

Non-Members Edition

September 2022 – Issue 157

## 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)

### Physical Workshops

21 Sept 2022 Improving Bus Services Using Data (Birmingham)

### RTIG Virtual Workshops

1 Sept 2022 Digital Twins - What are they?  
12 Sept 2022 ABODS: New Features  
13 Sept 2022 ABODS: Operator & Authority Workshop

For booking details see the website.

### Future Structure & Governance Events

6 September 2022

### Working Groups

5 Sept 2022 CCTV Technology & Best Practice

7 Sept 2022 Procurement of Software as a Service

### Committee

8 September 2022, Virtual

### PTIC

29 September 2022, Virtual

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Web: [www.rtig.org.uk](http://www.rtig.org.uk)

# 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.

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

The first meeting of this group will be 5 September 2022 at 15:00

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

The next meeting of this group will be 7 September at 14:00

**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,

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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.

## 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.

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- 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)

The latest draft of Part 3 on Graphical content is available 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 working groups are reviewing the graphical display.

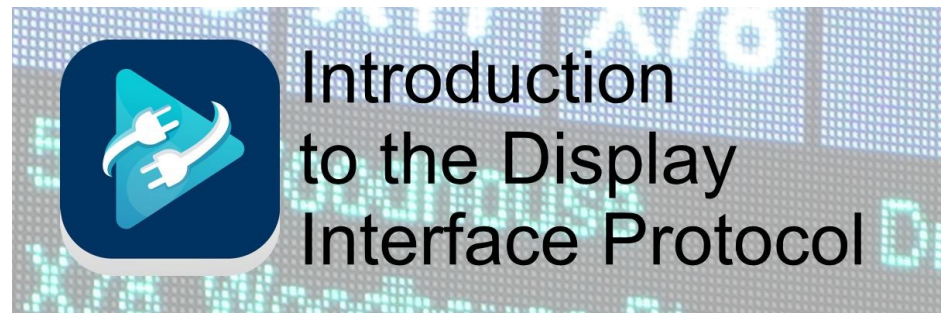
## Past Webinars

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

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



## Introduction to the Display Interface Protocol



Earlier this year we released the first part of a standard for the way that displays communicate with content management systems.

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These first parts have been developed in conjunction with Transport for Wales as part of their Welsh real time system developments.

The standard specifies 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).

In an earlier webinar we introduced MQTT, the underlying technology, in this session we look at the principles behind the standard interface and how it uses MQTT and some architectural considerations if you are planning to use the standard.

<https://youtu.be/JE9Sz8UnQoU>



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## Upcoming Events

### Digital Twins - What are they?



Digital twins are a virtual representation of a physical something which could be as simple as a drill or as complex as a city. The digital twin uses data, data analytics and machine learning to help simulation models that can be updated and changed (real-time) as their physical equivalents change. This allows different scenarios to be explored and tested before implementing them in the physical world.

This webinar will introduce the concept and explore they are already being used and start a conversation about how we can use them in public transport.

Thursday 1 September 13:00

<https://www.eventbrite.co.uk/e/digital-twins-what-are-they-tickets-393146490737>



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S****Improving Bus Services Using Data**

Managing bus services is increasingly complex with changing customer needs and expectations, increasing congestion and the introduction of Bus Partnerships .

Providing quality information to customers and understanding network performance is more important than ever before. The use, and presentation, of data can help ensure routes are as efficient as possible, customers are properly informed and the inevitable operational challenges are managed effectively.

In this day conference you will find out how operators are using data to manage bus services in more efficient ways than previously possible to optimise schedules and live operations.

You will hear about ways data is being used for:

- Reporting and analysis. Monitoring route and network performance, as well as identifying where there are congestion and delay hot spots and future network planning
- Bus priority at traffic lights.
- Information to customers.
- Live operations, allowing operators and traffic management teams to intervene in real time to identify incidents and delays so they can intervene quickly to reduce the impact to customers.

We are holding this event in Birmingham to ensure it is as easily to get to from as many places as possible.

The IBIS Birmingham New Street Conference Centre is located just 5 minutes walk from the main station Birmingham New Street Station.

Wednesday 21 September, 10:30 – 15:45

<https://rtig-improve-bus-services.eventbrite.co.uk/>

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S****Future Structure & Governance Arrangements**

There are proposed changes to the legal structure of RTiG that as a member you need to be aware of.

We have produced a paper, which describes the current legal structures, why the changes are necessary and outlines the proposed changes.

