

2 October 2020

OC200793

Hon Grant Robertson
Minister of Finance
Action required by:
 Friday, 9 October 2020

Hon Phil Twyford
Minister of Transport

NEW ZEALAND UPGRADE PROGRAMME UPDATE – SEPTEMBER 2020

Purpose

Provides an update on progress in the New Zealand Upgrade Programme (NZUP or the Programme) to 31 August 2020, as well as key issues of concern and focus.

Key points

- The NZUP Oversight Group (OSG) met on 2 September 2020. The OSG includes representatives of the Ministry of Transport (the Ministry), Treasury, the Infrastructure Commission (together, member agencies), and three independent members. The meeting was also attended by Waka Kotahi NZ Transport Agency (Waka Kotahi), KiwiRail, Deloitte and AECOM.
- Waka Kotahi and KiwiRail (together, delivery agencies) are continuing to make progress with the delivery of the programme. At this stage, the priority for both agencies is working to embed their governance and delivery structures for the programme. Work is also progressing on the first seven projects entering the delivery phase (Waka Kotahi: Tauranga Northern Link, Papakura to Drury South, Northern Pathway, SH58 Safety Improvements and Penlink; KiwiRail: Papakura to Pukekohe electrification and the Wiri to Quay Park Corridor Improvements).
- Following the recent OSG meeting, OSG members considered that the lack of a defined programme baseline (benefits, scope and cost) is a key risk for the transport component of the programme that needs to be resolved. This is critical so Ministers, as purchaser, have a clear view on the achievability of the programme and any deviations from Ministerial expectations.
- On information the OSG has, member agencies are all concerned that the programme in its current form is not feasible within the \$6.8 billion funding envelope. OSG advisors provisionally estimate overruns could amount to \$1.7 billion, or 25 percent over the \$6.8 billion. The OSG is concerned that project-level reporting appears to focus on allocated budget rather than an estimated actual cost of delivery.
- Waka Kotahi has said its reporting reflects that the projects are at an early stage. It had been under the impression that Ministers had agreed to meet any cost escalation, either as a further Crown contribution or reprioritisation from the National Land Transport Fund (NLTF).

- Waka Kotahi does not have access to other sources of funding to supplement the NZUP allocation. Hypothecation of the NLTF means it is not available to Waka Kotahi to cross-subsidise projects that are purchased by the Crown. Further Crown funding would need to be sought through the Government's normal capital approval processes. Because the funding context has changed since early 2020, and prioritisation may be challenging without a specific change to the Government Policy Statement on Land Transport (GPS), you may want to clarify with Waka Kotahi that it should not assume that more funding will be available or come from any particular source. Officials will report back on a full range of options for addressing the programme shortfall (through changes to funding and/or scope for example).
- The OSG has requested that the immediate focus of delivery agencies should be on establishing a robust baseline to better define benefits, scope, schedule and cost estimation. The delivery agencies have indicated they would like to have until March 2021 to provide baselining information. The OSG's advice is that this should happen by December 2020, with an initial focus on the first seven projects that are entering the delivery phase.
- Ministers have asked for speed in delivery of the programme and delegated a greater than usual level of decision-making to the delivery agencies, compared to other programmes where the Crown is directly purchasing. Prior to baselining, there are risks as projects may become contractually committed before the baseline is complete and Ministers can see the full picture. Options for addressing the Programme's emerging cost pressures will inevitably be reduced once these first projects are contractually committed.
- Given this context, you should expect that the delivery agencies will provide full and real time visibility to you and your purchase advisors of current and pending project commitments, risks as they arise and while they are being managed, and development of the project and programme baselines. We suggest you formally communicate this expectation to agencies.
- You may wish to discuss these matters with the Ministry to further understand your options for addressing these issues. We will provide further advice on the status of the programme following the next OSG meeting, which is scheduled for 8 October.

Recommendations

We recommend you:

- 1 **note** that the NZUP is at an early stage, and the delivery agencies are working at speed to put arrangements in place to manage its delivery, but the programme appears to be unachievable within its \$6.8 billion funding allocation, with a level of over-run that provisionally estimated at \$1.7 billion
- 2 **note** that the Oversight Group's view from its initial meeting is that:
 - the delivery agencies need to do more to embed the oversight structure and provide information to it
 - the OSG is concerned that the projects are being reported against an allocated share of the \$6.8 billion rather than estimates of actual cost
 - a higher degree of certainty needs to be achieved early because there are risks that decisions on the initial seven projects may force choices and trade-offs that are Ministers' choices to make

