

Rail Delivery Group



Modal comparison: Rail and Air

The Williams Rail Review

25th January 2019

Author – Rail Delivery Group

Submitting to The Williams Review, rail.review@dft.gov.uk

As part of a series of comparative studies of transport systems, this document profiles how air compares with rail.

This document was produced by Rail Delivery Group.

All material is property of Rail Delivery Group Ltd.

Rail Delivery Group is a membership organisation representing rail companies operating in Britain, this includes; Network Rail, train operating companies, freight operating companies and other infrastructure companies. For more information about Rail Delivery Group and its members please visit www.raildeliverygroup.com.

This document is part of RDG policy development and contains commercial and industrial information. If you would like to share this document wider than the original distribution list or if requested under the Freedom of Information Act please contact Richard Evans, richard.evans@raildeliverygroup.com

How does rail compare to aviation?

Passenger journeys per year



Rail 1,700 million



Aviation 290 million

Number of operators

Airline operators (Heathrow only) 90

Passenger operators GB 23



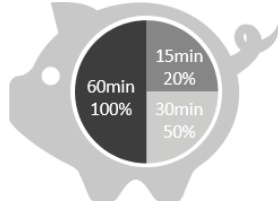
Put customers at the heart

Punctuality



5/10 minutes 15 minutes

Delay compensation

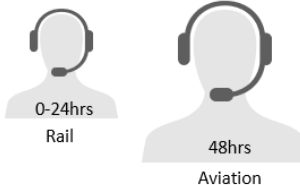


Rail



Aviation

Notification for PRM assistance



Journey satisfaction



Rail 81%



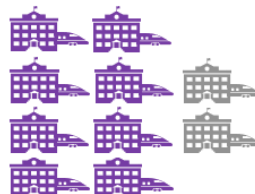
Air 65%*

*UK airlines, Jet2, EasyJet, Flybe, Virgin, BA (Which?)

Station or airport satisfaction



70%

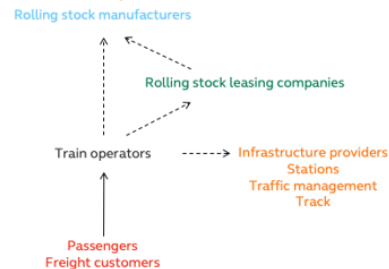


79%

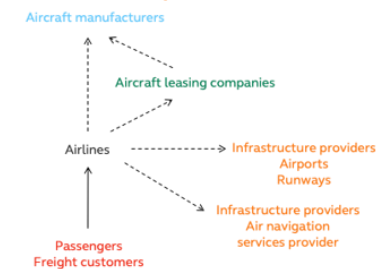


Clear accountability

Rail Industry Structure



Aviation Industry Structure



The rail and aviation industries have similar vertical structures. Just as train operators do not typically own track, stations, etc., airlines do not own the airports to which they fly.

Each element of the aviation industry is accountable for its part.



Strengthen communities



Living near a railway station has a positive impact on house prices. Living near a new Crossrail station has increased prices by 31%. Living near an airport has a varied impact on house prices. Outside London there can be a positive impact on prices but in London it reduces values.

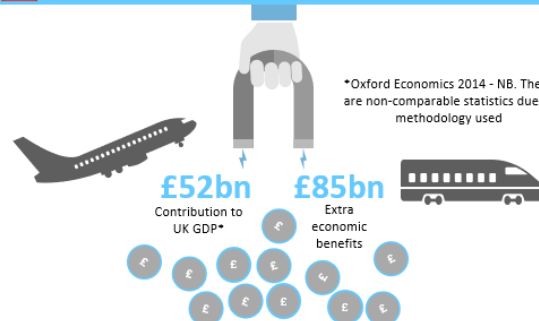


Deliver value for money

In 1997/98, government funding for rail was diverted from capital investment into plugging an operating loss equivalent to £2bn. Now the railway produces a £200m a year operating surplus, thanks to big increases in revenues, boosted by the huge rise in passenger numbers, part stimulated by the commercial activity of operators to encourage rail travel.

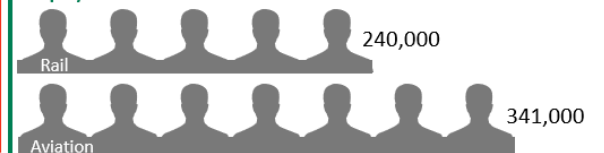


Drive economic growth



Inspire our people

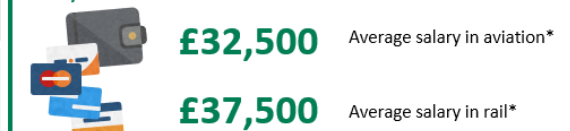
Employment



It takes between nine and 12 months to become a qualified train driver. It costs around £80,000 to train a driver but this is paid for by the recruiting company. Rail is introducing a National Train Driver Academy paid for by operators.

