

# National Ticketing Solution (NTS)

In confidence/commercially sensitive

<b>Meeting Date</b>	16 December 2021
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<b>Legal Reviewer</b>	Mike Birchler, General Counsel, Governance
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<b>Pages</b>	5 + 5 Attachments

## Purpose

This paper seeks the Board's agreement on accelerating delivery of the NTS for Environment Canterbury (ECan) and supporting a reset of the National Ticketing Solution (NTS) as the programme moves from procurement into a delivery phase.

## Recommendations

It is recommended the Board:

- **Approves** funding to Waka Kotahi NZ Transport Agency of \$27.5m at a 100% funding assistance rate from the Public Transport Infrastructure activity class to accelerate delivery of the NTS to Environment Canterbury (ECan) with the current preferred system supplier, including initial funding for setup of supporting financial services<sup>1</sup>
- **Approve** varying the 'National Ticketing Solution (NTS) - ECan Acceleration Implementation' phase into the 2021-22 NLTP with a total cost of \$27.5m<sup>1</sup>
- **Delegates** approval to enter into interim 'early works' arrangements with one ticketing and three financial services suppliers to the Chief Executive, Waka Kotahi
- **Notes** that approvals for the wider NTS will be requested from the Board in the first half of 2022, and that the 'early works' funding above should be considered at-risk if a subsequent decision is made not to proceed
- **Notes** that we recommend that the Board should plan to consider and endorse in principle the overarching Detailed Business Case (DBC) for the NTS in April 2022 ahead of other NTS partners, to demonstrate ongoing commitment to the NTS and to give other NTS partners certainty and confidence

<sup>1</sup> Note the financial impact on PT infrastructure activity class in Attachment 5. Overall, this request is neutral to the NLTP. This new phase is required for procedural purposes and is cost neutral to the NLTP.

## Strategic relevance

We have a window of opportunity to create a National Ticketing Solution for New Zealand, to meet the ever-increasing needs of our Public Transport (PT) customers, our NTS partners, and to deliver on central Government commitments to improve equity of transport access and reduce emissions.

The NTS forms a necessary piece of digital infrastructure to support the NZ draft Emissions Reduction Plan, which sets out a range of measures for reducing travel by private vehicles. A focus on integrated digital options including ticketing will help support people to change the way they travel in a low emission society, by addressing barriers such as affordability, accessibility, safety, and convenience, and by providing useful and timely information and incentives to help them make cheaper transport choices which are better for the environment. See Attachment 1 for benefits.

Waka Kotahi's strategy aims to support and enhance the use of public transport, walking and cycling. The Land Transport Management Act 2003 (LTMA) includes various sections of relevance to the NTS:

- to achieve best value for money in NLTF expenditure (s.25), and to optimise a number of investments nationally, including existing investment
- To give effect to the Government Policy Statement (GPS) on Land Transport (s. 70) which currently includes elements supporting Better Travel Options and Climate Change including mode shift from private vehicles to public transport and active/shared modes and demand management to accommodate that shift
- to oversee the planning, operation, implementation, and delivery of public transport (including issuing guidelines for regional public transport plans) (s. 95i)
- to deliver, or manage the delivery of, activities for ticketing systems and payments in relation to the land transport system (s. 95o)

## Background

### Why do we need a National Ticketing Solution?

By procuring a single national ticketing system we can avoid duplication of investment, deliver on government equity initiatives, offer a nationally consistent customer experience across NZ (led by our Public Transport Authority (PTA) partners), and provide a modern high-quality ticketing solution which supports low emission outcomes to all regions.

### Who is involved, and what have they committed to so far?

Our PTA partners are Auckland Transport (AT), Greater Wellington Regional Council (GWRC), Environment Canterbury (ECan), plus 11 members of the Regional Consortium (RC) of mid-sized and smaller councils who offer PT in NZ today<sup>2</sup>. Approximately 26 FTE are dedicated to the NTS Project (Waka Kotahi ~15 FTE, GWRC ~5, ECan ~2, AT ~4).

All NTS partners have signed a Participation Agreement dated December 2020 (the "P1"). The P1 also describes Waka Kotahi's new role as the Shared Service Organisation (SSO).

The formal commitment by PTAs to join the NTS will occur as they endorse the overarching DBC and sign up to the next Participation Agreement (the "P2"), expected in May/June 2022.

