National Smart Ticketing Advisory Board

Annual Report 2023-2025

Annual Report 2023 -2025

Contents

Chairs Foreword

It is with pleasure that I present the first Annual Report of the National Smart Ticketing Advisory Board (NSTAB), covering the period from November 2023 to March 2025. This report marks a significant milestone, not just for the Board itself, but for Scotland's ambitions to create a more integrated, accessible, and inclusive public transport system through smart ticketing.

From the outset, NSTAB has brought together an expert and representative group of transport operators, passenger advocates, regional and national transport bodies, and technical advisors. Our members have shown exceptional dedication, insight, and collaboration, laying the essential foundations needed to deliver real change. Their collective efforts have ensured the Board's advice is informed, balanced, and grounded in lived and professional experience across the sector.

The work undertaken during this inaugural period, particularly the benchmarking of current ticketing practice and technology across Scotland, the wider UK and internationally, is key to enabling our work on setting new national standards and developing a more consistent customer offer. Equally, the quick win initiatives we have supported demonstrate that meaningful improvements can be made now, even as we shape the longer-term strategy.

The challenge ahead is considerable. But our early progress proves that with focused collaboration and clear purpose, the Board can offer valuable insight to Scottish Ministers and help steer the nation toward a simpler, fairer, and smarter ticketing landscape.

As Chair, I would like to thank all Board members for their contributions, and our stakeholders across industry and government for their engagement. I look forward to building on this strong first year, delivering practical advice and innovative thinking that supports our shared vision for public transport in Scotland.

Dr Andrew Seedhouse
Chair, National Smart Ticketing Advisory Board

Executive Summary

The National Smart Ticketing Advisory Board (NSTAB) is a statutory advisory non-departmental public body. Its primary role is to provide independent technical and strategic advice to Scottish Ministers on smart ticketing systems and the associated national technological standards. NSTAB is not a delivery body but seeks to shape policy through insight driven, evidence-based recommendations that support inclusive, accessible, and integrated ticketing in Scotland.

NSTAB formally commenced with an inception meeting in November 2023 and held its first working meeting in January 2024. Operating on an eight-week cycle, it has convened nine times to date. Membership comprises a balanced mix of transport operators, passenger representatives, and technical experts, with legislation ensuring modal and user diversity. In response to sectoral complexity, particularly in the bus industry, dual representation has been introduced with shared voting rights.

NSTAB's initial workplan, published in August 2024 and aligned with the Scottish Government's Smart and Integrated Ticketing and Payment Strategy, sets objectives for 2024–2028. These focus on advising Ministers across three statutory functions: the strategic development of smart ticketing, national technological standards, and wider ticketing arrangements.

Significant progress has been made in this first reporting period. Key outputs include the 'Benchmarking Review,' a comprehensive analysis of existing Scottish ticketing systems and international comparators. It identified fragmentation, accessibility gaps, and inconsistent technological standards. In response, NSTAB is preparing a Standards & Technical Advisory Report with strategic and technical recommendations.

The Board also identified and is advancing several "quick win" projects, including enhancing integrated bus tickets, piloting multi-modal QR standards, and opportunities to develop transitional ticketing for under-22s. In parallel, it contributed to policy initiatives such as the Fair Fares Review and Climate Change Action Plan and engaged with UK-wide developments like Project Coral's cEMV broker solution.

Although no recommendations have yet been issued to Ministers, NSTAB's research and stakeholder engagement have laid the foundation for submissions in summer 2025. The Board operates under established public body governance, supported by Transport Scotland and overseen by the Director of Bus and Active Travel.

NSTAB's early contributions represent an important step toward shaping smart, integrated, and inclusive ticketing systems that support a more equitable and sustainable public transport network in Scotland.

Reporting Period

November 2023 – March 2025

As the Board was formally commenced towards the end of the 2023-24 financial year, this first annual report includes the November 2023 inception meeting and January 2024 start meeting, which would otherwise require a separate report. All future annual reports will be specific to the previous financial year.

Overview of the Board

Legislation

The National Smart Ticketing Advisory Board ("NSTAB") is a relatively new public body, arising from Section 27C of the Transport (Scotland) Act 2001, as inserted by Section 43 of the Transport (Scotland) Act 2019.

