperbound contracts is available to users if pre-ordered with the code NEC4PRE.

CONTENTS

New NEC4 Design, Build and Operate Contract	2
New NEC4 Alliance Contract	2
Changes in the NEC4 works contracts	3
Changes in the NEC4 service contracts	4
Changes in the NEC4 supply contracts	5
NEC4 guidance notes	6
Legal and insurance aspects	7
NEC launch events	8

New NEC4 Design, Build and Operate Contract







ROSS HAYES, RICHARD PATTERSON AND BARRY TREBES NEC4 DRAFTERS

NEC4 brings a new addition to the NEC family of contracts: NEC4 Design, Build and Operate Contract (DBO). It has been added to the suite of contracts in response to the increasing demand for contracts extending into the operational phase.

The demand is coming both from UK clients and from international funding agencies, such as the World Bank and the Asian Development Bank (ADB). In 2015 ADB commissioned NEC to draft a consultative DBO contract, the feedback from which has helped to shape the NEC4 version.

It also aligns with the UK government's commitment to 'soft landings', in which designers and constructors are involved with projects at least three years after construction completion to ensure a smoother handover to the operator.

New and existing assets

The new DBO contract is not only intended for the 'traditional' DBO approach, where the client requires a new facility or asset to be designed, constructed and then operated by a contractor. It is also available for situations where a client wants to have an existing facility or asset operated by the contractor while it is being upgraded or extended.

In such situations, the timing of the design and construction phase would normally be stated by the client, but may be determined by the contractor - which will undertake the work at a

point to suit the performance requirements of the overall service.

The new DBO contract provides for option A (priced contract with price list), option C (target contract with price list) and option E (reimbursable

Focus on operational needs

The contract starts with the operational and service requirements of the client and then integrates the new or replacement asset to reflect the way that the operation has been specified.

Perhaps even more than other contracts, the development of the client's requirements and specification in the scope will be crucial to the understanding, use and success of the contract.

Greater role for contractor

All the standard NEC provisions for communications, early warning and compensation events are retained along with some other features added in the NEC4 suite.

The management of the work through plans and programmes for the construction and operation phases are still important.

Recognising the greater involvement and responsibility of the DBO contractor in the operational phase, the contract has a lighter touch than some standard NEC design and build options.

Incentives and productivity

A key issue for the client is identifying and incentivising performance and productivity of the total asset. This may be through any or all of the traditional NEC approaches, including the reduction of payments for poor performance.

The new DBO contract brings incentives and productivity options together into one schedule and requires the client to identify and develop the approaches it wishes to use.



◀ NEC4 Design, **Build and Operate** Contract extends NEC into the operational phase of a project

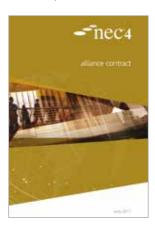
New NEC4 **Alliance Contract**





MATTHEW GARRATT AND IAN HEAPHY NEC4 CONTRACT BOARD MEMBERS

The construction industry is continually being challenged to deliver improvements in the outcome of projects and programmes of work. Collaboration and better integration of teams are seen as ways to achieve this.



■ NEC4 Contract is for clients wanting a single collaborative with a number of participants

NEC has been at the forefront of the process, creating a suite of contracts that allow all members of the supply chain to be engaged on similar terms and conditions.

Moving towards alliancing

Demand for better integration of teams continues - particularly for large, highly complex projects and programmes. In these situations, some clients have adopted a fully integrated delivery model known as an 'alliance'.

An alliance is where the client and key members of the supply chain are engaged under a single multi-party contract with shared objectives, risks and rewards. In the UK and internationally, most notably Australia, alliances have delivered better outcomes for both clients and suppliers, with increased efficiency and fewer disputes.

In 2015 the UK government advisory body Infrastructure UK published Improving Infrastructure Delivery: Alliancing Code of Practice. This said there was a clear business case for using alliancing as a procurement route, with increased efficiency being delivered through behavioural and cultural change.

New NEC4 Alliance Contract

Existing NEC contracts are bi-party arrangements onto which an alliance arrangement can be overlaid, such as by using secondary option X12. Last year NEC worked with the UK Infrastructure Client Group to publish Guidance on implementing alliancing using NEC3 contracts.

NEC users have requested the development of a distinct alliancing form in which all participants are engaged under a single multi-party contract. This has led to development of the new NEC4 Alliance Contract (ALC), which will initially be published in consultative form to allow industry

The basis of the contract is that all parties work together in achieving client objectives, and share in the risks and benefits of doing so.

The new ALC is therefore very different from other contracts in the NEC4 suite. However, it follows where possible the same principles and structure of other NEC4 contracts with familiar provisions, proactive management processes and terminology.

Benefits to users

The potential benefit of using the new ALC is a much deeper collaboration between all project participants, bound by common interests and

reduced grounds for dispute.

The contract drives appropriate behaviours in the alliance members through

- an emphasis on outcomes
- creation of a commercial model which rewards expected behaviours
- alignment of goals with client and suppliers
- use of integrated systems and processes
- a best-for-project philosophy.

Commercial performance is measured at an alliance rather than individual party level, with reward criteria based on client's objectives. All

alliance members are engaged on an open-book basis with project-specific incentive arrangements agreed at the outset.

