



improving public transport  
through technology

Non-Members Edition

January 2020 – Issue 125

## 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 Committee

20 January 2020, London

### PTIC

11 February 2020, Preston

### Workshops

23 January 2020, Stockport: Successfully Providing Bus Priority

17 March 2020, Chelmsford: Workshop & AGM

### Conferences

Transport Technology Forum  
4-5 March 2020, Bristol

### Working Groups

Integrating Disruption Information

Procurement Advice

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## 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>

## Working Groups

These working groups are now underway, its not too late to become involved – just get in contact:

## Integrating Disruption Information

There are many different systems where disruption information is available which are not normally part of the customer information process. This group will investigate how to practicably integrate the disparate systems in use across

# N E W S A N D E V E N T S

public transport: to provide more and consistent disruption information and if appropriate, to produce an advice document

## **Procurement Advice**

This group is working to produce a 'Dummies Guide' to real time system procurement. An initial draft is already available.

We are still looking for volunteers to become involved in these groups which are about to be starting work:

## **Maintaining an efficient and effective RTI system**

Whether you have you have just invested in your shiny new or upgraded system or if you've been running one for years, the challenge of how you maintain it is common to everyone.

We aim to provide an advisory guide on the best practice for keeping a real time system working efficiently and effectively.

## **Accuracy and quality of real time predictions**

Following questions at the last two workshops there it is clear that there is not sufficient common understanding across the community on how to effectively measure the performance of predictions.

This group will produce a guide on how to measure the quality and accuracy of predictions.

If anyone wants to become involved in any of the groups 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) .

**Workshop:  
Successfully Providing Bus Priority**

The next RTiG workshop will be about:  
Successfully Providing Bus Priority

On the:  
23<sup>rd</sup> January 2020

It is being kindly hosted by Stagecoach Group at their service centre in Stockport.

As congestion increases the need to reduce and improve the consistency of bus journey times becomes more important.

At this workshop you will hear from authorities, operators and suppliers about their experiences in providing priority for buses at traffic lights and the plans for the future.

Sign up now:

<https://www.eventbrite.co.uk/e/successfully-providing-bus-priority-tickets-86225086555?aff=email>

## **Annual General Meeting**

The AGM will be on the 17<sup>th</sup> March 2020 in Colchester, Essex.

It is being kindly hosted by Essex County Council.

Alongside the AGM there will be a workshop, the content of which is under development.

Sign up to attend now:

<https://www.eventbrite.co.uk/e/workshop-and-agm-tickets-86796457541?aff=email>

## **Business Plan 2020-21**

Now we are in the latter part of the 2019/20 business plan year it is time to start to consider what RTIG should be doing for the period from April 2020.

If you have anything that you would like to see RTIG involved in, producing or organising during 2020 then please get in touch with Tim [tim.rivett@rtig.org.uk](mailto:tim.rivett@rtig.org.uk).

## RTiG Brand Refresh

The current RTiG style has been in its current guise for many years and over the next few months a new fresher look will be rolled out as documents are updated.



## 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)

## Exchange of Disruption Information using SIRI SX Technical Document

The supplier workshop being run by RTIG & Transport for the North workshop will introduce a proposed SIRI SX profile, review the detail and enable Transport for the North to ensure that the final profile will meet supplier requirements and help deliver the expected outcomes.

The draft of the profile and initial guidance can be reviewed in the public documents section of the website.

<http://www.rtig.org.uk/web/Portals/0/RTIGT038-0.3%20-%20SIRI-SX%20Draft%20Schema%20Profile.pdf>

During the review phase which will run to the end of December welcome comments and feedback.

## RTIG in the Connected World – Discussion Paper

The committee has produced a discussion paper on the future direction of RTIG in the increasingly connected work.

The paper can be found here:

<http://www.rtig.org.uk/web/Portals/0/RTIGS014-1.0%20RTIG%20in%20the%20Connected%20World.pdf>

It is this paper's assertion, that whilst RTIG's original aims have been met, there is an increasing need for the organisation to take a wider role to encompass other modes and interfaces - particularly other smart systems that influence relationships with public transport travel.



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These could include fares, journey purpose data, journey personalisation and planning data, travel integration into smart cities, update and new standards such as NeTEx and ticketing implementation.

It suggests that our scope be increased to consider:

- Designing standard passenger / consumer information interfaces between modes – rail and tram, demand-responsive and non-emergency ambulance systems, micro mobility, taxis etc. (MaaS and Total Transport) as and when needs emerge, and in line with member and market expectations;
- Defining interfaces and protocols between systems that enable better journeys but are not directly related to the journey itself – Railway station ‘Concierge’ systems, city wide mapping systems, Airport and airline systems, smart city systems;
- Advising on the use and suitability of data sets that enhance travel decision making including fares, alternative, cross modal disruption, weather, personalisation preferences and accessibility requirements.

