# RTIG INFORM

## improving public transport through technology

## What's on

The calendar below shows key events over the next few months, from RTIG and our associates. For further details of RTIG events please contact secretariat@rtig.org.uk

### Webinars

| | |
|---|---|
| 17 May 2023, | Using Open Data to Make a Difference |

### Workshops

| | |
|---|---|
| 20 June 2023, | Enhancing the Off Bus Experience, London |

For booking details see the website.

### Working Groups

| | |
|---|---|
| 11 May 2023 | CMS to Display Protocol |

CCTV Technology & Best Practice
Procurement of Software as a Service

### RTIG Board
1 June 2023, Virtual

### PTIC
8 June 2023, Virtual

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Towards Net Zero Carbon
Enhancing the Off Bus Experience
Using Open Data to Make a Difference
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Invoicing

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Revamped TTF Data Working Group details plans for the rest of 2023
Manual for Smart Streets launched
RNIB Inclusive Journey Report
Study from Bus Users UK examines the accessibility of bus apps in Wales

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# N E W S & E V E N T S

## Newsletter Frequency and Email Alerts

The newsletters are produced on a monthly cycle.

They will be posted on the RTIG website and emailed out to the newsletter contact list.

If you think a colleague or contact would benefit from receiving the RTIG newsletter then please ask them to fill out the form on the website or use the QR Code.

## RTIG on Twitter

RTIG is now on twitter as @RtigInform

https://twitter.com/RtigInform

## Photo Library

To help liven up RTIG printed and digital outputs we are interested in receiving any images of public transport information real time or otherwise that you would be happy for us to use.

We will of course credit the appropriate source if published.

If you have any material, you would be able to let us have access to please contact Tim tim.rivett@rtig.org.uk

## Working Groups

If anyone wants to become involved in any of the work packages in the business plan then please feel free to discuss or commit by getting in contact with Tim tim.rivett@rtig.org.uk .

# NEWS & EVENTS

## Hearing Loops

During the pandemic, bus operators introduced Perspex screens between the driver and passenger to help provide protection from COVID-19. This barrier increased the challenge for passengers and drivers who have hearing problems.

The use of audio induction loops (hearing aid loops) and other solutions will help to alleviate some of the resultant problems.

The requirement will form part of the future vehicle requirements as seen in the new zero-emission buses scheme.

We will be producing an advice note for operators.
If you want to be involved in the group creating this then please let us know.

## CCTV Technology & Best Practice

In the 15 years since RTIG last produced guidance on CCTV there have been many changes in the technology available and its capabilities.

We are convening a working group to create updated advice on CCTV. We current expect this to cover different camera and recording technologies, and good practice advice on management of images, installation and maintenance.

If you want to be involved in the working group exploring this then please let us know. To get involved in this group please get in touch tim.rivett@rtig.org.uk

# N E W S & E V E N T S

## Procurement of Software as a Service



With an increasing move by software suppliers to supply services on a Software as a Service (SaaS) basis, the approach to procurement needs to change to reflect this shift.

Traditional procurement and contract arrangements need to be updated to reflect the requirements and expectations of SaaS.

We have convened a working group to create guidance on how to better procure SaaS systems.

We've had our first meeting and ideas for the report are being developed.

If you want to be involved in the working group exploring this then please let us know. To get involved in this group please get in touch tim.rivett@rtig.org.uk

## Towards Net Zero Carbon

The UK government has introduced ambitious goals for the UK to become net-zero carbon by 2050 and transport is the largest source of carbon dioxide ($CO_2$) emissions in the UK - damaging both the environment and public health.



In addition, the UK government's recent De-Carbonising Transport report outlines a strategy for reducing overall car use, promoting the "natural first choice" to be public transport and emissions-free modes of travel like walking and cycling.

**NEWS & EVENTS**

We all need to address the climate crisis and RTIG is reviewing its activities to take the necessary steps to ensure our own climate impact is reduced; and to assist with and promote, the actions public transport takes to reduce its carbon footprint.

The report that is underway on the Environmental Impact of Displays is the first piece of work.