It is further supported by the following secondary legislation

- The National Smart Ticketing Advisory Board (Public Services Reform) (Scotland) Order 2024 (2024 No. 129)
- The National Smart Ticketing Advisory Board (Gender Representation on Public Boards) (Scotland) Regulations 2023 (2023 No. 156)
- The National Smart Ticketing Advisory Board (Scotland) Regulations 2023 (2023 No. 80)

Purpose

The Board's key functions are to advise Scottish Ministers on smart ticketing arrangements and the national technological standard for smart ticketing. The Board also has the function of issuing advice and recommendations to the Scottish Ministers in relation to the strategic development of smart ticketing in Scotland.

NSTAB is an advisory board, rather than a delivery body, its function is to provide insight led, objective technical advice that will inform Ministers decision making, rather than to deliver ticketing schemes directly.

An inception meeting was held in November 2023, which covered the governance arrangements applicable to the Board, member inductions, initial introductions, meeting schedule approval and formal inception of the Board as an Advisory non-departmental public body. This was followed by the first 'working' meeting in January 2024. The Board meet every 8 weeks, with six meetings held in 2024 and three to date in 2025. Meetings are hybrid, a mixture of in person and online, with the Chair, Sponsor and Secretariat normally attending in person.

NSTAB published its initial four-year workplan in August 2024, covering the period up to 2028. The plan was made with specific reference to Transport Scotland's Smart and Integrated Ticketing and Payment Strategy, which was published the same month.

Membership

The Board is comprised of one Chair and a mixture of voting and non-voting members. The numbers and groups these members represent are detailed in the secondary legislation which established the Board.

The *National Smart Ticketing Advisory Board (Scotland) Regulations 2023* require that the Board have at least ten but not more than fourteen voting members, and not more than three non-voting members. The regulations also require that the Board have at least five but not more than seven members which represent, in the view of Ministers, the range of operators of different modes. In practice, this requires similar numbers of voting members who represent the interests of passengers.

- Chairperson (non-voting unless in event of a split vote)
- Operators of different transport modes (voting)
- Transport authorities, Passenger, and accessibility representatives (voting)
- Board advisors (non-voting)

Operators of different transport modes include buses, trams, ferries, railways, and subway representatives. This is balanced with members who represent transport users, including Regional Transport Partnerships, Local Transport Partnerships, Transport Scotland with reference to the national concessionary scheme and broader public policy, and representatives for young people and those with accessibility requirements. The Board is supported by three Board Advisor members, who are non-voting technical experts. Current membership of NSTAB and parent body can be found in Annex B.

Changes to Membership

The Board was formed in 2023 following a standard public appointment exercise, which saw Scottish Ministers appoint one Chair, five representatives of transport modes, five representatives of passengers and three technical advisors. In early 2024 the original subway (Strathclyde Partnership for Transport) representative Neil Wylie retired from the Board, and was replaced by Michael Nimmo, also of SPT.

In September 2024, original bus representative Alex Hornby stepped down due to moving sector, leading to a new appointment process. During the interim period, Graeme Macfarlan of First Bus provided bus sector representation in an observer capacity as agreed by the Transport Scotland Operator Smart Steering Group (OSSG), a forum for knowledge sharing and collaboration between operators on smart and integrated ticketing.

Figure 1: NSTAB Board meeting

Part of the 2024 recruitment process identified that given the scale and complexity of the bus sector compared to other sectors, it would be reasonable to support having more than one representative for bus as an ongoing arrangement. For example, while Scotland has a single tram operator and only 4 rail operators, there are over one hundred and thirty-six commercial bus operators active in Scotland. This makes it unlikely that any single individual would be able to fully represent the needs of the entire sector, within the time commitment for Board work.

Scottish Ministers have therefore appointed two bus sector representatives, Graeme Macfarlan of First Bus and Steven Chambers of Lothian Buses, who agreed to share a single vote to maintain the modal vote distribution on the board. It is likely that having permanent dual representation for the bus sector will form a recommendation to Scottish Ministers during 2025-26. The Board would like to thank Neil Wylie and Alex Hornby for their time on the Board, and to Graeme McFarlan for providing sector representation during the recruitment process.

Publications and Social Media

NSTAB meets its statutory and non-statutory publishing requirements via the Transport Scotland website. Transport Scotland, through its sponsorship of the Board, accommodates the publication of information about the Board, its membership, the framework document, key policies, recommendations to Ministers and meeting minutes as part of the Transport Scotland website, effectively providing an 'NSTAB' area for publication. The Transport Scotland Sponsor and Secretariat are responsible for keeping this area up to date.

