



PTIC meeting 11 Feb 2020, Preston

Welcomed by Andrew Varley, Lancashire County Council. Represents ATCO on the DfT Open Data board, so he is keeping an eye on what's going on.

Introductions

Meera Nayyar, DfT (by phone)
Jonathan Shewell-Cooper
Mark Jones, EP Morris
David Batchelor, Ticketer
Justin Bloom, Vix
Ian Barratt, Lancashire County Council
Amy Brown, Traveline
Mark Taylor, Staffordshire County Council
Gary Leek, Transport for West Midlands
Teresa Jolley, DEFT153
Nic Cary, Waysphere
Russell Gard, React Accessibility
Rob West, Independent
Tim Rivett, RTIG & Chair of PTIC
Kelyani Homkar-Desai, Basemap
Dan Saunders, Basemap

Apologies

Nick Knowles, Independent
Mike Baxter, Leicester City Council
Graham Browne, WYCA
Richard Mason, TfN
Tom Lock, TfN
Jan Klug, Ticketer

Actions from the previous two extraordinary meetings:

2 meetings since last regular catch-up.

- 8th October 2019
- 18th December 2019

8th Oct 2019 Actions:

1. Minutes of additional NaPTAN meeting on this in mid-August. These unfortunately will not appear but the DfT have recognised the outputs from the meeting.
2. Group to be setup to review options for next stop name for on bus displays from NaPTAN fields. This is on the agenda later.
3. TransXChange profile presentation was circulated
4. Fares build tool: TfN has started to publish information on the fares work. There is an update from them today. Few people in the room had seen anything about the fares tool.
Action: TR to encourage wider publication of information.
5. SIRI update presentation was circulated.

18 Dec 2019 — special meeting focusing of Bus open data.

Good turnout.

No particular actions from this meeting, as it was mostly presentation and discussion.

Peter Stoner (ITO World) recalled that feedback was noted and fed back into user feedback for BODS.

Agenda

Item 1: BODS guidance

Feedback for DfT on BODS guidance from PTIC attendees:

1. the change from 10 to 40 services has changed and has not been updated in guidance
2. the guidance implies it's statutory already, but this isn't strictly true.
3. it's quite hard to get picture of how data is being uploaded. It would be helpful if some sense of the progress this year might be attached to guidance, because:
 - a. for operators, they have to load stuff up there before you can see what's there;
 - b. an app developer doesn't know that BODS isn't fully complete with all data. It's not clear from guidance;
 - c. would be good to see progress against goal, for example, that TNDS has e.g., 300 services, but BODS only has 30 so far.

PTIC Actions:

1. feed the above back to DfT;
2. continue to keep getting the message out and keep talking about it. There is a whole mix of states of progress in each of the operators. Depends a lot on whether they have each had the time to spend learning and catching up on what's going on.



Item 2: TXC data uploads to BODS

Traveline approach considered very useful for smaller operators, as it plans to use TNDS to generate TXC files. There is theoretically no delay to this.

Some are telling very small operators to hold off for now. They don't have software for TXC yet, and there seems little point in them learning how to use the DfT Excel tool if there will be a way for them to provide their TXC files via the Traveline approach from data they have already provided.

Updates from Amy, on behalf of Traveline:

- BODS transition - haven't yet seen plan for working smoothly together but are expecting draft doc with/from DfT to set this out.
- Traveline is committed to providing TNDS in TXC 2.1 version for everyone not ready to transition. Working with Basemap (who provide the TNDS service), who can now convert stuff into TNDS; been testing this with First Group .
- Not heard of any Local Authorities planning to turn off updates to TNDS.
- Test version of Journey Planner now out. Can now put in operator data and check for quality.
- Partnership with First; now exploring their SIRI-VM feeds. Testing.
- Customer research with Transport focus ongoing. These results will guide future design of website and what we will be updating / adding to website.

With the DfT message being that operators should create and upload TXC files themselves, this is causing confusion for Local Authorities who may not know what changes their operators are making to their TXC files.