Changes in NEC4 works contracts





ROBERT GERRARD NEC USERS' GROUP SECRETARY AND TIM KNEE-ROBINSON NEC4 DRAFTER

The new works contracts are the NEC4 Engineering and Construction Contract (ECC), the NEC4 Engineering and Construction Subcontract (ECS), the NEC4 Engineering and Construction Short Contract (ECSC) and the NEC4 Engineering and Construction Short Subcontract (ECSS).

This article looks at the main changes and new provisions in the ECC and ECS, followed by a specific change in the shorter versions.

The changes have been designed to support the on-going drive for further collaboration and integration of teams, greater use of modern work methods, better avoidance of disputes and more effective identification and management of risk and opportunity – all of which will help lead to more successful outcomes.

ECC and ECS

There have been key changes to provisions in the ECC and ECS, as follows.

- Early warning provisions the 'Risk Register' has been re-named the 'Early Warning Register' to distinguish it from the project risk register often used for wider project management purposes. There are now default periods for early warning meetings.
- Programming changes there are new 'dividing date' provisions similar to those used in compensation events. New provisions provide for 'treated acceptance' of the contractor's programme in situations where the project manager does not respond to a programme issued by the contractor for acceptance, or to a reminder. This is to unlock the impasse which can sometimes occur.
- Terms standardised 'Employer' becomes 'Client', and 'Works Information' becomes 'Scope'.

There are also some important new provisions in ECC and ECS to help promote collaboration, as follows.

- Identifying opportunities an additional procedure includes the identification of opportunities by either party. These are discussed jointly and the contractor can share in the cost savings of opportunities that it initiates
- Early contractor involvement this is now included as a secondary option, based upon the clauses published by NEC in 2015.
- Supporting information modelling a new secondary option is added specifically to

- support the use of information models and digital engineering models. This requires the contractor to provide an information model execution plan either for incorporation in the contract from the outset, or within a period defined by the client.
- Dispute negotiation a 4 week period for escalation and negotiation of a dispute has been introduced, which takes place prior to commencing any formal proceedings. This requires nominated senior representatives of each party to meet and try to reach a negotiated solution.
- Dispute avoidance the works contracts now include a dispute avoidance option W3 which can be used if the UK Housing, Grants, Construction and Regeneration Act does not apply. This is to refer any dispute to a dispute avoidance board. The benefit of this new option is to encourage and support the parties in resolving any potential dispute consensually, and to support users who wish to use this facility on their projects.
- Financial agreement for payment applications and final accounts, there are now procedures aimed at reaching agreement on the final amounts due. Provisions have been introduced to the cost-based contracts (main options C to F) that allow the contractor to instigate a review and acceptance of its defined cost by the project manager, upon request. This encourages checking and agreement of defined cost and disallowed cost progressively as the work proceeds, and not to defer the exercise until the project has been completed.

Other new and changed provisions in ECC and ECS include the following.

- Collaboration in secondary option X12, 'Partnering' has been changed to 'Collaboration' better to reflect the intent.
- Retention the secondary option X16 for retention now includes the optional provision of a retention bond instead of having money retained.
- Confidentiality a new core clause deals with confidentiality, restricting the disclosure of project information.
- Communication the use of a communication system, including an electronic one, are recognised through amended clause 13.2, and if required is defined in the scope.

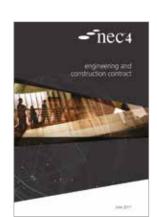
'The changes have been designed to support the on-going drive for further collaboration and integration of teams'

- Quality section 4 quality management provisions introduce a requirement for the contractor to prepare and issue a quality management system and a plan.
- Schedules of cost components some changes have been made to simplify the schedules of cost components and associated contract data inputs. The 'Schedule of Cost Components' is used only for main options C, D and E and the 'Short Schedule of Cost Components' has been removed from these contracts. The short schedule is now used exclusively in options A and B and only to assess compensation events. It adopts a pre-priced approach for people cost to replace the previous cost-based approach.
- Fee percentage there is now only one fee percentage, with no separate fee percentage for subcontracted works. The application of fee to defined cost is consistent across all main options.

ECSC and **ECSS**

A number of the above ECC and ECS changes have been passed through to the ECSC and ECSS.

The main change specific to the ECSC and ECSS is that the compensation event procedure has been simplified and shortened.



Most changes in the NEC4 ECC main works contract also appear in the ECS subcontract and, where appropriate, in the shorter ECSC and ECSS

Changes to NEC4 service contracts





ROSS HAYES AND BEN WALKER NEC4 DRAFTERS

With NEC4 comes change to all the service

The new service contracts are the NEC4 Term Service Contract (TSC), the NEC4 Term Service Short Contract (TSSC), the NEC4 Professional Service Contract (PSC), the NEC4 Professional Service Short Contract (PSSC) and the new NEC4 Dispute Resolution Service Contract (DRSC based on the NEC3 Adjudicator's Contract).

Since the service contracts have been changed in the same way as all contracts in the NEC4 family, there are a number of changes in common with those in the works and supply forms. This incudes standardisation of terms, with 'Employer' becoming 'Client' and 'Service Information' becoming 'Scope'.