We want to know what we should do next?
How can we help you and your organisations better understand your impacts?
How can we help you reduce your impact?

Please let us know what we can do to help and what you want us to work on.

## NEXT FACE TO FACE EVENT

### Enhancing the Off Bus Experience

Our next face to face event will be on Tuesday 20 June 2023 at the Transport for London office in North Greenwich.

How can we encourage more people to use buses? how can make their journey to the bus stop and their waiting experience more attractive?

At this event we will explore what passengers want and need from their journey to and from public transport, what information they need, what wayfinding is needed and what the facilities at stop should be to make public transport accessible and attractive to everyone.

Book your place at:
https://www.eventbrite.co.uk/e/604950522297

Please get in touch with tim.rivett@rtig.org.uk if you would like a speaking slot.

# N E W S & E V E N T S

## Upcoming Webinars

## Using Open Data to Make a Difference



There has been a sudden surge in data about transport being published and a new DfT Data Strategy.

It is easier than ever to access public transport data. What data sets are available now, what is expected and how could they be used?

How are data consumers already using transport open data ?

We will, in this webinar, provide you with information to help you get started with open data and provide some examples of how open data is already being used.

Join us on Wednesday 18 May at 13:00

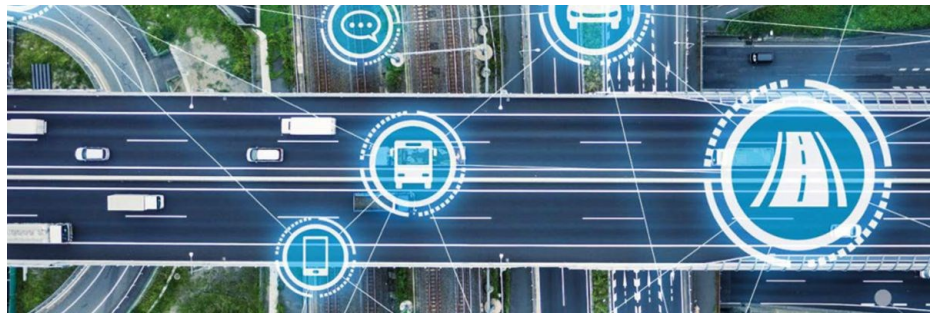https://www.eventbrite.co.uk/e/using-open-data-to-make-a-difference-tickets-607300511177

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# N E W S   &   E V E N T S

## Past Webinars

All our previous webinars have been recorded and available on our YouTube channel:

https://www.rtig.org.uk/youtube

## Introduction to the Transport Data Strategy

The Department for Transport recently published its Transport Data Strategy.

On Tuesday 18 April 2023 at 13:00 we have a webinar on the strategy.

This webinar will run through the key points for public transport contained in the strategy and the linked documents published at the same time.

We will then discuss how RTIG should support the strategy and what you need to help you work with it.

https://www.eventbrite.co.uk/e/introduction-to-the-transport-data-strategy-tickets-602092674397

## Invoicing

# N E W S  &  E V E N T S

It is the time of year when memberships are due, Dave Rawding is in the process of getting in touch with members to make sure that everything is in order when we send the invoices.

This year because of the changes to the legal structures its going to be a bit different.

As Merseytravel previously undertook all the banking and accounting services, we have had to set up a new bank account and will shortly be procuring accountancy support.

RTIG Inform Ltd is a new company, and therefore legally we are a new supplier to your organisation.

It is vital that where your organisation has an existing supplier agreement with the old entity and all its financial details, that this is updated as soon as possible.

If you are able to amend your records without us completing a new supplier form, the new company and banking details will be emailed to you.

