

nec users' group NEWSLETTER

New infrastructure provider to let £2 billion NEC contracts for Thames Tideway tunnel

SIMON FULLALOVE EDITOR

Thames Water's new 'infrastructure provider', Bazalgette Tunnel Limited, is set to let around £2 billion of NEC contracts to deliver the 25 km long Thames Tideway tunnel in London. Work on the eight-year project will start next year.

The 'super sewer' is the biggest tunnelling project ever undertaken by the UK water industry. It was tendered as three similar-sized main contracts: west, central and east. The total estimated value of the three contracts is between £1.4 billion and £2.25 billion (see issue 64).

All three contracts are being let under the NEC3 Engineering and Construction Contract option C (target contract with activity schedule) with 50/50 pain/gain share arrangements.

Joint ventures

The three winning NEC contractors are all joint ventures of major international construction companies.

The west section has been won by BMB, a joint venture of BAM Nuttall, Morgan Sindall and Balfour Beatty; the central section will be built by FLO, a joint venture of Ferrovial Agroman and Laing O'Rourke; and the east section has gone to CVB, a joint venture of Costain, Vinci and Bachy Soletanche.

Other organisations shortlisted for the contracts included Bouygues and joint ventures of Dragados and Samsung; Skanska, Bilfinger and Razel Bec; Bechtel and Strabag; and Hochtief and Murphy.

Amey will provide systems integration across all contracts under a £10-15 million ECC option E (cost reimbursable contract).

Infrastructure provider

The employer is Bazalgette Tunnel Limited, a specially created independent infrastructure provider that successfully bid to finance and deliver the project for Thames Water.

It is a consortium of investors comprising funds managed by Allianz, Amber Infrastructure Group, Dalmore Capital Limited and DIF.

Bazalgette, which now has its own licence from water industry economic regulator Ofwat, is chaired by former Carillion chairman Sir Neville

Simms. Chief executive officer is Andy Mitchell, former programme director of the £14.8 billion NEC-procured Crossrail project.

Eight-year programme

Due for completion in 2023, the Thames tunnel will be built from 24 construction sites across London. The project will employ 4000 people directly and create another 5000 jobs indirectly.

The work involves building a 7.2 m diameter sewer up to 65 m under the River Thames between storm tanks in Acton, west London to Abbey Mills pumping station in the east. It will pick up 34 combined sewer overflows along the way and have a storage capacity of 1.6 million m³.

Most of the 39 Mt annual storm discharges from the overflows – which currently go straight into the river – will be transferred from Abbey Mills to Beckton sewage works via the £635 million Lee tunnel, which is also being built using ECC option C by a joint venture of Morgan Sindall, Vinci and Bachy Soletanche (see issue 59).

CH2M Hill was appointed programme manager for both tunnel projects in 2008.

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Model view of the completed foreshore works at Victoria Embankment for the NEC-procured Thames Tideway tunnel in London ▼



NEC: delivering collaboration and best value on infrastructure megaprojects



STEVE ROWSELL NEC USERS' GROUP CHAIRMAN

At the highly successful NEC Users' Group annual conference in the UK in April this year, we heard first-hand accounts of the application of NEC3 contracts as part of collaborative approaches to project delivery.

Since then a general election has taken place and the UK has a new government. Like many other EU governments, it has set out plans for austerity to reduce the national deficit and indicated a continuing commitment to investment in major infrastructure projects to support economic growth.

In such an economic climate it is more important than ever that NEC users apply lessons learnt and best practice from previous projects to ensure best value for money is delivered on future projects.

There are currently plans for a wide range of major infrastructure projects in Britain. These include Thames Tideway tunnel (see page 1), Hinckley Point C, High Speed 2 and 3, Crossrail 2, London Underground upgrades, Highways England's road programme and the Environment Agency's Thames Estuary programme. Together they are worth more than £100 billion.

It is exciting to see that NEC3 is, or is highly likely to be, the contract suite of choice for the delivery of all of these megaprojects and programmes. It is also highly probable that collaboration principles will be a key part of their delivery strategies.

Supporting and enabling collaboration

The importance of collaboration in project delivery was emphasised in all the case studies presented at the NEC annual conference. NEC is recognised as being a collaborative contract suite, albeit that clause 10.1 of the Engineering and

Construction Contract requires parties merely to work together in a spirit of mutual trust and cooperation.

The spirit of cooperation is of course supported by contract procedures that require the parties physically to work together on aspects such as early warnings, risk mitigation, programme and compensation events.

In my view the combination of the requirement for a spirit of mutual trust and cooperation supported by the contract procedures means NEC3 is not only an appropriate contract suite to support collaborative delivery, it is also the best.

The full benefits of collaboration do, however, rely on more than just the choice of contract.

As Nick Woodrow explains in more detail on page 5, NEC3 contracts play an important role in supporting a collaborative culture, in which the requirements of the contracts are delivered, and in providing a fair and equitable position, which is required to facilitate collaboration.

We are also seeing an increasing focus by infrastructure clients on application of BS11000 Collaborative Business Relationships to the delivery of major projects, though the principles apply equally to projects of all sizes.

I believe collaboration across the industry will be supported by more consistent and standardised methods and procedures based on the NEC3 suite.

Doing more to deliver best value

The discussions at the NEC annual conference highlighted a number of lessons learnt where we can and should do more to support the delivery of best value in the use of NEC3 contracts.

First, we need to see a greater involvement of



Thames Tideway tunnel is one of over £100 billion of major UK infrastructure projects being procured under NEC – collaboration will play a key role in delivery

the whole supply chain in project collaboration arrangements supported by the use of NEC3 subcontracts.

Secondly, we must ensure, as NEC users, that contracts are as close to the standard form as possible. Instead of simply criticising clients for using Z clauses we should make more effort to help them understand the disadvantages of unnecessary Z clause in terms of cost, risk premiums and inefficiency.