Other changes in the NEC4 TSC and NEC4 PSC make the total changes arguably more significant. This article looks at the specific changes to the service contracts.

TSC

The principal changes specific in the NEC4 TSC compared to the NEC3 version are as follows.

Service manager instructions - NEC3 acknowledged changes to the affected property could occur, but in NEC4 the service manager may instruct them. This will be useful where the extent of a client's asset fluctuates, for example increases in numbers of houses for housing associations or new roads for highway authorities.

- Task orders NEC4 reinforces the intended purpose of task orders with clearer distinction over how instructions changing the scope, task orders and 'call off' against existing scope work in combination.
- Accepted plan and task order programmes a failure by the service manager to reply to plans submitted for acceptance paves the way for a new sanction, similar to that for compensation events, resulting in it being treated as accepted.
- Payment NEC4 TSC requires the contractor to submit an application for payment before each assessment date and, following the service manager's certification of payment, the contractor is required to submit an invoice.
- Compensation events two new compensation events address material differences in anticipated versus actual quantities, and the correction of mistakes in the price list.
- Schedules of cost components in NEC4 the TSC, like the ECC, now includes both a schedule of cost components and a short schedule of cost components. A new concept of service areas provides clarity in distinguishing defined cost from fee.
- Extending the service period and accounting periods - the ability for the parties to agree to extend the service period has been elevated into a new secondary option. A further new secondary option provides for a final amount due at the end of each accounting period.

PSC

In drafting NEC4 the decision was taken to bring PSC closer to the other contracts and move away from what might be considered a more traditional way of appointing a consultant or other professional. This has resulted in considerable change – indicated by a name change from Professional Services Contract to the Professional Service Contract to show its relationship to the TSC. While many of the changes are those seen in the TSC, there are some areas where it still differs

The principal changes are as follows.

- Service manager and payment the employer's agent option X10 has been removed and a service manager introduced as integral to contract. Among other changes this brings, the assessment of the amount due now lies with the service manager rather than with the consultant.
- Defined cost this has been introduced together with a schedule and shorter schedule of cost components. These follow the principles of the schedule and shorter schedule of cost components in the ECC and, now, the TSC.
- Option G this has been removed, leaving options A, C and E. A client which wants a call-off arrangement for professional services is now expected to set up a framework using the NEC4 Framework Contract (FC) and PSC contracts for the work packages. Small packages of work could be instructed under
- Termination by bringing PSC in line with other NEC4 contracts, the termination provisions have been changed, providing the parties with more clear and extensive termination rights.
- Programme this has retained its importance as a management requirement, and the new sanction of deemed acceptance for a lack of response from the service manager is also included in the PSC.

TSSC and PSSC

The new TSSC and PSSC reflect the procedures adopted in the new TSC and PSC while still retaining simplicity of management.

Changes include

- modifications to the compensation event procedures, with a defined cost approach now adopted, and one fee percentage quoted
- a procedure to agree people rates
- the option of adjustments to the prices for inflation.

DRSC

NEC4 TSC, PSC and

DRSC and shorter

contract forms TSSC and PSSC

have been

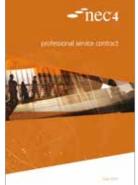
integrated

further

The DRSC is the NEC4 version of the NEC3 Adjudicator's Contract (AC), emphasising that it is not restricted just to appointing an adjudicator. It can also be used to appoint a member of the dispute avoidance board in an NEC contract.

A new section to apply to the duties of a dispute avoidance board member has been introduced as an alternative to the adjudication section in the AC. Users of the AC should easily transfer to this new form.

'In drafting NEC4 the decision was taken to bring PSC closer to the other contracts and move away from what might be considered a more traditional way of appointing a consultant or other professional. This has resulted in considerable change'







Changes in NEC4 supply contracts



JOHN LOFTY AND STUART KINGS NEC4 DRAFTERS

The NEC4 Supply Contract (SC) and NEC4 Supply Short Contract (SSC) have been updated in line with the rest of the contracts in the new NEC4 suite.

Since they first appeared in 2009, the two supply contracts have become increasingly widely used. This is anticipated to continue as the NEC4 suite becomes the 'contract of choice' for many organisations.

The SC and SSC enable the purchase of goods of any complexity sourced from anywhere in the world. The contracts can be for any sector and any level in the supply chain.

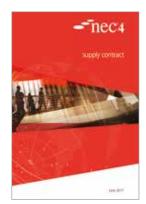
The updated contracts have better alignment with the NEC4 suite of contracts, provide improved commercial arrangements and offer

more opportunities for purchasers and suppliers to be proactive and innovative.

The main changes from the NEC3 versions are as follows.

- Managing risk as with other NEC4 contracts, the term 'Risk Register' has been replaced with the more appropriately termed 'Early Warning Register', better reflecting the risk management process within the contract.
- Communications the communication protocol also now includes provision to specify a communication system within the scope. This mirrors modern use of the SC and frequent adoption of collaborative software systems in practice.