As Local / Regional Transport Authorities have responsibility for co-ordinating (and historically often also creating) TXC files on behalf of their operators to ensure accuracy of published bus timetables and the operation of real time systems in their jurisdiction, the potential impacts of this are:

- Differences in use of operator codes (LA expressed they use own operator codes, but BODS required NOC codes) which will require a change in formatting for LA systems;
- Differences in TXC format and lack of knowledge of which operators in their area are planning to move to other format options;
- It is a bit circular - if Local Authority is doing the TXC creation and uploads on behalf of operators, and TNDS also uploads it, then we end up with two copies;
- Concern that the lead time is crazy - less than 18 months. Can't just introduce that and drop everything else: there is legacy stuff that's in play and we need to work with. The fact there are not many suppliers here doesn't give much comfort.



Whilst some felt these sorts of issues would delay the ability to upload data, others suggested that LA's should take the opportunity to liaise with their operators and work toward adjusting to the new approach.

PTIC Actions:

1. Raise these concerns with DfT and explore how PTIC can help make the path for transition clearer:
 - a. Regional / Local Authorities still have responsibility for co-ordinating all schedule TXC data for the purposes of published timetables;
 - b. Regional / Local Authorities still have legacy systems that help operators to create TXC registration and schedule files;
 - c. Suppliers of systems that Regional / Local Authorities use for TXC scheduling and creation need to now supply the bus operator market, and enable a single source of truth of timetable TXC to be shared with Local Authority (for published timetables and local RTI systems) and BODS.

Item 3: update from Meera

Updates:

- launched for bus timetables on 28 Jan. Pleased with this.
- Registered users can use the BODS service to create a TXC file or link to own scheduling software.
- Data quality managed service can be used to quality assure TXC files.
- Operators can readily report, identify things to fix, and then update if they wish.
 - To do so, bus operators will need a BODS data publisher account, and the ability to create TXC files of routes and timetables that they can store themselves, and upload to BODS.
- Legislation: regulations to be enforceable by end of the year. Will be accepting (m)any TXC versions this year, but from January 2021 will expect it in v2.4 and in BODS profile.
- Full detailed requirements will be available in the spring.
- Team are now working on vehicle location and fares data.
- Working on next version of BODS guidance for these next few months, and welcome comments on changes now, which we'll incorporate into amended version and reissue.

Asks for all / Actions for PTIC:

- use the timetable service and share your experience of how it is working with/for you.



- encourage operators to register and use it (they need to email the BODS service at DfT for an account)
- Attend the forthcoming business change workshops which can be found in newsletters and on the DfT website.
- Communications about BODS are being shared through: email communications, website, Twitter, and forthcoming business change workshops.

PTIC Feedback to DfT:

There are instances where local authorities have been contacted directly by operators without any prior knowledge of discussions between DfT and operators. It would be helpful for smaller operators to see link between LAs and DfT on an area/regional basis, and for LAs not to be left out of the loop in discussions on TXC, because:

- Local Authorities are letting contracts for data to be processed to enter data into TNDS. The sooner we know whether our data is required the better.
- Local / Regional Authorities still need to use timetable data for published information in paper, digital and to enable accuracy and reliability of RTI systems.
- DfT response:
 - DfT attend regional Traveline meetings, but haven't set up a formal process for doing the above.
 - DfT hold a transition discussion with Julie Williams at Traveline every fortnight. As part of this there is a process to update on which operators have been invited to join, who has accepted and their progress.
 - DfT are sending out regular (weekly) batch invites directly to bus operators via email introducing BODS and inviting them to sign up. If any Local Authorities would like their operators to be included on this list, then let Tim know.

PTIC Actions:

1. for bus operator members:
 - a. if you want explore using the TXC Excel tool for creating their own TXC files, then email the DfT BODS team and ask for the template file.
 - b. if you want to see how the Traveline /TNDS route for sharing TXC might help you avoid needing to do the above, then wait for further updates from Traveline on this.
2. for local authority members:
 - a. encourage operators in your area / region to register for BODS.
 - b. if you are re-procuring services to process and upload timetable data to TNDS, assume a reducing quantity of data required to be processed by you for TNDS over time.