If, however, a new supplier form is required then please submit your form for completion to dave.rawding@rtig.org.uk

**D f T   N E W S**

## NaPTAN Public Meetings schedule

NaPTAN will have meetings about twice every month – with sessions that are focussed on Bus Operators as well:

- 16th May 2pm to 4pm NaPTAN/SMS Codes – How do we use them
- 18th May 10am to 12pm Bus Operators – How do you use NaPTAN/SMS
- 13th June 2pm to 4pm – Data Retention Policy
- 26th June 10am -12pm – Data Retention Policy
- 11th July – 2pm to 4pm – TBC
- 25th July 10am -12pm – TBC
- 08th August– 2pm to 4pm – TBC
- 22nd August 10am -12pm – TBC

Topics to come include; HAR/FLX/DRT and how to code them?, "What is Train and what is a Tram?", "What's a Taxi and What's a Shared Taxi?", Why Look at CSV not XML – can we make data interesting! – Looks out for these meetings to come

## NaPTAN/SMS Codes – How do we use them

Public Meetings:
Tue, 16 May 2023 14:00 – 16:00
And
Thu, 18 May 2023 10:00 – 12:00

Lets get into how we interpret and use the different codes – ATCO, NaPTAN, SMS and QR codes – and how we think these help Beryl get a bus
There are four types of codes we know about which are used to identify a Bus Stop. We want to dive a bit deeper into how you are using these.
EventBrite link to sign up:
Tuesday: https://www.eventbrite.co.uk/e/the-codes-we-use-atconaptansmsqr-and-how-tickets-624431640847
Thursday: https://www.eventbrite.co.uk/e/bus-operators-the-codes-we-use-atconaptansmsqr-and-how-tickets-624436044017

**D f T**

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## Bus Centre of Excellence

RTIG attended the launch of the Bus Centre of Excellence on 20th April.
Its mission statement is:

"….raise capability and share best practice among all those involved in the delivery of better bus services and infrastructure. We aim to help train a new generation of bus professionals ready to deliver excellence, seizing opportunities and meeting challenges now and in the future. We will tell the world what buses have to offer:
raising awareness amongst stakeholders and decision-makers of excellent buses' role in a net zero transport system."

The BCoE is being hosted by the Chartered Institution for Highways and Transportation (CIHT) with governance provided by a project board and advisory group. The advisory group is chaired by Leon Daniels and benefits from a range of key stakeholders to provide guidance and support, this includes RTIG who have been invited to join the advisory group.



Welcome to the
Bus Centre of Excellence

The centre plans to provide:

- A virtual centre for the whole of the bus sector - LAs, operators, passenger groups,
- manufacturers, consultants etc
- Developing 'Generation Bus'- a new networked group of professionals delivering bus sector partnership excellence.
- Curating a programme of practical learning courses, events, seminars, networking opportunities.
- A dedicated website resource for learning and information.
- Generating new ideas/guiding the sector towards responding to evolving customer and societal needs, and the opportunities (including new technology) to serve them.

**I N
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## CONNECTED DIGITAL TWINS SUMMIT 2023

**Announcing the first Connected Digital Twins Summit on Thursday 22 June 2023, 09:00 – 19:00**

The Digital Twin Hub and Connected Places Catapult are hosting a one-day interactive event to showcase the latest cross-industry business applications for connected digital twins.

We will live-stream the event from our Urban Innovation Centre in London, and features VIP keynotes, a panel discussion, the Gemini Call live, working groups, demo's and showcase of digital twin innovation from the Catapult Network.

The Summit brings together policy makers, asset owners, solution providers, academics and investors to explore the business potential of connected digital twins and to:

- Learn about the latest outputs and tools to enable collaboration across industries
- Explore applications of digital twin technology across multiple sectors
- Share views on overcoming barriers to connecting digital twins
- Discover how to assess ROI and empower business decisions
- Network with Digital Twin Hub community members to spark new ideas and business opportunities.

This event will also introduce the DfT Transport Research and Innovation Board Programme and present a showcase of SME-led use cases for digital twins.

**What is the Digital Twin Hub Community?**

# IN OTHER NEWS

An industry-focused platform, enabling its 3500+ members to make more informed business decisions on digital twin applications. Community members gain access to new tools, knowledge, events and networking opportunities. Find us at **www.digitaltwinhub.co.uk**

## Revamped TTF Data Working Group details plans for the rest of 2023

The Transport Technology Forum Conference in Leeds has heard plans for the industry to be supported to make best use of data in its decision making.

