



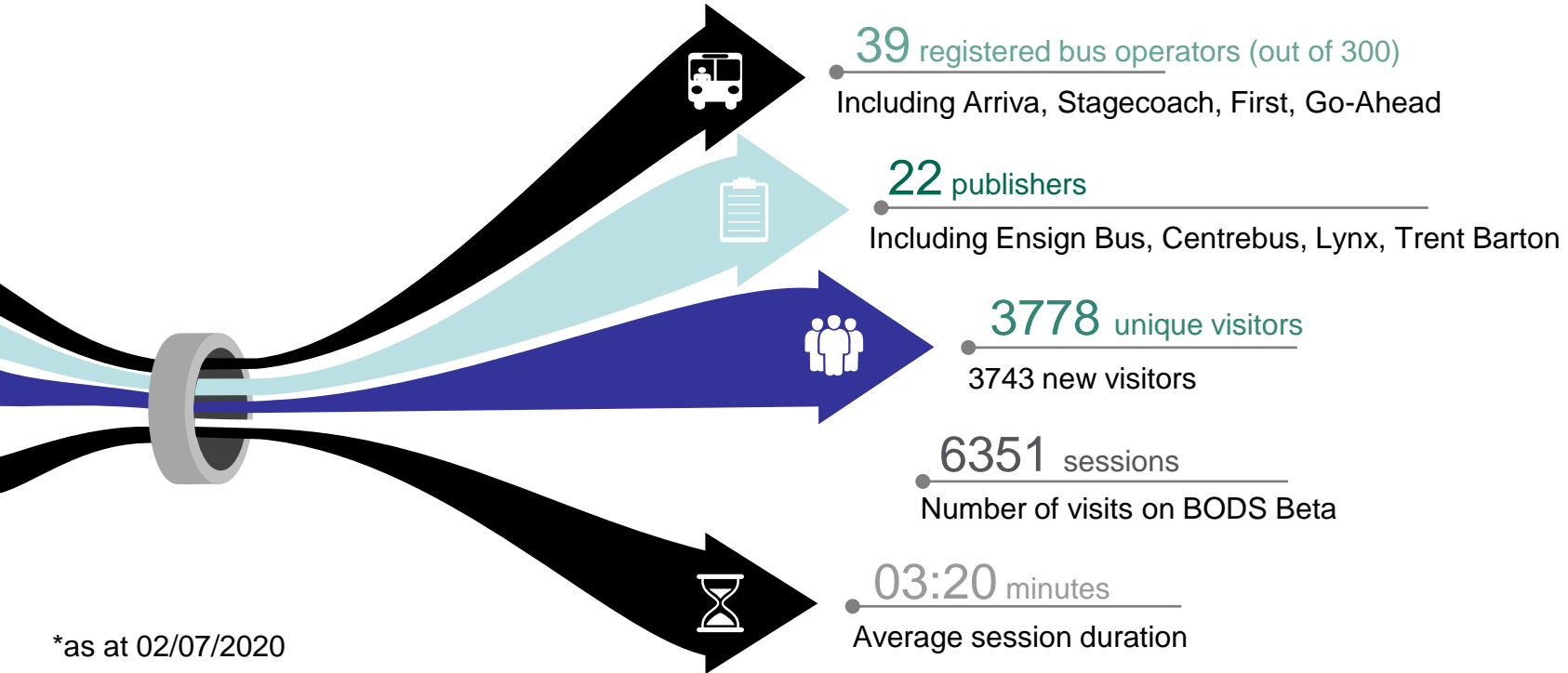
Department
for Transport

Bus Open Data: Progress Update (July 2020)

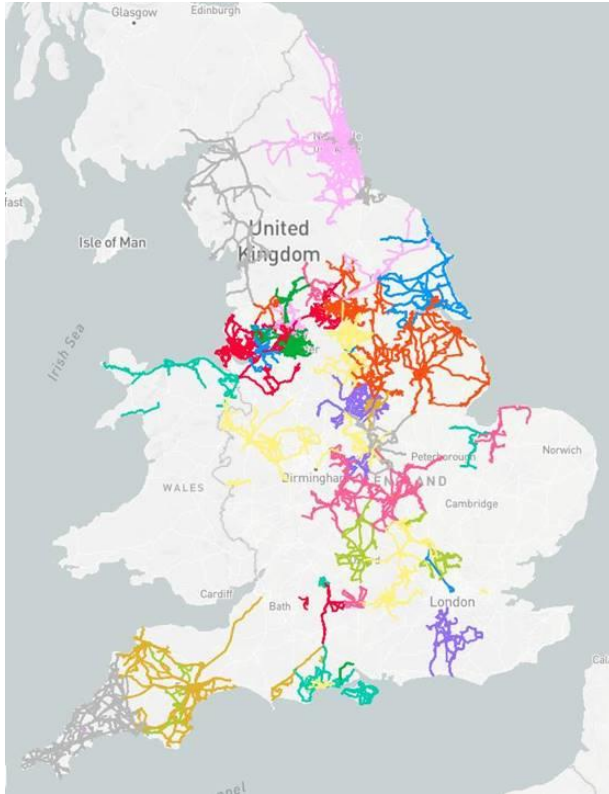
Driving the digital transformation of the bus industry