The consensus-driven collective decision-making approach to date, whilst a strength due to its inclusiveness, has also created some complexity, risk, and delay as the NTS can only move as fast as the slowest party to agree. This presents a challenge for this Project moving forward, and we need

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<sup>2</sup> Marlborough & Gisborne are not yet RC members; Gisborne will join; Marlborough is considering joining.

to manage this carefully as a complex change management programme recognising differing PTA priorities.

### What are the costs for the NTS?

The NLTF currently funds four separate ticketing systems today of differing functionality<sup>5</sup> and the NTS will bring all PTAs onto one system. Aligning ticketing systems nationwide comes with a capital cost of upgrading hardware and back-office systems, the transitional cost of PTAs moving customers to new payment methods and integrating existing systems and processes with the NTS. We expect the NTS to bring greater mode-shift and patronage benefits to NZ than existing systems, as well as many qualitative benefits not available to NZ today (see Attachment 1).

#### Estimated costs over 13 years \$m

Ticketing system capital costs  
Hardware replacement  
PTA transition from old systems  
Operating costs

NTS      Separate Systems<sup>3</sup>      Difference



Average operating costs for the NTS are 8.5% higher than with separate systems<sup>4</sup>

### What is the current NTS status?

An overview of NTS context, governance, and short-term milestones can be found in Attachment 2. The NTS is close to completing a comprehensive procurement process which has identified a preferred supplier with proven global ticketing experience. The next phase includes decision points in late December 2021 which will move the NTS procurement towards finalising of NTS contract negotiations and execution of documentation. In parallel, Waka Kotahi and the PTAs continue to negotiate the P2 agreement which will govern their relationships after the procurement phase, and we are continuing to work constructively and positively with them to complete this.

To meet ticketing system replacement deadlines for ECan by July 2023, the Project needs to work through a series of key approvals between February and July 2022 which is a significant programme of work (Attachment 3).

section 9(2)(ba)(i)

[Redacted content]

<sup>3</sup> Separate system cost based on PTA submitted 'Do minimum' counterfactual which may underestimate costs of what PTAs would actually spend if the NTS was not available

<sup>4</sup> Average is used as a proxy for steady state operations, calculated over 13 years

<sup>5</sup> AT HOP (Auckland), Snapper (GWRC), Metrocard (ECan), Bee card (RC)

<sup>6</sup> section 9(2)(ba)(i)

# Key Issues

## Commitment and timing imperative with ECan

ECan needs to replace its end-of-life and end-of-contract Metrocard ticketing system before the end of July 2023, which means we now need to accelerate the delivery of the NTS to ECan under an interim early works arrangement. This in turn will de-risk implementation and help the overall NTS programme.

A 6-month programme of early works requires \$27.5m of funding from the NLTF<sup>7</sup> including:

- agreement of an interim Master Services Agreement and a Statement of Works for ECan with the preferred ticketing system supplier and with three supporting financial services suppliers<sup>8</sup>
- planning and resourcing to support NTS implementation
- purchase and installation of \$4.5m of hardware

Our intention is for this early works arrangement to progress toward the NTS for ECan. This will require negotiating with the preferred supplier, and if we can't do this successfully, we won't proceed.

## Reset

We are now in a transition period, and in early 2022 we will commence a phased approach to reset the Project – this will include partnering, collaborating, and organising ourselves differently. This reset will likely commence with a workshop to reinforce the outcomes NZ is seeking from the NTS.

An ongoing high partnering orientation will require new capability, and we will appoint senior key managers who have accountability for each PTA relationship, preferably with direct reporting and access to PTA Chief Executives.

Existing governance structures should continue, with issues resolved by the PTAs and Waka Kotahi. The NTS will likely benefit from more Board to PTA Board/council engagement (potentially through subcommittees). This will ensure alignment, ongoing commitment, and set and maintain the partnering behaviours required to ensure NTS success.

The NTS programme will stop in early 2022 if all partners can't demonstrate collectively that we can deliver.

## Giving effect to an NTS reset

An NTS programme reset can be given effect to in various ways:

- Formal communication of a reset to be given to PTAs at the CE level, maybe in a phased approach, alongside regular CE to CE and Board to Board/council updates and dialogue
- Rapid escalation of issues through the NTS governance structure
- Final version of P2 will be aligned to the reset before completion
- Review of approaches to communicate with partners and with wider NZ stakeholders

Part of a reset also includes reconsidering the roles of all our PTA partners, and whether we can better utilise the breadth and depth of their experience in the coming NTS phases. This will include inviting AT to take on a larger role in the NTS in areas they already have considerable expertise, such as in data warehousing, analysis & reporting, customer experience standardisation, and contact centre operations. At a minimum, Waka Kotahi anticipates leading the financial operations

<sup>7</sup> Funding is already included in the current NLTP as 'probable'.

