

Non-Members Edition

February 2022 – Issue 150

## 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](mailto:secretariat@rtig.org.uk)

### RTiG Virtual Workshops

- 3 Feb 2022, Passenger Counting Report Launch  
24 Feb 2022 Low Bridge Strikes

### Physical Workshops

- 23 March 2022 Innovation in Displays, Birmingham

More events will be announced as the month progresses. For booking details see the website.

### Working Groups

Vehicle Metrics

### AGM

- 23 March 2022, Birmingham

### Committee

- 23 March 2022, Birmingham

### PTIC

- 3 March 2022, Virtual

### Bus Open Data Service Events

the full list of regularly updated events here:  
<https://www.eventbrite.co.uk/o/bus-open-data-service-31561104991>

## In this issue:

### News and events: update on RTiG work

[Vehicle Metrics Working Group](#)  
[Towards Net Zero Carbon](#)  
[Managing Customer Information during Driver Shortages](#)  
[Standard Interface for CMS to RTI Displays](#)  
[Passenger Counting Report Launch](#)  
[Low Bridge Strikes](#)  
[Innovation in Displays](#)  
[2022-23 Business Plan](#)  
[Annual General Meeting 2022](#)

### DfT News

[UK Public Transport Information - SIRI VM & Data Matching](#)  
[Bus Open Data Service Release 1.16](#)  
[Bus Services Act 2017: Enhanced Partnership creation](#)

### In Other News

[3G is on the way out, act now!](#)  
[IT Security Threats to Transport Companies](#)  
[Bus journey simulation to develop public transport predictive algorithms](#)

### Members' news: showcasing innovation

### Admin: useful facts about RTiG

[Committee members](#)  
[Contact us](#)



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# NEWS & EVENTS

## 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](mailto: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](mailto:tim.rivett@rtig.org.uk) .

## 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.

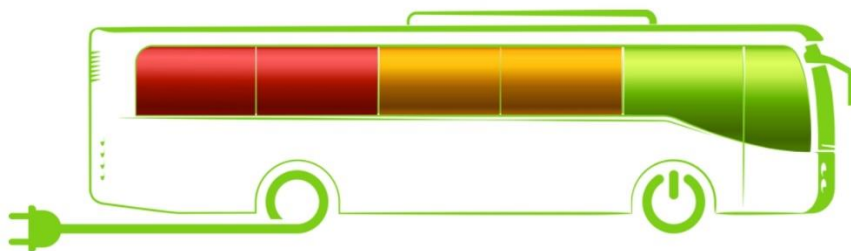


The requirement will form part of the future vehicle requirements as seen in the new zero-emission buses scheme.

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.

## Vehicle Metrics Working Group



With the increase in electric vehicles, there has been discussion in a few forums about a desire to have some common key vehicle metrics to help manage fleets in control rooms and plan charging layovers etc.

There is a need to decide what data is needed on bus and what is acceptable off bus and what the quality and accuracy should be.

This is an area that is of interest to in Europe and there has been recent discussions about the development of a set of data requirement and interface standard that could be used in specifications for Standardisation through CEN and in procurements.

A working group to identify the requirements of operators and authorities is being formed.

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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](mailto: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<sub>2</sub>) 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.

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.

# NEWS & EVENTS

## Webinars

With the inability to physically meet for the foreseeable future we have been running some webinars instead.

All these webinars are being recorded and available on our YouTube channel:

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



## Managing Customer Information during Driver Shortages



We held a working group discussion in January to work out how customer information systems, for example real time systems, can be managed to provide customers with reliable and accurate information during the current driver shortage.

- What information do customers want and need?
- How can operators, authorities and suppliers work together?
- What support is needed to make it as easy as possible?

During the discussion some recommendations were identified:

- It is recommended that printed information is caveated with something like “timetables subject to change, please see online or call traveline for latest information”.
- Authorities are recommended to include suppliers in discussions about deliverables and reporting requirements for Enhanced Partnerships as soon as possible to ensure the requirements can be delivered in a timely manner

Read the write up of the discussion:

<https://www.rtig.org.uk/documents/rtigt050-1>

## Planning Public Transport Networks



As the pandemic rumbles on operators and authorities need to decide what a post covid, green, transport network should look like.

Ensuring the public transport network meets the needs of passengers will be a key component in recovering from Covid and of bus service improvement plans.