Copies of the NSTAB Publications can be accessed at:

Minutes

Framework Agreement

The Board does not have a direct social media presence or operate any official social media accounts at present.

Contribution to the Government's Four Priorities

The overall work of the Board will help to standardise ticketing arrangements in Scotland, which will both break down barriers to employment, services, and healthcare in line with Priority One, "eradicates child poverty," but also supports Priority Three "growing the economy," and Priority Four "ensuring high quality public services."

Board Achievements Against Workplan

The Workplan

The Board are required to publish a work plan which sets out how it intends to perform its functions under sections 27C(2) and (3) of the Transport (Scotland) Act 2001 for the period of the work programme.

The current workplan covers the period 2024 – 2028 and was put before Ministers in August 2024. The published plan is available via the Transport Scotland website at: https://www.transport.gov.scot/publication/national-smart-ticketing-advisory-board-work-programme-2024-28/

The workplan sets the key objectives for the period and what advice it intends to issue to Scottish Ministers. It details the expected outputs and how these outputs will be tested. It highlights the key work streams and areas of engagement., and reflects the Board's strategic aims and objectives as agreed with the Scottish Ministers. Where applicable, it outlines how the Board contributes to the National Transport Strategy (2) and the Strategic Transport Projects Review (2).

The Board does not have a direct delivery function, and the workplan has identified the following areas as being out of scope:

- Owning the commercial arrangements for products/tickets;
- Owning the governance of products/tickets;
- Responsibility for fare structure reform and changes;
- Responsibility for discount/entitlement policy;
- Delivery of new Schemes and Standards.

Objectives are instead centred around the three statutory functions of the Board, noting the interdependence of function 3 on the advice given in regard to function 2.

1. To issue advice and recommendations to the Scottish Ministers in relation to the strategic development of smart ticketing in Scotland.
2. To advise the Scottish Ministers in relation to their functions insofar as they relate to the national technological standard for smart ticketing.
3. To advise the Scottish Ministers in relation to their functions insofar as they relate to smart ticketing arrangements

The Board is required to update its workplan no later than three months before the expiry of the current plan. The plan has not been revised or reissued in the reporting period.

Progress against Workplan

Statutory Function 1(SF1)

> **To issue advice and recommendations to the Scottish Ministers in relation to the strategic development of smart ticketing in Scotland.**

In 2024-25 NSTAB will:

Benchmark the as-is situation for smart ticketing in Scotland including a review of inclusivity, accessibility and value-for-money.

This Objective has been met.

The 'Benchmarking Review'

In 2024 the Board engaged a transport focused consultant to meet with industry, undertake a detailed survey and report on the current ticketing and payment arrangements across all modes in Scotland and at specific examples of systems from the wider UK and internationally.

This 158-page report, **"Benchmarking review of current practice: Scotland, UK and International",** is a key dependency for the work required in setting national technological standards for ticketing, and in providing advice on the future of smart and integrated ticketing in Scotland.

The Benchmarking Review has been drafted with specific reference to the Ministers vision for transport, specifically the need "To increase the use of sustainable public transport by providing smart and integrated ticketing, payment, and journey planning data enhancements, contributing to a healthier, fairer and more prosperous Scotland". This is underpinned by core principles related to ticketing, specifically that they be more available, simple and consistent, that they are

iNNOVATiOUS
Making multi-modal travel easy for everyone

National Smart Ticketing Advisory Board (NSTAB) – Transport Scotland

Benchmarking review of current practice-Scotland, UK and International

Version 2.0
Date 21/02/25

Commercial in Confidence

accessible and inclusive and that they promote affordable travel.

Section 4.10 of the Report outlines how the transport ticketing landscape across Scotland is very varied between the operators and modes, and even within individual operators who sometimes offer multiple retail channels, ticketing methods and products.

The majority of ticketing utilises pre-paid tickets delivered either as paper tickets, visually secured app tickets, barcodes or loaded onto smartcards. Some sizeable operators have established a Pay As You Go (PAYG) approach either on ITSO cards or using contactless EMV bankcard payment (cEMV) and this latter approach is gaining traction for commercial ticketing due to its simplicity and flexible customer offer.

For pre-paid tickets, the ticket needed is often not an obvious choice for the customer, in part due to the number of operators each with their own product range and in some areas the overlaid multi-operator schemes (sometimes multiple schemes in one area). There is some multi-modal integration (ZoneCard, Ridacard and Rail+Bus One-Ticket) but this remains fairly limited.