- 3 **note** that Waka Kotahi advises that it has excluded cost inflation from its costs because it is under the impression that Ministers' agreed that any cost escalation, estimated at around \$1 billion of the projected cost over-run, would be met through further Crown contributions or funding from other sources like the NLTF, though there are other options available such as changing the Programme's scope
- 4 **note** that clarity is needed on this but, if correct, this agreement needs to be formalised and Treasury will need to advise on how this may impact the Crown accounts
- 5 **note** that Waka Kotahi is not able to cross-subsidise Crown investments from the NLTF, but your January 2020 letter sets out a way to consider use of other sources including the NLTF. The funding context has changed since January, and you may wish to clarify with Waka Kotahi that it is too early to assume that further funding will be available or would come from a particular source
- 6 **note** that baselining of the programme is needed to enable a better understanding of costs and decisions on how to manage these, and Waka Kotahi has indicated that baselining information may not be available until March 2021 which is later than the Christmas 2020 date preferred by OSG
- 7 **note** officials' advice is that, to help manage NZUP's early delivery and cost risks, you should expect delivery agencies to raise any issues with you and your purchase advisors early and in real time, including advising on risks and issues as they arise and are managed, and development of project and programme baselines
- 8 **agree** that officials prepare a draft letter for your signature, communicating these expectations Yes / No
- 9 **discuss** with officials your expectations of how cost escalations in the NZUP programme were expected to be funded at the time the programme was agreed Yes / No
- 10 **forward** this report to the Minister of Finance. Yes / No

Bryn Gandy
**Deputy Chief Executive, System
Strategy and Investment**

..... / /

Hon Phil Twyford
Minister of Transport

..... / /

IN CONFIDENCE

Minister's office to complete:

Approved

Declined

Seen by Minister

Not seen by Minister

Overtaken by events

Comments

Contacts

Name	Telephone	First contact
Bryn Gandy, Deputy Chief Executive, System Strategy and Investment	[REDACTED]	✓
Robert Anderson, Acting Manager, Governance and Commercial	[REDACTED]	

Proactively released
by the Ministry of Transport

IN CONFIDENCE

NEW ZEALAND UPGRADE PROGRAMME UPDATE – SEPTEMBER 2020

Oversight Group meeting focussed on understanding initial state of NZUP

1. The NZUP Oversight Group (OSG) met on 2 September 2020. The OSG includes representatives of the Ministry, Treasury, the Infrastructure Commission, and three independent members. Waka Kotahi, KiwiRail, Deloitte and AECOM also attended. The purpose of the OSG is to provide governance and assurance across NZUP on your behalf as purchaser.
2. Subsequent to the first OSG meeting, Waka Kotahi and KiwiRail were advised that their respective Establishment Reports had been accepted as a starting baseline, with delegation of authority for project-level decisions up to materiality thresholds that will be further defined over the coming months.
3. As per advice provided on 26 August 2020 (OC200683 refers), it is still early days with the Programme and further detail needs to be refined over the next few months to migrate governance and assurance into a good position. It is also realistic for change and adaption to be necessary in a programme of the scale and scope of NZUP.

OSG identified that further work is required to baseline costs, scope, schedule and benefits

4. The OSG view from the meeting, which is supported by the OSG member agencies, was that further work is needed in critical areas as a priority:
 - a) Delivery agencies need to do more to embed the oversight structure in their work and provide information to the OSG. There appears to be limited acceptance by delivery agencies that they need to report externally to the OSG beyond their usual internal project governance activity. However, these projects are being purchased directly by Ministers, and the OSG is your primary assurance function for NZUP and a key element of its governance.
 - b) Both Waka Kotahi and KiwiRail appear to be using the NZUP funding allocation or 'budget' figure as their baseline cost, rather than a 'bottom-up' project cost estimate that reflects greater definition around the scope and risk, such as the impact of tolling¹ or construction inflation. This compromises the ability to track actual progress and is causing significant uncertainty over the programme achievability (see below).
 - c) A higher degree of certainty over the above factors is urgently required given seven projects are already entering a delivery phase. There is a risk delivery agencies may take procurement decisions on individual projects that impacts the wider programme direction, or deviate from the scope agreed with you, before baselining has been completed. In particular, procurement is underway for Penlink, Tauranga Northern Link, Queenstown and SH58 projects. Papakura to Drury South contains large uncertainties around the scope that mean baselining could take time. Delivery agencies are indicating March 2021 for completion of baselines even though major decision points will occur prior.
5. Altogether, these factors mean that the OSG does not have a line of sight to parts of the programme where it believes the greatest drivers of risk lie. The OSG will engage further with delivery agencies to ensure these risks are made transparent alongside the steps to address them.