Passenger's travel needs and expectations have already changed and will continue to do so with increasing rapidity, how can we stay on top of their changes?

This webinar will explore the latest tools that can be used to review and design transport networks, make more efficient use of resources, and meet changing passenger needs.

We heard from:

- Prospective,
- Basemap,
- EPM, and
- Optibus

View the recording of the event: [https://youtu.be/eEga81\\_20IQ](https://youtu.be/eEga81_20IQ)

## Standard Interface for CMS to RTI Displays

Transport for Wales would like to specify a standard interface between the Content Management System and RTI Displays, that suppliers would need to comply/work with to enable TfW to procure a single CMS that can interface to multiple displays from a number of suppliers.



The standard will specify the minimum capability that is to be expected of all displays supported through the interface (i.e. be able to represent real time vehicle arrival/departure information, text based messages and hold the scheduled timetable for at least that day's services).

The interface will cater for the following:

- Basic text based displays
- Graphical displays - in addition to the minimum capability, also be able to provide additional information such as weather, news feeds, advertising, information videos etc.
- Off grid displays - these will not have ready access to power and may not have significant data bandwidth available to show graphical content.
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The first two parts:

- Part 1 - Architecture
- Part 2 – Core Content Messages

Have been published:

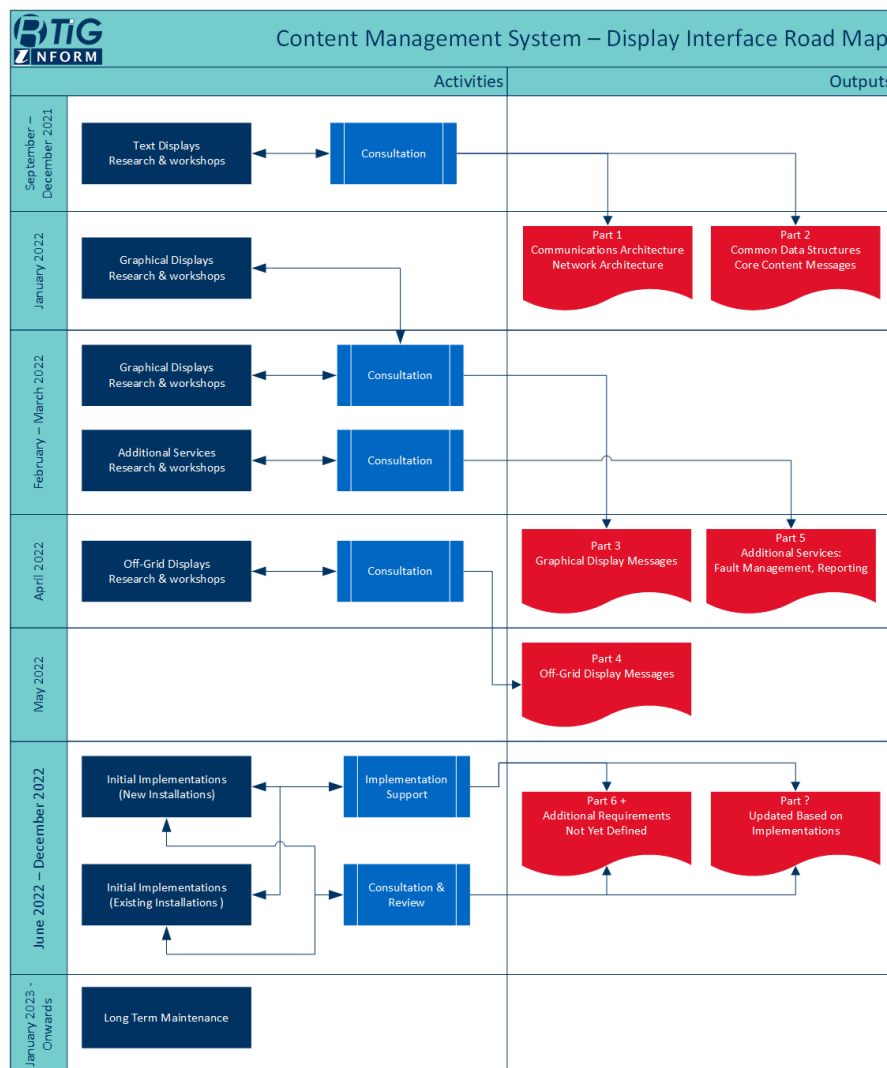
[https://rtig.org.uk/projects/CMS\\_PID\\_Interface](https://rtig.org.uk/projects/CMS_PID_Interface)

Attention now turns to the functions that the graphical display interface should support and what information is required by suppliers of graphical displays to achieve these functions. Should time allow we will progress to fault reporting and management data.