Item 4: quick update from Peter Stoner on using BODS

Peter felt himself as more of a user of the data and interrogating it, and found a few things:

1. **there are two distinct and separate user groups/interfaces with BODS** (and that us and likes of LA's will need to use it a bit from both sides):
 - data URL, for those wanting to use the data in BODS
 - publisher URL, for those responsible for uploading data to BODS

2. **File naming can be confusing, and more clarity would be very useful:**
 - a. File upload will include name of whoever uploaded it as the source of the data. Would be better to be able to define source of data, and publisher/uploader of data (which might be different, such as where Local Authorities upload on behalf of bus operators).
 - b. System attaches original date and time of upload, but once it is processed, the name will change based on:
 - i. you as data provider,
 - ii. together with name of automatically assigned locality fairly central to the route as well as the date from the start of the operating period,
 - iii. this data will change based on each operating period.
 - c. Name and date in file name will change based on updates, but those looking at the data from a published perspective only seem to see a single, same file.

Step gate 1: Passed the tests

Step gate 2: draft correct version

Step gate 3: publish to be available for others to use as a data user on publisher side.

Note: you can upload without publishing, and you can delete.

3. **Quality Reports; these** are not constraining you, and although you have to wait until data quality process is completed, there is nothing to make you read it or make changes.
 - If your uploaded dataset passes this stage, then it means the schema is ok. You can still choose to make improvements based on data quality report;
 - Might be good to have a title as 'published' when it is published;
 - You can publish someone else's data, as NOC codes not needed;
 - If you have access you can publish to anyone, anywhere.

4. **Tool for developing the TXC.** Have managed to do a few things with it; despite a few issues being sorted out:
 - a. BODS isn't accepting the output at the moment
 - b. the tests are currently only working on the file(s) uploaded at the same time. If it's uploaded by a different operator, it won't find that.



- c. first version had a lot of faults with destinations. TNSD files have failed. Learnt that if you upload it as an update to the original file, rather than a new file (but because of the file naming confusions above, its hard to know which file is which), then should be better.
- d. was going to be tested against everything you operate, but at mo it's only being tested against individual file.

PTIC Actions:

1. recommend that a FAQ site, ideally in the form of a community Wiki, is set up to provide practical guidance and support for use of BODS. Something similar in Rail is very helpful. Explore how to progress.
2. remind people (operators) to publish data to BODS, and collect feedback on blockers / barriers for people in doing so.
3. help Local / Regional authorities to connect in with operators and DfT as part of publishing process.
4. support anyone asking for help / chasing feedback.

Item 5: Update on TXC profile developed for BODS, from Stuart

Link to slide deck from Tim Rivett introducing TXC profile to wider / less informed audiences.

<http://www.rtig.org.uk/web/Portals/0/20200211%20PTIC%20BODDS%20TxC%20Profile%20Update.pdf>

Key messages:

1. Timing:
 - Until Jan 2021, can upload to BODS in all formats of TXC.
 - From Jan 2021, TXC v2.4 will be mandated. This is **not** a new standard.
2. Two types of TXC schema:
 - for registrations
 - General (doesn't mandate registration numbers)

The TXC 2.4 profile relates to the **General** schema.

3. Difference between schema and profile...
 - Schema:
 - is an XSD file;
 - is used with software tools to ensure data are correctly formatted and contain required content;
 - BODS does this checking now, so...
 - Profile:



- BODS is creating a profile of additional instructions that the schema doesn't specify.

A new schema is **not** required for BODS, **only the new profile**.

Guidance and support available to use this new profile:

- Documentation: v59 gives you enough about what you need to be doing; <https://my.pcloud.com/publink/show?code=XZtS9hkZF1zKNKHAzuz8qJAchaLTlyOSOD2k>
- Recognise there is a need for an equivalent of the Nick Knowles NeTEx guidance for this; and a draft is expected by end of March;
- This guidance will give people less familiar with TXC the information they need. Otherwise, ask Stuart Reynolds.
- This is enough to get going ready for Jan 2021. There'll be a whole different question about what happens when 2.4 is enforced after then.

Readiness of the supplier market to integrate this new profile. It was felt that:

- a. whilst they think its a whole new schema, they don't think they will be ready;
- b. as they realise its only a new profile, they feel they should be able to get ready in a couple of months, but caution that clients (operators) need to rollout and test, which will take time and is felt to be biggest risk to success.