Thirdly, we should support the early engagement and involvement of the supply chain in projects, both to maximise the value they can add and to support the development of collaborative relationships.

And last but not least, we need to support the use of supplier selection procedures aimed at identifying the best suppliers who demonstrate the right collaborative behaviours. This will help us to deliver successful project outcomes as efficiently as possible.

For further information please email info@necontract.com or visit necontract.com.

NEC Australasia Users' Group builds momentum



TIM WARREN NEC AUSTRALASIA USERS' GROUP SECRETARY

Following our recent re-launch in New Zealand in May, the Australasia Users' Group is continuing to gather momentum. We have strong interest in our planned meetings this year and new membership enquiries are coming in too.

New NEC steering group

Looking forward, our next steps have included setting up an Australasia Users' Group steering group. One of its key roles is to identify the wants and needs of Australasian construction markets and how best to support the introduction and implementation of NEC3 contracts throughout the region.

The steering group met briefly on 11 August in Auckland and will do so again on 8 September in Christchurch, immediately after the regular Australasia Users' Group meetings.

One of the first tasks has been to appoint a new chair and to start planning the Australasia Users' Group conference, which is now confirmed for 5 November at the Commodore Airport Hotel in Christchurch.

We will also start planning for events in 2016 and initiate the launch of expert sector interest groups, such as for buildings and facilities management.

Strong pick up for NEC

Locally the New Zealand construction market is continuing to grow, with spending look set to continue rising over the next couple years. From this we are seeing a strong pick up for NEC in the building sector – with three significant projects coming to market in Christchurch already, including Christchurch

Art Gallery (see issue 73).

There is also a more global view in the region, with more international performance comparators being used for Australasian construction businesses.

Overseas interests and experience are becoming more obvious, and we are also seeing Australasian businesses and staff collaborating more with those in the Asia-Pacific region.

As a final note it is also great to see some of our members taking advantage of the NEC on-line help desk form, with great response times from our advisors as well.

For further information please email info@necontract.com or visit necontract.com.

Hong Kong government produces NEC practice notes



IVAN CHEUNG NEC ASIA-PACIFIC USERS' GROUP SECRETARY

The Hong Kong government has recently engaged EC Harris to produce a set of NEC practice notes to help its staff administer their ever-increasing number of NEC contracts.

Though prepared as an internal document, it is likely the practice notes will serve as an invaluable guide not just for government staff but also a standard method for managing NEC in general.

Certainly it is a very positive step by the government to ensure consistency and drive efficiency across its NEC projects. We look forward to seeing the document in due course.

Accreditation programme

The NEC3 Engineering and Construction Contract (ECC) project manager accreditation programme is proving extremely popular since its Hong Kong launch earlier this year. The waiting list for the classroom sessions now extends to

November 2015.

Around 80% of those attending the first session in February have now qualified as Accredited ECC Project Managers, comparable with the pass rates in other regions.

Given NEC is still in its relative infancy in Hong Kong, programme tutors considered the standard of participants' understanding of ECC high and the results encouraging. Details of



further accreditation programmes are on the NEC website.

Workshop and conference

The NEC Asia-Pacific Users' Group workshop on 27 August 2015 focused on ECC risk provisions and managing ECC compensation events. Please visit the NEC website for further details.

Finally, the NEC Asia-Pacific Users' Group annual conference has now been scheduled for 10 November 2015. Further details will be published soon.

For further information please email info@necontract.com or visit necontract.com.

◀ Leighton-Able joint venture is designing and building the HK\$2.9 billion (£240 million) Tin Shui Wai hospital for the Hong Kong government under an ECC option A (priced contract with activity schedule), with completion scheduled for summer next year

Crossrail completes ECC tunnelling contracts

SIMON FULLALOVE EDITOR

The epic tunnelling programme for the NEC-procured £14.8 billion Crossrail project in London has finally been completed.

Tunnel boring machine (TBM) Victoria – one of eight used on the project – broke into the new Farringdon Crossrail station on 28 May, completing a total of 42 km of 6.2 m diameter rail tunnels in just 3 years.

The 980 t, 148 m long TBMs worked around the clock to excavate 3.4 Mt of London Clay, much of which is being used to create a wetland bird habitat in Essex.

The tunnels are up to 42 m below ground and weave their way between existing underground lines, sewers, utility tunnels and building foundations.

ECC option C used for tunnels

The NEC3 Engineering and Construction Contract option C (target contract with activity

schedule) was used to procure the tunnels and shafts, with a total value of £2.5 billion.

The largest contract, worth over £500 million, was for the eastern running tunnels, which were completed by a joint venture of Dragados and John Sisk.

A joint venture of Bam Nuttall, Ferrovia Agroman and Kier Construction completed both the western running tunnels and station tunnels, together worth £500 million, while Balfour Beatty, Vinci and Morgan Sindall built the eastern station tunnels.

Full range of NEC3 contracts

A full range of NEC3 contracts is being used on the project. Programme partner Transcend, a joint venture of Aecom, CH2M Hill and Nichols Group, is engaged under a £100 million NEC3 Professional Service Contract (PSC), and project delivery partner

Bechtel is similarly engaged under a PSC worth £400 million.

Design framework agreements are based on the NEC3 Framework Contract (FC), while all stations and systems are generally being procured using ECC option C or A (priced contract with activity schedule).

From 2018 Crossrail trains will transport up to 72 000 passengers per hour across London.

For further information see the Crossrail NEC lecture at youtube.com/nec3contract.

Prime minister David Cameron celebrates the end of Crossrail's NEC-procured tunnelling programme ▼



TSC road form updated

SIMON FULLALOVE EDITOR

The government-supported UK Highways Maintenance Efficiency Programme (HMEP) has published a second version of its standard form of contract for highway maintenance services,

which is based on the NEC3 Term Service Contract (TSC).