Its objectives will be to provide an opportunity for local authorities to raise data issues and help DfT to develop the Transport Data Strategy, facilitate communication and collaboration among local authorities, transport data experts, suppliers and relevant stakeholders, promote knowledge sharing and best and showcase use case experiences and approaches.

The Working Group will focus on supporting knowledge and information sharing and will aim to do this by establishing a group that will facilitate support and sharing experiences.

The Transport Data Working Group will host up to four expert-led webinars or workshops per year covering a range of topics, including data collection, analysis, visualisation, and application. These events will also showcase use case experiences, highlighting how different local authorities have successfully implemented data-driven transport initiatives.

The group expects to achieve enhanced collaboration and resource sharing, improved understanding and awareness of the potential of transport, greater understanding of data priorities and guidance, insight for the DfT, increased adoption of data-driven decision-making and encouragement of innovative and sustainable transport solutions based on shared knowledge and experiences.

RTIG will of course be playing a role in this group to ensure that the public transport voice is heard.

**I N  O T H E R  N E W S**

## Manual for Smart Streets launched



A new guide to provide guidance to support local authorities in implementing technology that supports traffic management and the operation of streets has been launched at the Transport Technology Forum Conference in Leeds.

The Manual for Smart Streets – produced by the TTF and Connected Places Catapult includes use cases on how traffic signals will develop to connect to vehicles into the future and how new sources of data can link into implementing other services in the local authority.  It also provides recommendations around cyber security.

https://ttf.uk.net/manual-for-smart-streets/

A video summarising the manual has been produced:
https://ttf.uk.net/manual-for-smart-streets/introduction/overview/

## RNIB Inclusive Journey Report

RNIB have published a new report
Inclusive Journeys: Improving the accessibility of public transport for people with sight loss.

**IN OTHER NEWS**

There are a range of barriers that people with sight loss face, and we are calling for transport providers to make their services more accessible to enable blind and partially sighted people to travel independently and live a fulfilled life. We also believe that accessible design is better for everyone – allowing an improved experience for all customers.

https://www.rnib.org.uk/professionals/health-social-care-education-professionals/knowledge-and-research-hub/reports-and-insight/inclusive-journeys-improving-the-accessibility-of-public-transport-for-people-with-sight-loss/

## Study from Bus Users UK examines the accessibility of bus apps in Wales

Bus Users UK has been investigating apps for local bus services in Wales to find out how accessible they are to passengers. Technology is increasingly being used to help passengers plan and make their journeys and under the Equalities Act 2010, mobile apps must be accessible and provide all users with equal access to services.

The team from Bus Users in Wales examined apps from Arriva Wales, First Cymru, Stagecoach in South Wales, Cardiff Bus, Newport Bus and Traws Cymru. Each app was tested for design and ease of use around ticketing, journey planning, timetable search, maps, user accounts and operating systems.

Cardiff Bus, Newport Bus and Traws Cymru achieved the highest overall accessibility scores of 99%, followed by Arriva Wales with 91%, First Cymru with 84% and Stagecoach in South Wales with 75%. There was room for improvement with all six apps, however, with the team concluding that assistive technologies would greatly enhance the user experience and improve accessibility for all passengers.

https://bususers.org/wales/study-from-bus-users-uk-examines-the-accessibility-of-bus-apps-in-wales/

# M E M B E R S   N E W S

## Keeping in touch with you

As well as keeping you up to date with all the latest news from RTIG, this newsletter aims to provide a community forum for members. We therefore offer RTIG members the opportunity to submit a short article here on any issue or innovation that might be of interest to the community.

There are two ways of becoming involved in this:

▶  Email pieces to us when you have them – press release format is fine, and pictures are welcome.

Nominate a marketing contact who will be included in the editor's monthly process of 'chivvying'.