- Scope this replaces the term 'Goods Information' and is now standard in all NEC4 contracts. The scope includes supply requirements, which allow users to comply with the latest international trading terms if they need to do so.
- Cost transparency commercial amendments include an improved definition of cost. This now sees the incorporation of a detailed schedule of cost components. Provision for people rates have also been included.
- Option improvements the X12 partnering option has been replaced with a multiparty collaboration option, a term which better describes the structured collaborative agreements typically seen on larger contracts. This should help suppliers in being genuinely included within supply chain arrangements and provide real incentive for innovation. This is further enhanced through a new option on supplier's proposals. This provides the facility for the supplier to propose changes to the scope to reduce the cost of an asset over its whole life.



The NEC4 SC and short form have been updated in line with the rest of the NEC suite

NEC4 guidance notes



TIM KNEE-ROBINSON NEC4 DRAFTER

the supply chain.'

The existing NEC guidance documents – in the form of guidance notes, flow charts and 'How to' guides – have been developed and added to over many years. This has led to guidance on a specific topic sometimes appearing in more than one place and some topics being less well covered than they might be.

In producing the NEC4 contracts, a comprehensive review and re-structuring of all guidance documents was completed. The aim has been to

- provide a simple, easy-to-follow structure so that guidance is more readily accessible
- address any gaps
- include explanations of how clauses are used
- provide practical advice by including checklists where appropriate.

The new NEC4 user guides provide step-by-step support to help users choose the most appropriate NEC4 contract, prepare the chosen contract, select a supplier and then manage the contract to deliver

the client's objectives.

'The SC and SSC enable the purchase of goods of any complexity sourced from anywhere in the world. The contracts

can be for any sector and any level in

Each of the topics is covered in a separate user guide.

Establishing procurement and contract strategies

The user guide on procurement and contract strategies helps clients to identify the best way of achieving their project objectives, taking into account constraints, funding, risk and asset ownership. It provides guidance on selecting the most appropriate procurement route and choice of available NEC4 contracts and available options to meet their specific needs.

The starting point assumes that the client has resolved the following

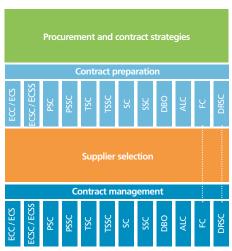
- the business case and project objectives
- the risk profile and overall management strategy including, in broad terms, decisions made with regard who is best placed to manage the risks

a decision has been made to use the NEC4, but the contract strategy has not been determined.

Preparing the contract

The contract preparation user guide helps clients prepare the particular NEC4 contract they have chosen to use to achieve their project objectives ready for supplier selection to

There are 24 user guides supporting users throughout the NEC4 procurement process



Continued on page 6 >>

commence. For each NEC4 contract, the relevant user guide includes

- an explanation of the constituent parts the contract
- a checklist on how to complete contract data as well as a worked example
- a checklist on what should be included in the scope and where relevant other documents like the site information (ECC, ECS, ECSC and ECSS) and affected property (TSC and TSSC)
- guidance on preparing a pricing document where relevant.

The starting point assumes the client has resolved its contract strategy and decided which contract to use, including the main and secondary options where relevant.

Selecting suppliers

The supplier selection user guide helps with how to select a supplier. Where tendering has been chosen as the method of selection, guidance is provided on the tender process including sending out invitations to tender, tender evaluation and assessment. Guidance is also provided on finalising and awarding contracts.

The starting point assumes the client has

prepared the relevant NEC4 contract.

Managing the contract

The contract management user guide helps manage the chosen contract correctly once the contract comes into existence. For each NEC4 contract, the relevant guidance book provides detailed practical guidance, broadly based on the clause structure, on how to operate them to achieve a successful outcome.

The nature of the FC and DRSC mean that the contract preparation and management parts of the guidance are contained in the same user guide.

Legal and insurance aspects



PETER HIGGINS NEC4 CONTRACT BOARD CHAIR AND JOHN HUGHES-D'AETH NEC4 CONTRACT BOARD MEMBER

Since it was first published in 1992, the NEC suite has promoted collaborative management processes over legal verbiage.

While lawyers (and occasionally judges) have criticised its drafting style and 'loose language', the NEC suite has successfully delivered projects with a combined value of many billions of pounds, both in the UK and overseas. It can also be fairly said that, on the few occasions when disputes have reached the courts, the judges have had no difficulty in giving NEC contracts their intended meaning.

With that impressive track record, it is unsurprising that the brief given by the NEC board to the drafting team responsible for NEC4 called for an update only, rather than a radical revision. The priority has been to maintain the NEC3 philosophy and there was simply no compelling case for a major re-write. So, any lawyers looking for wholesale re-drafting will be disappointed.

Users' Group feedback

However, the brief did not suggest there was no scope for improvement. One of the benefits of the NEC Users' Group network is that it has generated a wealth of feedback on how the forms are used in practice. This has identified a number of areas where the suite would benefit from clarification or additional provisions to facilitate its use.

We have been privileged to be part of the team responsible for delivering the changes, following in the distinguished footsteps of Philip Capper and Tony Blackler, who have provided legal input to previous editions. We are pleased to report that, in a number of areas, NEC4 represents a significant step forward from its predecessors.