The PAYG schemes are currently single operator only throughout Scotland. Their users do not need to understand a complex fares structure to travel as the fare calculation is done by the system. However, for frequent travel over longer periods, PAYG schemes do not always provide the best value option. In addition, they often do not cater for all users.

Currently, the most consistent and widely used ticketing approach is that of the national entitlement schemes, which are based on the ITSO standard.

In relation to Accessibility and Inclusion, the findings of the Review demonstrate that (a) the online and app based retail provision of many operators and schemes are not compliant with current legislation; and (b) they offer a fairly limited view of accessibility, often focused on pure legal obligations at the expense of a more considered view of genuine access. From this, NSTAB is preparing advice to propose a more formalised approach to the publication and adoption of best practice guidance, and an approach to enforcement such as operator attestations of compliance or regular independent audits. The Board will also be considering innovative approaches to more inclusive customer research and design, including Human Centred Design (HCD).

A summary overview of the Benchmarking Review and a copy of the Report itself is contained within Annex A.

Identify and advise on quick wins and support partners in implementing enhancements of smart ticketing.

This Objective has been met.

Quick Wins

In October 2024, the Board drew up a list of potential initiatives which could be developed without requiring new legislation and could be progressed using members existing networks and knowledge. The initial session generated 25 suggestions, with seven selected for further development. A summary of each win and its current status is given below.

Quick Win Proposal

Status

Enhance integrated bus tickets retail offering (Grasshopper, ABC, One-Ticket) - *Ongoing*

Bus Operator Representatives have shared with the other scheme owners their experience of enhancing via mobile phone barcodes the 'Tripper' product for Glasgow and parts of Southwest Scotland and provided practical guidance and advice on applicable fares. The enhanced Grasshopper product is due to launch in 2025, with positive discussions underway with ABC likely to result in updates in late 2025.

U22s Transitionary Product - *Ongoing*

This was a late stage 'win' identified in January 2025. The Board have identified that individuals transitioning towards commercial tickets could be encouraged to keep using public transport with a bespoke review of their established travel patterns, which could be used to identify the most suitable commercial product(s) available for use when the free travel ends. Beep Travel have agreed to demonstrate suitable software which may facilitate this.

New Inverness Multi Operator Smart Ticketing Project - *Ongoing*

An Inverness / Inner Moray Firth and Lochaber Integrated ticketing proposal was made by Board Members to scheme owners in that area. RTP and Transport Scotland representatives have discussed feasibility of shared software and have confirmed it is possible.

Discussion has taken place with Aberdeenshire Council on the potential to share key software (back office) with Grasshopper. Future expansion might involve Highland and Aberdeenshire Council interests to see if Tripper might offer potential for a common back office and potential for common brand and Governance processes. Tripper already includes a number of operators involved in the Highland and Aberdeenshire / Aberdeen Ticketing projects.

Rail & Bus integrated & digital ticketing - *Ongoing*

Rail representative member has updated on the trials happening in England, and the work already underway to offer 'PlusBus' as an eTicket for the first time.

Scotrail new Kiosk procurement underway.

Pilot Area testing of a single Multimodal QR Code Standard - *Complete*

A nationwide Multi-modal QR code Pilot Standard was developed, peer reviewed, and security tested.

A test app was built, and Edinburgh Trams handheld devices were reconfigured to read the product. A successful live test was undertaken at Glasgow Central railway station, arranged between the Board and Scotrail. This complemented the other tests around the UK.

Marketing - Interoperability & Integrated Ticketing - *Ongoing*

Members have promoted public transport as part of their in-house social media content, primarily via Young Scot's Instagram/TikTok channels. While there has been engagement and successful uptake, early findings are that only a co-ordinated media campaign with commensurate budget could progress this 'win' further.

Ferry integrated ticketing – with rail & coach – *Ongoing*

Discussions have been held between Ferries and Rail representative members, including ways to raise awareness of existing rail/sail ticketing or the free Scrabster taxi service. The Board are investigating avenues to make sure that both island residents and visitors are included in the scope.

Scotrail intend to raise awareness of options like PlusBus via their 'Did you know' marketing.

CalMac are set to launch an API (Application Programming Interface) in July 2025, which will allow CalMac's ticketing and timetable software applications to communicate with other software applications, such as the Traveline Scotland App.

Following the completion of the benchmarking review, NSTAB is preparing a Standards & Technical Advisory Report for the Scottish Ministers, which will contain a section on additional quick win opportunities based on High Priority, Short Term

Delivery and No/Low-Cost delivery parameters. This Standards & Technical Advisory Report is expected to be submitted during summer 2025.