Bus Open Data Service - Summary Statistics



*as at 02/07/2020



Timetable data indexed in BODS (as at 29th June).

Colours denote different Operators.

A few observations:

- First data missing e.g. in Bristol, Somerset and East Anglia
- Stagecoach data has expired in several areas they were previously supplying
- Arriva Wales has some lines running into Newcastle on Tyne, so they and other operators may be using the wrong NOC codes

- Many users will likely not start using BODS until late in Public Beta
- TransXChange, local authority support and digital exclusion issues need to be managed
- Support expected to be offered during 2020 and 2021
- Enforcement expected to be enacted from 2022 onwards
- Staggered approach to enactment of enforcement

- 31 December 2020 – Timetables requirement legally enforceable
- 07 January 2021 – Fares requirements legally enforceable
- 07 January 2021 – Location data requirements legally enforceable
- 31 March 2021 – Operators legally required to provide historic punctuality reports for previous 12 months

Bus Open Data – Overall Summary Update

Key successes

- Find Bus Data Service now has 22 operators publishing data and business change phase launches 13 July
- Stagecoach, Go Ahead, First and Arriva datasets now on Find Bus Data Site. NE to follow later in 2020 and bau process focus
- On TXC profile, Omnibus creating export and validator for Sept 2020. Trapeze and Optibus exports on track for Autumn also.
- Test site for publication of location data now launched and 17 operators/35 OpCos publishing data onto test site (First most feeds)
- Development of SIRI VM profile for BODS now complete and technical documentation being finalised before distribution.
- Ticketer and TfN have agreed to work together to deliver text NeTEX exports to test upload and URL links features of BODS Fares
- DfT have set up an ETM supplier group to bring together ticket machine providers as they develop their NeTEX exports
- Final debate for PSV Open Data SI cleared on 02 July and all Lords content to approve the Regulations. Regs now made.

Key challenges

- Need to expedite delivery of capacity and crowding data for third party application developers via BODS/ITM for Sept
- For timetable data, we have been working to resolve the end date issue and create bau update processes for operators
- For location data, we still need to test a broader range of feeds in the BODS service as Ticketer heavy currently
- For fares data, we need to have clear plans in place with ETM suppliers for delivery of NeTEX export
- Ensuring that all local authorities have provided completed returns for their operator audit to support business change
- For Reporting and Analytics, ensuring that we have delivered location data feed monitoring (Dec 2020) and punctuality (Mar 2021)

Areas to focus on

- Business change plans which commenced from 13 July 2020 in the west Midlands area for Seye and Ben to take forward
- Delivery of Agent Mode functionality for the Bus Open Data Service to support business change and LTA engagement
- Resolving end date issue for operators and consumers and ensuring that OpDi feedback has been considered and resolved.
- Onboarding more operators to provide test feeds to location data service and having clear migration plan into production.
- We also need to work at pace to ensure Ticketer have access to the test NeTEX files from TfN for export
- Delivering an updated version of the Implementation Guidance for Autumn 2020, for publication prior to AVL launch
- Scoping out Monitoring and Compliance workstream for Passenger Experience Policy Advisor and OTC/DVSA to take forward
- Making a Summer recess announcement following the making of the PSV Open Data Regulations in August 2020
- Resuming the Twitter campaign 'Ding that Bell' to positively reinforce operator publication of timetable data



Key successes

- ITM and RAA work initiated in June
- ITM mobilisation complete; backend work has commenced and all work is scoped and allocated to developers
- RAA user research has commenced with all key user groups (DfT, DVSA, Operators, Local Authorities)
- Initial prototypes/ wireframes have been produced and are being tested with users – these are at an early stage and will be iterated upon and become more sophisticated over the coming months