Many of the revisions are described in detail elsewhere in this issue. This article focuses on changes that are more of a legal nature, or which have liability or insurance implications. Inevitably it is selective and should not be taken as an exhaustive list.

Alignment of provisions

One important change is that the various forms in the suite have been aligned as far as possible, so that common themes are dealt with in a consistent way. For example, the confidentiality provisions that previously appeared only in the NEC3 Professional Services Contract (PSC) clauses 70.3 and 70.4 are now included in all NEC4 contracts.

Of course, there remains a number of areas where the forms diverge, reflecting the different nature of the works and services to be supplied under them. The dream (espoused by some) of a 'grand unified contract' covering all types of works, goods and services remains a distant prospect.

Dealing with corruption

New provisions have been included dealing with 'corrupt acts'. These reflect the increasing worldwide focus on bribery and corruption and imposes express obligations on the contractor, both directly and in relation to its supply chain.

An additional reason for termination linked to corruption has also been included.

Enabling transfer of benefits

An assignment provision has been included. This generally permits either party to transfer the benefit of the contract (but not the burden, which under English law may only be transferred by way of novation).

Reflecting the NEC imperative of mutual trust and co-operation, the client may not transfer to a party who does not intend to act in that spirit.

Finality of costs

Also for the first time, NEC4 includes provision for the issue of a final certificate, either following completion of the contractor's obligations or on termination. The NEC suite has historically taken the approach that, since costs and compensation events are required to be assessed in real time, there is no need for a final account process.

However, it has become clear that users would



'A substantially new option X8 has been introduced in NEC4 contracts, entitled 'Undertakings to the *Client* and Others'. This replaces a section on collateral warranty agreements'

benefit from a mechanism that gave finality to the final cost and avoided later challenges. The new clause obliges the project or service manager to assess and certify the final amount due, with a right for the contractor to issue an assessment if a certificate is not issued within the time stated.

The assessment will be conclusive of the final amount due unless either party invokes the dispute resolution provisions within a fixed timescale.

Allowing cost of supply chain disputes

The definition of 'Disallowed Cost' in the costbased contracts has been amended so that only the cost of legal proceedings between the parties is disallowed.

The thinking is that the cost of proceedings between the contractor and its supply chain should be chargeable as 'Defined Cost', since otherwise the contractor will be motivated to settle claims (at the client's expense) rather than challenge them.

Risks and insurance clarified

Section 8 in NEC3 contracts on risks and insurance has been significantly revised to clarify its intent and address concerns raised by insurance experts.

The term 'risks' in section 8 led to particular confusion as 'risk' has a different meaning elsewhere in the suite, so in NEC4 it has been

changed to 'liabilities'. The NEC3 word 'indemnity' has also been removed, partly because it is not well understood outside the UK.

The contractor's liabilities have been set out in detail, rather than being defined by exception as in NEC3. The interaction between the client's liabilities in section 8 and the compensation event regime in section 6 has also been clarified.

Finally, clause 84.2 in certain NEC4 contracts now requires insurance policies to include a waiver of subrogation rights against the parties, so that insurers can no longer take action which would undermine the agreed allocation of liabilities under the contract.

Enhanced secondary options

Secondary option X4 on parent company guarantees has been amended in NEC4 contracts to clarify that the client may require a guarantee either from the contractor's ultimate parent, or from an intermediate holding company if the client is satisfied with its financial strength. This reflects the approach commonly adopted on major projects.

A substantially new option X8 has been introduced in NEC4 contracts, entitled 'Undertakings to the *Client* and Others'. This replaces a section on collateral warranty agreements, which previously appeared only in NEC3 PSC. The new option has been designed primarily to meet the needs of the UK building

market, although it should be noted that the Contracts (Rights of Third Parties) Act 1999 is increasingly being used in the UK as an alternative means of conferring rights on third parties. However, option X8 will remain relevant in a non-UK context.

Option X15 on limitation of the contractor's design responsibility has been substantially rewritten in NEC4 contracts so that the contractor's design obligations and ancillary provisions (such as rights to use material and professional indemnity insurance) are aligned with those of a consultant under the PSC. In the process, the burden of proof has been reversed, so that (as under most contracts) it will be for the client to prove that the contractor failed to exercise skill and care in its design.

Improved dispute resolution options

Finally, NEC4 dispute resolution options have been substantially expanded to reflect the range of dispute avoidance and resolution mechanisms now in use on major projects worldwide.

NEC4 options W1 and W2 now include referral to senior representatives of the parties prior to the appointment of an adjudicator. A new option W3 provides for the use of a 'Dispute Avoidance Board' as an alternative to adjudication for contracts not subject to the UK Construction Act.

Become an NEC4 early adopter

DANIEL CELINO
NEC BUSINESS DEVELOPMENT

The launch of NEC4 on 22 June presents NEC users with an opportunity to enhance their procurement strategy, contract management, business processes and behaviours. Naturally many organisations will be keen to adopt NEC4 immediately, especially where there is a long-term project about to start.

The NEC team wishes to ensure such organisations have every opportunity to transition to NEC4 and realise the intended strategic, operational, financial and behavioural benefits. We would therefore like to engage with potential



'early adopters' to support their transition to NEC4 before the contracts are officially launched.