Review the requirements and actions included within the Fair Fares Review, Climate Change Action Plan, and the forthcoming refreshed Smart Delivery Strategy, and advise on the implications for strategic development of a smart ticketing system in Scotland.

This Objective has been met.

Over the past year, the NSTAB has reviewed and issued recommendations to the following bodies

Transport Scotland

Smart, Digital, Integrated Payments & Ticketing Delivery Strategy 2024 – prelaunch discussions with policy team (published 21 August 2024).

Fair Fares Review – advice provided to Transport Scotland as part of the development of the review (published May 2024).

In addition, the Year 2 Workplan of NSTAB is being revised to take into account the stated aim of the Government from the Fair Fares Review, in the short term to:

- Develop a proposal for a bus flat fares pilot for an area-based scheme to provide flat fares on bus travel, or reduced fares on zonal integrated travel for consideration in future budgets; and
- Develop a national integrated ticketing system, integrated travel hubs and develop proposals for an all-age national travel scheme and fare structure.

Provide a collective response to proposed ticketing study/report commissions, including:

o   pre-tender proposals, consultations and calls for evidence;

o   draft studies & reports; and

o   published reports across the Scottish Government and within the Sector;

This Objective has been met.

Over the past year, the Board has reviewed and provided a collective response to proposed ticketing study/report commissions to the following bodies:

Competition and Markets Authority

Consultation on the Public Transport Ticketing Scheme Block Exemption (PTTSBE) Written response (November 2024).

UK Government Department for Business and Trade

Response to "Invest 2035" Consultation on the UK governments industry strategy which seeks to improve the business environment and address the identified barriers to growth across the economy (November 2024).

Statutory Function 2 (SF2)

To advise the Scottish Ministers in relation to their functions insofar as they relate to the national technological standard for smart ticketing.

Benchmark the as-is situation for smart ticketing in Scotland in relation to technological standards used and compare this with the standards used within the rest of the UK;

<u>This Objective has been met</u>

Section 4. of the Benchmarking Review as introduced in SF1 summarises the Scottish public transport landscape in terms of the technological standards used for its as-is ticketing arrangements. It details these for the individual schemes within Scotland and compares these with seven representative schemes throughout the UK to review objectively against the outcomes and core principles given above. It acknowledges that for operators, commercial factors and passenger numbers are normally considered to be 'success' factors for a ticketing scheme.

The report also assesses Scotland's existing single and multi-operator ticketing schemes, which are provided at an operator level such as First's mTicket, or geographically around the four city regions; Aberdeen (Grasshopper, First TOTO), Dundee (ABC and One-Ticket), Edinburgh (One-Ticket, Ridacard, TapTapCap) and Glasgow (Tripper, ZoneCard, first TOTO), and looks at the technology and processes behind the Transport Scotland administered concessionary scheme for under 22s, over 60s and some disabled people.

The version of this report which was laid before Scottish Ministers included a complex diagram of mode options. This has been removed and replaced with the following text for this web accessible version. The 'Baselining Report' includes a graphical representation of the delivery model of select schemes from outside of Scotland. At the more simple end of the spectrum, the visualisation shows single supplier multi-model systems, such as Translink (single back office for all modes) and Solent (Barcode solution associated with a journey planning facility), moving towards more complex multi supplier multi-modal systems (TfL cEMV overlaid on Oyster and Cornwall's separate operator solutions that share a back office and payment supplier). At the most complex end of the scale, the integrated modal or

operators' systems, includes Nexus which uses an ITSO system with cEMV and ABT overlaid, and TfWM which uses a broker system.

The report confirms the fragmented nature of ticketing in Scotland, which varies between modes, operators, and even within individual operators over their range of services. In particular, there are different commercial suppliers of the necessary technology and software required to provide tickets, and the use of each varies by mode, region, and operator.

Review international best practice application of technological standards for smart ticketing to identify any transferable lessons;

This Objective has been met

To complement the comparison of Scottish technological standards with those applied elsewhere within the UK, the Benchmarking Review also reviews international best practice as illustrated by four representative schemes: Cal-ITP (California, United States), Myki (Melbourne, Australia), Metrolinx (Toronto, Canada), and Translink (Netherlands).

These four schemes were chosen to review key lessons learned, any best practice design or implementation approaches, and any new or novel approach to delivery or capabilities worthy of note. This is detailed within Section 7 of the Benchmarking Review.

