POSITION PAPER

WHY EU PASSENGER RAIL NEEDS OPEN DATA

January 2020

EXECUTIVE SUMMARY:

ALLRAIL, the Alliance of Passenger Rail New Entrants, is the newest EU rail recognised body and is a non-profit association that was founded in the first half of 2017. It brings together non-incumbent passenger operators and ticket vendors from around Europe: MTR, FromAtoB, LEO Express, WESTbahn, Omio (formerly GoEuro), FlixTrain, NTV-Italo, Regiojet, ILSA Intermodalidad, Transdev, Stagecoach and GetLink.

We call for more market liberalisation in passenger rail operations and rail ticket retail – because in those places where these already exist it has been empirically proven that these lead to **better quality, improved choice, cheaper prices, higher demand and reduced taxpayer subsidy. The modal shift from less sustainable modes of transport (e.g. Air) to Rail has also greatly benefited the environment.**

In this position paper, we will argue why (1) the Review of the Directive on the re-use of public sector information ("PSI Directive") and (2) the current negotiations on the EU Rail Passenger Rights recast in the European Council are both excellent opportunities to finally unlock the potential of the rail sector in providing competitive and accessible rail solutions for existing and potential public transport users in Europe.
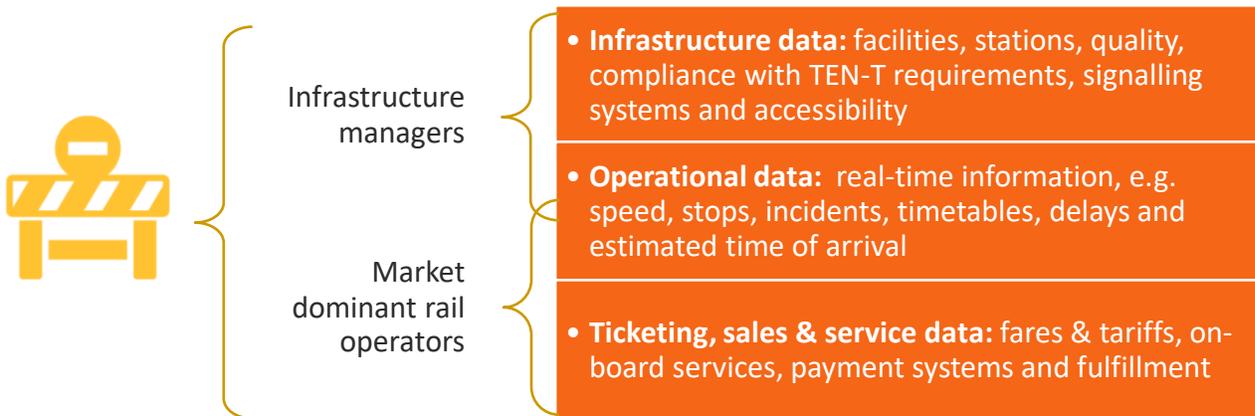
The solution is not difficult: if all passenger rail options were **more transparent and bookable** then both existing users of less sustainable modes of public transport (e.g. air) AND those who currently use the individual private motor car (still 80% market share in Europe) would migrate to Rail. Such modal shift would help reduce global warming. It would also reduce the burden on the taxpayer that heavily subsidises state-owned rail incumbents, as there would be more passengers using existing rail services.

Open Rail Data is first & foremost about making the total passenger rail market bigger while protecting the environment and making the rail system more efficient, which in turn reduces taxpayer subsidy. It's a clear Win-Win solution for all EU stakeholders – passengers, taxpayers and politicians alike

IT'S TIME TO END 'DIGITAL PROTECTIONISM' IN RAIL:

The lack of access to and flow of rail data from state-owned rail incumbents is THE major obstacle for the achievement of an open and competitive European passenger rail market. In specific EU member states, both dominant railway undertakings and state-owned national infrastructure managers often engage in **digital protectionism**, limiting the exchange of essential data for the development and growth of the passenger railway business.

