




July 2025

# STATION INNOVATION ZONE

Year Four

 Applications Close: 24th September 2025.  
Interviews : Mid-October 2025.  
Phase One: Early November 2025.

# AGENDA

Wednesday 30th August 2025

11:00 – 11:05 Welcome – Alan Peters, Rail Director

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11:05 – 11:10 Introduction to Station Innovation Zone – Anna Kerr, Innovation Consultant

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11:10 – 11:20 Year 4 - Competition Overview – Anna Kerr, Innovation Consultant

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11:20 – 11:30 Year 4 - Challenges – Anne Spaa, Senior Consultant, Rail

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11:30 – 11:40 Involvement of Network Rail – Brian Wortman, Senior Programme Sponsor

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11:40 – 11:45 Developing a Successful Testbed – George Wardell, Consultant

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11:45 – 12:00 Q&A



# WELCOME

**Alan Peters, Rail Director**



# HOUSEKEEPING

Anna Kerr, Consultant



# INTRODUCTION TO STATION INNOVATION ZONE

Anna Kerr, Consultant



# WHY THE STATION INNOVATION ZONE?

Stations serve as important cornerstones of the transport network. They often form the first impression a visitor has of a city or town, and they link rail travel with other public transport modes.

Innovators wanting to trial new solutions face many barriers, including:

- Navigating the approvals landscape
- Meeting procurement and contractual requirements
- Accessing funding
- Integrating with other systems
- and coordinating with diverse stakeholders

**Station Innovation Zone** is a 6-year programme whose aims are:

- To 'break down' the barriers to innovation within the station environment, and
- To demonstrate that innovation make a real difference to passengers' experience



# CO-CREATED VISION



“The station of the future will be a proud, efficient gateway to the place it serves. The station of the future reflects **local identity** and is **open and inclusive** to all.

It convenes people, businesses and culture without compromising on purpose: **effective transit** through its spaces.

Our vision is to design a safe, sociable, seamless and sustainable station that **enables both social and financial prosperity.**”

# STATION INNOVATION ZONE - THE VISION

Each year, Connected Places Catapult (CPC) and Network Rail (NR) work together to develop innovation challenges that shape the focus of the programme.

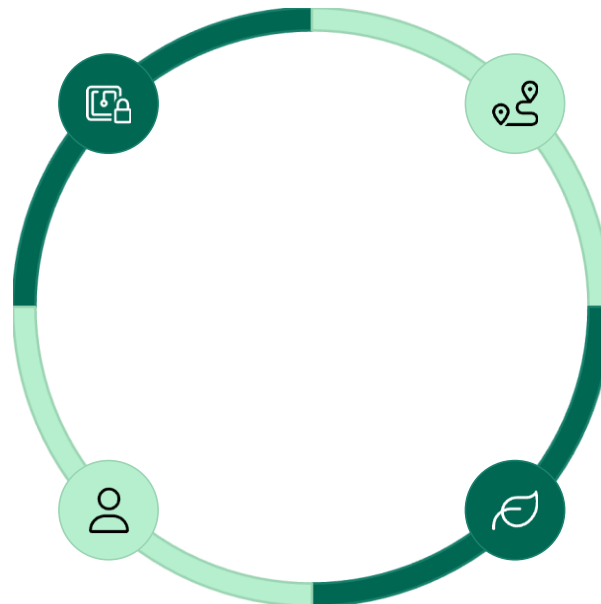
Aligning with Network Rail's key priorities like sustainability, accessibility, and passenger experience, these challenges support our shared vision for the station of the future. Through this partnership, we drive innovation and help SMEs deliver solutions that redefine the modern rail station.

## Safe Station

How might we enhance safety at the station through improved station operations?

## Social Station

How might the station be a great place to spend time for passengers and local communities, whilst functioning as a transport hub?



## Seamless Station

How might we incorporate sustainability into the station, without impacting operations and in-keeping with the listed status of the building?

## Sustainable Station

How might we incorporate sustainability into the station, without impacting operations and in-keeping with the listed status of the building?



# YEAR 4 - COMPETITION OVERVIEW

Anna Kerr, Innovation Consultant



# COMPETITION OVERVIEW

Connected Places Catapult, in collaboration with Network Rail and funded by Innovate UK, is excited to announce the fourth year of the Station Innovation Zone Competition.