Project documentation and the draft for review can be found at:  
[https://www.rtig.org.uk/projects/CMS\\_PID\\_Interface](https://www.rtig.org.uk/projects/CMS_PID_Interface)

The current roadmap for the standard is as follows:





## Passenger Counting Report Launch



Passenger counting technology has developed significantly over recent years - with a much wider range of technologies used. Greater accuracy and implementation is now standard in some countries, though within the UK there are still few implementations on-bus.

The COVID-19 pandemic has changed how people approach many situations, but none so drastically as how they contend with, and avoid, crowds.

The traditional rush hour crowding on public transport has shifted away from being a slight annoyance and minor inconvenience, into being a personal health and safety concern. While several studies have found no correlation between public transport use and COVID-19 transmission, more effort will be needed to change perceptions and boost confidence and trust.

Sharing occupancy levels on public transport vehicles empowers passengers to make informed decisions about their trips now; and will continue to add value to the passenger experience beyond the pandemic.

Automated Passenger Counting (APC) is not new, having been introduced in the 1970s; but new technologies and techniques have been rapidly emerging in recent years.

Over the course of 2020, significant work was carried out and progress made, by suppliers and bus operators to introduce passenger counting solutions and present the information to passengers.

Passenger counting can be used for a range of different purposes from providing information to customers about the live loading of a vehicle, through to service operation and planning.

This report will help members understand the benefits of passenger counting and some of the potential use cases; and to develop business cases and understand the technology options.

# NEWS & EVENTS

Members can access the report when logged in to the website.

Non-members wanting a copy please get in touch to discuss the options available.

We will review the key elements of the report in a webinar on:  
3 February 12:30 -14:00

<https://www.eventbrite.co.uk/e/passenger-counting-report-launch-tickets-235382022967>

## Low Bridge Strikes



We have published our paper on Low Bridge Strikes. This paper brings together the findings of an RTiG research project carried out in 2021.

Low Bridge Strikes have been a problem for high-sided vehicles such as HGVs and buses for a long time and can be very costly - both in economic and human terms.

There was a focus on HGV bridge strikes around 2010-2012 arising from the huge damage being done to the rail network. Similarly, bus operators have understandably been focussing on the issue in light of the spate of very serious bus bridge strikes in 2020.

The primary function of the research and this report is to raise awareness of the problem in the UK bus industry; and offer some guidance on how bus operators might prevent and ultimately - eradicate the problem.

The paper is being made publicly available on the website because of the wide safety implications:

<https://www.rtig.org.uk/documents/rtigt044-1>

A webinar to introduce the paper and solutions is being held on 24 February.

## On Bus Audio Visual Display Implementations Report Published



In 2017, through the Bus Services Act, the government introduced powers to require the provision of audible and visible information on local bus services throughout Great Britain.

When enacted, this will require bus operators to equip their vehicles with display screens to provide next stop information and audio systems to announce the information - using both speakers and induction loops.

This document provides advice and guidance on the customer information requirement, different types of displays and audio equipment, installation and maintenance of on bus audio visual equipment to assist operators in identifying the right solution for their operation and how it needs to be managed and maintained.

Because of the importance of this topic to the industry as a whole in the coming years this report is available to members and non-members:

<https://www.rtig.org.uk/documents/rtigt045-1>

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S****Innovation in Displays****Innovations  
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For our return to face-to-face events we will explore the latest innovations in display technology.

In the last couple of years we have seen the launch of many new displays being launched by suppliers, this is an opportunity to hear about the latest innovations and trends and see some of them in real life.

From battery to solar to wind, from LED to TFT and OLED there are new products and innovations available to help keep passengers informed and promote public transport. Which is the right one for your next project?

With the increasing need to reduce our impact on the planet as part of this event we will launch the report on the “Environmental Impact of Displays” produced by one of our recent working groups.

During this event from 13:00 to 14:00 we will hold our AGM. If you are unable to physically attend the event but want to participate in the AGM we aim to stream this section.