<https://www.rtig.org.uk/system/files/documents/RTIGC073-1.0%20Restructure%20of%20RTIG.pdf>

We are holding two events that will, along with the paper, outline the background to the current legal structures and outlines the proposed changes for your comment.

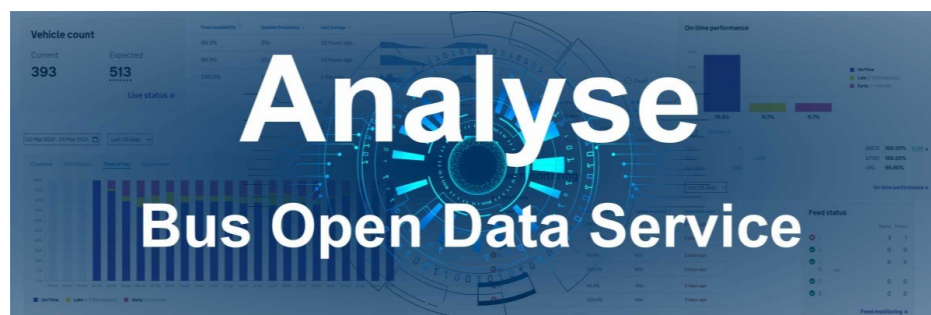
There will be plenty of time for you ask questions at the event or if you don't want to ask them at the events please get in touch with Tim Rivett or any of the committee members.

When changes have been discussed and consensus reached and ready to be progressed, we will need to hold an Extraordinary General Meeting of members to approve the changes.

Two events to present these changes and answer questions are being held on:

- 17 August 13:00  
Recording available at: <https://youtu.be/fkhyXbWbNC4>
- 6 September 12:00  
<https://www.eventbrite.co.uk/e/391791969327>

## Analyse Bus Open Data Workshops



In August 2022 we will be holding workshops that will explore some items currently on the development road map and seek to identify what new features and functions local authorities would like to see in ABODS.

There is a combined authority & operator workshop on 13<sup>th</sup> September 14:00 – 16:00

<https://www.eventbrite.co.uk/e/analyse-bus-open-data-authority-operator-workshop-tickets-392960805347>

## Analyse Bus Open Data New Features: Corridor Speed Metrics, Admin Area Filtering

The Corridor feature launched in September 2021 lets users compose sequences of stops and perform journey time analysis for the services which run through this chain of stop-to-stop sections. From this release, where Track elements describing the shape of the RouteLinks used by a service have been provided in the TransXChange timetable data submitted to BODS, these are used to estimate the speed of buses along each corridor section.

The page for each corridor will now display:

- Length of corridor sections (in miles) – where shape data is unavailable, this distance will be the straight-line distance between stops
- Overall average speed of services (in mph)
- Average speed of each service (in mph)
- Speed variation by date, time of day, and day of week
- The distribution of journey speeds during the selected time period

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This information will help local authorities to perform pinch point analyses and recommend bus priority measures and service and infrastructure changes.

So far, ABOD users have been able to measure the combined nationwide performance of all services belonging to an operator using the summary statistics in the On-Time Performance section. This update will also introduce the ability to filter performance figures by NPTG administrative area, helping operators and local authorities to understand combined service performance in the context of a bus service improvement plan or partnership. When one or more administrative areas are selected, the performance statistics for operators will consist only of services which run within or through those areas.

## On-Time Performance

- Active filters are now set as URL parameters. This lets users belonging to the same organisation share filtered views of performance data with one another without needing to adjust filters manually.
- Users can now show/hide columns of performance tables.
- Pages are now scrollable when the filter draw (on the right) is open.

This lets users more easily see the impact of tuning these filters on performance figures.

12th September 12:00 – 13:00

<https://www.eventbrite.co.uk/e/analyse-bus-open-data-new-features-corridor-speed-admin-area-filtering-tickets-403871710157>

## MaaS Update

Responses to the code of practice consultation are currently being analysed and a government response will follow in due course. The code of practice will be published later this year and the themes will cover accessibility and inclusion, data sharing and standardisation, multimodal ticketing, consumer protection, competition and promoting sustainable travel.

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## New NTPG Download Service

Over the last few weeks, we have been busy developing the new NTPG download service. You are now able to download the NTPG data in both CSV and XML format, as well as access the data via the new NTPG API.