A Navaho Transport systems destination blind on the ADL Enviro 400 EV

# MEMBERS NEWS

## Swiftly partnering with transit agencies to evolve the GTFS-rt standard
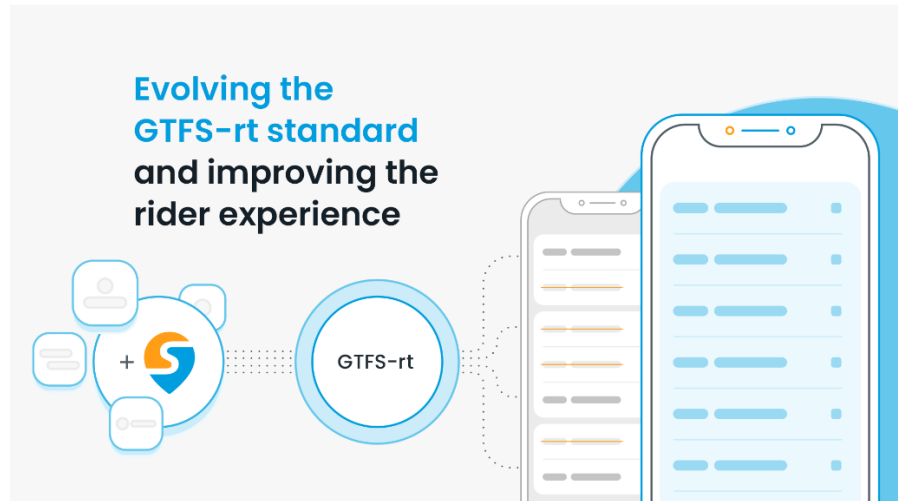


Transit agencies today are operating in an increasingly connected world. Passengers expect to receive real-time information on the device and app of their choosing, and agency staff members want collaborative, cloud-native software tools to efficiently do their jobs.

Data standards are the digital bridges empowering transit agencies to share data seamlessly across internal and third-party software and devices.

GTFS-rt has arrived as the definitive data standard for transit data - where a bus is in real time, where it is going, and when it will get there. Transit agencies use GTFS-rt today to standardize data across consumer-facing applications, internal staff software, on-vehicle hardware, and with third-party partners.

Open data standards like GTFS-rt are constantly evolving. It requires collaboration and sustained investment from the transit community for data standards to evolve with changing industry needs and technological advancements. This includes partnership between transit agencies and solution providers, who can lend technical expertise to address specific agency pain points.

Swiftly has consistently been involved with the development of data standards, dating back to our co-founder Mike Smith's collaboration on the original GTFS standard. Working with over 135 transit agencies to generate GTFS-rt feeds for agency and

third-party app consumption, we witness firsthand usability challenges and opportunities for improvement. Agencies will frequently approach Swiftly with proposed improvements to the GTFS-rt standard, and we are thrilled to contribute our resources for solutions that benefit all transit agencies using the standard.

https://www.goswift.ly/blog/gtfs-rt-deleted-service-update?utm_content=244940209

## Ticketer next-gen solution for TfGM bus franchises

Transport for Greater Manchester (TfGM) has signed a contract with Ticketer that will see the supplier's next generation ticketing and real-time information solution rolled out on franchised bus services in the city region, commencing in September.

It will connect to the Ticketer Smart Gateway for vehicle communications. That will deliver what is described as "an ecosystem of connectivity for on-bus IT infrastructure" and allow franchised operators to reduce the amount of on-bus hardware and SIM cards. In the case of electric vehicles, it will also permit enhanced monitoring of energy consumption.

Ticketer says that the next generation ticket machines have a more powerful processor, more memory and are tablet-based, running on Android. The Smart Gateway's improved GPS enhances tracking and vehicle location capability, which TfGM adds will improve real-time information provided to customers via journey planners and displays at interchanges.

The supplier remarks that the upgraded real-time information system also enables "advanced disruption management, corridor management, on-bus inventory management and advanced tracking among many other features to improve operator efficiency."

The ticket machines will be accompanied by standalone tap-off readers. Operators and TfGM will receive tap-off data, which through use of GPS location reports will give a high degree of understanding of customer origins and destinations.

https://www.route-one.net/news/ticketer-next-gen-solution-for-tfgm-bus-franchises/

## FIRST BUS AND TICKETER COMPLETE UK WIDE ROLLOUT OF TAP ON / TAP OFF TICKETING TECHNOLOGY ACROSS ENTIRE FLEET

First Bus has completed a UK wide rollout of Tap On / Tap Off (TOTO) ticketing technology across its entire fleet of more than 4000 buses, in collaboration with partners Ticketer and Littlepay.