Key challenges

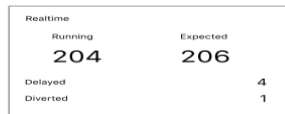
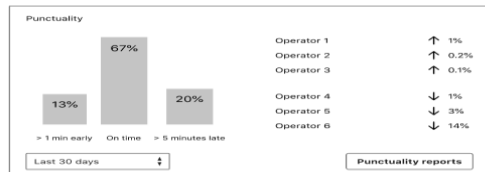
- Availability of AVL data to support ITM and supply of GTFS-RT (needed by Sept)
- Quality of user research sessions, considering Covid-19 restrictions on traditional engagement

Areas to focus on

- Immediate focus for ITM is to continue with the backend set up work for this
- Immediate focus for RAA is on continuing the good work that has started on user research and design, and iterating the user interface designs and gathering more feedback
- Looking ahead, timescales for delivery of ITM & RAA are:
 - ITM delivery due September 2020
 - Phase 1 of RAA (Feed monitoring, performance, and alerting) due December 2020
 - Phase 2 of RAA (Journey completeness, on-time performance and headway reporting of routes and operators) due March 2021
 - Phases 3 and 4 of RAA (Enhanced vehicle, line and operator statistics and Business Intelligence (BI) tool connector) due September 2021



Blackpool

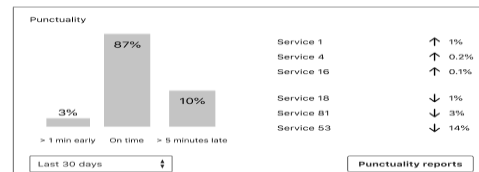


Feed status

Operator	Errors	Alerts
Operator 1	16	24
Operator 2	15	16
Operator 3	12	5
Operator 4	3	16
Operator 5	1	4
Operator 6	1	0
Operator 7	1	0
Operator 8	1	0

Last 7 days

Operator 1



Feed status

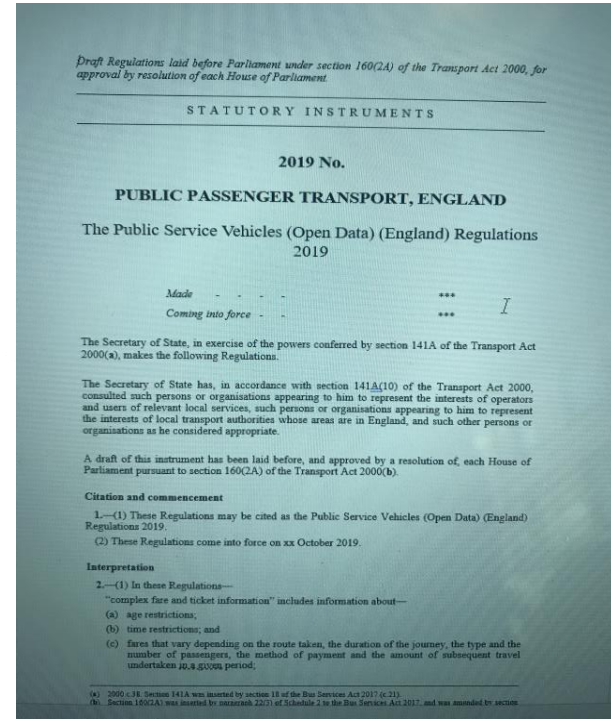
Available

Recent events

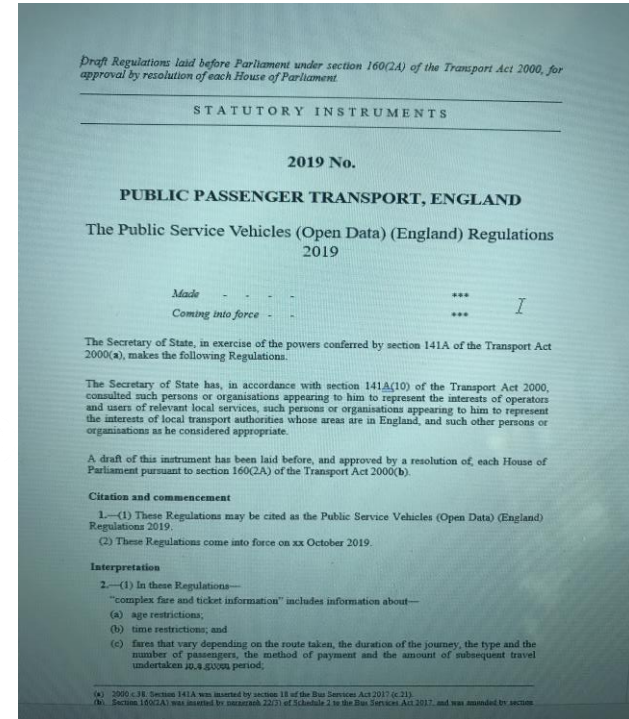
- ⚠️ **Feed alert** Elements of your feed appear to be missing data. 10:00
- 🚫 **Feed error** We were unavailable to access your feed. Jun 29, 03:13
- 🚫 **Feed error** We were unavailable to access your feed. Jun 29, 03:04