Book your place:

<https://www.eventbrite.co.uk/e/innovation-in-displays-tickets-260216052217>

If you would like to display your displays at this event please get in touch with [tim.rivett@rtig.org.uk](mailto:tim.rivett@rtig.org.uk)

## 2022-23 Business Plan



Now we are in the latter part of the 2021/22 business plan year it is time to start to consider what RTiG should be doing for the period from April 2022.

If you have anything that you would like to see RTiG involved in, producing or organising during 2022- 23 then please get in touch with Tim [tim.rivett@rtig.org.uk](mailto:tim.rivett@rtig.org.uk) .

## Annual General Meeting 2022



The AGM will be on Wednesday 23<sup>rd</sup> March 2022 at 13:00 and will either be part of a wider face to face workshop

The AGM will review 2021 and the 2022-23 business plan and elect the committee of the group.

The AGM is open to all Subscribing Members and Affiliate Members of RTiG who have committed to subscribing for FY22-23.

Members have been sent a request for nominations to next years committee. If you are a member and not received this then please let us know [secretariat@rtig.org.uk](mailto:secretariat@rtig.org.uk)

More details will be published nearer the time with agenda and papers being circulated to all member contacts by email.



## UK Public Transport Information - SIRI VM & Data Matching



To achieve customers' expectations and the benefits of real time information it is important that the necessary data is readily available and of good quality to enable easy processing.

The Bus Open Data programme, coming from the Bus Services Act 2017, places a requirement on all bus operators of local bus services across England to openly publish timetables, fares and location data for their registered services. This includes producing SIRI (VM) data containing their vehicles location as open data. While SIRI has been around for many years now, and is a mature standard, there are different ways in which data can be constructed within the standard.

As part of the Bus Open Data Service (BODS) programme, the Department for Transport (DfT) has developed a SIRI (VM) profile to support BODS. The aim of this profile is to specify a consistent use of elements and a consistent way of using SIRI VM that will be used within BODS and which will lead to a higher quality data set and, at the same time, lower the barriers to entry by users new to SIRI.

This profile is set out in the document, which is now published.

[https://www.rtig.org.uk/bods/SIRI\\_VM\\_Data\\_Matching](https://www.rtig.org.uk/bods/SIRI_VM_Data_Matching)

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## Bus Open Data Service Release 1.16

The 1.16 update to BODS that is to be released w/c 14th February contains key updates for both Publishers (Bus Operators, Agents, LTAs), and Consumers

### **Publishers:**

To pass the Timetables validation code will now require the service code field within the timetables data is populated with the registration number in the format: PG9113075:12. Otherwise they will fail and get a validation observation.

Timetable Data will now FAIL VALIDATION if it contains a 'service code' that cannot be mapped to a Registration number from the OTC database. The 'service code' field is used to measure an operators compliance per registered service and MUST contain the relevant OTC Registration number.

If your data does go into an 'errored state', download the errored validation report and make the necessary changes to your timetables. If you are unclear how to resolves any validation issues, send your data supplier your validation report and ask for guidance as to how to solve the problem in their specific system.

To help with this change there are a series of demo's on 7 February:

[BODS RELEASE 1.16 DEMO - CONSUMER FOCUSED  
RELEASE - Monday 7th February 15:00-15:30](#)

[BODS RELEASE 1.16 DEMO - BUS OPERATOR UPDATES -  
Monday 7th February 15:30-16:00](#)

[BODS RELEASE 1.16 DEMO - OMNI & TICKETER TIMEABLES  
VALIDATION DROP IN - Monday 7th February 16:00-16:30](#)

## Bus Services Act 2017: Enhanced Partnership creation

The Department for Transport has published guidance on creating an Enhanced Partnership, including an example format and structure:

<https://www.gov.uk/government/publications/bus-services-act-2017-enhanced-partnership-creation>



# D f T N E W S

## Update to Inclusive Mobility Guide

The updated document **Inclusive Mobility. A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure** supersedes Inclusive Mobility first published by the Department for Transport in 2002. It does not change the principles of the original guidance document, which explained the background and how it was originally developed.

This update includes responses to some recommendations of research carried out as a commitment in the Department for Transport's Inclusive Transport Strategy of 2018, and following engagement with disabled people and representative groups, and with practitioners

This guidance describes features that need to be considered in the provision of an inclusive environment and issues related to disabling barriers, the use of technology, maintenance, awareness of the needs of disabled people, and engagement.

