

## PRACTICE

# Managing inflation risk in NEC4 and the effect on compensation events



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## KEY POINTS

- NEC4 users can choose how to manage the risk of inflation using main and secondary option clauses.
- Compensation events that delay the contractor may also include price impacts of delays.
- Under option X1, changes to prices for compensation events are base-dated, while inflation adjustments are applied to interim amounts via X1.3 and X1.4.
- The price indices selected may not reflect the actual inflation on your project.

With the costs for materials and services rising to historic highs in the UK and Europe, it is vitally important to recognise the risk of inflation when procuring or contracting for projects in the construction industry. This article provides a summary of the various mechanisms provided within the NEC contract forms for managing the risk.

Considerations that should be taken into account during procurement or contract negotiations include:

- What is the potential inflation exposure for the contracted goods or services?
- Which party has the ability to carry the risk of price increases?
- How long are the goods or services to be provided for?

The answer to these questions will determine the parties' potential exposure to inflation risk and identify which party has the greatest ability to manage it.

was +8.5%, then the calculated amount for inflation would be £42,500, which would be applied to the interim payment. In theory, this should recompense a contractor for inflation, but only at amounts calculated via the indices chosen.

Under Options C and D, the PAF is calculated in a similar way but is then deflated by itself before being factored against the interim amount. The formula for calculating the amount to be included is  $PAF / (1 + PAF)$  factored against the interim amount.

For example, if the interim amount was £500,000 and PAF was +8.5%, the calculated adjustment for the total of the prices would be £39,170.51. In this instance, the target is adjusted to allow for the inflation contained within the defined cost at the time of the interim payment. Thus, the inbuilt mechanism adjusts for inflation.

The contractor is reimbursed the effect of the inflation at the time of the interim payment under both calculations, however, under Options C and D, the parties will realise additional adjustments under the pain/gain arrangements at completion.

If option X1 is to be used, it should be selected in the contract data part one general statements and must be applicable with the main option. The optional statement for X1 should also be fully completed with the nominated indices to be used and the base date.

## Price risk allocation in ECC main options

NEC4 Engineering and Construction Contract (ECC) Options A and B are priced contracts meaning, absent any changes to or breaches of contract during the works, the contract comprising the activities or measure must be delivered at the agreed price or rate. Under these options, the price risk for procuring and delivering the activity or unit of work is owned by the contractor.

ECC Options C and D are target cost contracts, under which the contractor will initially be reimbursed the defined cost for delivering each element of the works, which relates to the total of the prices (the target). Any increases or decreases in the prices paid for these materials, away from the base allowances, will lead to betterment or overspend of defined cost. Ultimately the reward or pain in relation to beating or exceeding the target

will be apportioned holistically via the pain/gain mechanism.

Under ECC Option E (cost reimbursable) and Option F (management contract), the contractor is reimbursed the defined cost for carrying out or managing the works. The cost of payments for purchasing plant, materials and other resources such as people, equipment and fuel are included in the schedule of cost components. Therefore, increases in purchasing costs will lead to an increase in the calculation of the defined cost of the works. Under these options, the client carries the risk for increases to cost.

## Using option X1 to protect the contractor

If the client decides to take all the risk for inflation, then secondary option X1 can be used in the majority of NEC4 forms (see also Patterson (2022) in Issue 118). This secondary option can be selected with Options A, B, C and D, although not under E or F as reimbursement of defined cost under these is at real-time prices.

If using option X1 under Options A and B, a contractor's interim payments are adjusted for inflation by calculating the 'Price Adjustment Factor' (PAF) using the formula  $(L-B)/B$  for each of the elements that has an index, where L is the 'Latest Index' and B is the 'Base Date Index'. This percentage figure is factored against the calculated amount of price for work done to date in the interim payment.

For example, if the interim amount was £500,000 and the calculated PAF in the month

## Price risk in compensation events

Pricing compensation events where option X1 is selected requires a mixture of base rates and current prices. Users should include base-dated defined cost rates for people and equipment, which may have been included in the contract data part 2, and current prices factored to base-dates for other elements which, in effect, converts the quotation into base-dated terms.

The above processes can be used to manage the effects of inflation upon the contracted sum and upon changes to the works. It is commonly asked which compensation event can be used to recover the effects of inflation, to which there are several answers. There is no core or main option clause for a compensation event arising from price increases. This is due to compensation events being causal episodes, and inflation being a factor which can affect the cost or timescale for completing the works.

While inflation is not a compensation event, several types of delay event or other changes can lead to recovery. Recent examples can include events such as Brexit, where changes in the law (option X2) led to changes in the availability of resources which, in turn, led to changes in defined cost. In contracts excluding option X1, a compensation event under option X2 could include the effects of changes in the defined cost of carrying out the works. The impacts of any inflation are, therefore, included within the quotation for the event.

Covid-19 has also been recognised as an applicable prevention compensation event (clause 60.1(19)) on various projects. On others, the changes in law introduced by the government have been cited as giving rise to a compensation event under option X2. Instructions changing the scope (clause 60.1(1)) were also issued on various projects to mitigate impacts, comply with health and safety law, or introduce new constraints on working. Notwithstanding bespoke drafting of compensation event clauses and determination of specific circumstances, where a compensation event has occurred the effects on prices and time for the completing the works can be addressed through the assessment procedure.

Other events, such as the project manager giving an instruction changing the scope (clause 60.1(1)) or the client delaying the contractor (60.1(2-6)), can lead to design, procurement and manufacturing delays. In these circumstances, where option X1 is not used, the impact upon defined cost can be included within the compensation event quotation. Where option X1 is used, compensation event assessments should use base-dated or deflated rates.

## Reference

Patterson R (2021) How to use NEC secondary option X1 on price adjustment for inflation, *NEC Users' Group Newsletter*; 118, May, p. 8.