

# PTIC meeting 29 Sep 2022

YouTube video: <a href="https://youtu.be/-6x8wjNetOA">https://youtu.be/-6x8wjNetOA</a>

Video timings for the start of each agenda item are provided below.

### **Actions in red text**

Opportunities to engage/test/feedback in green text

## Contents

PTIC meeting 29 Sep 2022	
Attendees	
1. Introduction	2
2. Notes of last meeting 9 June 2022	2
3. Bus Open Data Digital Service	3
3.1. Routes & Timetables, and Location Data (6:30 - 25:40)	3
3.3. Fares (25:40 - 35:00)	6
4. NaPTAN Project (35:00 - 57:30)	
5. Introduction to the Rail Data Marketplace (57:30 - 1:21:40)	11
6. 15-Minute Neighbourhoods (1:21:40 - 1:38:45)	14
7. Traveline Projects (1:38:45 - 2:02:12)	17
8. EU Standards development (2:02:12 - 2:07:04)	21
9. Issue Log (2:07:04 - 2:18:50)	21
10. Next Meeting	22



### Attendees

Sarah Al-Adely, DfT, Product Owner for NaPTAN John Austin, Mobihub David Batchelor, Ticketer Mike Baxter, Leicestershire City Council Chris Birkett, Oxfordshire County Council Graham Browne, WYCA Neil Byford, TfL John Carr, ATCO Josh Goodwin, bustimes.org Mark Jones, DfT, BODS Clare Morrissey, Rail Data Marketplace Steven Penn, KPMG, BODS, Fares Data Rebecca Roe, South Yorkshire MCA Dan Saunders, Basemap Carl Selby, Rail Data Marketplace Chris Sherry, Passenger Technology Group Peter Stoner, Ito World Steven Turner, South Yorkshire MCA Rob West, Elydium Julie Williams, Traveline and Plusbus Keith Willis, React Accessibility

### 1. Introduction

Apologies:

- Tim Rivett, RTIG
- Meera Nayyar, DfT
- Triumph, DfT
- Nick Truscott, Cornwall Council
- Neil MacKinnon, Stagecoach
- Ian Barratt, Lancashire Council

# 2. Notes of last meeting 9 June 2022

Action to follow up on 15 minute neighbourhoods - discuss and think how to make this work? Action to host meeting and support this discussion with interested parties. Updates / latest below...



Action for Tim to circulate last set of BODS use by operators figures.

Action for Mike / Sarah /Adrian: discuss alternatives to waiting for new DfT solution to replace Ito World NaPTAN Data Quality Management Tool. What problems does not having it cause?

## 3. Bus Open Data Digital Service

### 3.1. Routes & Timetables, and Location Data (6:30 - 25:40)

Mark Jones, no side deck.

#### Updates on recent activities:

- Working on BODS programme development v1.19, and the recent release on that includes revisions on logic to how service codes are dealt with, and how this is processed for tech suppliers. Discussions continuing on how this process should work in future.
- Working with DVSA to increase compliance for timetables. Identified outstanding operators and number of services they are not supplying data for, and opened up cases with those operators to review their standards.
- Working with OTC to integrate via an API to pull live data about registrations from that database this gives us baseline data for matching with BODS.

### We're also looking at:

- Feasibility of publishing tram and light rail data on BODS platform. Chatting with current light rail operators to understand the data they have available and asset type to supply that data to BODS ongoing.
- Options for the TransXchange tool, the DfT sponsored lightweight solution via Excel to allow operators to create timetables in TXC format. Looking at next generation of this ongoing.
- Compliance how some services need to be excluded from the BODS validation process. Building exceptions functionality in the back end of BODS to help with that.
- Disruptions data how it can be obtained from local authorities exploring how other Local Authorities can be onboarded, and ideas for future national disruptions service.
- Looking at how BODS can evolve putting together options paper for what can and can't be done.
- ABODS solution:
  - o updated to v1.6. Now includes corridor speed metrics can now join stops together to look at performance of whole corridor or individual segments



- Introduced local authority filtering so can look at specific operations within a local authority
- o v1.7, due for release around November 2022, includes more granular level reporting on journey analysis
- o Exploring with DVSA how they can use ABODS for compliance monitoring.