Review the smart ticketing technological standard(s) required to deliver the Fair Fares Review, Climate Change Action policy, and the forthcoming refreshed Smart Delivery Strategy actions;

This Objective has been met

In addition to the work undertaken in delivering the Benchmarking Review as detailed in SF1 Objective 1, the NSTAB has also engaged directly with UK and International technological standards organisations and Suppliers to review experiences and identify lessons learned, which will be applicable to the delivery of the Fair Fares Review, Climate Change Action Policy and the Smart Delivery Strategy.

In total, throughout 2024, NSTAB hosted seven presentations on the following technological standards:

Account-Based Ticketing (ABT) solutions from leading providers Masabi, Unicard, and Littlepay.

Contactless EMV (cEMV) developments from Project Coral – the body supported by the DfT for procuring an open, multi-operator cEMV payment back-office broker system for bus travel. This has led to a specific Project Coral workstream (below).

Mobile Ticketing systems, with contributions from iBlocks and Fairtiq on mobile pay-as-you-go (PAYG) systems in the UK and Europe.

ITSO Smart Ticketing developments from the CEO of ITSO Ltd.

The NSTAB has also had extensive engagement with the team at Project Coral and its work on developing an option for a national EMV Broker Solution.

Project Coral National EMV Broker Solution

The West Midlands Combined Authority (WMCA) through Transport for West Midlands ('TfWM'), and in partnership with Project Coral, Midlands Connect and the DfT are aiming to progress and introduce a contactless ticketing solution for public transport users on bus and tram in England, initially within the West Midlands region.

The system will use cEMV technology, allowing passengers to 'tap' using a bank card, or electronic bank card, to gain access to travel. Payments have a defined 'cap' and will allow users to obtain the best price/best value single journey tickets for their travel pattern that day.

Project Coral was formed in 2019 and is a collaborative private sector led Steering Board comprised of FirstGroup PLC, Arriva UK Bus Ltd, Stagecoach Services Ltd, The Go-Ahead Group Ltd, National Express Ltd and Rotala PLC. Its initial purpose is to promote an alternative solution to using a single 'back office' product, allowing operators to retain their individual systems, but have shared transactions handled via a third party 'broker service' which effectively acts as go between.

The procurement for this project is nearing conclusion at an estimated maximum contract value of circa £16.7m over five years. Whilst initially this will only cover the West Midlands area, Project Coral are actively promoting that

their 'broker solution' could be used across England, Wales & Scotland and have been registering interest from English Local Authorities for the service to be provided to the Authority at no charge.

The Board has received a presentation from Project Coral and have formally noted their interest in the project. The Board has arranged to be updated on the progress of the project in order to consider the use of a broker type solution more fully. Subsequent to registering their interest in the project, the Board has joined the Integrated Ticketing Advisory Forum (ITAF), the entity responsible for Project Coral's national broker platform for contactless bank card payments on buses.

This collated knowledge and the work undertaken in the Benchmarking Review, is being used as the basis for an NSTAB Workshop in May 2025, to develop a Standards & Technical Advisory Report for the Scottish Ministers, which will detail core actions required to deliver the requirements of the Fair Fares Review, Climate Change Action Policy and the Smart Delivery Strategy. This Standards & Technical Advisory Report is expected to be submitted during summer 2025.

Identify opportunities and challenges related to standardising smart ticketing technology, including customer experience, that will help to deliver an integrated multi-modal ABT style smart ticketing system.

<u>This Objective is being progressed</u>

In line with the response to SF2 Objective 3 above, the collated knowledge from the Benchmarking Review, together with Board Members Industry experience and the informative sessions with Suppliers and Standards bodies is being used as the basis for an NSTAB Workshop, to develop a Standards & Technical Advisory Report for the Scottish Ministers, which will detail core actions required to identify opportunities and challenges related to standardising smart ticketing technology, including customer experience, that will help to deliver an integrated multi-modal ABT style smart ticketing system. This Standards & Technical Advisory Report is expected to be submitted during summer 2025.

Statutory Function 3 (SF3)

> **To advise the Scottish Ministers in relation to their functions insofar as they relate to smart ticketing arrangements.**

This Statutory Function requires the completion of initial evidence gathering and baselining work and is not scheduled to commence until 2025/26. Progress in this area will be recorded from 2025/26 onwards.