Free consultation service

For early adopters we can offer a free consultation service to support the transition to NEC4. We can also offer project support delivered by our NEC4 subject experts and NEC4 drafting team, who will be on hand to provide guidance, advice and assistance. We will help you to identify the appropriate NEC4 contract strategy, draft

tender documents and equip your team and stakeholders with the information, skills and practices needed to ensure success.

Working with NEC to become an early adopter will also speed up the release of your tenders following the launch of NEC4 in June.

For further information and to become an early adopter, please email daniel.celino@neccontract.com. Terms for the free consultation to be agreed for each project.

Chandler KBS Conject

Cripps LLP Crummock (Scotland) Limited

Construction Dispute Resolution

Contract Controls Ltd.

Limited
Ctori Construction
Consultants Limited
Deane Public Works Ltd
Department of Health
ProCure22
Docte Consulting
Doig & Smith Ltd
Dencaster Metropolitan
Borough Council
Dumfries & Galloway
Council
dunstan-consulting Ltd

dunstan-consulting Ltd

Fast Lothian Counci

Fundamentals Ltd

Engineering Contract Strategies

George Corderoy & Co GHA Livigunn Ltd

Glanville Projects Ltd

Glasgow City Council Hanley Pepper Ltd Hanover Housing Association

Haskoning DHV UK Ltd HLG Associates Limited

J Breheny Contractors Ltd

John F Hunt Demolition

Hydro International (Wastewater) Limited

Ironside Farrar Ltd

JJL Consultancy Ltd

John Papworth Ltd Lagoni Engineering Limited Lancaster City Council Leicestershire County Council

London Borough of Hillingdon

Mangotree Kent Limited McAdam Design

Met Office MM Miller (Wick) Ltd

Natural Resources Wales

Newcastle City Council

Nuvia Limited
Orkney Islands Council
Palbro Consulting Limited
Pat Munro (Alness) Ltd
pdConsult
Peter Brett Associates
Peter Cousins & Associates
Portsmouth City Council
Pro Eng
Procom-IM Ltd
Proments Ltd

Novi Projects Nuvia Limited

Pyments Ltd

Rambol

RA Gerrard Ltd

Ramskill Martin

Reynolds Porter Chamberlain LLP

Ridge & Partners

Russell Scott Ltd RWJP Ltd

alvation Army

Solomons Europe Ltd

Specialist Engineering Contractor's Group SPQS Associates Ltd States Property Services

Summers-Inman LLP

Sutton & East Surrey Water Plc

vvater Plc Synergie Training Sypro Management Ltd T & N Gilmartin Tanner Project Managem Ltd

The Highland Council
The Scottish Government

Taylor Wessing LLP The Big Red Apple Company Ltd

Trebes Consulting Limited

Trowers & Hamlins

Veale Wasbrough Vizards LLP

Via East Midlands

Viridor Waste Management Ltd Vulcain Engineering Ltd

Viewpoint

Rex Procter & Partners

Royal Holloway, University of London RSK Environment Ltd

Shropshire County Council

NEC4 launch events

5 April 2017: 'Revealing NEC4' – NEC webinar

The first public presentation of NEC4 will take place on line at 13:00 UK time (GMT + 1) on 5 April 2017 in a webinar entitled 'Revealing NEC4'.

Peter Higgins, chair of the NEC4 contract board, and Ian Heaphy, NEC consultant and board member, will explain why and how NEC4 was developed and guide NEC users through the new suite. Higgins drove the overall NEC4 drafting process and Heaphy has been directly involved in drafting and development.

During the webinar they will discuss the new features and changes in the NEC4 contract suite and how these are an improvement on NEC3. They will also introduce the new NEC4 Design, Build and Operate Contract (DBO) and the consultative NEC4 Alliance Contract (ALC).

Overall they will explain how the changes have been driven by user feedback and changing user requirements, while still ensuring NEC principles of clarity, flexibility, collaboration and fairness remain intact.

The 1 hour webinar is free for all to join and participants can raise questions with the presenters. The event will be available for free from the NEC website

22 June 2017: 'NEC3 to NEC4: from partnership to collaboration' – NEC Users' Group Annual Seminar

The NEC Users' Group Annual Seminar in London on 22 June 2017 will incorporate the formal launch of the new NEC4 suite of contracts. Entitled 'NEC3 to NEC4: from partnership to collaboration', the event will take place in County Hall, rather than One Great George Street to provide greater capacity.

The annual seminar is the biggest event in the NEC calendar and this year is expected to be larger than ever. As in previous years, the seminar is designed to bring together NEC users from around the world to share their experiences, discuss best NEC practice and get the latest insights on using the contracts to deliver successful outcomes

The focus of many of the presentations this year will be on NEC4 contracts and how they differ from NEC3. Topics will include the improved flexibility in NEC4 contracts, key changes to NEC4 for tier 2 subcontractors and the new NEC4 Design, Build and Operate Contract and consultative NEC4 Alliance

Expert speakers from government and industry will also cover the latest perspectives and developments regarding NEC use in the UK and internationally. Speakers already confirmed include

- Nick Baveystock, Director General, Institution of Civil Engineers
- Tim Broyd, President, Institution of Civil Engineers
- Beth West, Commercial Director, HS2 and Chair, NEC Users' Group
- Rudi Klein, Chief Executive, Specialist Engineering Contractors' Group and President, NEC Users' Group
- Peter Higgins, Chair, NEC4 Contract Board
- John Hughes-D'Aeth, Partner, Berwin Leighton Paisner
- Matthew Garratt, Commercial Director, Costain
- Ian Heaphy, Consultant, NEC
- Tim Knee-Robinson, Consultant, NEC
- Barry Trebes, Consultant, NEC.