Items covered in more depth elsewhere:

- Fare Standards update from Stephen Penn
- 15 minute neighbourhood discovery project completed update later.

# **Discussion / Questions**

#### Tram-Train

Steven Turner: Qu - have you considered tram-train vehicle - how that switches between both services and how it can be reflected in BODS (Stagecoach run these services in Sheffield)

**Action for Mark Jones and Stephen Turner:** to follow up with Becky Roe and Steve Turner - know the team have been in touch with Stagecoach Supertram.

Steven - just checking it has been looked at and how it can be improved in future. Nic: suggests Steven emails Mark.

#### DVSA compliance - data availability or quality?

Mike Baxter: I don't use BODS a great deal, but one thing I have noticed is that another part of LCC had Journey Planner developed and taking data for Leicester from BODS. If an operator misses out a service from their submission to BODS, it might not get picked up. Guess this might be something that is getting spotted by this tie-in with DVSA and OTC? Operators can submit batch of data, but a service or to might be missing?

Doesn't seem to be checking for how often people update the BODS

Mark: there is a validation check against service code. To understand where gaps are for operators. DVSA focus is to operators who are not supplying any data at all. But in future, there might be more focus on accuracy of supplied data.

**Action for Mike Baxter:** email Mark Jones (DfT) for further clarification / details on this query.

Nic: would it help if authorities who were aware in gaps of services, to notify DfT?

Notes and Actions from the 09 June 2022 meeting Next meeting 14 December 2022 1400-1600, Online

PTIC website: <a href="http://pti.org.uk/">http://pti.org.uk/</a>



Mark: it would help us validate the data we have got around operators and their compliance.

Mike: is there a mechanism for that?

Mark: a helpdesk. But also just email me.

Mike: ABODS solution - couldn't seem to make it work, but is there training out for ABODS? Have just done lot of training with LAs recently, so if you drop me a line, we can set something up.

Julie Williams and Peter Stoner's comments in the chat.

#### **Disruptions**

Becky Roe: disruption side of things...it moved over from TfN and 5 big Local Authorities in North, then moved to DfT. TransportAPI hub that had been created for it ended in March, but there has been nothing since then. Still using old tool to enter info, but DfT nothing new for outputs since then. If that all going into to BODS as a national disruptions hub, will the tools already created (Ito) will they still remain, or new tools and new development?

Mark: early stages - options review for what source of that information would be.

Becky: would there be sessions to explore this and input into this. We have developed on the back of this to benefit our customers, so changes might affect us, also there were things with it that didn't get as far as we would have liked.

Mark: once we agree way forward, there will be a lot of stakeholder engagement to understand problems and what needs to be built into new system going forward.

Becky: other concern is with who could actually enter data. Operators aren't necessarily choosing the right words to express an incident as a e.g.. Concerns if it's open too widely for data entry, could get challenging. Maybe approval and review via to publishing as part of it.

**Recommended action for Mark Jones**: Nic suggests might be worth highlighting this Disruptions topic in email newsletter - it is a really live issue.

#### TransXchange tool

Keith: next gen TXC tool - you were looking at it - what stage are you at with that?



Mark: reviewing options for how the data would be captured in various different systems and the merits of these. Ease of use, financial models etc. Ongoing review now. Next phase - how and when it would be funded. No current timescales yet.

Keith: don't know if you are buying or making something?

Mark: it's unlikely we are going to make something

### Compliance levels around BODS routes and timetables

Dan Saunders: compliance levels around BODS routes and timetables. do we have an idea of volumes / numbers etc provided by operators?. Are we getting close to 100% now?

Mark: think about 500 operators in scope of BODS and 80% onboarded, and currently at OTC data, 70% of registrations. Of those 30% missing, ... top 10% of 70 operators, missing registrations. This will make a significant difference to the compliance figures.

#### Welsh or Scottish BODS?

Dan Saunders: know there is similar BODS type discussions in Wales and Scotland - wondered if there are news / updates from around the group on those?

Mark: Wales do have aspirations to provide a Welsh BODS services, but don't know any details. Stephen Penn: an ITT was issued (out and open now) by Transport Scotland recently.

# 3.3. Fares (25:40 - 35:00)

Steven Penn, No slides

Notes from last PTIC - plan for improving Fares data - implement series of validations over a year. Bit behind timescales compared to last meeting, but now have a small development team in place, and begun work on an application that will run additional validation rules above the base schemas, as there are serious data quality issues to deal with such as different suppliers providing very different data structures.