The following link will take you straight to the download options page, where you can access the data: <https://beta-naptan.dft.gov.uk/download/nptg>

To download NTPG automatically from the API, please see the documentation here: <https://naptan.api.dft.gov.uk/swagger/index.html>

## Updating NPTG Data

The new NaPTAN and NPTG service will see a change to how updates are requested for NPTG Data. Due to the sporadic nature of updates to this dataset, changes will now need to be requested via the [naptan.nptg@dft.gov.uk](mailto:naptan.nptg@dft.gov.uk) support email.

More details about this process change and a demo of the new NTPG download service was covered in a Public Meeting on 25 August.

## Closure of legacy NaPTAN and NPTG services

The legacy NaPTAN and NPTG service closed on 30 August. All links to the old service are in the process of being re-directed and will no longer work.

The new NaPTAN and NPTG service is available at <https://beta-naptan.dft.gov.uk/>

If you want to use our NaPTAN and NPTG API, documentation is available at <https://naptan.api.dft.gov.uk/swagger/index.html>

We'd like to take this chance to say thank you for your patience whilst this redevelopment work has been taking place. And an even bigger thank you for all of your input.

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If you have any issues with the new service or you are a data provider and want to request an account, do contact us at [naptan.nptg@dft.gov.uk](mailto:naptan.nptg@dft.gov.uk)

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S**Government sets out driverless plans**

The Government's suggesting British roads could see self-driving vehicles rolled out within three years, with plans – backed by £100 million of taxpayers' money – which prioritise safety through new laws and create thousands of new jobs in the industry.

It says some vehicles, including cars, coaches and lorries, with self-driving features could be operating on motorways in the next year, while the latest plans set out new legislation which will allow for the safe wider rollout of self-driving vehicles by 2025.

It says this enables the UK to take full advantage of the emerging market of self-driving vehicles – which could create up to 38,000 jobs and could be worth an estimated £42 billion.

The government's vision for self-driving vehicles is backed by a total of £100 million, with £34 million confirmed today for research to support safety developments and inform more detailed legislation. This could include researching the performance of self-driving cars in poor weather conditions and how they interact with pedestrians, other vehicles, and cyclists.

The government is also today confirming £20 million, as part of the overall £100 million, to help kick-start commercial self-driving services and enable businesses to grow and create jobs in the UK, following an existing £40 million investment. Successful projects could help see, for example, groceries delivered to customers by self-driving vehicles, or shuttle pods assisting passengers when moving through airports. £6 million will also be used for further market research and to support commercialisation of the technology.

It says self-driving vehicles could revolutionise public transport and passenger travel, especially for those who don't drive, better connect rural communities and reduce road collisions caused by human error. Further in the future, they could, for example, provide tailored on-demand links from rural towns and villages to existing public transport options nearby. They could also provide more direct and timely services that enable people to better access vital services such as schools and medical appointments.

<https://highways-news.com/government-sets-out-driverless-plans/>



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S**fflecsi – the experience of Demand Responsive Transport in Wales**

Updated report – findings from passenger research in Newport

Transport Focus Wales has been working with Transport for Wales to assess the experience of Demand Responsive Transport following the introduction of a number of pilot schemes under the fflecsi brand in Wales in 2020. We also looked at two schemes in England for comparison – Tees Flex in the Tees Valley and Go2 around Sevenoaks.

This updated report outlines the learnings from a second phase in Newport where an expanded fflecsi operation was launched in autumn 2021

<https://www.transportfocus.org.uk/publication/fflecsi-the-experience-of-demand-responsive-transport-in-wales-updated-report-findings-from-passenger-research-in-newport/>

**City Bus Manager Simulation.**

*Ever fancies trying to run your own bus company?*

Aerosoft revealed the new City Bus Manager alongside a few other new simulation titles (such as SubwaySim). With City Bus Manager the goal is to create a new set of bus routes, outfitting them with new buses, proper maintenance, and happy staff.

City Bus Manager features home towns and famous cities from all over the globe, minus China. Its maps are based on data provided by OpenStreetMap, including featuring Points of Interests. Further adding to its complexity, the sim will also feature passenger simulation and bus route travel time using real data. This will allow players to faithfully recreate existing bus lines from their own real-life city, or put a new spin on things with an original network of their own.

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S**Bustin' bus time schedules**

The list of duties doesn't just stop at constructing the lines, however. Infrastructure must also be set up by the player. This includes building garages, warehouses, maintenance facilities, parking slots and more. Staff will also expect amenities like food services and rest areas. So, the "management" in City Bus Manager really does stem to the entire network — not just the buses themselves.

Customers will be keeping tabs on your operations and will leave their feedback accordingly if things exceed or fall below their expectations.