ALLRAIL identifies two main types of unfair rail data control in Europe:

Infrastructure managers

Market dominant rail operators

- **Infrastructure data:** facilities, stations, quality, compliance with TEN-T requirements, signalling systems and accessibility

- **Operational data:** real-time information, e.g. speed, stops, incidents, timetables, delays and estimated time of arrival

- **Ticketing, sales & service data:** fares & tariffs, on-board services, payment systems and fulfillment

Rail infrastructure in each EU member state is still largely funded by the taxpayer- there is not a single one where track access fees cover the entire cost. However, a large majority of the operational data (meaning data related to the real-time status of trains on the infrastructure) is not made publicly available; the incumbent only re-uses it on its in-house information & sales channels. There is little incentive to improve because the passenger has no other choice than to use them – nowhere else to go. This in turn means in-house channels have no incentive to innovate, reducing the rail system's competitiveness – other transport modes (e.g. air & bus) will jump ahead in terms of customer experience.

A similar problem exists with selling tickets: state-owned incumbents have control over the creation and the sharing of essential data, such as the lowest fares, as well as who has the 'right' to sell their trains, on the vast majority of services across Europe. Blocking access to all timetable & fare data as well as the right to sell tickets means that independent ticket vendors cannot combine operators' products to offer the cheapest or fastest travel chain between any two railway stations in Europe. This hinders the attractiveness of rail travel, to the detriment of passenger choice and again the railway industry's competitiveness.

A new culture is needed when it comes to the availability and access of data in order to support rail's competitiveness and attractiveness as a transport mode. The burden of proof should not be on advocates of free data flows but on those wanting to maintain barriers. This requires strong legislative action at the EU level – such as the PSI Directive and the EU Rail Passenger Right recast - in order to remove existing barriers for opening access and data re-use.

OPEN PASSENGER RAIL DATA – OUR SOLUTION:

A binding, robust EU legislative framework is needed to oblige historical rail incumbents to open access to non-personal data that can be re-used for consumer benefit.

ALLRAIL seeks to promote key features of the open data model at the EU level:

1. *Opening data of publicly owned/funded entities and dominant players*

We urge publicly owned and/or funded entities to grant access to their non-personal data. In the rail sector, the principle is simple: by granting infrastructure access to operators, state-owned infrastructure managers in all EU member states have timetable and real-time data about the trains running on its network. Therefore, the infrastructure manager – and not the railway operators – should be the generator of the data and the entity that makes it available in a usable format.

The same should go for rail incumbents when it comes to fares/ticketing data, who are market dominant in their national intramodal market, and any entities receiving taxpayer subsidies for running services (i.e. a PSO 'Public Service Offering' contract), regardless whether local, urban, suburban, regional or long distance trains. Any licensed ticket vendor should receive access to such data as well as the right to sell the tickets.

2. *Free flow of data - data that EU citizens have already paid for*

All operational, infrastructure and fare data should be made available for re-use use in order to provide better, more innovative services to rail passengers. EU citizens who are subsidising the rail system (both track infrastructure and PSO 'Public Service Offerings") should also have the right to search and book all available rail options (e.g. across several rail operators and borders) in a fast and convenient manner, in as few clicks as possible.

In the case of passenger rail, independent ticket vendors, whose sole focus is to maximise / increase sales by specialising in building customer-centric, digital solutions, could then make optimal use of the data, capitalizing on the latest technical capabilities, such as smartphones and geolocation, in order to make rail travel as attractive as possible. **Competition should not be in terms of who has better access to the data (which is traditionally the in-house channels of the state-owned infrastructure managers and operators) but instead who makes better use of the same data (available to all) for the benefit of the passenger**

All rail data should circulate without data location restrictions, and only sensitive personal data should be restricted. ALLRAIL believes that EU should take actions to **remove all the remaining barriers** to the free flow of data and to better **strengthen any relevant existing data legislation, both through Directive on the re-use of public sector information ("PSI Directive") and the proposed new EU Rail Passenger Rights recast.**

3. *A simple and fair licensing contract for access to data*

The access to the data should be based on a very simple licensing regime. The objective is to enable the emergence of an innovative developer community. Competition should not occur by means of contractual clauses, but instead by means of innovation, namely: how to best optimise use of data in order to provide quality services (e.g. Web and App features).

ALLRAIL believes that only a **European contractual template** for licensing data can guarantee fair and equal access to data of state-

The situation in Europe today: unequal bargaining power
Due to the historically monopolistic character of the rail sector, new passenger rail operators and ticket vendors often face unfair bargaining relations. This prevents the ability of the rail sector to provide integrated solutions for its customers (i.e. passengers). Incumbents are using their dominant position to impose unfair clauses e.g. restriction of data location, limited use of data, marketing and remuneration (compared to the incumbents' in-house ticket vendor subsidiaries). The market power of the data owner is dominant and unequal.

owned entities and create a level playing field between all railway sales channels in the market - regardless whether state-owned rail incumbent in-house or independent ticket vendors. In order to be as attractive as possible, the licensing template must remove unnecessary complexities and be transparent.