Validation rules will mandate a specific consistent and mandatory way of defining tariffs, product types etc, and ensuring reference to the latest timetable files on BODS.

Hoping to have it deployed to BODS UAT site in late October. Might sit there for some time, while we run through all NeTEx data already supplied, then report on results from that testing to the



suppliers. Then deal with those problems before rolling out the validation into production environment.

Hopefully by next PTIC, should start to see quality of NeTEx improve. No point pushing completeness agenda while data is still inconsistent.

Then second iteration of validator - more on the users control sort of thing. Pricing structures - can't use fare triangle to express flat fare etc. Also granularity of user types, and then complex fares. This likely to start in November.

#### Questions / discussion

### Matching challenge between datasets

Nic: would be great if we could apply this same consistency approach to attempt to align two fields with similar names in the SIRI-VM and TXC output, to allow a proper journey match without inference or using other fields for a fuzzy match. Tim's work with DfT identified this, but timetable providers are dragging their feet, and it also needs discussions with Ticketer.

Stephen: It is a fair point and ongoing issue. More of a compliance issue. Think there are still discussions with business change team and suppliers on this.

We will be making similar demands, and enforcing demands, for NeTEx to reference to TransXchange in a similar manner. We'll also be running post-publishing checks (early 2023) to identify what services we should there to be fares data for, and what fares data there actually is, and chase it down.

Nic: operators are required to comply, but it is their timetable suppliers that provide the means. Suppliers are not under the legislation and not earning from it, and the operators who can get censured under legislation, but have outsourced the need to timetable suppliers who are not as engaged because of the way it is working. Likely to continue unless timetable suppliers brought into the fold, and real-time providers, to be part of team that actually make this work.

#### **Actions / followup**

Stephen: how we apply pressure is not for me to say, but we are aware it is an 'open sore' that needs to be resolved, and that the data on BODS is not as valuable as it should be. Should take it forward outside of this call.

Nic, also see valuable comments from Julie in the chat.

Mike Baxter: clarify - this problem - journey matching? Not fares?



Nic: yep, but it is the same kind of software and data accuracy measures mean it is the same kind of thing as in fares - can I make a match between two fields?

Mike: so there is no requirement on the SIRI feed to have the Journey number in it?

Nic: only indirectly via the profile, which the operators are expected to comply with, but their suppliers are not.

# 4. NaPTAN Project (35:00 - 57:30)

Sarah Al-Adely, no slides

**NaPTAN** - we have finished the redevelopment side of things, and moved into service. I'm product owner, also have product manager and delivery team too. Still a few redevelopment things to do, but the service is up and running as expected.

**New upload service** went live, and all running smoothly now, with all usual communications updates in place on this

**NPTG** - new internal upload process, so the location and locality side of NaPTAN data - me and colleague can update these at the moment. Email request via NaPTAN inbox, and looking to open up these in future.

**NaPTAN mapper** - new tool (previously stops shown on a map online). This has been insourced, it is written in R and github, and published on the web. Intermediate stages of this right now while DfT check security measures - currently there are only selected people who can log in.

We show how to use this in the upcoming public meeting.

Future of NaPTAN - project alongside day-to-day to explore future options

- micromobility
- accessibility (extension to this project and looked into bus accessibility bus and bus stop. Looking to go out to a longer discovery project on this for NaPTAN. We talked with people in this field - in trains etc. People are already collating data on this. Not trying to reinvent the wheel or reinvent data type. Looking at what data is currently available and investigative discovery piece.

Notes and Actions from the 09 June 2022 meeting

Next meeting 14 December 2022 1400-1600, Online

PTIC website: <a href="http://pti.org.uk/">http://pti.org.uk/</a>



# $Questions \ / \ discussion$

#### **NaPTAN Mapper**

Becky: the Ito NaPTAN viewer that was closed down, enabled us to review NaPTAN warnings - will this new solution provide that functionality?

Sarah: eventually yes. We recognise the issues, and we'll provide further features and functionality in future to help solve this. We'll iterate on this from now to December so you have something to work with.