<https://www.pcinvasion.com/city-bus-manager-revealed/>

## Trueform - Business Development Manager

trueform

[www.trueform.com](http://www.trueform.com)



# We're Hiring!

## Senior Sales / Business Development Manager - Digital Signage

**Passenger Transport, Smart City Infrastructure, E-Mobility, Clean-Tech & Zero Carbon Mobility sectors**

**A fantastic opportunity to join one of the World's leading green manufacturing and technology organizations.**

Trueform Digital is a pioneering British manufacturing & technology company. Operating internationally, Trueform are global leaders in the design and manufacture of innovative infrastructure and applied technology solutions for Smart City Infrastructure, E-Mobility, Clean-Tech, Zero Carbon Mobility and Public Transportation sectors.

Trueform provide award winning hardware and digital signage solutions to many of the World's leading cities and have installations at over 150,000 locations throughout the UK and internationally.

To support increasing demand for Trueform's award winning products we require a high caliber **Digital Signage Sales / Business Development Manager** to assist with sales, business development and tendering activities.

A senior position, candidates will ideally have extensive RTI / digital display sales experience gained from within the public transportation / systems integration industry.

The position includes responsibility for managing and developing existing customer relationships with key customers in the UK, Europe and North America to ensure Trueform is positioned in preferred status for future new business as well as identifying new business opportunities.

The position would suit those with existing digital signage / RTI display experienced gained within similar industry sectors.

APPLY NOW AT  
[jenny.rye@trueform.com](mailto:jenny.rye@trueform.com)

# 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

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

## New Real Time Passenger Information signs to be installed at bus stops throughout Wiltshire

Wiltshire Council is installing 188 new Real Time Passenger Information (RTPI) digital signs from r2p at bus stops across the county to give bus users access to up-to-the-minute journey information.

The new signs, which will cost around £600,000, will be installed during October and November, and will replace the current outdated signage, which has been in place for many years and has reached the end of its life.

In order to make the switch over to the new signs, the old signs will be switched off on 31 August, and there will be no RTPI signs in service at Wiltshire bus stops during September. This is because the computer system that controls the new signs is incompatible with the old versions.

Cllr Richard Clewer, Leader of Wiltshire Council, said: "This is a significant investment into Wiltshire's public transport system that will improve the experience for bus users throughout the county.

"The new digital signs will be rolled out in phases during October and November and will become operational soon after that.

"Unfortunately, because the old signs are at the end of their life, we will have to turn them off on 31 August and there won't be any real-time digital signs in use at Wiltshire bus stops until the rollout of the new signage has been completed.

"We apologise for any inconvenience caused by this short break in the RTPI service, but we're confident that the wait will be worth it, and soon people can enjoy greatly improved digital and real-time signage at bus stops throughout the county."

## IMPROVING TRANSIT EQUITY IN NORTHERN IRELAND

In August, Vix Technology worked with Translink, and charity NOW Group, to run a day of sessions supporting disabled passengers in Northern Ireland.



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Vix Technology has been working with Translink for more than a decade, having delivered real time information systems across the region, including on-board and on-street passenger displays and vehicle monitoring systems.



The day event featured a number of activities and sessions designed to support passengers with a variety of disabilities, to help them become more comfortable with using the public transport network, including learning about the on-board accessibility features, and how to purchase tickets for their journey, as well as taking a trip on one of Translink's prestigious Gliders to the Titanic Museum. It was also a chance for Vix to learn more about how this group of passengers approach public transit, and learn from this to further improve the technology we offer.


The event received excellent feedback from the participants involved, whose measured confidence levels in using the bus networks increased by 50% as a result of the day.

<https://vixtechnology.com/news/improving-transit-equity-in-northern-ireland/>

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

## RNIB REACT announces travel information on your smartphone.

RNIB have recently been promoting the REACT services.

We can't make the bus come sooner, but we can help you know when it'll arrive! 

RNIB REACT announces travel information on your smartphone and is available in some areas already.

<https://twitter.com/RNIB/status/1563461316496482304>



# A D M I N

## Management Committee Members

The Management Committee for the year 2022-2023 was appointed at the AGM on 23 March 2022. Membership is currently as follows:

Chair: Tony Brown

Members: Sonya Sparks (Essex), 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 158 – Monday 3<sup>rd</sup> October 2022.

Please send all contributions to [secretariat@rtig.org.uk](mailto:secretariat@rtig.org.uk) at any time up to Thursday 29<sup>th</sup> September 2022.

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