The committee is seeking your views, thoughts and comments to help guide the future direction and work plans of RTiG.

Please pass them to Tim at [tim.rivett@rtig.org.uk](mailto:tim.rivett@rtig.org.uk)



## New TransXChange Profile for Open Data

The Department for Transport has been working with Stuart Reynolds to develop the TransXChange (TxC) Profile. Following extensive consultation with the bus industry, the profile is now complete and ready for distribution – please see the link below:

<https://my.pcloud.com/publink/show?code=XZtS9hkZFIZKNKHAzuz8qJAchaLTlyOSOD2k>

The development of the TxC Profile is an important aspect of our Bus Open Data Programme and the profile will serve as the TransXChange standard that will be required for publishing route and timetable data.

The aim of the TxC Profile was to create a simplified profile that could be used consistently by all systems / operators, which could be more readily understood by open data users and help create better journey planning products and apps. We would encourage all individuals responsible for data creation in their organisation to familiarise themselves with the TransXChange Profile ahead of publishing route and timetable data onto the digital service.

We will continue to engage with the bus industry over the course of next year and we will be running a number of workshops and meetings on the TxC Profile.

Some of the key points from the TransXChange profile include:

- The use of National Operator Code is mandatory in the schema.
- Instructions on how to appropriately structure TransXChange files.

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- A Service Code field will link the profile to OTC Registration numbers for checking and comparison.
- Services that run “until further notice” shall not have an end date in the Operating Period.
- Registration information, is of little use in passenger information and will not be required in the Service field.
- The Annotated Stop Reference field is mandated when there is an appropriate, active, stop in NaPTAN. Other stop fields, if present, are for readability only – the actual values shall be taken from NaPTAN.
- Route fields shall be mandatory, whilst Track fields are recommended but not mandatory. However, operators should strive to provide at least one point per road to align with the EBSR / registration process.
- TXC allows fields to be over-ridden by more precise elements, this can lead to errors when merging data from different places. The profile is therefore recommending that over-riding shall be eliminated as far as possible by defining an element fully in the most appropriate place.
- Having serviced organisations aids in explaining date restrictions to the travelling public (e.g. “College of West Anglia days only”) and is encouraged over simple date restrictions. However, it has not been mandated in the profile due to reservations expressed during consultation.
- Regardless of the coding of the trip, the profile recommends the display to the public is positive, i.e. “this trip only runs when School X is closed” in contrast to “this trip does not run when School X is open”.
- All bank holidays shall be explicitly stated and “groups” (e.g. Holiday Mondays) shall not be used.
- Information to support real time information shall be included where available.

## Bus Open Data Service Digital Service update

During the last few months, the DfT have been continuing their focus on user needs with extensive user research. We held two workshops in the North – in Leeds and in Preston – in October and a further two in November, in Exeter and in Birmingham. During these workshops we invited operators and other stakeholders to test various aspects of the service and help us develop and refine it prior to launch. We have also completed an accessibility audit and now overall we are happy with the service and excited to present our service to GDS in January 2020 for our service assessment.

The service includes two sub services – Publish Bus Data and Find Bus Data. The team have worked solidly to build the Bus Data Service as well as integrate the Data Quality Managed Service to enable operators to not only publish their data but to quality assure their data too. The service assessment is designed to assess the Bus Open Data Digital Service against the Government Digital Service Standard (<https://www.gov.uk/service-manual/service-standard>). If we pass the service assessment (<https://www.gov.uk/service-manual/service-assessments/how-service-assessments-work>), the Bus Open Data Service will publicly launch on 28 January 2020.

A mock assessment back on 21 October 2019 resulted in the service being deemed to have MET the service standard subject to a few issues being addressed. During November, the team prioritised addressing those issues and also completed extensive accessibility audit testing. Since then we have migrated the service and started recruiting operators to be early adopters of the service which was a significant milestone. If you would like to be an early adopter of the service, please do get in touch and we can arrange for registration links for

the service to be sent out to you in early Jan 2020.

Following launch of the service we'll be prioritising the delivery of the location data functionality for the service. This workstream kicks off in late Jan 2020 and we'll no doubt want to engage with each of you at different points. Fares and tickets publishing functionality will follow in April 2020 allowing the TfN team time to develop a prototype fare data build tool, following the successful mobilisation of this project just a few weeks ago.