4. *Data available in a usable format*

Similar to what will be implemented in Finland under the new Finnish Transport Code (introduced in 2018), we strongly believe that all data should made available through an Application Programming Interface (API). APIs are the most user-friendly interaction tool between data generators and data users. It is a machine readable and compatible interface, giving the user legal confidence and predictability.

ALLRAIL thinks that **promoting APIs at the European level** is the best way to share data across EU borders. This is a convenient interoperable standard for contributing to establish an integrated market. APIs have become a pragmatic alternative to the complexity of setting up one single rail ticket reservation system across Europe and entail zero cost to the taxpayer.

Furthermore, a common 'central layer' is necessary in order to achieve proper interoperability. All operators using the same railway station should use the same technical co-ordinates, so that any hub is easily recognizable as a place where passengers can change operators. Once passenger rail has done this, other transport modes should use the same co-ordinates too, allowing passenger rail to be part of integrated multi-modal concepts.

WHAT DATA SHOULD BE MADE ACCESSIBLE UNDER THE OPEN DATA MODEL?

ALLRAIL strongly supports the principle that a**ll data should automatically be made available for re-use**; only sensitive personal data should be restricted. Specifically, the following different data types:

➢ **Operational data**

Operational data are all the data related to train operations (speed, delays, stops, incidents, Expected Time of Arrival, location of the train); it is machine-generated. This is essential information that can contribute to improved traffic management and allow for the easier planning of diversions (in the case of building works or in emergency scenarios) and provide new services to passengers. For example: where is the best place to change trains in order to make the fastest journey between any two railway stations?

All rail services (both commercially viable open access and taxpayer funded 'public service offerings') **operate on publicly financed infrastructure assets** and not under the ownership of an individual railway operator. Therefore, operational data should be made available by the infrastructure managers to any legitimate body (e.g. licensed independent ticket vendors) that needs it.

➢ **Infrastructure data**

Among other things, Infrastructure data includes compliance with TEN-T requirements, the signalling system, the quality of the track infrastructure, speed and weight restrictions, and the charges for track & sales infrastructure. Rail operators (both large and small; incumbent and non-incumbent) need this information to plan services and adjust their operations to the constraints. Opening data will also help develop Key Performance Indicators, steering the future improvement of operations and efficient performance of track and ticketing infrastructure.

➢ **Ticketing data**

Dominant incumbent railway undertakings and public service (PSO) operators should be obliged to open their ticketing data, and provide relevant rights to use it, in a non-discriminatory and fully transparent way. Opening access and re-use of ticketing data is an effective way to create a level playing field between incumbent and independent ticket vendors, allowing them to compete not on access to incumbent data but on quality, innovation and better services. It would allow ticket vendors to show passengers optimised, integrated rail journeys across all railway operators, thereby showing all rail options between any two railway stations in Europe (currently, this is often not the case).

Often, this can double or triple the number of available and offer price savings of up to 60-80% versus the limited range that incumbent in-house ticket vendors show and sell – all using existing train services!!

It is important to stress this would NOT mean that incumbent rail operators will "lose control of their data". They would continue to have full control over the prices charged for a ticket, and - after a successful sale - they would still receive all non-sensitive details of the ticket sold (i.e. passenger name, phone number, email, price and exact route travelled) – in other words, all the data that they need in order to continue to optimise their rail product and reach out to the customer in case of a disturbance during the journey.

Incumbents also often complain that they will then "lose the relationship with the passenger". Roughly translated: what state-owned rail incumbents *really* mean by making this argument is that they want the ability to market directly to all passengers on their trains after the journey, including those acquired not by themselves but through an independent ticket vendor.