There is potential of significant programme budget overrun and Ministers may need to consider trade-offs

6. Analysis for the OSG currently indicates that the NZUP programme targets are unachievable within the \$6.8 billion funding allocation. Modelling of a subset of key risks (including Mill Road cost increases) indicates that the Programme budget overrun could exceed \$1.7 billion (25%), under conservative assumptions. This is based on the delivery agencies' own information plus price inflation, but limited by incompleteness in some instances.
7. The \$1.7 billion estimate is before consideration of any COVID-related costs, and before detailed design and geotechnical work is carried out on many of the projects. The difference between this figure and other budget indications can be broken down as follows:
 - a) \$6.39 billion – the delivery agencies' own Establishment Report "P50" costs (a modelling level at which fifty percent of costs fall below and fifty percent of costs fall above in simulations) or, where not available, the project's funding allocation. The P50 estimates are \$0.36 billion below the budget figures at which Ministers purchased the programme.
 - b) \$7.40 billion – including cost escalation based on a conservative 3% p.a. assumption, noting that P50 estimates do not reflect the time period construction will take place in. In some cases, there are several years of inflation required to bring them to the expected cost.
 - c) \$8.46 billion – currently known or expected cost increases on Northern Pathway, SH1 Papakura to Drury South and Mill Road.
8. While these figures are preliminary, the size of the challenge is significant. These figures total a more than thirty per cent increase from the \$6.39 billion figure, or 25 percent above the fixed \$6.8 billion allocation. Waka Kotahi has indicated that it intends to use strategies such as alliancing to help manage costs, but the OSG expects that approaches such as these will help only at the margins of this potential level of budget overrun.
9. Deloitte are working to the guidance contained within the Delegation Letters, in this case the requirement for Joint Ministerial involvement where there are *"any significant changes to cost estimates that are expected to impact the delivery of the Programme within the Crown funding envelope"*.
10. As an example of specific project risk in the \$1.7 billion potential overrun, Waka Kotahi's SH1 Papakura to Drury South project now has an estimated cost at completion of \$669 million, which is \$246 million over the project's funding allocation (although a decision from Joint Ministers is still required before Stage 2 is included in the project). In addition, Waka Kotahi's Northern Pathway now has an estimate at completion of \$434 million, \$74 million over the project's funding allocation. Collectively, this amounts to an estimated \$320 million budget shortfall for this Waka Kotahi sub-programme alone.
11. Per Waka Kotahi's delegation letter, this constitutes a significant change in the cost of the project. The actual scale of overruns needs to be verified through the baselining work that the OSG has requested as a priority. If confirmed, there will be important choices joint Ministers may need to make across the programme, such as reducing the scope or number of projects, or making additional funding available.

Waka Kotahi considers that escalation costs are not part of the \$6.8 billion allocation

12. Waka Kotahi is under the impression that NZUP Ministers had agreed to meet any cost escalation beyond what could be managed within the programme funding. Waka Kotahi notes its original cost estimates on which the funding allocations were made were stated in 2019 dollars.
13. Officials' understanding is that the \$6.8 billion is a fixed allocation for all programme costs. Ministers' January 2020 letter to the Waka Kotahi Board Chair reflects that \$6.8 billion is expected to cover the delivery of a listed set of projects, which would typically include adjustments (such as cost escalation) that reflect the timing of delivery. Waka Kotahi's Establishment Reports say that *"The Establishment Report presents costs on an unescalated basis, using estimates from the relevant business case or Waka Kotahi costings for each project. Further work is required to understand the potential impact of input cost increases on final project delivery costs as a result of underlying inflationary pressures in the construction sector. Cost escalation attributed to individual projects or packages within the NZ Upgrade Programme will vary based on the expected construction programme, with projects delivered sooner than expected attracting lower cost escalation."*
14. Clarity is sought from Ministers as to whether their understanding accords with Waka Kotahi's. If you have agreed with Waka Kotahi that year-on-year escalation was not included in the fixed programme allocation, this agreement would benefit from being formalised and Treasury will need to consider whether the amount has to be reflected in the Crown accounts. Officials estimate the level of escalation to be around \$1 billion.
15. Waka Kotahi says its view in part reflects that NZUP meets about \$2 billion of costs, which would otherwise have been cost pressures on GPS 2021. As outlined in your January letter to Waka Kotahi's Chair establishing the programme, you have options around how to meet additional costs, or you can rescale the Programme to match the funding available. Waka Kotahi cannot access the NLTF to meet pressures in Crown funded projects like NZUP, because the NLTF can only be invested in accordance with the GPS, reflecting the rules that govern the hypothecated fund. This is reinforced in the GPS itself (section 3.6). Further Crown funding beyond the fixed \$6.8 billion allocation would need to be sought through the government's normal capital approval process.
16. Your letter sets out a process for agreeing that the NLTF can meet costs of up to \$200 million per year. This was agreed prior to COVID-related pressures, and it is likely that a formal amendment would be needed to the GPS 2021 to deprioritise some of your existing priorities and enable NZUP projects to receive funding instead. These trade-offs will be harder to make than would have been anticipated when the programme was agreed. Given the change in context since January, you may wish to clarify with Waka Kotahi that it is too early to assume that further funding will be available or will come from a particular source.
17. Waka Kotahi's view was provided following the OSG's meeting. The OSG has not yet had a chance to engage on these issues or discuss them with Waka Kotahi. Its next meeting is on 8 October 2020. Officials will provide advice on options for addressing the pressures in NZUP as a full picture of the Programme is established.