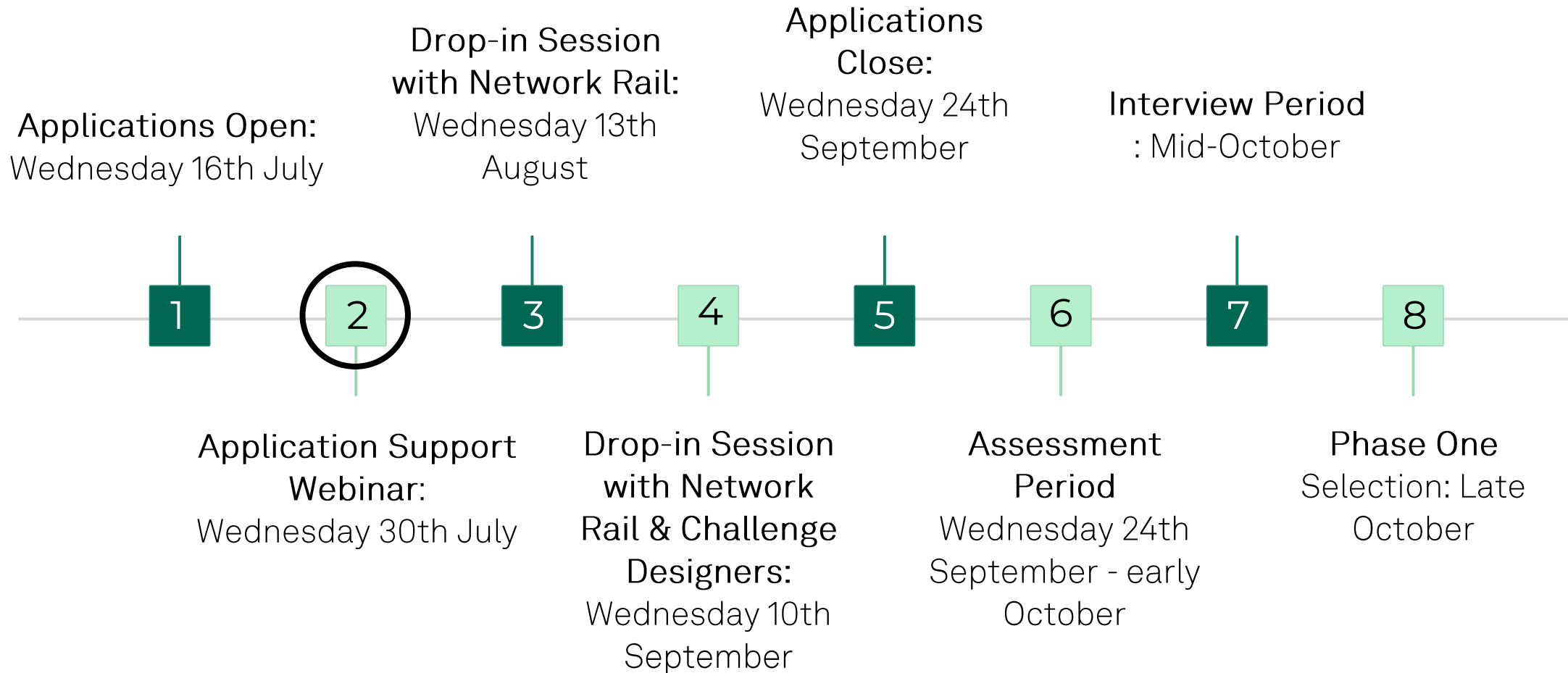
This year we will be focusing on finding solutions around **surface condensation buildup** and **interchange anxiety**.

- **Phase One: Trial Development Plan Phase:** Up to £4k each for up to eight businesses to develop their trial plan.
- **Phase Two: Testbed & Demonstration Phase:** Up to £45k for three innovators to trial their solution at Bristol Temple Meads Station.
- **Funding & Business Support:** Receive funding and work closely with experts from Connected Places Catapult .
- **Testbed Support:** Receive testbed support from the Network Rail team based at Bristol Temple Meads Station.





# APPLICATION PERIOD - KEY DATES





# DROP-IN SESSIONS - SIGN-UP HERE





# PROGRAMME STRUCTURE AND FUNDING



## Phase One: November 2025

Up to 8 SMEs will each receive up to £4,000 to develop a proposed trial plan during the first two months of work.