Last 30 days | Feed activity

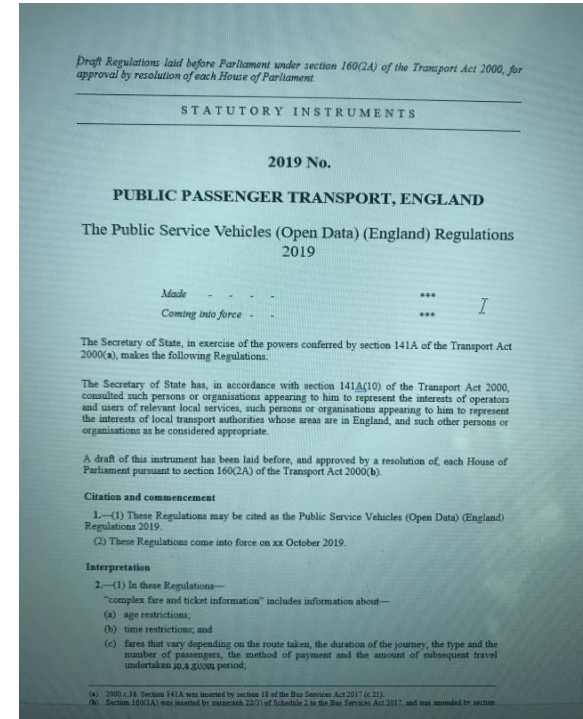
- Primary legislation made back in 2017 – Bus Services Act
- Bus Open Data or PSV Open Data regs are covered in S 18
- <https://www.legislation.gov.uk/ukpga/2017/21/section/18>
- At the time, it was thought to be ‘very hard to do’
- Very little detail included in the primary legislation
- So it was decided these regs would be subject to the affirmative procedure
- Since 2017, we have been working in 2 week sprints with the lawyer to iterate the legal instructions
- Instructions are provided by the policy team to the legal team who then draft the regulations
- DfT has strong reputation across HMG for quality of legislation



- Laying scheduled for Autumn 2019 but HMG dissolution resulted in missed laying date
- The PSV (Open Data) (England) Regulations will be laid in the House on 05 May 2020.
- Regulations subject to the affirmative procedure and must be debated and voted on, to pass.
- Virtual debates to be scheduled for the Commons and Lords during May/June 2020 and so form next stage of preparations.
- The regulations will legally require bus operators to publish data to set standards (TXC, NeTEx and NaPTAN).
- Timetables and stops enforceable from end of 2020. Punctuality, location and fares requirements enforceable from early 2021.
- Transitional period of 2020-21 before enforcement begins in 2022.



- Regulations apply to England only but Wales and Scotland may align
- Data incl. timetables, fares, locations, stops and punctuality
- Also it will mandate who provides the data
- So primarily bus operators but ltas must provide stop data
- LTAs can provide data on behalf of operators (franchising and EPS)
- And the standards for provision (but not the version)
- So TXC for timetables, NeTEx for fares, SIRI VM for location and NaPTAN for stopping data
- The method of provision so submitting data to BODS
- And the manner of provision so must be machine readable
- And the statutory dates by which data must be provided
- Must be machine readable and no restrictions on use and disclosure



- a. the name, and where applicable the trading name, of the operator;
- b. the operator's National Operator Code;
- c. the number of its public service vehicle operator's licence applicable to the service;
- d. the number or name of the service;
- e. the number under which the service is registered with a traffic commissioner (except in areas where a franchising scheme is in operation);
- f. the route of the service, including the principal starting and finishing points;
- g. the stopping places of the service in the order of stopping;

- h. information to ensure identification of a stopping place, comprising—
the stop code, taken from the National Public Transport Access Nodes() database; and includes: the Ordnance Survey grid reference; relevant landmarks; a topographic reference taken from the National Public Transport Gazetteer(); and an indication of whether the stopping place is used as a timing point.
- i. the arrival and departure time (defaulting to departure time) at each stopping place or, where applicable, the frequency of the service;
- j. the days on which the service runs, or is to run, and any public holidays or other days on which the service does not run;
- k. where a service is provided for the purpose of serving a school, college or other educational establishment, the dates of terms for that school, college or other educational establishment.
- l. any change in the information provided under sub-paragraphs (a) to (j); and where the service has been or is to be terminated, information about the termination.