### **Regulations: The Public Service Vehicle (Open Data) (England) Regulations 2019**

The Public Service Vehicle (Open Data) (England) Regulations 2019 were due to be laid in Parliament during Autumn 2019 however the dissolution of the government meant that the regulations could not be laid on the agreed date. The route and timetable requirements become legally enforceable from Dec 2020 and then will be followed by fares and location data which will be required from 2021. We intend to lay the regulations now following completion of the fares/tickets and location data functionality workstreams and delivery of the full digital service during Summer 2020.

This is to ensure that any new requirements which emerge during early-mid 2020 are reflected accurately in the SI and there is no requirement in the future to amend the regulations. We have in the last week already made one more change to the requirements – we have now agreed to host data for operators of 40 services or fewer on the service (previously we had set the limit at 10 services or fewer). We will publish the Implementation Guidance during early 2020 to coincide with the launch of the service.

## TfN Fares Data Build Tool

The Transport for the North Fares Data Build Tool (DBT) - NeTEx Creator contract has been awarded to Infinity Works.

The project will follow the GDS agile methodology and is being delivered in collaborative partnership between Transport for the North's Integrated and Smart Travel programme, the DfT Bus Open Data (BOD) programme and Traveline Information Ltd.

Alpha commenced in November 2019 - development is underway.

An alpha working group has been established to shape the design and ensure the service is fit for purpose:

- i. Group consists of Pilkington Buses, Connexions buses, TLC travel, Lancashire CC, East Ridings of Yorkshire, and Durham.
- ii. Discovery workshop was held in early December 2019.

The aim of the alpha minimum viable product (MVP) is to ensure the most simple forms of the end-to-end user journey are demonstrable. At its most basic this involves relating the public transport network (services, stops) to operator fare stages and zones and then being able to produce a validated xml file in NeTEx format. Initially this process would only cover basic products such as singles, returns and zonal tickets.

The Fares DBT will be delivered by TfN and is being developed with the ability to scale nationally in support of the Bus Services Act 2017 requirements for the provision of fares information in the NeTEx format.

The project team are working with the DfT BOD team on the interdependencies that exist across both workstreams.

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

Beta phases (private and public) are due to start in spring and run through to the end of 2020, the scope for Beta will be defined as alpha develops.

Any operators, local authorities or data agents who are interested in helping support development should contact TfN as we will be looking for additional participants to support private beta.

For more information on how to take part then please contact

[richard.mason@transportfornorth.com](mailto:richard.mason@transportfornorth.com)

## **TfN Disruption Messaging Tool - Siri SX Creator**

Development is progressing to schedule. Live release of the tool is due at the end of January 2020.

Initial rollout is expected to cover planned disruptions and be in large city regions in the North of England; unplanned disruptions will come later and the tool is designed to be used by local authorities across the North.

TfN held a workshop with RTiG in December 2019 to socialise the Siri SX profile that has been developed.

- Slides from the session are available here: [http://www.rtig.org.uk/web/Portals/0/20191204%20RTiG TfN Disruptions Profile Slidedeck.pdf](http://www.rtig.org.uk/web/Portals/0/20191204%20RTiG%20TfN%20Disruptions%20Profile%20Slidedeck.pdf)
- The draft profile and guidance are contained within this following document: <http://www.rtig.org.uk/web/Portals/0/RTiGT038-0.3%20-%20SIRI-SX%20Draft%20Schema%20Profile.pdf>

TfN have been actively working with data driven businesses that have an interest in using the Siri SX data to enhance their customer information travel apps and websites.

### **TfN Open data hub**

Development is complete and the Hub is now being tested ahead starting to publish Siri SX data from February 2020.

RTiG members are encouraged to integrate the SIRI-SX feeds into any of their systems, particularly those that interface with customers.

Test NeTEx data is expected to be available from autumn 2020.

### **DfT Discovery – Data Sharing between Highways England, Local Authorities and private companies**

The DfT is working with Ernst & Young (EY) to complete a data discovery project, exploring the opportunities and barriers that exist when sharing data between Highways England, Local Authorities and third-party companies to manage and maintain the UK road network.

EY has asked for your help as they complete this project. They have created a short survey that they would like you to answer, asking you to share the benefits and issues that you experience when sharing data between organisations. It will take under five minutes to complete this survey, and you can access it here:

<https://www.surveymonkey.com/r/9TGMR33>

Your information will help the team identify how to improve collaboration and communication between these organisations, which will result in better journeys for road users and a more connected country (helping prepare for a digital and connected infrastructure in the future).