## Selection Process

Upon completion of trial plans, up to three SMEs will be chosen to proceed to Phase Two.



## Phase Two: February 2026

Selected SMEs will conduct live trials over a six-month period at Bristol Temple Meads Station, with each receiving up to £45,000 for deployment.



## Additional Support

All successful applicants will receive business development and technical trial support, plus opportunities to showcase their technology at industry events.



# ELIGIBILITY REQUIREMENTS

## Business Requirements

- Must be UK-registered business
- Must be a micro, small, or medium-sized enterprise

## Solution Requirements

- Technology Readiness Level (TRL) 5 -7 i.e must be ready to trial in a live environment
- Must address one of the identified challenge areas

## Other Key Requirements

- Willing to travel for face-to-face meetings in Bristol
- Able to manage the trial with agreed support levels from CPC & Network Rail.

For any queries relating to your eligibility to partake in this programme, please contact [innovation\\_funding@cp.catapult.org.uk](mailto:innovation_funding@cp.catapult.org.uk)

Kindly note that we cannot declare an application either in or out of scope on your behalf, this must be determined on the basis of your alignment with the competition challenges AND the additional 'out-of-scope' information provided in our Application Guidance Document.



# FUNDING – ADDITIONAL INFORMATION

## Phase One – Grant Funding

- Up to £4,000 is available to develop your trial proposal
- 50% upfront and 50% upon completion of your trial proposal.
- Grant funding subject to Minimum Financial Assistance (MFA) rules which dictate you must not have received more than maximum £315,000 in public funding within the last 2-3 financial years.

### Eligible Expenses:

- Labour/Staff Time
- Consultancy Costs
- Equipment & Material Costs installation costs
- Laboratory/Testing costs
- Travel and Subsistence Costs

## Phase Two - Pre-Commercial Funding

- Up to £45,000 is available for conducting a full 6-month trial at Bristol Temple Meads Station.
- 40% upfront, a further 40% at a determined point in your contracted trial plan and the final 20% upon completion of your final report *\*subject to change*.
- Pre-commercial funding, meaning it will be conducted using invoices and will not be subject to MFA.

### Other Key Information

- **Eligibility Period:** Only fees incurred between project start and end dates are eligible.



# APPLICATION PROCESS AND DEADLINES

1

## Read Application Guidance Document

Carefully review all competition information before preparing your application to ensure eligibility and proper submission – this is available on our main opportunity page.

2

## Complete Online Application

Submit your application through the online portal. Only information in your application form will be assessed - no additional documentation should be attached unless requested. The portal is accessed via our main opportunity page.

3

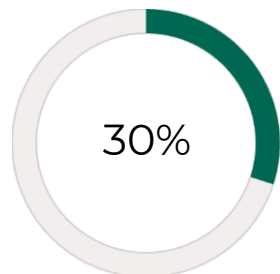
## Submit Before Deadline

Applications close at 17:30 on Wednesday 24th September 2025. Late submissions will not be considered under any circumstances.

*Applicants requiring assistance should contact [innovation\\_funding@cp.catapult.org.uk](mailto:innovation_funding@cp.catapult.org.uk) least 10 days before the competition closure to allow for appropriate support.*

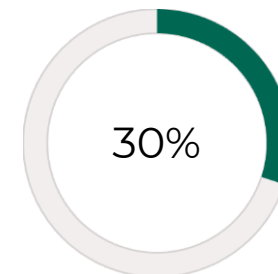


# SCORING CRITERIA



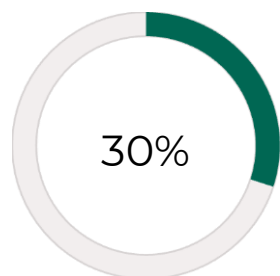
## Challenge

Evaluates how effectively the innovation addresses one of the key challenges of the competition.



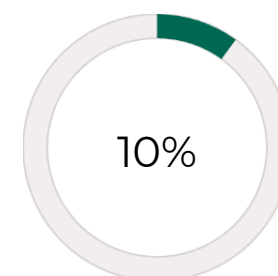
## Solution & Trial Proposal

Evaluates the practical aspects of your solution and its proposed trial at Bristol Temple Meads.



## Impact

Evaluates the broader benefits and value your innovation will deliver, exploring the economic and sustainability impacts on the rail industry.



