

Network Outcomes Contract Governance & Management Group

Reference Number:	NOCC No.7
Subject Title:	BPRQs: Reconciliation to the accumulated annual Pavement Rehabilitation programme
Issue Date:	12 October 2015
Clarification Purpose	Clarification is provided to ensure the NOC is being interpreted consistently. The clarification does not remove or supersede the Network Outcomes Contract documentation.

SUBJECT

The subject is around the “risk and reward” concept between proactive and reactive maintenance as mentioned in SM 018.

We have endeavoured to provide clarity on each of the concerns raised.

SUMMARY OF ISSUES

A Contractor considers that the change to the accumulated annual pavement rehabilitation programme as reconciled against the Contractor’s tendered accumulated Pavement Rehabilitation Baseline Plan is risk excluded. They would like the Principal’s view on;

- The interpretation of Risk Profile Item 7 in the Conditions of Contract,
- Addressing the definitions of “do-something”,
- Recognition of the length as part of the Base Line Quantities, and
- The risk profile on post-construction performance acceptance.

The Contractor has highlighted the following documents and clauses to be considered in addressing the issues these include:

- Conditions of Contract NZS 3910:2003. Clause 2.8.3 and 2.8.4,
- Conditions of Contract, Thirteenth Schedule: Contract Risk Profile Description 7

RESPONSE

The interpretation of Risk Profile Item 7 in the Conditions of Contract

Intent: the Baseline plan is there for the protection of all parties (The Principal, the Supplier, and the Network).

The intent was (in plain English) - "NZTA have intended to fund every rehabilitation project that is 'justified', up to a maximum level of the baseline plan accumulated qty, each year" (Protection for the Supplier).

This also means that NZTA have the right to decline funding more than the accumulated baseline qty, in any year, without incurring a risk change claim from the supplier (Protection for the Principal).

The intent was that NZTA would not simply default to 'Only funding up to the baseline plan qty's', but fund what was best for network (justified), even if over the baseline plan and NZTA could afford to financially (Protection for the Network).

Important English language clarification: If NZTA fund a renewal, it is only because it is submitted by the Supplier and justified.

If NZTA fund more than the Suppliers accumulated baseline plan, then NZTA are entitled to lump sum money back from the supplier. (Protection of the integrity of NZTA's Lump Sum payments to the Supplier)

Baseline Plan definition.....this is defined in MS 2.5.4. This section also outlines in more detail what the words in Risk Profile 7 state, that is

"The Principal's Annual Plan Instructions Manual (SM018) contains justification requirements that will need to be met by the Contractor, in order to implement the Contractor's Baseline Plan strategy.

Pavement maintenance risk will pass over to the Principal if the Principal is unable to, or chooses not to; fund SM018 justified pavement rehabilitation renewal projects where this results in the Contractor being prevented from implementing the renewal investment levels as set out in the Supplier's Pavement Rehabilitation Baseline Plan. **"Risk Excluded"**

Pavement maintenance risk will remain with the Supplier if the Pavement Rehabilitation Baseline Plan investment levels have not been applied to the Network owing to incorrect justification, or if the reactive maintenance levels have not justified the need for each individual renewal project."

In English: If the NZTA fund less than the base line accumulated qty each year (or any year) because the network condition is such that not many rehabilitations can be "justified", then it is business as usual and both parties just get on with the job, i.e no claims or variations or money changing hands, or change in risk negotiations necessary. **"Risk Included"**

Conversely, In English: If the NZTA do not fund justified projects because of e.g financial constraints, and the base line accumulated qty each year (or any year) is below the baseline plan, then the NZTA must cover the risk that the Supplier has been exposed to, as a result of this non-funding action. **"Risk Excluded"**

MS Section 2.5.4 provides clear guidance on the role the baseline plan has, along with when risk ownership roles change and while Risk Profile 7, could be read in isolation, it is not the full statement, to cover the reconciliation process.