Item 6: NaPTAN changes to accommodate Accessible Information Regulations (stop announcements)

A paper was presented in the Dec 2019 meeting on stop announcement name by the Working Group set up to action this. The Paper suggests the best approach for compliance with the Accessibility Regulations will be to use of the 'short common name' field for next stop announcements.

1. **Phonetic name:** the field is intended for what is to be displayed; a visual representation. In the cases of stop names that aren't spoken how they are written, people are asking if there will be a separate field for the phonetic version of the stop name. As the Working Group wanted to improve adoption for the Accessibility Regs, and felt that adding a new field to NaPTAN would work against this goal, a separate field for the phonetic version is not recommended.
 - a. Noted that NeTEx does have a display name but not phonetic field.
 - b. recording names and attaching them to the short common name field not felt to be a big job.
2. **Welsh / other language versions:** The 'short common name' field can have different languages. The Accessibility Regulations only covers England, making for an interesting



challenge cross-border. Welsh Assembly and Scottish Government are looking at similar requirements. Highlands and Islands have requirement for Gaelic too.

Accessible Information Regulations:

- public consultation took place at same time as Bus Open Data consultation on Routes and Timetables, but publication of the results are delayed.
- Intention is to publish the Regulations around end of March 2020.
- The DfT have had a challenging time recently re: work on derogations to accessible vehicles. Coaches and rail replacement vehicles were all meant to be compliant by end of Nov 2019, and there are a few late extensions to get all relevant vehicles registered as compliant.
- Guidance for the Accessible Information Regulations is being prepared in parallel (similar in concept to the BODS guidance). Understand this is likely to be published at same sort of time as SI for BODS.
- Before the SI for BODS, there will be the competition for small operators to apply for grants to equip their vehicles with AV equipment.
- Although information on the opportunities under the grant will not be available beforehand, if you are an operator facing investment decisions now and would appreciate some guidance, contact Tim Rivett or Robert Johnson in DfT who can help.
- Requirements for equipment are likely to be designed so that where vehicles already have AV equipment the existing equipment is likely to meet the requirements so not require replacement.

Item 7: Location data (AVL/SIRI-VM) into BODS

DfT are developing requirements now for the supply SIRI-VM to the BODS portal. The DfT User experience and discovery team are getting in touch with people to inform this work.

- ITO World crew doing most of the work on the SIRI-VM profile.
- Expect guidance to be available late March/early April; with a few weeks to feedback and comment, before it gets reviewed finalised and published, as an RTIG formal document.

The plan is that SIRI-VM feeds presented / sent to BODS are live, and are then processed, and spat out in consistent format from BODS:

- SIRI-VM feeds will be mandated for upload into BODS by Jan 2021;
- Smilar to TXC for the rest of 2020, if you have a SIRI-VM feed of any flavour, the BODS portal will accept it - if you produce SIRI VM 1.3 or v2 at mo, for the rest of 2020 it won't matter;
- We still don't know if it's going to be pull or push feeds;



- When you request published SIRI-VM in published format from the BODS portal, this will come out as a consistent format.

Interface between TfL and nearby shires

Although the Bus Services Act does not apply to TfL, TfL are facing challenges for their buses going outside London boundaries into the shires.

- Compliance arrangements are still being sorted out with DVSA at the mo.
- Softly softly is likely to be the approach.

Support for Operators to get AVL equipment on-bus

For operators to provide SIRI-VM; they need equipment on bus. For the few buses that don't have this; Meera and the team at DfT are exploring how there might be some form of support for these operators. Don't know yet what form this will take but it will be a fairly small pot as we know there are not many operators / buses who need this help.

Item 8: TfN update on Fares

The TfN team were unable to attend the meeting, but provided this update:

1. Current Alpha Phase:

- Work now underway, with [press release about this in early Feb 2020](#).
- Discovery work happening with Leeds-based developer Infinity Works, who has experience working on GDS projects. This is the first transport project they have been involved with.
- They have set of handcrafted data to work with as part of the alpha. NeTEx fares data available for them to get to grips with it;
- Alpha will produce adult single and day rider tickets. Available in April.
- GDS guidance makes it a challenge; can't use Java; and when you have a fares table that might grow dynamically; some interesting challenges about how they deliver that;
- As part of the user research, there is an online survey to understand how operators publicise their fares;
- Experience of taking part in the user research work from a local authority perspective is it's a struggle to find operators not on Ticketer. This is important, because Ticketer defines quite a specific of format/structure, and we need to understand and accommodate different systems too.