<https://www.gov.uk/government/publications/inclusive-mobility-making-transport-accessible-for-passengers-and-pedestrians>

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

## 3G is on the way out, act now!

This is something we have covered a few times over the last couple of years, when something is a few years away its easy to put it to the back of the pile of things that need doing. Its now months away and so needs to get to the top of the pile pretty quick with operators announcing switch off dates.

If you have got 3G connected devices and or SIMs in your displays and or vehicles then you need to be working out what you need to do to upgrade them or replace them now.

Recent press coverage includes:

**Prepare now for 3G sunset period, Ticketer advises**

<https://www.route-one.net/features/prepare-now-for-3g-sunset-period-ticketer-advises/>

**Vodafone to switch off UK 3G network by end of 2023**

<https://www.theguardian.com/technology/2022/jan/25/vodafone-to-switch-off-uk-3g-network-by-end-of-2023>

## IT Security Threats to Transport Companies

You may have seen, if you are members, coverage in recent newsletters about ransomware and other forms of IT security attacks on transport organisations mainly in the US.

In a recent alert from the FBI they warn of a cybercrime group that has been mailing out USB thumb drives in the hope that recipients will plug them into their PCs and install ransomware on their networks. These were targeted at US transport companies, including bus operators late last year.

There is no indication that they have started to target UK based organisations but in these days of increased tensions across the world everyone needs to be paying more attention to their IT security and be alert to emails and USB devices from unknown sources.

# IN OTHER NEWS

## Bus journey simulation to develop public transport predictive algorithms

Encouraging the use of public transport is essential to combat congestion and pollution in an urban environment. To achieve this, the reliability of arrival time prediction should be improved as this is one area of improvement frequently requested by passengers. The development of accurate predictive algorithms requires good quality data, which is often not available.

Dave Hulbert (from Passenger) and two academics from Bournemouth University have demonstrated a method to allow controlled testing of predictive algorithms.

<https://www.sciencedirect.com/science/article/pii/S2666222121000174?via%3Dihub>

# 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 Journeo 28" stretched TFT, double sided, pole mounted unit in Nottingham

## New sustainable bus stop displays deliver real time passenger information at any location

21st Century Passenger Systems, part of Journeo plc, has launched a range of completely off-grid displays that provide passenger information at any bus stop location. Powered by batteries, or a combination of battery and solar cells, the signs can operate for between three and seven years, depending on the model, before any maintenance is required.

The ultra-low-power RTPI displays provide detailed journey information, showing both real time and scheduled data alongside emergency messages, but use e-paper technology to keep power consumption to a minimum. Unlike LCD or LED signage, they do not draw power all the time, just when information is updated.



The new displays not only use considerably less power than traditional TFT or LED displays but are also much more environmentally friendly in their construction; when it reaches the end of its working life, the solar-powered model is almost entirely recyclable.

They can be quickly installed on any existing pole making them a great way to deliver real time passenger information to rural or underserved areas at minimum cost and maximum sustainability. The signs also connect seamlessly to 21st Century's EPI content management system, the RTPI and CMS solution of choice for many of UK's leading local transport authorities.

Russ Singleton, Chief Executive of Journeo plc, commented: "There is a genuine and strong demand for transport networks to make sure that all communities can access real time passenger information, regardless of their location. Indeed, the National Bus Strategy for England identifies the provision of at-stop information

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

as key to giving passengers and potential bus users the confidence to choose public transport time and time again.”

He continued: “We are very proud of these new displays, which give local transport authorities a way to provide accurate travel information whilst minimising their environmental impact. There isn’t anything else available to local transport authorities that provides these levels of flexibility and sustainability, and we see a great future for these solutions.”

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# A D M I N

## Management Committee Members

The Management Committee for the year 2021-2022 was appointed at the AGM on 18 March 2021. Membership is currently as follows:

Chair: Tony Brown

Members: Andrew Wilson (Hants), Graham Davies (WYCA), Russell Gard (React Accessibility), Darren Maher (21<sup>st</sup> Century), Tony Brown (Atkins), George Connell (Stagecoach), Simon Gold (Reading Buses), Meera Nayyar (DfT)

## Contact us

Best by email: [secretariat@rtig.org.uk](mailto:secretariat@rtig.org.uk).

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

## Next issue

Issue 151 – Tuesday 1<sup>st</sup> March 2022.

Please send all contributions to [secretariat@rtig.org.uk](mailto:secretariat@rtig.org.uk) at any time up to Friday 25<sup>th</sup> February 2022.

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