Mike: a lot of people use it - sounds like it is a development project right now. When will it be available to those who do not have development expertise or environment right now?

Sarah: only reason is for security at the moment. As soon as that is cleared, it will be a publicly accessible website. I don't know timing for this.

You can use it now with technical click-throughs now, and the Public meetings will be to give more help and support on how to do this as an intermediate step.

Mike: will it have a login?

Sarah: probably not

Mike: is it only accessible if you have access to Github?

Sarah: would need to get a login for it and pull from Github to do it?

Mike: IT in Leicestershire Council have a block on Github etc.

#### Accessibility

John Carr: Concern is about potential 'box ticking' in terms of accessibility. Recent example of a bus stop with accessible features, but length of the stop was only bit of hardstanding there, and to get to it, only a brave wheelchair user and confident walking stick user to get through muddy field and paths that surround it.

Similar in urban areas. Realise I'm asking in a new area of technical research - accessibility of bus stops - as in we can actually get people to them from the point at which they want to start/finish their journey.



Sarah: definitely thrown up in discovery, and good points. Off a stop and into shelter, and not out again. Also, terrain around the bus stop. So the advice is a wider discovery piece to explore more this wider area. Google maps / pictures to review this - can be bit outdated. Some Local Authorities do have a mechanism to keep records / photos of it.

Nic: probably a limit to what NaPTAN can do about this, but it is clearly very important with them. DfT colleagues do look at this, so might be worth convening a group to take this forward.

Sarah: we have been engaging with these internal groups - collective piece bringing us together and explore it.

John: absolutely right Nic - bigger than NaPTAN, and also comes into the Journey Planner area too. When we procure, we focus on certain performance aspects, but for real world users, if Journey Planners don't support their needs, then not much good at all.

Chris Sherry: can I have the GitHub link please. Also, we use Open Street Map that powers our Journey Planner and if we have a problem with bus stop not being accessible, we can go and update that if it is wrong.

Dan Saunders: OSM data is not necessarily authoritative, and so a bit of a caveat against it.

Chris: what we like about it is that everyone has the power to correct it.

Nic: wider accessibility point - in chat: lots done for Olympics.

Sarah: scope of the project seemed to explore - 'what is at a stop'? NaPTAN is obviously, stop-based. For e-scooter that are placed a stations that help you to get from one place to another, could potentially be included in NaPTAN.

Bikes and e-scooters would be the same data points (location data), whereas accessibility might need to be a separate dataset that needs to deal with that.

NaPTAN was expanded for Olympics. Was that useful? A lot more data might be needed to make these decisions. Lots of services happening in this space - we want to supporting existing stuff not just build something new.

Peter Stoner: point of work done for Olympics - short period of time got national coverage of this information. Rather than saying 'what is accessible'? (this is very personal to the individual and



their needs), if you focus on what has proved *not* be accessible, due to feedback etc, the ability of a Local Authority to make sure that complaint is logged and is actioned in every Journey Planner is the quickest and powerful way to get useful information into the data ecosystem, allow rerouting a different way.

## 5. Introduction to the Rail Data Marketplace (57:30 - 1:21:40)

Clare Morrissey and Carl Selby, slide deck available on request.

Rail Data Marketplace concept began life in 2018, when Rail Data Council and Rail Supply Group recognised that all rail data was segmented. This flowed into William Shapps plan for rail.

DfT have funded rail marketplace project with idea of it being cost-neutral by end of funding in 2024.

**Problem to be solved** - fragmented mix of public and private sectors - no clear cross-sector view of data available and accessible.

Done lots of user research to define parameters of the project -common thing is we don't know where we can find certain datasets, they are of unknown quality, standards are inconsistent, and not all data is open. RDM is open data by default with the purpose to drive innovation.

Simplify access to rail data and open it up to wider user base.

User research - we are not a huge data lake or aggregator - we are about exposing APIs and flat files to make data accessible.

Business Case: to access data and RTI to deliver better customer experience. (see slide deck for list of these)

- customer data
- technical data
- maintenance schedules based on data rather than old decisions
- operational efficiencies
- Great British Railways transitions team
- to drive growth to rail. Green. facilitate cross-modal transport.

Learning platform too for next generation of data professionals. UX positive in sense of 'I might be a data consumer, but if I can aggregate and overlay with AI I could become a publisher too'.