There are numerous references to how the baseline plan annual reconciliation process works, which defines when/where/how/who in terms of risk changes. These are repeated throughout the NOC MS whenever the renewal topic is raised, specific clauses include;

- MS 2.5.4 Changes to Annual Renewal Investment Levels
- MS 6.1.2 Pavement Rehabilitation

- Appendix 2.4, Process Maps, includes the Management of Annual Rehabilitation Quantity process map.
- IFT Variation benchmark questionnaire

In line with the Project Management Manual (SM011) for Capital Projects a parallel Management manual has been developed for the NOC (SM034). The manual provides a very good synopsis of the Management of the Annual Renewal Preservation Quantities (refer section 4.7).

Table 1 below looks at the full range of scenarios and how these are dealt with to achieve the above intents.

To summarise Risk Item 7 has two parts to the “risk excluded” the first is the accumulated annual reconciliation of rehab quantities delivered under the contract (refer scenarios in Table 1) and the second is at the conclusion of the contract the final reconciliation of rehab quantities that offer an opportunity for a reward equating to 15% of the value of any reduction in the contract quantity that the contractor can achieve by employing appropriate preventative strategies that extend asset life and defer investment need.

Clarity around the definition of "do something (i.e. heavy maintenance)"

The NOC Maintenance Specification Section 6.2.1 states pavement rehabilitation is defined as the treatment (including pavement recycling treatments) over a continuous lane length of at least 100 metres.

The specification further states that design options must be economically justified in accordance with Annual Plan instructions and that a design meets the requirements of the Austroads Guide to Pavement Technology and the NZ Supplement.

The maintenance specification does not define a pavement design life nor does it use the term do something. The maintenance specification does require the contractor to select the most cost effective long term treatment to restore the required level of service. The Contractor is required to explore and recommend the most appropriate treatment to provide the required outcome.

Quite simply put rehabilitation is the treatment (including pavement recycling treatments) over a continuous lane length of at least 100 metres and the treatment option is the most cost effective long term option.

While the Annual plan Instructions indicate that a Do something option includes, delaying a full treatment of the pavement, viable treatment options include more extensive pavement repairs and subsequent reseal treatments than the do-minimum option and a so called “holding treatment” can often delay the full treatment by 10 years (maximum) giving financial benefit by delaying the significant cost of a full rehabilitation treatment. The Annual Plan instructions do not override the definition of a rehabilitation treatment, nor are they in conflict with the maintenance specification.

Again while, the Annual Plan recommends that a pavement rehabilitation treatment is properly designed for the circumstances and unless there is good reason, the pavement design life should be 25 years, noting that this is the design life for pavements where 95% are expected to endure beyond 25 years. It still requires the selection of the most cost effective whole of life treatment which may include shorter design lives for a selected treatment site. The Annual Plan instructions do not override the definition of a rehabilitation treatment, nor are they in conflict with the maintenance specification.

In summary the maintenance specification quite clearly defines a rehabilitation treatment as;

- A treatment (including pavement recycling treatments) over a continuous lane length of at least 100 metres
- The design option must be economically justified in accordance with Annual Plan instructions
- The design meets the requirements of the Austroads Guide to Pavement Technology and the NZ Supplement

Therefore while the Annual Plan instructions describe a do something option any treatment which is 100m or over a continuous lane length and is economically justified will be a rehabilitation treatment.

Clarity around when a treatment draws on BRPQ's

MS Section 6.1.2 states, Pavement Rehabilitation is defined as the treatment over a continuous lane length of at least 100m. It is clearly the intent of the contract that all work that meets the definition in clause MS 6.1.2 for pavement rehabilitation will draw on base renewal preservation quantities.

That is the pavement is over a lane length in excess of 100m and was NPV justified then it is a rehabilitation renewal and draws upon the BRPQ's.

A more typical "do something" option could be heavy duty maintenance and a reseal. In this case as long as no heavy duty maintenance is carried out over a continuous 100m lane width section within the treatment length then it does not consume the BRPQ's, if it does then that section which had heavy duty maintenance over the 100m lane width will consume that length of the BPQR's.