First published in November 2012 (see issue 61), the standard contract and

associated specification and other tools are helping to streamline the way England's 153 local highway authorities procure £3 billion of road maintenance work each year.

The second edition includes amendments and additions to the TSC April 2013 edition and comprises the HMEP form of agreement, contract data parts one and two, a template for service information and guidance.

A new price list and standard method of measurement also now form part of the HMEP procurement suite.

Meridian uses multiple NEC3 contracts to deliver major hydro refurbishment in New Zealand

NICK HORSWELL MERIDIAN ENERGY

Meridian Energy is using more than 50 NEC3 contracts to refurbish its Waitaki hydropower station in New Zealand. The complex NZ\$40 (£20 million) programme to overhaul the dam, power station and surrounding infrastructure started in 2012 and is due for completion at the end of next year.

Located in Waitaki Valley in the South Island, the 1930s plant has seven 15 MW turbines generating up to 105 MW. It is owned and operated by Meridian, the country's largest renewable electricity generator and a major user of NEC contracts since the early 2000s.

NEC3 contracts being used at Waitaki include the Professional Services Contract (PSC), the Engineering and Construction Contract (ECC), the Supply Contract (SC) and associated short contracts.

Nine works packages

The programme has been split into two projects with a total of nine works packages. The projects and packages include input from a range of specialist hydropower consultants and contractors in the mechanical, electrical, civil and structural engineering disciplines.

The site refurbishment project led by Caroline Rea consists of erosion remediation of surrounding civil engineering structures, seismic enhancements to the powerhouse and modifications to the dam uplift drainage system. It also includes a package of site-enabling works, ranging from refurbishment of the historic wood-panel lift to upgrading the site road junction with the state highway.

The unit refurbishment project led by Chris Baldwin includes overhauling two 80-year-old generating units, installing new protection

upgrades and fire-suppression systems to all seven generating units and the commissioning of unit 3 which seized in 1998. In addition there is a unit-outage-dependent package of work, ranging from new intake screens to new priming-valve arrangements.

Over 50 different contracts

The nine work packages are being procured using more than 50 different contracts from the NEC3 suite. These range from small task orders carried out under a master PSC to multi-million dollar ECC option A contracts (priced contract with activity schedule).

Other ECC variants include option B (priced contract will bill of quantities) and option C (target contracts with activity schedule). Also in use are the SC, Engineering and Construction Short Contract (ECSC) and Supply Short Contract.

According to Meridian's project manager Chris Baldwin, 'The NEC3 suite of contracts has been

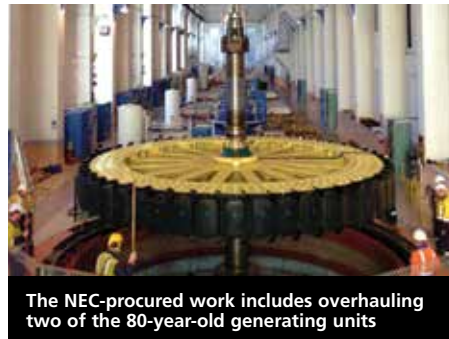
key to ensuring this programme of work is, and continues to be, delivered in a fair, collaborative and productive manner.'

Contract management tool

Meridian's project managers Chris Baldwin and Caroline Rea are using a web-based contract management tool from NEC licenced partner Conject to tender and administer the various NEC3 contracts.

'This has been key to standardising administrative tasks and ensuring contractors understand what is sometimes new terminology and often a new way of working with the employer,' says Baldwin.

Contractors and suppliers include ABB, Damwatch Engineering, Electrix, E-Type Engineering, Farra Engineering, McConnell Dowell Constructors, Mitton Electronet, Mace Engineering, Otis Elevator Company, PSC, TLJ Switchgear, Transfield Services, Wormald and PB Power.



The NEC-procured work includes overhauling two of the 80-year-old generating units



All external works at the plant are being carried out under a variety of NEC3 contracts

ECC used for civil and electrical works at Wellington wind farm

CHRIS MORE MERIDIAN ENERGY

Last year Meridian Energy started generating electricity from its new Mill Creek wind farm in the Ohariu Valley near Wellington, New Zealand. The extensive civil works were procured using an NEC3 Engineering and Construction Contract (ECC) option C (target contract with activity schedule), while the electrical balance of plant works and transmission line were procured using ECC option A (priced contract with activity schedule).

Mill Creek has 26 turbines with a total capacity of 60 MW. The NZ\$33 million (£17 million) civils work was undertaken by Higgins Contractors,

which had already successfully delivered infrastructure at three of New Zealand's largest wind farms, including Meridian's Te Apati and West Wind projects.

The electrical balance of plant works contract value was NZ\$1.9 million (£1 million) and the transmission line was NZ\$5.6 million (£3 million). Construction started in January 2013 and commercial operation started in September 2014.

Extensive civil works

The civil works included access roads, bulk earthworks, pavement construction, trenching

and cabling, tower foundations and associated drainage and structures. A total of 800 000 m³ of earthworks with associated environmental management and full compliance were substantially completed by November 2013 – a significant achievement for a winter programme.

The pavement works, trenching and cabling, and foundation construction works progressed over three separate phases for the 26 turbine bases, and all were delivered on time. In total there were 24 km of roads, 12 km of cabling and 10 000 m³ of concrete and 1 300 t of steel in the foundations.

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Cooperation, collaboration and how NEC provides a framework for both



NICK WOODROW CEMAR

During a lively debate at the NEC Users' Group annual seminar in April this year, someone asked why we were talking about collaboration when NEC3 contracts only ask for, 'a spirit of mutual trust and co-operation'.

What followed was an interesting discussion on the differences between collaboration and cooperation and how NEC3 contracts are written to compel the latter and facilitate the former. Also, given that collaboration is a more beneficial state than co-operation, delegates discussed what practical steps could be taken to achieve collaboration.

Defining cooperation and collaboration

Anyone can cooperate. Obeying the speed limit, putting the rubbish out, signing a contract – these actions are evidence of cooperation. They involve assisting someone or complying with their requests.