Breakout sessions will enable attendees to take part in interactive discussions led by NEC experts and contract drafters. With the opportunity to discuss and ask questions, attendees will gain the first detailed insight into the new NEC4 contract suite and see how it has evolved from NEC3 so that it continues to address users' needs and drive industry behaviours.

In addition, a series of workshops will allow attendees to improve their practical knowledge of the NEC contracts. The seminar will conclude with the NEC 'Clause 10.1' awards, celebrating how users have successfully delivered NEC projects using the clause 10.1 'spirit of mutual trust and cooperation'.

The delegate cost is £399. NEC Users' Group members are entitled to free or discounted place depending on their membership level and availability of spaces.

For further information and to register please visit neccontract.com/revealing-nec4 for the webinar and neccontract.com/events for the seminar.

NEC Users' Group members

A warm welcome is extended to all new members, highlighted in **bold** in the membership category lists below.

PLATINUM AAWE Plc

Cambridgeshire County Council Dounreay Site Restoration Ltd

Geoffrey Osborne Ltd Geoffrey Osborne Ltd High Speed Two (HS2) Highways England Co Ltd Lafarge Tarmac Magnox Limited Northern Ireland Water Parliamentary Estates Directorate

Pinsent Masons LLP RWE Innogy UK Limited Sellafield Ltd Southend Borough Council

Southern Water
Surrey County Council
Transport for London
West Yorkshire Councils

GOLD

AECOM Professional Services LLP Aggregate Industries UK Amec Foster Wheeler Nuclear UK Ltd Areva SA Atkins Limited

Atkins UK Balfour Beatty Group Limited

Emited
Balfour Beatty Major Civil
Engineering
Balfour Beatty Utility
Solutions BAM Construct UK Ltd BAM Nuttall Ltd

Barnsley Metropolitan Borough Council Belfast City Council Bell Contracts & Co Ltd Bolton Metropolitan Borough Council Bracknell Forest Borough Council

Council
Bristol City Council
Campbell Reith Hill LLP
Carillion Plc
Cavendish Nuclear Ltd
CCS Group PLC
Central Procurement
Directorate
City of Edinburgh Council

Cubic Transportation Systems ITMS

Gleeds Corporate Services Ltd

Guys and St Thomas NHS Trust

Interserve (Facilities Management) Ltd

Interserve Construction Ltd J Murphy & Sons Ltd

Lend Lease Consulting (EMEA) Limited Lincolnshire County Council LLW Repository Ltd

Jackson Civil Engineering Group Ltd

Kings College London Laing O'Rourke

Mace Group Ministry of Justice

WSP UK Ltd

Currie & Brown UK Ltd Defence Infrastructure Organisation (DIO) Dover Harbour Board

Dover Harbour Board
Driving & Vehicle Standards
Agency
East Sussex County Council
Eurovia Group Ltd
Farrans (Construction) Ltd
FTI Consulting
Fugro Geoservices Ltd
Galliford Tr Mouchel Group Plc MWH UK Ltd NBS Services Nexus Rail North Ayrshire Council Northern Ireland Housing Executive Galliford Try

Osborne Clarke

Palm Commercial Services Ltd Pick Everard Playle & Partners LLP

R J McLeod (Contractors) Ltd Renfrewshire Council

States of Jersey Topbond Turner & Townsend

Ministry of Justice
Moreton Hayward Limited
MW High Tech Projects
UK Limited
National Grid Pic
NG Bailey
Norfolk County Council
Northumbrian Water
Limited
Ove Arup & Partners Ltd
Oxfordshire County Council
Perth and Kinross Council
OpinetiQ Ltd
RPS Consulting Engineers
RWE Technoly UK
Limited Worcestershire County Council

Limited Schofield Lothian Limited Scottish Water Siemens Skanska Construction UK Limited BRONZE
Amaro Signalling Limited
AMEC Foster Wheeler
Environment &
Infrastructure
Amey Black & Veatch JV Limited Springfields Fuels Ltd SSE Plc Tarmac Trading Limited The British Museum UK Power Networks Ltd United Utilities Water Plc Vinci Construction UK Limited

Ardent Consulting Ltd Beattie Communications Volker Wessels UK Ltd VPI Immingham LLP Warwickshire County Council

WYG Management Services

SILVER

Aberdeenshire Council Anglian Water Services Ltd Angus Council Aquila Nuclear Engineering Ltd Balfour Beatty

Balfour Beatty
Barhale Plc
BEP Delivery Team
Bezzant Ltd
Borough of Poole
Boskalis Westminster Ltd
Bournemouth Borough
Council
Brink Management &
Advies
Rull Intelligence Ltd