Contribution to wider policymaking

The Board has contributed to wider Transport Scotland Work streams, including the NTS2, and information sharing between Board and Scottish Government via the Transport Scotland member.

Advice to Scottish Ministers

As of 30 June 2025, there have been no direct recommendations to Ministers. The first Ministerial recommendations are likely to be put forward in summer 2025 via the proposed Standards & Technical Advisory Report following the conclusion of the baselining work undertaken in year one.

Dissenting Opinions

There were no dissenting opinions during the reporting period.

Governance

The Board is chaired by Dr Andrew Seedhouse, supported by a Transport Scotland supplied secretariat. Due to resourcing issues in 2024, this has been offered by a joint secretariat/sponsor post for part of the reporting period.

The Board reports directly to the Scottish Ministers, facilitated by a Transport Scotland Sponsor. Sponsorship sits separately to Transport Scotland's' membership of the Board, which is appointed to in representation of the national concessionary scheme and the Scottish Ministers vision for smart and integrated ticketing. Sponsorship sits within Transport Scotland's overall smart ticketing policy and delivery function. Transport Scotland have published both a statement on the relationship between Scottish Government and the Board, and the mandatory Framework Agreement.

Director of Bus and Active Travel Bettina Sizeland is the Senior Responsible Officer for NSTAB and has attended initial meetings in an observer capacity during its mobilisation, to ensure early activity and founding principles are aligned with the statutory purpose of the Board.

The Board have in place a specific conduct, expenses, and appraisal policy, which are referenced in the terms and conditions of membership. Members are required to attend a formal induction on appointment, which gives more detailed information about the purpose of the Board, the expectations of members, and key contacts for complaints or 'whistleblowing.'

The Board is subject to the standard governance arrangements for sponsored public bodies as set by Scottish Ministers.

Finance

Funding for Board activities is administered directly by Transport Scotland in line with the Scottish Public Finance Manual and subject to Scottish Government governance and controls.

Membership of the Board is voluntary, however members are entitled to claim for reasonable expenses, such as travel costs. In line with other Transport Scotland advisory bodies, any associated spend is accounted for within Transport Scotland's own accounts.

Reflection and Forward Planning

As NSTAB progresses into Year Two of its workplan, the focus now turns from evidence gathering to shaping formal advice for Ministers, centred on the development of the Board's first Standards & Technical Advisory Report, due for submission in summer 2025. This will mark a significant transition from research to recommendation, consolidating the insights gained during the first reporting period into clear, actionable proposals.

A key milestone in this process will be the NSTAB Technical Standards Workshop, scheduled for May 2025. This dedicated session will bring together the sector led members, technical advisors, and external stakeholders to test assumptions, refine priorities, and help structure the Standards & Technical Advisory Report. Drawing on the Benchmarking Review, international best practice, and supplier engagements, the workshop will ensure the recommendations are evidence-led, feasible, and aligned with policy ambitions.

The Standards & Technical Advisory Report will outline a pathway toward greater integration, accessibility, and consistency across Scotland's smart ticketing systems. It will focus on priority actions needed to support the Scottish Government's Smart Delivery Strategy, Fair Fares Review, and Climate Change Action Plan. These will include recommendations on the adoption of national technological standards, customer-centric ticketing models, and scalable account-based and contactless solutions.

Year Two will also see the further development of the "quick win" initiatives initiated during 2024, including enhanced integrated ticketing pilots, retail standardisation efforts, and the continued promotion of inclusive design practices. These short-term actions will complement the longer-term reforms proposed in the Advisory Report.

Together, the May workshop, Advisory Report, and ongoing workstreams will form a coordinated response to Scotland's strategic smart ticketing ambitions. They signal the Board's transition from groundwork to leadership, and from exploration to impact, laying the foundations for a smarter, simpler, and fairer ticketing future.

Annex A - Benchmarking review of current practice: Scotland, UK and International

Overview

The report, prepared for NTSAB by Innovatious Ltd., provides a comprehensive benchmarking review of smart ticketing practices in Scotland, the wider UK, and internationally. Its primary aim is to assess the current landscape, identify areas for improvement, and offer recommendations for future smart ticketing initiatives.