Collaboration is different as it requires a positive choice to be made. Working jointly on an activity or project is collaborative working. It requires shared ownership and a shared concept of a common problem. Communication is also required along, potentially, with negotiation and compromise.

The distinction between co-operation and collaboration could perhaps be defined as the difference in how we participate – it is either active or passive. People can cooperate by taking no action at all, while it would be hard to say the same about collaboration. To collaborate we must communicate, and possibly negotiate and compromise, while taking positive actions.

A good way of looking at the distinction is in relation to cooperative labour, where the tasks required are just divided up by the resource available. Anyone can see that this may not be the most efficient way of undertaking the work. Collaboration would lead to the most efficient use of those resources, benefitting all involved.

There is an academic model which clearly outlines why moving from cooperation to collaboration is useful and effective. The Thomas Kilmann Conflict Mode Instrument plots assertiveness with cooperativeness to identify five distinct conflict-handling modes: competing, avoiding, accommodating, compromising and collaborating.

We have all worked on projects where parties act in the first four of those conflict-handling modes, and we all remember fondly projects where assertiveness combined with cooperation has resulted in collaborative action.

How NEC facilitates collaboration

The NEC3 suite outlines a framework in which to cooperate. It even makes that cooperation a contractual obligation in the form of clause 10.1 of the Engineering and Construction Contract (ECC): 'The Employer, the Contractor, the Project Manager and the Supervisor shall act as stated in this contract and in a spirit of mutual trust and co-operation.'

Examples of where NEC3 contracts provide

processes to impose cooperation and go further to facilitate collaboration include the following.

NEC's early warnings and risk reduction meetings involve communicating potential issues, making and considering proposals, seeking solutions advantageous to all those who will be affected and agreeing actions to be taken. This is clearly a collaborative approach to problem solving and is integral to the NEC3 suite of contracts.

The NEC programme submission, acceptance and updating process involves communicating and articulating the plan, allowing a considered response and providing for regular updates to keep everyone informed. An accepted plan of how the project is going to get from start to finish promotes shared ownership and a shared concept of common objectives.

Notifications, responses and quotations relating to NEC compensation events all have sanctions described in the contract to improve the momentum of decision making and not allow issues to stagnate.

Commitments, either contractual or otherwise, to raise notices and respond in a timely fashion are clearly evidence of fostering a collaborative environment, not just one of cooperation.

Do not forget that the timescales are the maximum and there is no imperative to use up all of the time. Real collaboration would recognise when those timescales must be bettered for the common good, and the NEC concept of project manager's assumptions can assist in streamlining that process even further.

Either through NEC target-cost options with shared savings, or through secondary options such as X6 bonus for early completion and X12 partnering, the project team can be further incentivised to work collaboratively. Cost and time savings now become a shared benefit and a common goal, both critical elements to collaborative working.

Practical steps to achieve collaboration

As we can see above, NEC3 contracts are embedded with processes that engender at least cooperation. However they cannot force the positive actions and assertiveness that result in collaboration.

So what real and practical steps can be taken to move from the four sub-optimal modes of conflict-handling described in the Thomas Kilmann Conflict Mode Instrument to the win-win one of collaboration? Building on NEC's framework for collaborative working as described above, there are six simple and practical guidelines which can be followed by all.

First, adhere stringently to ECC clause 10.1 – and not just the friendly second part. It is critical that parties, 'act as stated in this contract'. Only in that consistent environment can trust, cooperation and ultimately collaboration grow.

Second, utilise ECC clause 16 on early warning as it was intended, not as pre-notification of a compensation event. This is where the contractual relationship can be made and broken.

Use early warnings as stated in the contract – which is for anything that could compromise the project – and you will benefit as the contract intended.

Third, you do not need to agree the programme but it does need accepting. In NEC3 contracts the accepted programme is not called the agreed programme or the contractor's programme, and it is not a commercial weapon or shield to be used in times of dispute. It is the lifeblood of the project: having a recently accepted programme is the only way either party can really understand how the shared concept of the common problem is going to be dealt with.

Fourth, spend the majority of time and effort pre-contract on the NEC works information and site information. If this is brilliantly written and compiled then any number of Z clauses and changes to the equitable nature of the contract timescales will not affect the team's ability to collaborate. What is required, when and where will be simply described and easy to follow.

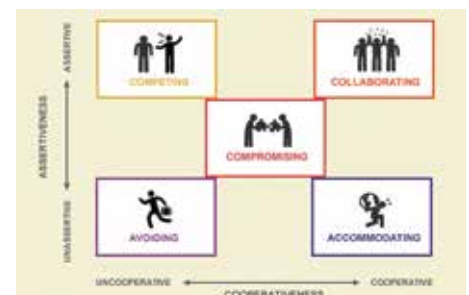
Fifth, act consistently. When submitting and responding to quotations, programmes, payment assessments and any other NEC communications, behave in a consistent manner. The clauses of the contract do not change and the principles of responses should not either. In any relationship, inconsistent behaviour will lead to distrust and reduce effective means of communication.

Last but not least, do not forget to talk to each other. It is people who manage NEC projects, not contracts or computer systems, the latter simply serve to make people more efficient and effective. Nothing improves on co-location of project teams and joint reviews of programmes, quotations, proposed instructions and any event where 'two heads are better than one'.

Conclusions

It is difficult to answer succinctly what the difference is between cooperation and collaboration, but we all know it when we see it.

NEC3 contracts have been drafted to provide a cooperative platform and, as outlined above, we can build on that with good practice to create a collaborative environment 'in a spirit of mutual trust and co-operation'.



▲ The Thomas Kilmann Conflict Mode Instrument – collaboration is a combination of cooperation and assertiveness (courtesy CPP, www.cpp.com)

FAQs



ROBERT GERRARD
NEC USERS'
GROUP SECRETARY

This is a selection of recent questions to the NEC Users' Group helpline and answers given. In all cases it is assumed there are no amendments that materially affect the standard NEC3 contract referred to.

