Results of competition: Enhancing customer experience in rail travel

Competition code: 1503\_CRD2\_TRANS\_AIR3

Total available funding for this competition was £6million from Innovate UK & Rail Safety and Standards Board (RSSB)

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
Assist-Mi Ltd Integrate Systems Engineering Ltd Cubic Transportation Systems Ltd Grand Central Railway Chester-le-Track	Spontaneous Mobile Accessible Rail Travel (SMART)	£458,700	£260,632

#### Project description - provided by applicants

SMART is led by assist-Mi, a Disabled Person's User Led Organisation (DPULO) developing an innovative smart-phone app & service provider's administration platform to help disabled passengers have an improved travel experience using the rail network. Currently, disabled travellers requiring assistance need to book >24 hours in advance - even then assistance is often not provided; a potential breach of the Equality Act 2010, a legal driver for improved customer experience. In response to this urgent industry need, this project aims to produce a demonstrator system for a combined ticket, assistance booking & delivery process, integrated with current rail systems. This will allow passengers to personalise data, send & receive information about specific needs in advance & in real-time. It can then be used by rail staff providing assistance to anticipate & plan for arrival, track passengers, routes & requirements, & remember details for subsequent travel, thereby improving resource efficiency for rail industry service providers. As a platform technology it can also be expanded to include other user groups & modes of transport to maximise commercial impact.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Cisco Systems Ltd  Level 3 Communications UK Limited  CGI IT UK Ltd  Wittos Ltd	SWIFT - Superfast Wi-Fi In- carriage for Future Travel	£1,969,375	£1,006,633

#### Project description - provided by applicants

SWIFT will use high-speed in-carriage Wi-Fi to improve the passenger experience, enhance commercial opportunities and improve train management capabilities. Wi-Fi on trains is currently delivered using bonded mobile solutions. This is essentially providing Internet access to whole trains via a handful of tethered smartphones. Improving capacity in-carriage requires trackside Wi-Fi backhaul, which relies on advanced service management, with session handover at 2ms. This has been demonstrated in a lab but not in a real-life environment. SWIFT will demonstrate this technology on UK rail, advancing the state-of-the-art. Furthermore, Wi-Fi is moving beyond a pure Internet access model to value-added services based on location and presence-awareness with Big Data analytics. These types of services are seen increasingly in the retail sector, but have not as yet reached on-train Wi-Fi. SWIFT will bring this innovation to the UK rail sector through its application development and SME Open Innovation competition. It will expose new businesses with creative, technical, and user experience capabilities to the UK rail sector, enhancing the customer experience in rail travel.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
London Underground Ltd Us Two TM Placr Ltd	Accelerate: Integrating Passenger Intelligence in Smart Rail Systems	£964,079	£531,869

#### Project description - provided by applicants

The project will develop a customer facing UI solution called "Accelerate" that will utilise the high density of passenger mobile devices and the observational powers of their owners on the LU rail network. The vision is use a range of actively and passively collected data to enable 2-way interactions between train passengers and TOC's maintenance systems using privacy best practices. The dialogue enabled will allow reporting of maintenance issues as they are spotted and instant feedback on resolution progress. The project will enable future TOC operating efficiencies to be realised (proving long term commercial viability) and added value to SME existing transport product offerings. The mobile solution will captures and analyse customer motion and future health data readings to help network performance and maintenance activities with previously-unavailable live data. There will also be new ultra-personalised travel recommendations to increase customer satisfaction and new commercial products that arise from this motion source data.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
ManagePlaces Limited University of Surrey Pervasive Intelligence Ltd London Underground Ltd Monkey Mischief Ltd Igeolise Limited	Travel Guardian - enhancing customer experience in rail travel with an innovative human-centered system	£309,123	£207,941

#### Project description - provided by applicants

When you board a train today it is noticeable that travellers are occupied with their connected devices in some way. What if their interaction included instant, useful and personalised travel information about their journey, whilst helping the travel operator to gain valuable personalised feedback data at the same time?