<sup>8</sup> Supporting services to settle daily card transactions, and to provide alternative payment methods for those who don't have a bank issued card or choose not to use one (children in particular).

functions, contract management, project and programme management, and assurance<sup>9</sup> through the new shared service unit, the Transport Ticketing & Payments (TTP) team.

Various other tasks will need to be completed to ensure this reset is successful including:

- Confirming responsibilities and accountabilities for key project elements
- Finalising capability and resource plans for Waka Kotahi and the PTAs
- Establishing an integrated programme office with a blend of ticketing skills to optimise and leverage cross organisation experience of all participants and suppliers, especially AT
- Standardising as much as possible against a target nationally consistent customer experience, led by the PTAs (AT have considerable experience in this area).
- Scaling and balancing the NTS resourcing requirements to grow our current 26 FTEs by 50 to 100% to reflect the new delivery and implementation needs of the future
- Leveraging the current commercial position with the preferred ticketing solution provider to address key risks and maximise commercial opportunities prior to execution of the key MSA contract

We may consider other options to further address PTA participation risk via additional incentives, stronger collaborative language in the P2 or any appropriate use of funding and procurement levers. We have also ensured that our contribution to the mode shift bid within the ERP makes explicit reference to the NTS opportunity.

## Next steps and future decisions

- NTS DBC endorsement in March/April 2022. PTAs are targeting May/June 2022
- Sign the P2 before June 2022 (similar to DBC, signing earlier will give PTA's confidence)
- Approval to sign NTS contracts with up to four suppliers once all PTAs have entered the P2 and agreed to join the NTS. The four contracts are for the Ticketing Solution Provider, the Merchant Acquirer, the Transit Card Programme Manager (if required), and a Retail Network manager.

## Health & safety, customer/stakeholder & environmental impact

The impact of this decision is considered by Waka Kotahi to be positive in terms of health and safety, the public and other stakeholders, and the environment.

## Related papers

2020-02-24 NZTA Board Paper *National Ticketing*

2021-09-17 Risk & Assurance Committee *National Ticketing Solution*

## Attachments

- |                     |  |
|---------------------|--|
| <b>Attachment 1</b> | NTS qualitative benefits and opportunities summary       |
| <b>Attachment 2</b> | NTS project context & status & governance                |
| <b>Attachment 3</b> | National Ticketing Solution (NTS) – Early works overview |
| <b>Attachment 4</b> |  |
| <b>Attachment 5</b> | Financial impact of funding request on Activity Class    |

<sup>9</sup> The extent of assurance will depend on final agreement of responsibilities between suppliers, the SSO, and PTAs, and could include all aspects of operations and service delivery. Financial operations assurance will include payment card industry security compliance (PCI).



# Attachment 1

## NTS qualitative benefits and opportunities summary

As part of the DBC process we will quantify benefits, most of which will be focused on increases in patronage in Public Transport as a result of the NTS. There are however many benefits which we can't easily quantify, and these are described below.

### Qualitative benefits

We have included quantitative benefits in the form of increased patronage as part of the DBC. This section highlights some of the qualitative benefits of the NTS. Why customers want the NTS, why PTAs want the NTS, and therefore why Waka Kotahi needs to work with NTS partners to deliver the NTS.

### Customer benefits

Many customer benefits can't be easily quantified, and some of these are shown below.