Simple fare and ticket information” includes —

- adult single and return
- child single and return
- group fares and tickets;
- period tickets;
- single operator fares and tickets;
- multi-operator fares and tickets;
- zonal fares and tickets;
- the ways in which fares may be paid;
- which tickets can be purchased in advance and which can only be purchased on board a vehicle;
- age restrictions;
- time restrictions;

Complex fare and ticket information” means information about fares that vary depending on—

- the route taken;
- the duration of the journey;
- the type and the number of passengers;
- the method of payment;
- the amount of subsequent travel undertaken in a given period;
- whether or not a discount or a cap is applied to the fare;

In this regulation, “automatic vehicle location data” means data, in respect of any vehicle while it is being used to provide a relevant local service, that meets the requirements of the Vehicle Monitoring Service version of the Standard Interface for Real Time Information() and which comprises—

- information as soon as it becomes available about the location of the vehicle along a route;
- where available, the location of the vehicle in relation to a stopping place;
- the vehicle identifier;
- the name or number of the service;
- the time the vehicle started its journey; and
- the finishing point of the vehicle.
- also worth noting that the mandated update frequency is at least every 15-30 seconds
- and the data is to be provided by the operator

Information about the operation of services

applies to:

- the operator of a registered relevant local service in relation to the operation of that service in the relevant area;
- a local transport authority that is also a franchising authority in relation to any relevant local service which operates in the area to which the franchising scheme relates.

Subject to paragraph (3), the operator or, where applicable, the local transport authority must provide the bus open data digital service internet site with data about punctuality of relevant local services in the previous calendar year, in electronic form, by 31st March of the following calendar year.

The requirement referred to in paragraph (2) applies to the part of the calendar year falling on and after the date on which these Regulations come into force, and to subsequent calendar years.



Information about stopping places and changes to stopping places

A local transport authority must provide the Secretary of State's National Public Transport Access Nodes database with the following information in electronic form in relation to each stopping place in its area:

- the location;
- the stop code() or the nodes code taken from the Secretary of State's National Public Transport Access Nodes database;
- the area code;
- the Ordnance Survey grid reference;
- relevant landmarks;
- a topographic reference taken from the National Public Transport Gazetteer;
- details of any change in the location.
- The provision of information under paragraph (1) must commence by 31st December 2020.

The stop code is the Association of Transport Co-ordinating Officers' stop code which is a unique identifier for bus stops.



Any information provided to the Secretary of State must be made available by the Secretary of State:

- publicly,
- in electronic form,
- free of charge, and
- without any restriction on its use and further disclosure.

A person will not be able to use any information made available under paragraph (1) without having first provided the Secretary of State with the following information in electronic form—

- their name and, where applicable, trading name;
- their land-line telephone number or a mobile telephone number;
- their address; and
- their e-mail address.

A person will not be able to use any information made available under paragraph (1) if the person:

- does not acknowledge in a statement of attribution in any App that they have or may develop using information made available under paragraph (1) that the information has been taken from the bus open data digital service internet site;
- does not state in any App that they have or may develop using information made available under paragraph (1) that while the Secretary of State strives to preserve the integrity and quality of information on the bus open data digital service internet site, the Secretary of State cannot warrant the accuracy or quality of the information on the site;
- in any way implies or explicitly states that any App they have or may develop using information made available under paragraph (1) has the endorsement, affiliation, support or approval of the Secretary of State;
- does not publish the date on which any file mentioned in regulation 4(1)(b)(i) or 6(1)(b)(i) was created;
- uses the information made available under paragraph (1) in a manner that unreasonably impinges on the ability of others to use it; or
- uses the information made available under paragraph (1) unlawfully.

- ~~• To prepare for two debates in the Houses; one in the Lords and one in the Commons~~
- ~~• Twenty one days after the debates and approvals, the regulations will be made~~
- **Following debates and approval both Houses, the regulations will be made.**
- Then we prepare for an announcement post Covid 19 as part of restart and recovery
- And we will publish an up to date version of the Implementation Guidance when we make the regs
- To work with Office for the Traffic Commissioner (ITC) to review their Stat Guidance Doc No 14
- To write to the OTC regarding the dates for enacting enforcement of the regulations
- To work with DVSA to amend their documents and processes for compliance monitoring
- To work with DVSA to revise their 21-22 workplans and Service Level Agreement
- To work with Ito World in the Reporting, Analytics and Archiving Service for BODS



Department
for Transport

Thank you....

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