2. **Next step** will be to look at user interface; which is where challenges are likely to be found.

3. **Next stage later this year** in scope for Jan 2021: concessions. Will have to understand that a child may be a concession off peak but additional charge in peak.



4. **Aim of Beta:** get to Sept when this is released, and plug it into the Open Data Portal. This will then give a few months for operators to supply fares data before Jan 2021 launch.

Feedback:

There are still big questions about a unique service ID across all these different things (aspects of BODS: fares, timetables and real time).

There seems a lot to do in the timeframe.

It's not yet clear if are we going to be uploading files that they will convert?

In principle, once you've published fares and timetables, this becomes the reference point, and connects between other components of BODS via unique IDs.

That's the theory, but it is complicated and don't feel it is fully thought through yet because we have:

- Legacy systems;
- Ticketer format.

or if/how uploaded files will be connected with other files, containing unique reference IDs.

PTIC Action / opportunity:

1. **For current Alpha phase: we are interested in non-TfN operators responding to the user research for Fares Alpha. If you want to explore this, let Tim know and he'll put you in touch with Richard Mason.**

Item 9: Disruptions and TfN open data hub project.

- User Acceptance Testing milestones achieved.
- Live versions were delivered by suppliers as planned at end of Jan.
- Now in final process of Gateway reviews which will enable Local Authorities to use the systems.
- 5 city regions TfGM, WYCA, Nexus, SYPTE and [a.n.other] have agreed to use the tool.
- Developers who previously worked on test SIRI SX data invited to join end of Sept, and be able to active use it in the spring.
- Encouraging LA's to use first, as they are more likely to have bigger oversight picture. But forward thinking operators can use.

Feedback:

1. **Re: commercials** it is a cost per seat over and above the first few years of the initial agreement. For Local Authority Highways that is doable, but for transport services, this is not something we currently do, particularly as:



- we haven't got a consistent approach in which to move in to;
 - it is unusual to sign up to services that have revenue funding implications.
 - there have been conversations with other areas, eg Midlands Connect. There is a cost to running these things, and after initial funding of project it needs to be sustainable in the future.
2. **Re: readiness (or otherwise) of processes for creating and publishing disruption messages:**
- Need ability to create both fixed and free messages. The TfN tool is aimed at people who already have processes for managing disruption messaging.
 - Feels like a strong push to get this to be the single source for disruption messaging and then deploy it everywhere. For those Local/Regional Authorities already publishing disruption messaging via Twitter, this would mean fitting our current process to use the tool as a central CMS.
 - There's a big consideration of consistent, clear messaging; one message can't counteract/contradict another. This is why TfN team are targeting LA's to use the tool first:
 - How an LA chooses to use it is important;
 - How far do you go in encoding some of this thinking into the tool is important to understand;
 - Feels that there is much to do as professionals to develop good practice in for how we construct and manage the publishing of disruption messaging.
 - There is a possibility that DfT could mandate provision of disruption information in the future. In this case, wondering where TfL are on this; it's too early to know future path yet.

PTIC Actions:

1. **Correct October meeting minutes, which refer to it as only for use by operators, which is not correct. It's a tool for both Local Authorities and operators.**

Item 10: RTIG SIRI SX profile

In an exercise linked to the TfN Disruption Messaging project, RTIG have been working with TfN and ITO World to develop a SIRI SX profile.

The profile is largely complete, with final comments invited by 21 February 2020. Minor tweaks since the last draft are to do with TfN expectations of the profile; namely;

- If publishing disruption messaging to the TfN Disruption Messaging portal; then the operator code needs to come from National Operator Code (NOC) database, and the route line has to match what's in the Traveline National DataSet (TNDS), so you can link everything up;



- If there is an SX message saying some stops will be affected / closed etc, this referencing enables knowledge of these changes to cascade automatically;
- Because there is no other use of SIRI SX at the moment this will in effect be the unofficial national profile SX.