Preparing the framework information

Question

We are in the process of preparing a set of documents using the NEC3 Framework Contract (FC). Could you please clarify what information should be included in the framework information? There is no detailed guidance on the document and to a degree it is open to interpretation as to what should be included in the framework information.

Answer

It is important to note that the FC is not a contract to carry out any works or services. It is a contract to provide a quotation for work when asked. Once that quotation is accepted by the

issue of a package order or a time charge order, then a separate contract is set up to carry out those works or services, and is governed by the particular NEC3 contract that the FC specifies will be used. In addition, there are no payment provisions under the FC itself. The consideration for that contract is in kind.

The framework information governs only the management of the FC part. The works information (ECC) or scope (NEC3 Professional Services Contract (PSC)) in each order contract will govern what is to be done under that contract. So, the framework information contains information about how the FC is to be managed. For example, it will say what co-ordination meetings will be required or what other commitments the parties have that will not be paid for under the time charge or package orders. It does not contain information on the various packages of service that will be ordered under the FC.

What should be in the framework information is anything relating to the way the employer wishes to manage the framework. What should not be in it is anything to do with the management or requirements of the services or works work carried out under the orders issued. That should be included in the scope (PSC) or works information (ECC) that forms part of the contract for those orders.

What the framework information does include depends entirely on the way you want to manage the FC and therefore it is difficult to say what 'should' be in it. It is up to you. Some employers carry out very little in the way of managing their FCs, other than issuing contract documents for the proposed orders to the suppliers, getting back their quotes and choosing one.

Other employers have a much more proactive approach, requiring regular meetings with all of the suppliers on each framework and, for example, instigating at the completion of each order a complete appraisal of everybody's contribution.

Reviewing contractor design

Question

We understand the ECC stipulates a period of 3 weeks for the review of fabrication drawings arising from a contractor-designed portion. As project manager we would interpret this to mean that a particular drawing revision should be reviewed within 3 weeks. However, this may result in a revision to that drawing, which would require further review and may take longer than the 3 weeks time period stipulated.

Clearly, we would want to review a particular revision of a drawing much quicker than the 3 week period but, depending on the scale of the project, there could be a considerable amount of drawings to review. The contractor has interpreted the contract to mean that the total period for drawing review should be 3 weeks, regardless of whether drawings need to be revised or not. What are your thoughts on this?

Answer

ECC makes no direct mention of reviews of fabrication drawings, a 3 week period, or a contractor-designed portion.

We assume you are referring to a part of the works that the contractor is to design. In that case clause 21.1 simply states that the contractor designs those parts of the works which the works information states the contractor is to design.

The obligation to instruct and timely notices



SHY JACKSON PINSENT MASON'S

Questions relating to changes and how they are instructed are a common feature of all constructions projects. A decision of the Court of Appeal in Northern Ireland last year (*Northern Ireland Housing Executive v. Healthy Buildings (Ireland) Ltd [2014] NICA 27*) provided some useful guidance on the NEC mechanism for instructing changes and notifying compensation events.

Issues to be determined

The employer, Northern Ireland Housing Executive, is a housing authority with a large number of tenants in domestic dwellings. It has an obligation to manage risks and it appointed consultant Healthy Buildings to carry out asbestos surveys under an NEC3 Professional Services Contract (PSC).

Based on the specification provided with the contract it was possible to undertake the surveys using a sampling strategy. However, the minutes of a meeting in January 2013 recorded that the employer required every room to be surveyed. This greatly increased the workload and laboratory testing.

In May 2013 the consultant gave notice that it considered the instruction recorded in the minutes to be a compensation event. There were therefore two issues to consider. Did the minutes of the meeting record an instruction changing the scope of the services, thereby giving rise to a compensation event? And was the notice of compensation event out of time, because it was served more than 8 weeks after the consultant became aware of the event?

The consultant obtained an adjudicator's decision to the effect that this was a change and that they were not time barred. The employer's attempt to resist enforcement in the High Court failed and it appealed to the Court of Appeal.

Court of Appeal's decision

The Court of Appeal considered the original scope of work set out in the contract and concluded that the requirement for a greater amount of sampling was a change to the original scope of works. The court then went on to consider whether the notice of compensation event was out of time.


The issue turned on the interpretation of PSC clause 61.3 and in particular whether this was a situation where the time limit did not apply as, 'the Employer should have notified the event to the Consultant but did not'. The employer argued that since it did not consider this to be a change, it had no obligation to issue an instruction.

The court rejected that argument and held that if the employer gives an instruction that, as a matter of fact, constitutes a compensation event then it is obliged under clause 61.1 to notify it as a compensation event, regardless of its own belief as to whether or not the event constitutes a compensation event. All the more so when the wording is contrasted with the wording relating to the consultant's obligation to notify which does refer to the consultant's belief.

When considering the meaning and effect of the obligations in PSC clause 61.3, the court also referred to the provisions of clause 10.1, as they apply to the language of clause 61.1. The court went on to hold that the overall time bar provision in clause 61.3 was an exclusion clause in favour of the employer and fell to be construed *contra proferentem* (i.e. against the employer).

Conclusions

This case is a useful reminder of the risks of using informal instructions instead of the contractual mechanisms and the uncertainty that can then arise with regard to notifying compensation events.

The decision was based on the original 2005 wording of clause 61.3. This has since been replaced in NEC3 2013 contracts with, in the case of ECC, 'unless the event arises from the Project Manager or the Supervisor giving an instruction, issuing a certificate, changing an earlier decision or correcting an assumption.' 

The assumption therefore is that the works information puts responsibility on the contractor for this design – if not then the contractor has no responsibility for design. If you wish it to take such responsibility as project manager, you must instruct a change to the works information and that instruction will be a compensation event under clause 60.1(1).