NTS Customer Benefits	AT	GWRC	ECan	RC	NZ Govt	Customer comments
New payment methods to make PT travel faster and easier	✓	✓	✓	✓	✓	I can just hop on a bus or train. I don't need to buy a special card or top-up
Pay after travel, no need to top-up	✓	✓	✓	✓		I don't need to pay before I travel, which means I get to keep my money longer. Today I have to prepay for everything, and sometimes wait days to get a top-up.
Travel in a consistent way across NZ, including best fare promise	✓	✓	✓	✓	✓	I realise that fares and fare products are different between regions, but I know I'll be charged the right fare across NZ
Correct journeys before being charged	✓	✓	✓	✓		If I forget to tag in or out (and I'm eligible) I can get my journey corrected before I'm charged. Today I have to wait for days or even weeks.
Concessions apply across NZ	✓	✓	✓	✓	✓	If I'm a child or SuperGold or Community Connect user in one region, I'm recognised everywhere in NZ
I can use one card to travel anywhere on PT in NZ	✓	✓	✓	✓	✓	I can use the same card rather than 4 different ones; Can see all NTS travel in one place; today need to access

## PTA benefits

Many of the PTA benefits are new to many PTAs. Auckland has the most sophisticated ticketing system in NZ today, so some benefits may not apply to them, but for the other regions the NTS will provide them, and their customers new features as shown below.

NTS PTA Benefits	AT	GWRC	ECan	RC	NZ Govt	Supporting Comments
Central funding of ticketing leaves more \$ for local PTA projects	✓	✓	✓	✓	✓	Savings in local share of investments gives control of that money back to PTAs to re-invest in other parts of the network
We have ticketing experts in our teams which we can use in the SSO	✓	✓	✓	✓	✓	Experts can be seconded to the Transport Ticketing & Payments team (TTP) and their experience applied for all NZ
We want a modern ticketing experience for our customers to delivery national concessions easily	✓	✓	✓	✓	✓	Delivery of Community Connect across NZ would be faster and cheaper; systems will be less of a constraint
We're not all big metro's - central administration of some functions will simplify the business of PT delivery and reduce our cost		✓	✓	✓	✓	Some of us PT Managers have a lot to do on a daily basis, and removing some of these routine functions to keep systems up & working would be great
We can access a system which we might not otherwise be able to afford by ourselves		✓	✓	✓	✓	Economies of scale really help NZ when delivering outside of Auckland; Auckland can help us too with its great experience!
Consistent national data around PT travel	✓	✓	✓	✓	✓	Consistent, detailed, anonymised customer travel data will be a huge asset

## NTS opportunities

The NTS improves digital access to payments, products, and information:	Integrating digital platforms such as the NTS across a range of services enables:
<ul style="list-style-type: none"> <li>Enabling people to use the same payment card, device or phone to pay for public transport services, including using Contactless debit/credit cards and their digital equivalents</li> <li>Offering automatically 'capped', subsidised, or concessionary fares representing the best fare for their travel and personal circumstances</li> <li>Linking transport charges such as tolls, congestion charges or parking to a nominated personal account</li> <li>Helping people plan their journeys and calculate the costs of different travel options</li> <li>Allowing governments to provide more equitable access to transport services, through targeted fares and concessions across NZ</li> </ul>	<ul style="list-style-type: none"> <li>Nationwide collection of anonymised travel data reflecting people's real-world travel choices, which helps optimise future network planning, design, scheduling, and fares</li> <li>Cost savings through integration of 'back office' systems and bulk procurement of common ticketing infrastructure</li> <li>A more agile response to changing environmental drivers such as smoothing the impacts of COVID-19 restrictions on public transport demand</li> <li>A unified platform to be built over time for delivery of wider transport services – such as vehicle registration, payment of subsidies for low-emissions vehicles or scrappage of high-emitting vehicles</li> </ul>

# Attachment 2

## NTS context & status & governance

### Context

The NTS is founded on the premise that a national approach to public transport ticketing is the best outcome for all Public Transport Authorities (PTAs), for Waka Kotahi, and for all our travelling customers. An effective, efficient, and easily accessible public transport network is a key contributor to social equity and a low emission society, and we need active participation of all PTAs and Waka Kotahi in the NTS to deliver:

- best value for money in national and regional investment
- ways to pay for public transport which doesn't exist in NZ today and is long overdue
- a consistent, modern customer experience across all regions regardless of size
- an easy and flexible ticketing service that increases public transport attractiveness and reduces barriers to use, helping shift people out of their cars and onto buses, trains & ferries

By procuring a single national ticketing system we can maximise NZ's attractiveness to global suppliers of proven systems, we can avoid duplication of investment, we can deliver a nationally consistent customer experience to all New Zealanders, and we can provide a high-quality ticketing and payment solution to all regions. Collectively our very experienced regional PTAs can help us pull out the best PT experiences we have in NZ today and make them available to everyone in a way they can access, at a time they need, and at a price they can afford.

