

Results of Competition: SBRI: Innovation in Rail Security Surveillance Analytics, Phase 2

Competition Code: 2006_NETWORKRAIL_SBRI_TRANS_SECURITY_PHASE2

Total available funding is £500k + VAT (£600k)

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
IPSOTEK LIMITED	AIVA development to enhance Network Rail experience for passengers and staff Phase 2	£299,970	£299,970

Note: you can see all Innovate UK-funded projects here: <https://www.gov.uk/government/publications/innovate-uk-funded-projects>

Use the Competition Code given above to search for this competition's results

Project description - provided by applicants

Ipsotek specialises in advanced video analytics solutions enhanced through artificial intelligence techniques ("AIVA"). Its technology has been applied to address safety, security and operations requirements in a wide range of commercial verticals, and particularly in airports where it has significant deployments.

As part of a two-phase project Phase 1 -- the precursor to this project -- Ipsotek have developed and implemented a bespoke solution to address Network Rail requirements pertaining to detecting and identifying threatening behaviour or safety risks arising from individuals or crowds at a Network Rail Station.

This suite of capabilities covered both security solutions (for example loitering detection and abandoned baggage detection), as well as safety solutions (for example overcrowding detections). These capabilities were demonstrated to a high degree of maturity in Phase 1 and this will be built on.

Phase 2 -- aims to further refine and develop the solutions and improve performance of the system by using a live station environment to collect further training data. During the 12-month deployment the Ipsotek AIVA system will be fine-tuned and further developed to enhance detection performance by using live feeds from the station CCTV network to accurately recognise the unique scenes (platforms, rails, trains) and detect behaviours/conditions of interest.

Furthermore, example footage of behaviours of interest that were not available in phase one footage will be sought to develop those detection capabilities.

Throughout the project, Ipsotek will demonstrate the feasibility of adopting the solutions developed on a large scale with minimum reconfiguration or redesign by relying on its mature underlying video analytics platform that provides advance scene recognition, segmentation and calibration capabilities.

Ipsotek will also engage Network Rail operators in providing constant feedback to steer the development in order to provide a fully integrated solution that brings real value to the station operations as an effective safety and security tool.

Note: you can see all Innovate UK-funded projects here: <https://www.gov.uk/government/publications/innovate-uk-funded-projects>

Use the Competition Code given above to search for this competition's results

Results of Competition: SBRI: Innovation in Rail Security Surveillance Analytics, Phase 2

Competition Code: 2006_NETWORKRAIL_SBRI_TRANS_SECURITY_PHASE2

Total available funding is £500k + VAT (£600k)

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Manufacturing Technology Centre	DETER phase 2 - crowd behaviour and object detection for Railway station security	£300,000	£300,000

Note: you can see all Innovate UK-funded projects here: <https://www.gov.uk/government/publications/innovate-uk-funded-projects>

Use the Competition Code given above to search for this competition's results

Project description - provided by applicants

The MTC has partnered with One Big Circle, a Bristol-based SME, to develop an intelligent security surveillance system for Network Rail. The two partners have delivered an application capable of detecting undesirable behaviours such as: violence, loitering, people running in groups, falling of escalators, etc. which can make railway stations a safer environment, helping to alert security services sooner, get to people in need quicker and help keep the public safe whilst making a security operator's job easier and more fulfilling.

In this second phase of the project, this application will be deployed in London Bridge station to test its capabilities in a live environment and optimise its performance.

Note: you can see all Innovate UK-funded projects here: <https://www.gov.uk/government/publications/innovate-uk-funded-projects>

Use the Competition Code given above to search for this competition's results