In addition, as project manager managing the works on behalf of the employer, you have no automatic right to review the design unless the works information says so (clause 21.2). And, if the works information says so, you have to accept or not accept the design – see the first sentence of clause 21.2 and clause 13.8. You then have the period for reply stated in the contract data part one to do this (see clause 13.3) – and it appears likely that in your case the employer has stipulated this to be 3 weeks. If you do not reply within that period it will be a compensation event (see clause 60.1(6)), which will allow the contractor to be compensated for the time and money consequences of the failure.

If you do not accept the design, you have to give a reason. Any reason can be given. The contractor then resubmits its design within the period for reply to deal with that reason (a new one, so another 3 weeks) and you deal with it again within another new period for reply. See clause 13.4 for all of this.

If the reason given for non-acceptance is not in the contract then this will be a compensation event again (see clause 60.1(9)). If the reason is in the contract, then there is no compensation event (see clause 13.8). The reasons for not accepting the design can be found in clauses 13.4 and 21.2.

From the above you will see that there is no room for 'comment'. The project manager either accepts or does not accept. What effect non-acceptance will have with regards to time and monies depends upon the reasons given. Please note that the term used is, deliberately, 'acceptance' rather than 'approval'. The contract makes it clear that any such acceptance does not transfer liability from the contractor – see clause 14.1.

With regard to the number of drawings, project managers have to ensure they have sufficient resources to administer the contract

in accordance with its terms. If they fail to do so then, in this case, it will be a compensation event. 'We do not have enough time' is not a reason in the contract to not accepting, or for replying later than the period for reply. Such matters should have been considered when the employer chose the period for reply when drawing up the contract.

Changing decisions on rejected compensation events

Question

We have a compensation event time bar query. The contractor has notified a number of compensation events within the 8 week time bar stipulated within the ECC. Some of these have been rejected as they were deemed to not be compensation events given the information available at the time. Further substantiation is now available and the contractor would like to resubmit a notification of compensation event for the same issues. However, this is now outside of the 8 week period for which the contractor would have become aware of the compensation event.

How does the time bar operate in relation to resubmitted notifications of compensation events that refer to an event which had previously been notified within the correct timescales but subsequently rejected?

Answer

Your question assumes this is one of a minority of compensation events that the contractor, rather than you as project manager, is supposed to notify (see clauses 61.1 and 61.3 to define those), but that will not necessarily be the case. If, for example, this compensation event has arisen as a result of you issuing an instruction, then the time bar in clause 61.3 does not apply at all.

Once the contractor has notified the compensation event, you as project manager can only reject it for a reason set out in clause 61.4. If the contractor considers the reason is incorrect, then it should tell you and provide additional information if necessary. However, the contractor does not need to notify the compensation event again. All the contractor has to do is to provide the additional information and invite you to

reconsider the decision.

If you think you have made a mistake then you should discuss this with the contractor and agree to change your previous decision. Otherwise it is likely the employer will end up in an adjudication it will probably lose.

Using the activity schedule to assess compensation events

Question

I am the project manager on a project using ECC option A. We are in the process of agreeing the quotation for a compensation event to delete items of work from the contract. The items have prices in the activity schedule. Why would the quotation not be simply the value of these items in the activity schedule? The contractor is suggesting otherwise and provided a cost build-up of about 60% of this value. The activity schedule has items to cover all general items with site establishment and supervision cost and so on, and the work is not reducing time on site as it is not on the critical path.

Answer

The simple answer to your question as to why the value is not the amount in the activity schedule is because that is what the contract says.

The deletion of work in the works information is an instruction to change the works information issued in accordance with clause 14.3, which is a compensation event under clause 60.1(1). Compensation events are assessed in accordance with the rules set out in clause 63. Specifically clause 63.1 states they are assessed as the effect the compensation event has upon the forecast defined cost of the work that is not to be carried out, plus the fee. Therefore, in the case of deleted work, you are required to assess the forecast defined cost of carrying out the deleted work to which the fee is added. The resultant figure is then deducted from the total of the prices in the activity schedule – see clause 63.12.

The process and timescales involved in assessing compensation events can be found in clauses 61–65. If you do not agree with the contractor's quotation, you are entitled to make your own assessment – see clause 62.3 and the 2nd bullet of clause 64.1.

>> Continued from page 4

Electrical balance of plant works and overground transmission lines to the national grid were then delivered under separate ECC contracts. Siemens manufactured, delivered and installed the 26 2.3 MW 82VS turbines, which have a rotor diameter of 82.4m and hub height of 80 m.

Collaborative working

Acting in accordance with ECC's 'spirit of mutual trust and co-operation', Meridian and Higgins worked together to drive opportunities, innovation and smart construction methodology to help deliver the critical civil works for the wind farm on time and on budget.

According to project manager Chris Jones,

'We found that the ECC supported collaborative working by having clearly defined processes and timeframes, which promoted openness and responsiveness'.

'This was the first option A and C contract used by both parties and, despite their being a few surprises along the way, we found the overall contractual experience to be very positive.'



NEC-procured civils works included 800 000 m³ earthworks and 24 km of access roads



The 26 bases for 80 m tall turbine towers were delivered on time using ECC option C

ICE Register of Accredited NEC3 ECC Project Managers

The following individuals are listed on the Institution of Civil Engineers (ICE) Register of Accredited NEC3 ECC Project Managers at nec3eccprojectmanagers.ice.org.uk. The register has been set up to recognise the technical and practical skills required of a project manager using the NEC3 Engineering and Construction Contract (ECC). The individuals on the register have completed the ECC project manager accreditation programme and have successfully passed the stage 1 and stage 2 assessments.