Built Intelligence Ltd Cambridge City Council Cambridgeshire County Council CH2M Hill UK

CNS Planning Ltd Colas Ltd Connect Plus (M25) Ltd Cornwall Council Dee Valley Water Plo Defence Science & Technology Laboratory East Ayrshire Council
East Riding of Yorkshire

Eastern Solent Coastal Partnership Environment Agency Faithful+Gould Faithful+Gould Fife Council First Choice Homes Oldham George Leslie Ltd Glaxo Smith Kline GMH Planning Graham Construction GVE Commercial Solutions

GVE Commercial Solutions Heathrow Airport Holdings

Hill & Smith Ltd T/A Techspan Systems IPP Contracting Ltd Jacobs UK Ltd

Leading Edge Projects Consulting Ltd MacKenzie Construction Limited

Management Process Systems Ltd Medway NHS Foundation Trust

Mott MacDonald Limited

Northumberland County Council

PD Group Management

Prysmian Cables & Systems Ltd R G Carter Technical Services Ltd

Resolute Project Services Ltd SemLogistics Milford Haven Ltd South East Water Ltd South Lanarkshire Council South West Water Ltd Telford & Wrekin Council The Capita Group PLC

The Orange Partnership University of Glasgow Volker Rail Ltd Walter Thompsor (Contractors) Ltd Wardell Armstrong LLP

Yorkshire Water Services Ltd

Andrew Sinclair Ltd Anthony Collins Solicitors LLP

Bennetts Associates Bilfinger Industrial Services UK Ltd Caledonian Maritime Assets Limited (CMAL)

Wrekin Consulting Limited ASIA-PACIFIC

Airport Authority Hong
Kong

Wallace Stone LLP WDR & RT Taggart

Atkins China Ltd Beria Consultants Ltd BK Surco Ltd Black & Veatch Hong Kong Ltd Capture Green Limited Castle Hayes Pursey LLP CEMAR Centre for Business Research Chevalier (Envirotech) Ltd

Arcadis Consi Kong Limited

Chevaller (Envirotech) Ltd.
Chinese University of
Hong Kong
Chun Wo Construction &
Engineering Co Ltd
Civil Engineering &
Development Department,
HKSAR

CLP Power Hong Kong Ltd Clyde & Co

Contract Communicator Systems Deacons

Development Bureau, HKSAR Dragages Hong Kong Ltd Drainage Services Department

Gammon Construction Ltd. Highways Department HKSAR

Hill International (HK) Ltd Hogan Lovells (Hong Kong) Hong Kong Construction Industry Council

Hsin Chong Group Holdings Limited Institution of Civil Engineers (Hong Kong) KCI Management Consultancy Ltd

Kum Shing (KF)
Construction Co Ltd
Leighton Contractors
(asia) Ltd
Mace Limited (Hong Kong) Mannings (Asia) Consultants Ltd Maver Brown JSM Meinhardt Infrastructure & Environment Ltd Mott MacDonald Hong Kong Ltd

MY Cheng & Co (Engineering) Ltd Navigant Consult Kong) Ltd Paul Y Construction Company, Limited Pinsent Masons Sum Kee Construction Ltd

The Contracts Group Ltd Turner & Townsend (HK)

URS Hong Kong Ltd Vasteam Construction Limited VSL Intrafor (HK)

Water Supplies Department, HKSAR AUSTRALASIA

Advisian Pty Ltd Aquenta Consulting Pty Ltd

BIMS Group Services

Broadspectrum (New Zealand) Limited

Christchurch City Council Civmec Construction & Engineering Constructing Excellence NZ Cuesko Limited Hawkins MACA Civil Pty Ltd Marc Palmer Meridian Energy Limited New Plymouth District Council

New Zealand Defence Force PBA Ltd PowerNet RICS Oceania Watercare Services Limited

REST OF WORLD

Benson Consultancy (HK)
Limited Cementation Canada Inc ConsulCAD Egis Road & Tunnel Operation Ireland Fulton Hogan Limited K2l CAPITAL Nuclear Consultants International Thurlow Associates

ACADEMIA
Anglia Ruskin University
Coventry University Glasgow Caledonian University Kingston University, UK Leeds Beckett University Loughborough University Nottingham Trent University Robert Gordon University Aberdeen The College of Estate Management University of Central Lancashire University of Greenwich University of The West of England University of Ulster

All articles in this newsletter are the opinions of the authors and do not necessarily reflect the views of the NEC. Only NEC's wholly-owned products and services are endorsed by NEC, so users need to satisfy themselves that any other products and services referred to are suitable for their needs. For ease of reading, all NEC contract terms are set in lower-case, non-italic type and their meanings (unless stated otherwise) are intended to be as defined and/or identified in the relevant NEC contract. Constructive contributions to the newsletter are always welcomed and should be emailed to the editor Simon Fullalove at simon@fullalove.com (telephone +44 20 8744 2028). Current and past issues of the newsletter are also available in the MyNEC area of the NEC website at neccontract.com. All other enquires should be made to the Lucy O'Connor, NEC marketing manager, NEC, 1 Great George Street, London, SW1P 3AA, telephone +44 20 7665 2305, email info@neccontract.com.