Structural changes in the supply chain reducing competition and bringing further risks

18. Member agencies understand that predating COVID-19, risk allocation had been undergoing a rebalancing in the construction market, more in favour of contractors than historically. The Construction Sector Accord (CSA) recognises some change is

needed to better reflect the relative risks between procurers and contractors, and reduce the incidence and impact of collapses on sub-contractors.

19. However, through a combination of events including the impacts of COVID-19, there appear to be challenges balancing the fair level of risk that should lie with parties. This environment could undermine the willingness of contractors to participate in some tenders.
20. Anything that reduces competitive pressure or leads to dependency on fewer contractors, creates additional cost escalation and completion risks (the latter in the event a contractor folds, or walks) that could place further pressure on the achievability of the programme. This is something agencies will continue to monitor.

Delivery agencies recognise a number of challenges which require further work

21. Waka Kotahi highlighted a number of risks and issues to the OSG:
 - a) many projects are still in early development and outcomes, objectives and scope are only defined at a high level
 - b) the significant increase in volume of property transactions required and unplanned cost increases are an emerging issue
 - c) expectations from local authorities and wider system complexity (e.g. Queenstown) are high
 - d) COVID-19 impacts on council revenue, project delivery and costs are significant
 - e) longer term costs generally – revocation, maintenance and operations – are a concern.
22. Waka Kotahi is undertaking a number of initiatives in response to the programme challenges they see, including strengthening assurance activity as well as cost and risk management practices, appointment of project directors on larger projects, and establishing a programme management team by December 2020.
23. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] The OSG sees it is vital that the delivery agencies work to supply baseline information with urgency, given the emerging cost risks and the speed at which delivery is getting underway.
24. KiwiRail's Drury Stations and Regional Rail projects are complex and have significant dependencies on projects being delivered by other organisations (e.g. Auckland Transport and private developers) in order to complete projects and support benefit realisation.
25. KiwiRail's Drury Stations project scope is currently uncertain, noting the potential requirement for a third station, conflicting stakeholder views as to station location and potential for change in which organisations deliver which elements. This translates to limited confidence in the existing cost estimate and schedule.

26. KiwiRail's 'Wellington Rail Programme: Infrastructure project' has a significant dependency on the nature of rolling stock procured. This is causing project delays with potential for the project to be paused for up to two years.
27. The Papakura to Pukekohe and Wiri to Quay Park projects have made significant steps in the procurement process. Both have selected preferred suppliers, with ongoing negotiations to confirm the Target Outturn Cost (TOC) underway.

The OSG has requested actions to advance certainty around the programme ...

28. The OSG considers that a focus on some specific actions by each delivery agency is needed to advance confidence and certainty around the status and progress of the programme. In particular, the OSG would like agencies to:
 - a) Confirm that key OSG assurance and oversight processes/controls, such as effective reporting, are in place across all NZUP projects, and any deviation to expected processes or planned assurance is advised and explained;
 - b) Provide additional content to better understand the state of projects (e.g. Project Delivery Plans, Project Management Plans, and other relevant source documentation);
 - c) Develop robust project baselines to confirm scope, cost, schedule and benefits. Baselining will need to be an iterative process as more detail becomes known about the projects.
29. Officials are conscious of the priority Ministers have given to the programme proceeding at pace, as well as the NZUP Programme's potential to bring investment to market during a challenging period. But there are also risks from the initial set of projects² proceeding and becoming contractually committed before you can see the full picture. Options for addressing the likely cost pressures will inevitably be reduced once these first projects are contracted.
30. The OSG's preference is for a December 2020 deadline to baseline scope, costs, timing and benefits for all projects. Waka Kotahi advises that the end of March 2021 is achievable.
31. If Ministers wish the programme to proceed at speed and without interruption, we suggest that you set a clear expectation that the delivery agencies provide full and real time visibility to you and your purchase advisors of current and pending project commitments, risks as they arise and while they are being managed, and developing project and programme baselines.

Next Steps

32. The Ministry and Treasury will continue to engage with Waka Kotahi and KiwiRail on the further actions and priorities identified by the OSG.
33. We will engage with you on what expectations you would like to communicate to the delivery agencies.

² Tauranga Northern Link, Papakura to Drury South, Northern Pathway, SH58 Safety Improvements and Penlink (Waka Kotahi) and Papakura to Pukekohe electrification and the Wiri to Quay Park Corridor Improvements (KiwiRail). These projects are already entering the delivery phase.