In this project a unique platform will be designed, created and tested that helps a user to customise their travel experience based on large-scale data analysis of real-time information from data feeds, end user community contribution, transport systems and sensors.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
PA Consulting Services Ltd  Milne Research Ltd  IXC UK Ltd  Abellio UK Ltd  London Underground  Network Rail  Institute of Rail Research (University of Hudden	Enhancing Customer Experience in Rail through Engaging Customers in Innovation	£1,701,479	£895,442

#### Project description - provided by applicants

Customer experience is enhanced it two ways, either improving services or resolving problems well. Either case cannot be achieved without engaging customers in innovation. However, for each customer-facing organisation (CFO) the cost and risks of building the necessary IT innovation infrastructure, individually, are considerable barriers. Worse still, such fragmentation is confusing for customers. The project will address these challenges by developing a single UK-wide innovation infrastructure seamlessly connecting customers to any CFO and their supply chain. The project will pilot the infrastructure on a range of CFO projects such as addressing the needs of the visually impaired passenger, better "wayfinding" at stations/platforms, reduction of disruption due to suicide attempts, innovative group ticketing e.g. families, school outings. They also want to develop customer experience enablers and digital assets including social media analysis, journey mapping, digital customer panels, extracting more insights from passenger surveys all of which will allow the industry to achieve a step-change in its ability to improve customer experience through innovation.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Samsung Data Systems Europe  Blackbox Company Fujitsu Abellio Transport Design Consultancy Ltd	Single truth' Customer Information Services	£1,501,941	£798,693

#### Project description - provided by applicants

The project will develop a cloud-based information management solution that will provide passengers with a 'Single Truth' of data across on-platform customer information displays and mobile devices. It will provide passengers with more details about their journey including predicted train capacity, timetable information and variations, delays, train facilities and journey planning options to help them make informed choices and have a better experience whilst travelling the UK rail network. The project will overcome existing challenges to data availability and integration from multiple sources. Building on learning from airports and Blackbox Company DCIS (digital customer information screen) development with Abellio, it will develop & demonstrate a proof-of-concept version of the 'Single Truth' solution. This will be used to assess benefits to station operators, evaluate scalability & commercial viability, and establish next steps to the development of a full commercial solution. The project is led by Samsung Data Systems Europe, supported by Fujitsu and SMEs Blackbox Company & TDC. Abellio will provide the use case (Darwin data streams, locations for pilots and assessments).

Participant organisation names	Project title	Proposed project costs	Proposed project grant
TruckTrain Brokerage Limited (trading as FreightArranger) John G Russell (Transport) Limited Asda Stores Limited Zim UK Limited Highland and Islands Transport Partnership Unilever UK Central Resources Limited University of Hull	FreightArranger Applications for Smooth Transition to Rail (FASTRAIL)	£827,721	£510,463

#### Project description - provided by applicants

The FASTRAIL Project will help more businesses to use rail freight and benefit from lower cost, carbon emissions and road congestion. This will be achieved by facilitating container hire (an essential ingredient to moving freight by rail) so that customers can access a container, a train and any necessary road movement in a single transaction. This will be made available both within the UK and through the Channel Tunnel. Web-based backhaul opportunities for rail freight will be enabled for the first time, helping rail compete in service quality with its road competitors, increasing income and profit for the rail industry while saving CO2 and road congestion. The outcomes will be delivered by extending FreightArranger's existing digital capability as an intermodal freight platform.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Unipart Rail Limited	Customer Loyalty and Dynamic	£1,997,856	£1,210,815
TrainFX Limited	Seat Reservation System (CLoSeR)		
Loyalty Prime Limited	(CLOSER)		
First Greater Western Limited			
The University of Warwick			
Cranfield University			

#### Project description - provided by applicants

The project seeks to develop a system that will personalise the relationship between the passenger and the train operator before, during and after travel. A combination of in-seat instrumentation, mobile applications and back office systems integrated with a customer loyalty platform, will enable a customer's experience to be substantially enhanced through the delivery of individualised information, services and rewards by the train operator to the benefit of rail travellers. The project will benefit the train operator by enabling operating efficiencies and associated cost savings, creating a foundation upon which an almost endless range of opportunities for personalised passenger communication and engagement can be built.