Austin Addison-Smyth	Robert Corbyn	Kerry Hutchings	Tina Parnar
Shazad Akram	Alan Doherty	Joel Jackson	Christopher Prior
Ada Albert	Alex Dovey	Julie-Ann Janko	George Reid
Demawu Apeti Bng	Joe Dowds	Patrick Johnston	Andrew Reid
Allan Armstrong	Simon Dow	Mark Kitchingman	Paul Romanko
Daniel Barnett	Kenneth Douthwaite	Tim Knee-Robinson	Jeremy Robinson
Kevin Bell	Barry Drewett	Edward Lax	Matthew Rowton
Paul Bell	Ian Drummond	Timothy Lewis	Andrew Ryder
Christopher Benford	Jeff Dutton	Duncan MacKillip	Ian Shaw
Martin Belshaw	Neil Farnery	Alasdair Macniven	Carl Sperke
Jason Bibby	Manuel Fernandez de la Concha	Kerry Martin	Andrew Stephenson
Kenneth Birch	Rebecca Fleming	Helen Matheson	Barry Trebes
Piotr Bogusiewicz	Nicola Gemmell	Stuart McArthur	Li Yan Chun
Stuart Brown	Paul Gibbs	Richard McLellan	Martin Young
Anthony Brady	Paul Gorge	Mark McLinden	Tim Waite
Oliver Brewster	Andrew Griffiths	Charles Morris	Lee Webster
Gary Buick	Philip Harrison	Allen Murray	Simone Wyatt
Adrian Coney	Mark Harvey	Terence O'Connor	Peter Williams
Hei Wing Cheung	Ian Hedley	Teresa O'Sullivan	Gerald Wilkins
Chung Ho Clarence	Nicholas Hilder	Rhodri Owen	Alan Wilson
		Richard Patterson	Sarah Wilson

NEC DIARY

02 September	Introduction to the ECC	Glasgow
03 September	ECC project managers' workshop	Birmingham
07 September	ECC project manager accreditation	Hong Kong
07 September	NEC Users' Group workshop	Christchurch, NZ
08 September	Introduction to the TSC	Birmingham
14 September	ECC project manager accreditation	Bristol
15 September	ECC supervisor accreditation	Birmingham
17 September	Introduction to the PSC	London
17 September	Commercial management using the ECC	London
17 September	NEC breakfast briefing	Wellington, NZ
22 September	Introduction to the ECC	Birmingham
24 September	NEC Users' Group workshop	Leeds
29 September	NEC Users' Group workshop	Bristol
30 September	Managing risk under the ECC	Glasgow
07 October	Introduction to the ECSC	Birmingham
08 October	Introduction to the SC	London
15 October	Introduction to the ECC	Bristol
19 October	TSC service manager accreditation	Birmingham
22 October	ECC compensation events workshop	London
29 October	Practical application of the ECC	Birmingham
29 October	NEC Users' Group workshop	Glasgow
02 November	ECC project manager accreditation	Hong Kong
03 November	ECC supervisor accreditation	London
05 November	ECC programming workshop	Birmingham
05 November	NEC Users' Group conference	Christchurch, NZ
10 November	NEC Users' Group conference	Hong Kong
16 November	ECC project manager accreditation resit	London
17 November	NEC Users' Group workshop	Belfast
19 November	Introduction to the ECC	London
23 November	ECC project manager accreditation	London
25 November	Preparing and managing the ECC	London

Key: **Bold** - NEC Users' Group events, **ECC** - Engineering and Construction Contract, **ECSC** - Engineering and Construction Short Contract, **PSC** - Professional Services Contract, **SC** - Supply Contract, **TSC** - Term Service Contract