Feedback / discussion:

- There was some debate on whether this should be a BODS ID instead of a TNDS one.
- This is because for some local authorities, the reference in the source data is not in TNDS.
- As a result, Local Authorities are wondering:
 - how the NOC code will be put in locally and included in SIRI SX?
 - because 'all our downstream uses NOC, but the unique reference from BODS is what BODS relies on for all BODS references'. There needs to be a lot of work on consistency of references which has not been addressed.
- Traveline confirmed that it made the change last year to using NOC.
- Comes back to the initial conversation about how we line all the various bits up. Once BODs populates it should be easier to understand the next bits, and how all the various bits line up / connect:
 - TNDS has unique reference. BODS does obligate users to have unique reference, and naming convention builds this up.
 - If you use versioning the way Stuart Reynolds describes, you can understand which iteration is correct.
 - Each user needs to ensure unique consistency is input into BODS.
 - when we get to latest TXC 2.4, but we are not there yet, and that's what's causing the problem.

PTIC Action:

- Explore the details around the above and resolve / provide clarity for local authorities on how to manage this.

Item 11: introducing Operating raw data and statistics exchange (OpRa) - something new

OpRA is a European project exploring the standardisation

The project will remain valid after end of 2020, as the UK will remain involved in CEN body.

Context:

- We've got standards for plan and live data.
- U.K. European bus of the future did work on historical data.
- Looking at a bit of Transmodel not looked at before: Generic higher level architecture for public transport operations - P8: management information and statistics



Never really been looked at from a standards perspective. So, this is the next bit to be standardised. Yes, it's European so many involved are coming at it from a franchise perspective.

But in our deregulated environment, we still have / share similar problems.

Relevant for operators; authorities; system integrators; passengers.

Interesting one for buses - only a few operators publish their own service quality data. Only Transdev and Reading Buses do it here, that we know of. In Europe it's very common for operators to publish this.

What sort of data?

- Replay history
- KPI's
- Vehicle failure and alerts system (use case is actually vehicle manufacturers, as they have increasing no, of vehicles they are repaid bile for, as operators are leasing not buying).

Focus on data:

- Raw data requirements
- Format and descriptive standardisation
- we're NOT looking at presentation standards.

The question that is focusing this work is: 'How do we codify this, and translate between systems, and then present'? Mostly it's all about the data that needs to be transferred.

Work done so far:

- There is a technical report that says this is feasible.
- XSD model has been created.
- Identified challenges

Next steps:

- Delivering the EU funded project, which is budgeted for next financial years programme (April 2021)

PTIC Actions:

- **Looking for new project members: If you get involved in performance data as authority or supplier, then we are interested in you being part of this.**
 - your time will not be funded for this, but your involvement will end up shaping a CEN standard on this, so some UK involvement would be good.



- One bit in the Bus Services Act; DfT could expect operators to produce a set of performance data that are expected to get increasingly granular over time - this OpRa project could inform the basis for this.
- Some suppliers have expressed interest. There will be a group in the U.K. with some more suppliers, plus operators and authorities into this.
- We should have sight on this, as it will be important in future.

Note that DfT not asking for progress on standards at the moment, as figuring out how to make use of current amounts of data that DVSA have and need to understand what is useful for compliance.

Item 12: Issues log

Air quality - compliance of vehicles, and what sort of fuel a vehicle is using is increasingly of interested.

It is supported in NeTEx but not in SIRI.

Work being proposed:

Change request to be made to get this into SIRI. Would ne included in an update SIRI which is due by end of this year.

Feedback/comments:

- It doesn't look too significant; if you can provide it, do so, if not, don't.
- Should this also be included in TXC too?
- Would vehicle number not be more powerful? Useful?
- Already in SIRI there is a unique vehicle reference which is expected to be id fleet number which the operator has. You can look this up, but need access to a fleet database. Local Authorities might not be able to get this. So the point is that doing it the other way (above) makes it more open and accessible.
- Have you got hydrogen on your list?
- This will be added and will trigger a change request to NeTEx too.

AOB

None.

Next meeting

18 June London, 13:00 - 16:00 @CPT. [Click here to register your place](#)