## Project Delivery & Team

Evaluates your trial delivery team's capabilities, skills and financial planning for your trial.



# ASSESSMENT PROCESS



## Initial Screening & Due Diligence Check

Applications checked against eligibility criteria, Companies House and competition scope.



## Technical Review

Assessors evaluate applications against scoring criteria and challenges.



## Interview Stage

Shortlisted applicants will be contacted in early October 2025 for an interview with Connected Places Catapult and Network Rail in mid-October 2025.



## Phase One Selection

A decision will be communicated to all those who interviewed by the end of October 2025, with Phase One commencing in November 2025.



# YEAR 4 - CHALLENGES

Anne Spaa, Senior Consultant in Rail



# STATION WEATHER RESILIENCE

## Challenge One

Innovations to reduce surface condensation at stations, preventing slips, trips, and falls.

### Sub-Challenges:

**Active Prevention:** Develop active solutions to prevent condensation on floors in public and listed building areas.

- **Goal:** Reduce/avoid condensation and slip risk in high-footfall areas.
- **Measurable:** Aim to show reduced condensation events, fewer slip incidents, and positive user feedback.
- **Achievable:** Use available materials, ensure station operational compatibility, and gain heritage approval.

**Passive Prevention:** Focus on innovative floor safety solutions to reduce slip risk, especially in listed buildings.

- **Goal:** Meet or exceed Pendulum Test Value (PTV)  $\geq 36$  (wet) and  $\geq 40$  (dry) for slip resistance.
- **Measurable:** Aim to demonstrate fewer slip incidents and achieve PTV standards across treated surfaces.
- **Achievable:** Similar to active prevention – use suitable materials, ensure operational compatibility, and gain heritage approval.



# IMPROVING THE INTERCHANGE EXPERIENCE

## Challenge Two



This challenge focuses on reducing interchange anxiety, a common issue for passengers changing trains, often caused by rushing or platform changes.

### Key Objectives:

- **Reduce Stress:** Help passengers feel more relaxed, prepared, and in control when changing trains.
- **Minimise Conflict:** Reduce congestion and conflicts between rushing passengers and those moving more slowly or dwelling on platforms.

### Solution Scope:

- **Physical Innovations:** Explore novel uses of light, sound, sensors, and other visual stimuli within the station environment.
- **Digital Solutions:** Consider augmented reality or other digital approaches that influence passenger behaviour.

### Measurable Outcomes:

- Aim to demonstrate a reduction in passenger anxiety and a positive impact on their overall station experience.
- Aim to show a reduction in rushing for services among interchanging passengers.
- Aim to prove a decrease in trips, falls, and near-misses caused by rushing.





# OUT OF SCOPE

- Existing rail station innovations: Solutions already tested or seen at UK rail stations.
- Non-aligned innovations: Solutions that do not support Network Rail's strategic priorities.
- Bristol Temple Meads specific exclusions: Innovations of typologies already tested or used at Bristol Temple Meads, including:
  - LIDAR crowd monitoring solutions
  - British Sign Language screens
  - Wayfinding apps for indoor spaces (including digital maps)\*
  - Journey Assistance apps/platforms
  - Neurodiverse passenger assistance apps
  - Rentable office pods
  - Carbon capture panels
  - Computer vision inspection software for hazard prediction
  - VR assisted staff training programmes



# INVOLVEMENT OF NETWORK RAIL

Brian Wortman, Senior Programme Sponsor





# BRISTOL TEMPLE MEADS STATION



## Bristol Temple Meads: A Live Innovation Testbed

- Provides access to real-world contexts & user groups, removing traditional barriers to innovation in a railway environment.

## Historic & Protected Building Status

- Dates back to 1840 (Brunel's original structures) with the main station built circa 1870.
- Holds Grade 1 Listed status, meaning any physical changes require specific Listed Building Consent.

## Current Operational Environment & Constraints

- Undergoing significant improvement schemes (roof, electrics, new entrances, retail).
- These ongoing works may limit access to certain areas and necessitate careful interface with project teams.

## Essential Site Familiarisation for Innovators

- Applicants are strongly encouraged to visit the station to understand its layout and operational environment.
- Reviewing the Station Map (showing gates, platforms, etc.) is vital to confirm solution viability and placement.