Carl: Product owner for Rail Data Marketplace.

- Functionality features we see as being important and delivery methods
- In build with partner. Clickable prototype with UX with publishers and consumers to develop concepts
- 5th development sprints. 4 releases between now and next summer. MVP in October, private, public and live by summer 2023.

Aim to increase number of users, and data sources, but also roadmap of features shown on the slide:

- It is not a data lake or a list of links to where data might exist elsewhere.
- **It is** a dynamic API gateway, subscription-type models. Flat files still exist, so need to accommodate them too.

Data catalogue - findable, accessible, interoperable, reusable. etc

**Community** - want industry to post challenges, e.g., TOC, Regulator RSSB post challenges or requests for things to be solved / addressed, and others post threads for discussion and explore how to solve it, through hackathons with partners etc.

**Content management functionality** to help us provide user guides. Ability for community to provide content and feed into that.

**Data licensing** - license builder within the platform to offer support to overcome the friction / challenges with many different ad-hoc, duplicated and bespoke data-sharing agreements. the License builder offers publishers a route to a simpler, standardised solution that is compiled through response to questions during the upload process. Can still publish bespoke licenses if needed.

**Commercial model -** need to make it attractive for both publishers and consumers, and need to have open and free data by default.

But also have this target to be cost neutral by May 2024. So we are talking to various smaller providers and innovators and larger integrators, and TOCS who might have commercially sensitive data but happy to share part of it with certain users.

Information for users to assess data quality, by both publishers and consumers to rate / rank quality.



**Pricing** - Publisher in control of who can access and what to charge for it. charging can be by time, subscription, or volume, and we handle the back-office management of that.

#### **Questions / Discussion**

#### Tram-Train

Rebecca Roe: we have the tram-train in South Yorkshire. Essentially, it's two separate things, half on light and half on heavy rail. On light rail, we use tram radio for real time location predictions on displays. We manage to take data from Darwin to predict from the train side too. the problem is, we've not been able to that in reverse. It's not until the Tram enters the heavy rail system that Darwin picks it up. It's been a problem for a while but with a new stop being added next year close to the cross-over point, accurate prediction information at the stop is going to be key. Problem is discussion with RDG - can we push data into Darwin to say 'Tram is here', and then return journey.

Carl: pushing data into Darwin might be a challenge, but the Rail Data Marketplace might be a solution in the provision of a central location where you can choose to place and share data from different sources. You're not the first person to mention trams!

Clare: having spoken to people about co-ordinated journeys, they rely on manual spreadsheets to push into other systems. The interoperability and seamless approach is a barrier to a joined up geolocated journey.

#### **Actions / followup**

#### Tram-Train

Carl: get in touch with Clare on who you've been chatting with, and we'll follow up actions.

Stephen: supporting what Becky is saying - biggest challenge is who to chat with in RDG. Any points of contact to help us with that, much appreciated.

Becky: will email Clare.

Neil Byford: TfL - exploring before - trying to get LUL data into Darwin. Found some issues with that, sounds quite difficult to do. Marketplace and data in one place, will be interesting to see how we can data from different modes. We share some information on some lines with National Rail.

Carl: multimodal story and first /last mile etc is really important for us

TJ: how can people get involved and engaged?



Clare: community element for the platform , this is exactly the type of use case we want to highlight.

Timelines - in build now. MVP in Oct. User Group of 11 datasets across 7 different publishers, half of these are commercialised datasets. Pool of consumers to test it. Working on data pipeline, with public beta spring 2023, ad final deployment of functionality by summer 2023.

Carl: anyone on this call can get involved if they find it useful.

John Carr: Public Transport market should be becoming more and more integrated. Rail customers are interested in how they get to and from the station.

Should there not be a case for you to be regular contributors to this forum? Criticism of public transport in past is the mode separation.

**Action:** Rail Data Management team attending PTIC meetings regularly.

## 6. 15-Minute Neighbourhoods (1:21:40 - 1:38:45)

https://www.pti.org.uk/system/files/meeting\_files/papers/PTIC%2015%20Min%20Neighbourh\_ood%20Starter%20Paper%20v1.pdf

Dan Saunders update on this.

Last PTIC meeting update - action to take forward to give weight and background to this.