First Bus is the first major UK bus operator to achieve this milestone thanks to an investment of around £1 million, alongside further funding from several local authority partners which has helped to accelerate the rollout.

This technology enables customers to travel on buses as much as they please, whilst ensuring they'll never pay more than the daily or weekly cap.

This distance-based charging structure makes pricing fairer for customers allowing more personalisation, so they're charged based on their individual travel requirements. TOTO not only provides frictionless travel but will also help to reduce dwell times for passengers with speedy boarding that doesn't require them to speak to the driver.

This technology is the first step in next-generation ticketing and allows First Bus to get more data than ever about its customers' travel habits and demand for services. This enables the company to make data-led decisions in the future that are based around its customers' needs. Access to enhanced data around travel patterns and customer behaviours can also inform fleet management and improve operational efficiencies.

# MEMBERS NEWS

## RISE OF THE MACHINES
## How Advanced Computing will Drive Bus Ridership Recovery

Machine Learning is an increasingly common aspect of modern life. Using the power of modern computing, it enables vast volumes of data to be harnessed, delivering valuable insight and improvements to everyday products or services, including fraud detection in online banking and tailored recommendations within streaming, shopping and social media platforms.

Given its power, there is little doubt that Machine Learning will play a transformative role in shaping the public transport networks of tomorrow. Indeed, there is an expectation that it will pave the way to an entire new generation of bus prediction algorithms, ensuring truly accurate passenger information whatever the level of disruption on the roads.

Developments in this area have in fact already begun: We at Trapeze are currently working on a project in which Machine Learning is being used to improve the reliability of public transport information systems.

https://trapezegroup.co.uk/article/rise-of-the-machines/

## Wolverhampton Bus Station is now one of the UK's most accessible transport hubs

Wolverhampton joins New York and Barcelona in testing the latest, inclusive technology.
Transport for West Midlands (TfWM) has unveiled new smart codes at Wolverhampton Bus Station, giving passengers immediate access to wayfinding details and live travel information on their mobile phones.

The six-month trial is part of a strategy by TfWM, which is part of the West Midlands Combined Authority (WMCA), to improve accessibility, create a fairer society and tackle the climate emergency.

"We are looking forward to working with NaviLens to see how these new smart codes can further improve accessibility for everyone using the transport network."

**MEMBERS NEWS**

The NaviLens codes are implemented to make the bus station smarter and more inclusive. Using free apps (NaviLens and NaviLens Go) and the camara on a phone, codes are detected automatically, and the details presented to a user on screen or read aloud.

For blind and partially sighted passengers, NaviLens codes present an accessible alternative to traditional signage providing context and ability to independently navigate the station. Sighted passengers can equally benefit from using NaviLens codes to navigate the station, including automatically translating station information in more than 30 languages.

At Wolverhampton the codes are installed at floor level decision points along the tactile path, providing timely and relevant wayfinding information. Codes are also positioned on walls at all points of interest providing context and improved situational awareness. This combination enables personalised directions around the station, details of how to access and use amenities together with real time departure information for every bay and bus service.

https://journeo.com/resources/wolverhampton-bus-station-is-now-one-of-the-uks-most-accessible-transport-hubs/

**ADMIN**

## Management Committee Members

The Management Committee for the year 2022-2024 was appointed at the EGM on 19 January 2023. Membership is currently as follows:

Chair: Tony Brown

Members: Sonya Sparks (Essex), Graham Davies (WYCA), Russell Gard (React Accessibility), Darren Maher (21st Century), Tony Brown (Atkins), George Connell (Stagecoach), Simon Gold (Reading Buses), Triumph Okojie (DfT)

## Contact us

Best by email: secretariat@rtig.org.uk.

https://www.linkedin.com/groups/8557065

## Next issue

Issue 166 – Thursday 1st June 2023.

Please send all contributions to secretariat@rtig.org.uk at any time up to Friday 26th May 2023.

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