Current Scottish Landscape (Deliverable 1):

The report outlines how Scotland's transport ticketing is highly fragmented, with diverse approaches across operators and modes. While pre-paid paper, app-based (barcodes), and smartcards are common, Pay-As-You-Go (PAYG) using contactless EMV (cEMV) is gaining traction due to its simplicity. A key challenge for pre-paid tickets is the complexity for customers to select optimal fares amidst numerous operators and overlapping multi-operator schemes. The only consistent approach is the ITSO-based entitlement schemes. On-bus ticketing remains prevalent, with contactless payment options widely available, though cash is still accepted. Closed-loop smartcard schemes have seen mixed commercial success, often overshadowed by the growing popularity of barcode and cEMV solutions. In relation to Accessibility and Inclusion, the findings of the report demonstrate that (a) the online and app-based retail provision of many operators and schemes are not compliant with current legislation; and (b) they offer a fairly limited view of accessibility, often focused on pure legal obligations at the expense of a more considered view of genuine access.

UK and International Benchmarking (Deliverable 2):

The report highlights similar trends in the UK, including the prevalence of on-bus ticketing, varied success of ITSO for commercial purposes, and the rise of mobile and cEMV PAYG solutions. Examples like Transport for London (TfL) demonstrate comprehensive, integrated cEMV-based systems, while others, like Cornwall, show successful "cEMV lite" implementations. International examples, such as Cal-ITP (USA) and Myki (Australia), emphasize the importance of interoperable standards and human-centered design in developing effective ticketing solutions. The report notes challenges in transitioning from legacy systems and the high cost of maintaining fragmented solutions.

Key Conclusions and Recommendations:

The report identifies several quick wins, for intermodal ticketing and formalising accessibility guidelines. It recommends reviewing the long-term role of ITSO cards as the exclusive medium for entitlement-based provision and avoiding heavy investment in new ITSO card-based commercial initiatives.

A significant recommendation is to support the early expansion of cEMV PAYG schemes, but crucially, within a clear guidance framework to ensure future interoperability. The central belt of Scotland is suggested as a testbed for achieving such interoperability.

For the medium to long term, the report advises engaging with national initiatives (GBRTT/RDG for rail, Project Coral for bus broker solutions) and prioritising in-depth customer research to define future propositions. It stresses the importance of making "hard decisions" to decommission legacy technologies to reduce operational costs and create consistent customer experiences.

Ultimately, the report urges Transport Scotland to clarify its strategic role in the market, including its willingness to influence or mandate propositions, solutions, and standards. It recommends an Account-Based Ticketing (ABT) solution supporting both cEMV and closed-loop tokens, offering both PAYG and pre-purchased capabilities, as the "best-in-class" target for Scottish passengers, with a strong focus on inclusivity and accessibility from the outset.

Annex B - Current Membership

The National Smart Ticketing Advisory Board (NSTAB) is comprised of 15 members including;

- a Chairperson,
- 5-7 operator representatives of different modes,
- 2-4 representatives of local and regional transport authorities/partnerships,
- 1-3 representatives of passengers and accessibility,
- 1 representative of Scottish Ministers (Transport Scotland) and
- up to 3 advisory roles relating to smart ticketing.

Position	Name	Voting?	Represents
Chairperson	Dr Andrew Seedhouse	Only in the case of a tied vote	Chair
Local Transport Authority Representative	Margaret Roy	Yes	Local Authority/RTP
Regional Transport Partnership Representative	Ranald Robertson	Yes	Local Authority/RTP
Passenger Representative	Kirsten Urquhart	Yes	Passengers
Accessibility Representative	Hussein Patwa	Yes	Passengers & Accessibility
Transport Scotland Representative	Mary Docherty	Yes	Scottish Ministers
Bus Operator Representative	Stevie Chambers	Yes	Operators
Bus Operator Representative	Graeme McFarlane	Yes	Operators
Ferry Operator Representative	Diane Burke	Yes	Operators
Rail Operator Representative	Claire Dickie	Yes	Operators
Tram Operator Representative	Marilena Papadopoulou	Yes	Operators
Subway Operator Representative	Michael Nimmo	Yes	Operators

Technical Systems Advisory Representative	Mostafa Gulam	No	Technical Advisors
Smart Delivery Advisor	Matt Smallwood	No	Technical Advisors
Transport Strategy Advisor	James Gleave	No	Technical Advisors

Annex C - Governance and Communication Structure

The National Smart Ticketing Advisory Board (NSTAB) is supported by both a sponsor and a secretariat function.

The sponsor function supports NSTAB with managing risks, operational impacts, appointments and budget.

The secretariat function supports NSTAB with minutes, expenses and documentation, as well as communicating with the Scottish Ministers to whom NSTAB report to and advise.