15 minute neighbourhood - what is in a 15 minute walk? Looked at kind of locations that would be of interest: train stations, pubs, supermarkets, gyms, public transport, schools, grocers, car parking, etc.

What open data is available to assist with this?

- Open Street Map (OSM) has Point of Interest (POI) datasets to help with gyms, pubs, train stations.
- Premium datasets too
- 4square API now to work out where things are located
- DfT have data about location on schools and hospitals

Where can people walk, cycle, and move around, this was a bit more challenging for us.



DfT via OS and Geospatial commission - national geographical database. For each road, segregated information for footpaths, cycling etc. Concerns it will be a Commercial offer, so restriction for use.

OSM - open, but requires co-ordination and manual update burden

Safe walking routes - Stats19 data for accidents. Streetlighting etc.

Tools we can use to explore this. Basemap. Passenger have a tool too. DfT have national Journey Time statistics with annual data for each average walk, cycle times to locations

Policy to how this should be done. Levelling up was a key thing before this paper. In the last week priority reduced now?

Who is charge of making it? Local Authority to apply for fundings for things like traffic calming measures, active travel plans etc.

Examples in the back of where it has worked quite well. WSP - Kidbrooke village example.

Paper circulated for comments.

Realised it has gone a bit more from public transport usage. Is it worth exploring and continuing in this group, or move to other group? Discuss?

We can build great solutions, but how do you get people to use it / change mode use behaviours? Marketing isn't enough?

Charity white paper - how you could tax vehicles differently, also discussions on distance-based pricing model?

### Questions / discussion

John Carr: 15/20 minute neighbourhood - will have a hinterland too. Further than that, don't regard public transport as non-active travel. 1. it is transport for those less able to move themselves around. 2. in centre of the 15 minute circle, that is quite a distance for many a bus traveller.

Either look at it - bus is part of active travel. Or active travel + bus. Latter less sustainable in future.



**Action for Tim to consider**: John Carr urges two things: this group should continue to take an interest in 15-minute neighbourhoods. Kidbrooke works because there is good information on the ground. Design is inbuilt from the start. I say we carry on, and see what Tim thinks...

Dan: new builds etc - real need there to legislate quite a bit. How do you retrofit into existing communities - who pays for it?

John: look at expected release of land for housing in present government - got to ensure those are well-connected to the rest of the network.

Dan: yep connectivity into rail long-distance is crucial.

Rebecca Roe: can see how this works in larger metro areas. Personally I live in rural area - I do have to walk 15 mins to get to anything!! Don't think we can ignore car use at all - not going to carry shopping back. Also, moving into the Sheffield area - lot of districts and local areas where it is still a large area. Areas of shops, pubs and things, and areas that don't. Lots of shops closing down.

Have to be careful - it's fluid and changing. Larger areas where you do have more local areas - congregations etc.

Dan: DfT said their journey time statistics showed disparity between rural and urban areas. Rural journey time to the top 5 destinations, was over twice as much, and so they are much more reliant on car travel.

Becky: I have got a lot of facilities available 15 minutes away, apart from a train station. But with buses, nearly lost that going in to Sheffield - but it did get saved.

John: reinforcing what Becky is saying- nobody is saying cars are not useful. But in terms of proper 20 minute community, things should be grouped in similar location.

Peter Stoner: Time isn't everything in this case. Often to do with the quality of local environment. This comes down to much better quality of the walking surfaces. Interest in how pavements are maintained, parking on them or not?

Cambridge - wonderful cycling city, but their pavements are appalling

Need somebody to be a better champion of pavement quality and this allies well with bus use.



Dan: I'm happy to reach out to former OS person, and also suggest we find out more about National Geographical database - presenting at 14/12/2022 PTIC meeting.

### 7. Traveline Projects (1:38:45 - 2:02:12)

Julie update, no slides.

Traveline and Plusbus updates

Progress on taking data from BODS to integrate with TNDS:

- Majority of data in TNDS is supplied from Local Authorities, except for information on First and Stagecoach services, which we get direct from them.
- We publish to google and others to use, 3-4 times a week
- Working with Basemap, we've developed an automated way of downloading data from BODS and integrating with TNDS. Ready to go live when bus operators are ready. First group going live in November. Other operators need a bit more time.
- Google already takes data for some of the big operators directly from BODS that is not always correct. We are waiting until our stakeholder partners tell us their data is good.