Where the heavy duty maintenance does not exceed the 100m length requirement but the resurfacing applied is over a lane width of 60m for category 1 sites (T/10) or 100m for site category 2, 3, or 4 sites (T/10) then these sections will draw on the resurfacing base preservation quantities.

The risk profile on post construction performance

The intent of including a Post Construction Design Assessment into the NOC was to give the Principal confirmation and assurance of the treatment selection and design through the evaluation of inputs and cross verification of outputs.

The NZTA acknowledged that it is not always feasible to achieve the defined criteria of outputs on all sites, and allowance was made in the contract specification, for modification to the output criteria with the agreement of the Principal.

On this basis consideration could be given to relax the criteria with the agreement of the Principal in particular the national pavements team. It is the Suppliers responsibility to put forward justification for relaxing any specific criteria and what the proposed new cross verification output achievement should be.

CONCLUSION

In conclusion Risk Profile 7, should not be read in isolation but taken into context with the full contract document. This rule should be applied to any risk profile item within the conditions of contract and is why the variation benchmarking exercise is undertaken.

Table 1 Rehabilitation Scenarios

Scenario	Reference	Discussion	Why this is Risk Excluded?
Reconciliation identifies no change between Funded Rehab programme (In length) when compared against Contractors Tender BRPQ	N/A	N/A	Risk Excluded means there is no risk to the contractor.
Reconciliation identifies xkm of additional NPV justified sites when reconciled against the Contractors Tendered BLP. The Agency is able to and chooses to fund the extra xkm length.	Refer Process Map 2.5.4/6.1.2 The accumulated Funded plan is higher than the Contractors tendered accumulated Baseline plan, the Agency can seek holding costs for 1 year from the contractor.	Refer MS CI 2.5.4 & Process Map 2.5.4/6.1.2 Calculated in August each year. Requires Joint site inspection of the lowest priority funded site(s) Contractor pays Agency the agreed holding costs. (by way of a credit note) (Refer specific details in above clauses) Note that the NPV may also provide useful details of expected year 1 maintenance costs.	Risk Excluded means the Agency has agreed to fund the additional length earlier than was otherwise anticipated. There is a financial cost to the Agency of financing the work earlier than the Contractors BLP indicated. The expectation is that the savings for the contractor of maintaining the site for an additional year (that will no longer be incurred), are recovered to offset this.
Reconciliation identifies xkm of additional NPV justified sites when compared against Contractors Tendered BLP. The Agency is unable or chooses NOT to fund the extra length and can only fund the equivalent of the contractors accumulated BLP	Refer MS CI 2.5.4 The accumulated Funded plan is THE SAME as the Contractors tendered accumulated Baseline plan. Contractor will incur the holding costs in maintaining the length until such time as it is funded.	As the extra sites are above and beyond the Contractors accumulated BPL, the risk remains with the contractor for all maintenance to keep the site safe and OPM compliant.	The risk only passes over to the principal if the contractor is prevented from implementing the renewal investment levels as set out in the contractors tendered BPL.
Reconciliation identifies a shortfall of x km in the funded Rehab programme when compared against Contractors Tendered BLP as a result of the Agency being unable to or	Refer MS CI 2.5.4 Refer MS CI 2.5.4 & Process Map 2.5.4/6.1.2 Principal pays agreed holding costs.	This could occur as a result in a genuine lack of funds in the Annual Plan or because of other higher priority demands, or because we don't believe the NPV is correct but we can't agree.	Risk excluded means the 1 year holding cost risk transfers to the Agency, mitigating any detrimental effect on the contractors Routine maintenance LS

Scenario	Reference	Discussion	Why this is Risk Excluded?
<p>choosing not to fund NPV justified sites.</p>	<p>(Refer specific details in above clauses)</p>	<p>As the Agency are meeting the holding costs, clause 2.5.4 prescribes a process in August each year to establish the work required to keep the site maintained to the minimum safety condition approved by the principal.</p> <p>Calculated in August each year.</p> <p>Requires Joint site inspection of the highest priority unfunded site(s)</p>	