# IMPORTANT NOTES – NETWORK RAIL

## Solutions for Bristol Temple Meads (BTM)

- Seeking solutions for BTM challenges, proposals must consider BTM's unique aspects and demonstrate broader applicability to the wider rail network.

## Operating in a Live Station Environment

- BTM is a key, high-traffic station in Wales & Western region.
- Successful applicants must undergo assessments (data protection, digital connectivity, accessibility, security, inclusivity, reputational impact).

## Trial Management and Support

- Approved trial delivery is managed by the applicant, with support provided by CPC & NR SIZ Team.
- Applicants should note any anticipated support needed from Network Rail or GWR (e.g., data access, staff interviews).

## Excluded Areas:

- Signalling or train dispatch systems.
- Direct access to the live railway (no trials beyond the platform yellow line).
- Station Wi-Fi – your solution must have its own 4G/5G connection if required.
- Trials impacting safe station operation.
- Projects requiring significant staff management/participation.
- On-board train projects (focus is station environment).
- Access to CCTV, security protocols, or evacuation procedures.
- Trials previously held elsewhere, unless a clear benefit or unique Temple Meads case study is presented.



# DEVELOPING A SUCCESSFUL TEST BED

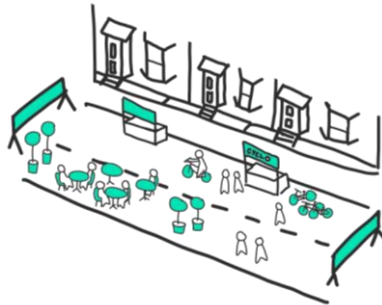
George Wardell, Service Designer, Connected Places Catapult



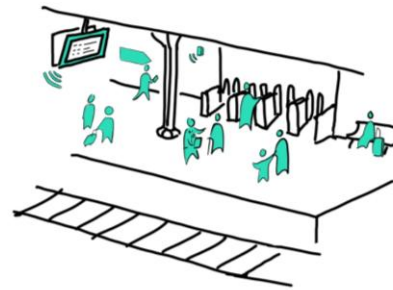
# WHAT IS A TESTBED?

A testbed is an approach that removes barriers to testing by giving innovators access to user groups and real-world contexts so they can develop, test and showcase new or existing products and services without the usual risks. Testbeds can be facilitated in either controlled or uncontrolled environments.

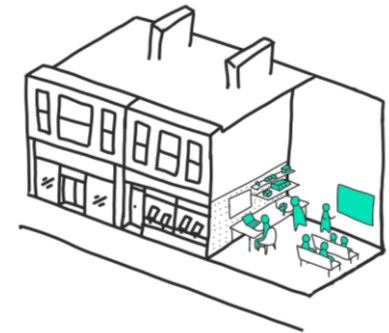
Some examples of what testbeds could look like are:



Utilising an area of public realm to trial solutions to improve onward journey and active travel



Equipping station staff with new products or services to test how well they support their work and improve the experience of passengers



Deploy a new community activity or retail offer in an empty shop front to test how compelling it is to visitors and how it integrates in the station offer



# TESTBED MINDSET

Testbeds are great opportunities to **trial innovative and ambitious ideas** in real-life settings, gather insights and feedback from user groups and refine or adjust those solutions. Testbeds offer a **safe space for learning and iteration** to move towards developing a more meaningful user-centered solution.



## Ambitious

Test bold ideas to make the most of the experiment and learn a lot.



## Open-minded

Be curious and ready to gather unexpected feedback and insights



## Flexible

Testing means iterating! Be ready to adapt and pivot quickly!

# TESTBED DEPLOYMENT SUPPORT

The Catapult team along with Network Rail and station teams will be here all along the process to support SMEs with the design, deployment, monitoring and evaluation of their trial in the station context.



## Testbed support

Trial design training, preparation and deployment support



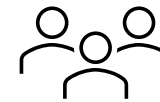
## Rail specific masterclasses

To discover and understand the industry, its processes and stakeholders in more depth



## Data Privacy & Safety

Responsible data management and data ethics support



## Engaging with end-users

Training around best practises to collaborate effectively with end-users and gather insightful feedback in trial context



## Monitoring & evaluation

Support for evaluating the results and impacts of the trial in the station and in relation with the selected challenge



# APPLY NOW





# Q&A

**Anna Kerr, Consultant**