However, this undermines the value that independent, transparent digital platforms have brought to the rail market, similar to how they have done so in other sectors such as aviation or e-commerce. In the aviation sector, whoever has found the customer also owns the relationship. In other sectors, it is quite normal that independent distributors bring customers to upstream suppliers that they then otherwise would not have had – this is after all incremental, additional revenue - but then the customer relationship remains with the distributor who spent money and effort to win that customer. Why should this normal practice elsewhere not apply to passenger rail? After all, nobody is suggesting rail operators should not be able to have their own in-house ticket vendors too; they should have equal opportunity to build up a customer relationship. Any other solution would independent ticket vendors losing customers after just one booking – state incumbents then market directly to acquire the next booking - and unfairly augment the dominance of the incumbent in-house ticket vendors.
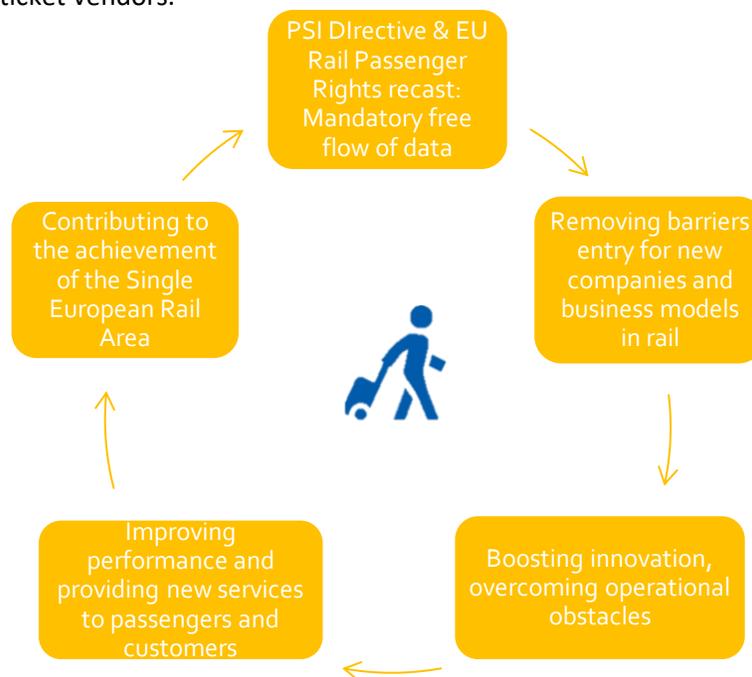
SUMMARY: OPEN DATA MEANS QUICK WINS FOR THE PASSENGER RAIL SECTOR AND ITS CUSTOMERS

ALLRAIL is convinced that the very positive results of open data in the Finnish, French and UK rail sectors can be scaled-up at the European level and deliver quick wins for rail players and customers. The current review of the directive on the re-use of Public Sector Information (PSI Directive) and the EU Rail Passenger Rights recast should ensure that there is no continued exemption for passenger rail or public transport.

Open Data would create important synergies helping all railway operators – large and small - to become more visible in the rail market and to sell their train service, which would be a huge boost for Above Rail competition, an explicit goal of the European Commission. In addition, it would allow passengers to book a wide-range of ticket combinations across different rail operators as well as receiving the most up-to-date real-time information whilst on their journey, winning customers away from less sustainable forms of public transport, such as car-sharing & low-cost airlines.

All in all, after many years of various attempts, **voluntary data sharing in the rail sector has been proven to be insufficient.** Earlier this year, on 4th May 2019, one of the world's most well-known rail bloggers – the Man at Seat 61 (real name: Mark Smith) published an article in The Guardian[1] about how to "Book Trains in Europe". The problems mentioned in his article are not new, and indeed Mark Smith himself has been to Brussels himself in recent years to alert stakeholders as to what he perceives to be the key issue:

"Here's the rub – no single website sells tickets for every European train operator at the cheapest rate"

This must change. **Data localisation is the number 1 trade barrier in the world**, and we experience it in the Single European Rail Area as well. Preventing free data flows goes against the fundamental concept of a Digital Single Market and, most of all, it hurts innovative EU rail start-up and tech companies.

For more details please contact:
Nick Brooks, Secretary General, ALLRAIL asbl, Alliance of Passenger Rail New Entrants in Europe
Tel +32 485 832 991; Email info@allrail.eu; 🐦 @ALLRAIL_EU; Reg nr. 675.784.944.
Publication in the Belgian Official Gazette on 29.05.17

---

[1] https://amp.theguardian.com/travel/2019/may/04/how-to-book-trains-in-europe-the-man-in-seat-61?__twitter_impression=true