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Lastly, the team will be conducting further interviews and workshops as the task progresses and are looking to the RTIG community to help inform and shape this work in more detail. We' like to encourage anyone asked to participate and support this important piece of work.

## 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 'chivvyng'.



A 21st Century totem at the newly refurbished Walsall bus station.

## **21<sup>st</sup> Century Technology renames to Journeo™**

# **Journeo™**

Journeo (jur-nee-oh : new-journey) is the new name for 21st Century Technology plc. It marks the beginning of the next stage in the group's development in delivering advanced information systems and transit related technical services to customers within smarter-cities, based increasingly on our own powerful technologies, services and software.

Whilst the technology and some of the applications may be new, we are proud of our heritage built on over 25 years-experience in designing reliable urban passenger information systems to towns, cities, local authorities, and delivering a wide range of technical services to many of the UK's largest multinational public transport operators.

Over the last few years, £4m has been invested in research and development and our 15-strong team are helping us to transform the groups' capabilities. Our innovations are enabling us to access new markets at the same time as providing the underlying technical solutions for an increasing number of large, complex and valuable sales opportunities.

Customers are already benefiting from this investment as we bring an Internet of Things (IoT) approach, open standards and agnostic connectivity to cloud-based services together with our field-proven engineering to create new products, software and services. This union will grow ever stronger as the company, brand and most importantly, the technologies continue to converge.

A number of new technologies are scheduled to begin to enter the market during 2020. These will

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continue to be important components of our Fleet Systems and Passenger Systems projects and, for the first time, they will also be available to qualified Systems Integrators and Value-Added resellers under the brand identity Journeo™ Technologies.

Our website has changed to [www.journeo.com](http://www.journeo.com) and it is being updated to support the launch of the new brand and new products that will deliver ever-more interconnected and scalable systems, for large, complex and important infrastructure applications.

For the next few months, we will continue to deliver systems to Passenger Transport Executives, local authorities, towns and cities through 21st Century Passenger Systems, and integrated services to bus operating companies through 21st Century Fleet Systems. However, as Journeo™ technology and software increasingly underpins the majority of sales that we win, these business units will also be brought in line with the new Journeo brand during Q1 2020.

<https://www.journeo.com/en/about-us/>

## **Ticketer purchases FARA**

Ticketer has acquired the Norwegian ticketing company FARA, which also has offices in Poland, Sweden, Finland and Denmark. The investment in FARA by Ticketer, the UK's leading ticketing company, will not only increase the company's product portfolio but strengthen its expansion into mainland Europe.

FARA (an old Norse word for travel) shares the same core philosophy as Ticketer, of making travel easier for passengers. Through the very latest technology in ETMs, back office software and passenger facing apps, they focus on providing Real Time Information (RTI) for use on board,

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online and on mobile to increase the use of public transport.

John Clarfelt, Ticketer CEO, comments: “We are thrilled to be investing in FARA and bringing together two leading payment providers in transport. We share the same values, and by virtue of working together, in future we will have significantly wider development capabilities and product portfolios for our customers both in the UK and across the rest of Europe.”

FARA and Ticketer both specialise in ticketing and location-based solutions for public transport and share many similar business attributes. Both companies are leaders in their respective markets and have a strong reputation for industry leading R&D and delivery.

Ørjan Kirkefjord CEO for FARA, comments: “I am delighted that Ticketer has acquired FARA. Their investment in FARA will combine products, skills and market share to create a powerhouse in IT solutions for public transport. We have big ambitions to grow our business, and Ticketer is an ideal partner for this vision.”

## About FARA

FARA is a Norwegian customer-oriented technology company that provides IT solutions within public transport. FARA’s aim is to improve life quality, make the environment greener and meet passenger expectations, by making travel easier for passengers, operators and transport authorities. FARA was founded in 2005 and has cutting-edge expertise and a strong Nordic heritage. FARA offers advanced ticketing, Real Time Information and fleet management solutions. FARA’s solutions are modular, using open standard interfaces and commercial hardware that can be tailored to the customer needs, integrated into existing systems, or used as a full stand-alone solution. FARA products are proven, secure and ready for the future.

# A D M I N

## Management Committee Members

The Management Committee for the year 2019-209 was appointed at the AGM on 12 March 2019. Membership is currently as follows:

Chair:

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

## Contact us

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

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

Twitter: <https://twitter.com/RtigInform>

## Next issue

Issue 125 – Monday 3<sup>rd</sup> February 2020.

Please send all contributions to [secretariat@rtig.org.uk](mailto:secretariat@rtig.org.uk) at any time up to Wednesday 29<sup>th</sup> January 2020.

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