We're also creating a report that tells you what is in BODS, what's in TNDS and compares the two:

- For the first time this gives a view on what and what isn't in BODS. This report does not cover rural Scottish or Welsh data, trams or ferries.
- For every service the report will show you the data source: Local Authority, BODS, or direct from operator.
- TNDS publishes single file per line. Even if an operator publish several files for a service, we will put it back into 1 file per line. flattening to make it easier for our users.

Also added a report that identifies where data in BODS includes datasets with overlapping or gapping periods of operation. Report allows us to identify where this is happening, and talk with operators to help them mitigate these problems.

#### **Block number challenge**

Biggest challenge is Block number, which says: this is what is scheduled for this bus today. This is not mandatory, but it is a quality check on BODS. If they want 100% quality on BODS, need to include it.

#### However:

• This information is usually not available until 1-2 weeks before data is live, because it relates directly to drivers duties, hours etc.



• Customers want to journey plan weeks ahead for for 1/2 term, Christmas etc. How can BODS give a 42-day lookahead with data that only has a lookahead of 2 weeks?

Working with Becky and SYPTE exploring getting data direct from operators before it has the Block number added. But this should not be what we are doing. BODS should have everything in it. The statutory Instrument say the operators needs to provide a 42-day lookahead for standard registrations, but they can't mee that regulation is the BODS standard says you must have the Block number in it.

John was referring to this earlier, and the need for a least one field to be the same in the operator operational timetable, scheduled/registered timetable, and SIRI-VM feed, to allow for more accurate matching and predictions.

#### Website redevelopment

Looking at redeveloping our data website so easier to use, to help open data community can can self-serve, and operators can look at it and see their data.

 also exploring converting TNDS to a GTFS dataset, because there is a huge demand for it, and because not all the data is on BODS

Been talking to the Rail Data Marketplace team. Would like to publish TNDS to the RDM so TOCs and others can access it from there.

The natural next step for us is publishing Plusbus data. Can't yet it into NeTEx yet. But we will put it up as a table with fares, ticket types, and database of locations and zones. Il open data on bus, tram, and ferry will be on RDM for everybody to access.

If we can do Plusbus, and putting fares and zones onto our own journey planner, what if we can do multi-operator tickets on our journey planner. Been on hold because operators working with NeTEx, so we are considering getting back into this, and could probably make this open, and could also go to RDM too.

Quick win for lots of people, not just our customers, such as BSIPs.

340 stakeholders in Plusbus, so it's a big project!



### Plusbus e-ticketing

Now have plusbus eticketing standard published. Gone through final governance and ready to use. Rail retailers can take that data and build tickets that can be sold for use on Plusbus. Next step 9s updating bus driver training material to help them recognise and use these.

280 plusbus stations - all bus operators need to know it happening, all TOCS know, all retailers ready, and customer information on our website. Complex project and excited to go live with.

#### **Future Plusbus ideas**

Plusbus explore; a rail ticket holder to access an e.g., Cornwall-wide ticket, and encouraging rail passengers to get off the train and onto public transport rather than into a car.

Plusbus as a rail product is our brand, so could associate it with other things such as healthy and active walking, or accessing venues with discounted tickets. Basically, looking at other ways to use the product without it being just the rail ticket. Ability to access and use multi-operator tickets too.

#### **Fares**

Drafting a discovery paper looking at work on NeTEx, work from Transport Focus and people wanting to know how much it will cost to get on a bus. Been waiting for this for 22 years! When can we sort it?!

New full-time staff member- Mike Nolan, from WYCA as Customer Experience Manager. Traveline journey planning product- developing conversations with LAs on BSIPs. Joint resource. Also working with me on Plusbus and other projects above. 4 full-time people.

### Questions / discussion:

Carl - thanks for the mention!

#### **Block codes in TXC**

Rob: Block codes in TXC. Worth a conversation offline on that. Smaller operators don't even use that concept, so when I've been an agent for smaller operators, I've had to make them up. Under pressure from smaller operators to do that for them, but then aware that what you see in BODS timetable data is not going to match what is in the ticket machine SIRI-VM feed.