NEC Users' Group members

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

PLATINUM	Vinci Construction UK Limited	Beattie Communications
AWE Plc	Volker Wessels UK Ltd	Bennetts Associates
Dounreay Site Restoration Ltd	VPI Immingham LLP	Bliffinger Industrial Services
High Speed Two (HS2)	Warwickshire County Council	UK Ltd
Highways England Co Ltd	WSP UK Ltd	Black & Veatch Ltd
Lafarge Tarmac	WYG Management Services	Blake Newport Associates
Magnox Limited		Bowdon Consulting Limited
Milton Keynes Service Partnership LLP		Brachers LLP
Pirenet Masons LLP		Caledonian Maritime Assets Limited (CMAL)
RWE Innogy UK Ltd		Castle Hayes Pursey LLP
RWE Technology UK Limited		CEMAR
Six Property Services		Chandler KBS
Southeast Borough Council		Compton Verney House Trust
Surrey County Council		Conject
Transport for London		Construction Dispute Resolution
West Yorkshire Councils		Corderoy
		Crummock (Scotland) Limited
GOLD		Clori Construction Consultants Limited
AECOM Professional Services LLP		Deane Public Works Ltd
Aggregate Industries UK		Diamond Light Source Ltd
AMEC Power & Process UK & Europe		Docé Consulting
Arney Local Government		Doig & Co
Areva S.A.		Doig & Smith Ltd
Atkins UK		Dumfries & Galloway Council
Babcock International Group		East Lothian Council
Balfour Beatty Major Civil Engineering		Engineering Contract Strategies
Balfour Beatty Regional		FP McCann Ltd
Balfour Beatty Utility Solutions		Gearing Consulting Services Ltd
BAM Nuttall Ltd		GHA Livigunn Ltd
Barnsley Metropolitan Borough Council		Glasgow City Council
Belfast City Council		H A Goddard & Sons
Bolton Metropolitan Borough Council		Hannah Reed & Associates Ltd
Bracknell Forest Borough Council		Hanover Housing Association
Bristol City Council		HLG Associates Limited
Caiffion Plc		Hydro International (Wastewater) Limited
Caulfield Contractors Ltd		Ionside Farrar Ltd
CES Group PLC		J Brehery Contractors Ltd
Central Procurement Directorate		JIL Consultancy Ltd
City of Edinburgh Council		John F Hunt Demolition
CNS Planning Ltd		John Papworth Ltd
Colas Ltd		Keegans Ltd
Costain Limited		Lancaster City Council
Cubic Transportation Systems		Land & Water Group
ITMS		Lindford Consulting Ltd
Cumbria County Council		MacKenzie Construction Limited
Defence Infrastructure Organisation		McAdam Design
Department of Health Procure1		Met Office
Dover Harbour Board		Mon-Arch
Driving & Vehicle Standards Agency		Natural Resources Wales
Dundee City Council		Navigant Consulting (Europe) Ltd
Eurovia Group Ltd		Newcastle City Council
Farrans (Construction) Ltd		North Yorkshire County Council
Fife Council		Nottinghamshire County Council
Foreign and Commonwealth Office		Novi Projects
FTI Consulting		Nuclear Decommissioning Authority
Galiford Try		Nuvia Limited
Guys and St Thomas		Orkney Islands Council
NHS Trust		Oxand Limited
Hanson Contracting		Pat Munro (Alness) Ltd
Horizon Nuclear Power Services Ltd		Patronus Consulting Ltd
Hugh LS McConnell Ltd		pdConsult
Interserve (Facilities Management) Ltd		Pelings LLP
Interserve Construction Ltd		Peter Brett Associates
J Murphy & Sons Ltd		Peter Cousins & Associates
Jackson Civil Engineering Group Ltd		Portsmouth City Council
Kelda Water Services (Defence) Limited		Procom-IM Ltd
Kier Infrastructure and Overseas Ltd		Project Engineer Ltd
Lagan Construction Ltd		Pyments Ltd
Laing O'Rourke		Quigg Golden Ltd
Lend Lease Consulting (EMEA) Limited		R A Gerrard Ltd
Lincolnshire County Council		Ramsden Enterprises Ltd
Lincolnshire County Council LUW Repository Ltd		Ramskill Martin
Mace Group		Reck Procter & Partners
Ministry of Justice		Ridge & Partners
Moreton Hayward Limited		Royal Haskoning DHV Ltd
Morgan Sindall Group Plc		Royal Holloway, University of London
National Grid Plc		RSK Environment Ltd
Network Rail		Selwood Limited
NG Bailey		Sheffield City Council
Norfolk County Council		Shropshire County Council
Northumbrian Water Limited		Solomons Europe Ltd
NWSP Specialist Estates Services		Specialist Engineering Contractor's Group
Osborne Clarke		States Property Services
Ove Arup & Partners Ltd		Suffolk County Council
Perth & Kinross Council		Synergie Training
QinetiQ Ltd		Sypro Management Ltd
Rider Levett Bucknall		T & N Gilmartin
RFS Consulting Engineers		Taylor Wessing LLP
Siemens		Telford & Wrekin Council
Skanska Construction Group		The Big Red Apple Company Ltd
SLR Consulting Ltd		The Highland Council
South London & Maudsley NHS Trust		The Sheffield College
Springfields Fuels Ltd		Trowers & Hamlin
SSE Plc		Veale Wasbrough Vizards LLP
The British Museum		VHE Construction Plc
The Capita Group PLC		Vinorid Waste Management Ltd
The Coal Authority		Wallace Stone LLP
UK Power Networks Ltd		WDR & RT Taggart
United Utilities Water Ltd		Weir Power & Industrial Wiltshire County Council
University Of Cambridge		
		ASIA-PACIFIC
		Advian Limited
		Airport Authority Hong Kong APM (HK)
		Atkins China Ltd
		Beria Consultants Ltd
		BK Surco Ltd
		Chinese University of Hong Kong
		Civil Engineering & Development Department, HKSAR Government
		CLP Power Hong Kong Ltd
		Construction Industry Council
		Continental Engineering Corporation
		Deacons
		Development Bureau, HKSAR Government
		Drainage Services Department, HKSAR Government
		Driver Trett (Hong Kong) Ltd
		EC Harris (Hong Kong) Ltd
		Fugro (Hong Kong) Ltd
		Gammon Construction Ltd
		Highways Department, HKSAR Government
		Hogan Lovells (Hong Kong)
		Institution of Civil Engineers (Hong Kong)
		Kum Shing (KF) Construction Co Ltd
		Langdon & Seah Hong Kong Limited
		M.Y. Cheng & Co (Engineering) Ltd
		Mace Limited (Hong Kong)
		Maka Consulting Company Limited
		Mayer Brown JSM
		Meinhardt Infrastructure & Environment Ltd
		Mott MacDonald Hong Kong Ltd
		Navigant Consulting (Hong Kong) Ltd
		Pirenet Masons
		Sum Kee Construction Ltd
		The Contracts Group Ltd
		The Hong Kong Construction Association Ltd
		Turner & Townsend (HK)
		URS Hong Kong Ltd
		VSL Intrafor (HK)
		Water Supplies Department, HKSAR Government
		Chun Wo Construction & Engineering Co Ltd
		Hsin Chong Construction Group Ltd
		Leighton Contractors (Asia) Ltd
		Paul Y. Construction Company Limited
		Shun Yuen Construction Co. Ltd
		AUSTRALASIA
		AECOM
		Arrow Strategy Ltd
		Christchurch City Council
		City Care Limited
		Coffey Projects Ltd
		Constructing Excellence NZ
		Donald Cant Watts Corke
		Dow Airen
		Evans & Peck Pty Ltd
		InfoSpl Group Pty Ltd
		Meridian Energy Limited
		OSPRI New Zealand Limited
		PBA Ltd
		RICS Oceania
		Watercare Services Limited
		REST OF WORLD
		Aquatera Consultants Ltd
		Cementation Canada Inc
		Contract Communicator
		Exarchou and Rosenberg International
		Fulton Hogan Limited
		Simpson Grierson
		Solomons Europe Ltd
		Thurlow Associates
		VGI Consulting Inc
		WorleyParsons RSA
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		Glasgow Caledonian University
		Leeds Metropolitan University
		Loughborough University
		Oxford Brookes University
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