The NTS is complex change programme with a somewhat chequered history dating back to the early 2000s. It has been a difficult path to get to where we are today, but we are closer than we have ever been.

In the context of the NTS, Waka Kotahi provides co-investment for Public Transport infrastructure & services, procurement oversight, PT policy & strategy, and provides the National view which underpins the NTS – representing the interests of PT customers, operators, and councils across NZ, as well as enabling central Government priorities to be funded and delivered.

### NTS procurement

The NTS procurement is continuing and has received good feedback as a well-run process. Current key issues include:

1. While the procurement process has been robust, it has taken longer than anticipated to complete the Request for Proposal (RfP) and Best and Final Offer (BAFO) processes, and a decision on whether to start commercial negotiations with the preferred supplier won't be made until 20 or 21 December 2021
2. This means the implementation timeframes have extended out beyond original expectations, which has had a significant impact on PTA commitment, and on the political pressure PTAs face to deliver a new system
3. Lack of participant commitment makes it harder to complete the procurement, gain the approvals necessary (including agreeing and signing participation agreements), and to work through the operating model & organisational issues to enable formal establishment of the Shared Service Organisation (SSO)

### Key upcoming decision points & short-term milestones

Two decision points are currently scheduled for the NTS Steering Group on 20<sup>th</sup> & 21<sup>st</sup> December 2021<sup>10</sup>.

- **Decision point 10** – Confirmation of the Preferred Supplier with whom to proceed with contractual negotiations (DP10)
- **Decision point 11a** – Confirmation of the interim acceptability of the DBC by PTAs (DP11a)

<sup>10</sup> Decision points are defined in the Project NEXT Procurement Plan v5.2



Subsequent milestones include:

Date	Activity
<b>Jan 2022</b>	Commence contract negotiations, prioritise Ticketing Solution Master Service Agreement (TSMsa) schedules to deliver early works for ECan, and contract Design Statement of Work 1 (SoW1) to get work underway
<b>February 2022</b>	Waka Kotahi to formally signed TSMsa and contract for SoW1 including placing equipment order for ECan & commencing design phase
<b>March 2022</b>	Finalise Statements of Work (SoW) to order hardware, start design, build & transition activities: Central back-office establishment (SoW2), ECan design (SoW3) & ECan transition (SoW7)
<b>June 2022</b>	NTS partners commit to NTS formally, all key approvals in place for each participating authority

## Programme governance structure

Current programme governance is shown below.

Functions	Governing Groups	Representatives
	Respective Governing Bodies	
Escalation	Mobility Payments Governance Group (MPGG)	CE Level: AT, GWRC, ECan, Regional Consortium (BoPRC), Waka Kotahi and MoT
Programme Governance: Decision Makers	NTS Participants Group (NTSPG)	Tier 2: Independent Chair – Rick van Barneveld AT (2), GWRC, ECan, Regional Consortium (ORC), Waka Kotahi (2 including SRO)
Management	<p>NTS Programme</p> <p>Transport Ticketing &amp; Payments (TTP)</p> <p>Programme Working Groups   Engagement Forums   Programme Workstreams</p>	Working level engagement across all parties, including: AT, GWRC, ECan, Regional Consortium, Waka Kotahi, NTS Suppliers and other required 3 <sup>rd</sup> parties

## Attachment 3

### National Ticketing Solution (NTS) – Early Works Overview



**Key:**

ECan – Environment Canterbury

PTA – Public Transport Authority (Auckland Transport, ECan, Greater Wellington Regional Council, or 11 Regional Consortium members)

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Key to initials:

Initials	Name	Role
AM	Andrew McCallin	Lead Advisor, Transport Ticketing & Payments
CR	Charles Ronaldson	Programme Director, Commercial Projects
FB	Fiona Buckner	Senior Manager, Financial Operations
GA	Graham Alston	Project Director, Project NEXT procurement
JT	James Timperley	National Ticketing Establishment Manager
LW	Laura Wilmot	Engagement & Comms Manager
MW	Matthew Walker	General Manager, Corporate Support
PG	Participation Group	Rick van Barneveld, Independent Chair Roger Jones, AT Vanessa Ellis, AT Charles Ronaldson, Waka Kotahi Delaney Myers, Waka Kotahi Stewart Gibbon, ECan Nick Donnelly, Otago Regional Council Scott Gallagher, SWRC

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## Attachment 5

### Financial impact of funding request on NLTP Activity Class