Julie: some of the work we did earlier on matching without a BlockRef, we already do that; we take data from local authorities and use a NOC, time left stop, line number and been using it for 13 years. 50-60% of data on BODS missing the block code, so can't use it to match for cross-journey matching. 50% not in BODS but is in our data. How do we explain this is missing?



Becky Roe: conversations about Block number. Really looks like a local solution which isn't a really a solution, as you need to take it nationally. If its inconsistent anyway, especially with smaller operators not providing it in BODS, at 42-day point - could it be that it isn't there at that point, and operators provide it at a later point?

Julie: agree, but working out, BODS validation gets a low quality score without a block number, but it has a low quality score. From a data consumer point of view, this is not great. If there was some way of BODS to measure data twice / measure closer to service live. Operators need to supply once, not repeat it. Maybe look at registration reform? Block number can't go in there. DfT open to conversation on this to make it work.

Becky: BODS came about to make journey planning better, but because their lookahead is reduced, value of BODS is reduced.

Mark Jones: registration reform question - gets mentioned every week! Something I'm pushing for and welcome more conversations on. It will resolve so many questions. Ongoing project to get that started. Doesn't sit in BODS team, it sits elsewhere, but we can help move it along.

Invite from Mark to share and follow up with him on this, to help

**Action:** Nic and Teresa to follow up with Mark Jones re: matching efforts / experience with Hertfordshire.

John Carr: great chat. lots of progress. Big question that concerns me - talked about First and Stagecoach quite a lot. What about the smaller operators who provide essential services; are they represented and getting the service they want/need??

Julie: data we have is everything from local authorities. We have low complaints on missing data, it's more about short-term changes.

Julie: Google analytics data to help us see top 20 operators by demand when our customers search. Some of the groups are not the top operators. Independent or local which have huge hits on our database. Big group representatives are on our board, and we can chat with them directly. We take Nottingham City and Reading buses directly.

How willing operators are to say they are not ready in terms of data quality?



### 8. EU Standards development (2:02:12 - 2:07:04)

https://www.pti.org.uk/system/files/meeting\_files/papers/20220929%20European%20update.pdf

# 9. Issue Log (2:07:04 - 2:18:50)

Peter Stoner raised Issue 100: possibly tomorrow issuing the guidance for Christmas / New Year timetables - helpful guide updated for respective days. But each time we look at it - discussion about Christmas Eve and New Years Eve have been handled.

Bank Holidays have got more coverage in the profile. Ideas to put Christmas Eve and New Years Eve to put in with that principle of this coding. But they are different in the way public transport operates. Journeys will follow the day of the week. This week Christmas Eve is a Saturday, so a Saturday is what is used as basis.

Problems we've had - not only the Sat service, but all other day services too - as they have not adjusted their coding.

This proposal is - if the guidance was slightly changed so that it only coded the journeys as not running, then could code the data up in perpetuity, such as not running, then leave them for year to year - which is the big advantage. Would not have to do what you do at the moment, which is to specify which day is the basis this year for these two days.

Logged it for issues - for discussion. Not for this year, but for future years.

David Batchelor: agree with Peter it's a nightmare. Been telling KPMG that, and will be for the next two years. Other problem is that the systems cannot produce a Boxing Day Holiday date this year because there wont be one this year, but BODS is validating for it. Data is being taken off of BODS if it fails that validation.

Now working with operators to try and solve that.

#### **Action** for Peter Stoner to follow up David Batchelor offline.

TfGM cannot put Boxing Day holiday in their software. Works perfectly in real world because day doesn't exist. BODS fails a whole zip for one change.

Mike: often in real-time systems - get round it by bodging it! Where we're coming unstuck is trying to systemise everything.



Mike: with TNDS, is there a schematic on how things fit together? TNDS, Google, BODS etc. What feeds what? What drives what?

Julie: Some of the data from google is from BODS, but we don't know which. We're just moving to a new way of doing this, and regular factsheets and helpsheets on why my data is different in each place .

Publishing data a week or two apart, slightly different.

Have asked Peter Stoner for some of the timescales - how long does it take to get processed and published on Google?

Best we can do is tell our open data users and customers what the likely causes are, but we are not quite sure!

Might change from day-to-day and we have the functionality to move back to local authority data if operator data was not good enough. But this might change from week to week.

# 10. Next Meeting

14th December 2022, 1400-1600