To train as an airline pilot costs between £60,000 and £90,000. And takes three to five years. Some airlines will sponsor this.

Salary



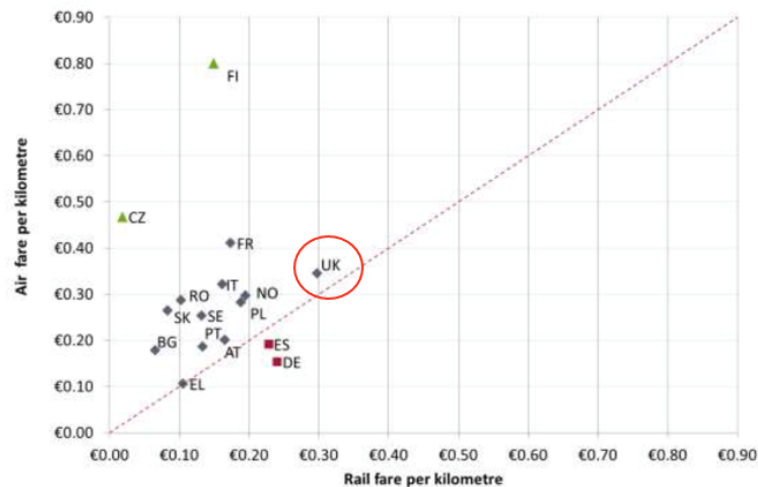
*totaljobs.com - note, figures may not be totally reflective and are indicative only

This document is part of RDG policy development and contains commercial and industrial information. If you would like to share this document wider than the original distribution list or is requested under the Freedom of Information Act please contact Richard Evans, richard.evans@raildeliverygroup.com

Whilst care has been taken with the sources and accuracy of the data provided this has not been adjusted or normalised which may mean comparisons are indicative rather than actual.

Fares

Rail fares v airfares



Interurban 300km:

<https://ec.europa.eu/transport/sites/transport/files/modes/rail/studies/doc/2016-04-price-quality-rail-pax-services-final-report.pdf>

An independent study by SDG in 2016 found that comparable journeys by rail and air in the UK domestic market were not dissimilar in price, averaging €0.3 per km for rail and €0.35 for air.

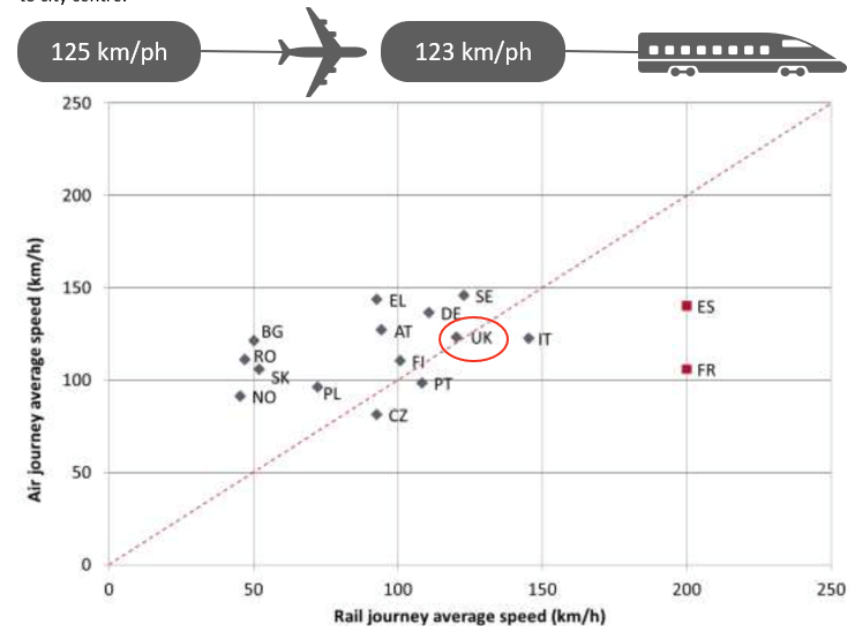


Speed

Average journey time for domestic journeys

An independent study by SDG in 2016 found that domestic rail and air travel have similar speeds (factoring in waiting etc). However, the assumed waiting time at airports was low.

The model assumes a 30 minute check in and 30 minute exit time. In reality these times are longer with recommended check in of 1 hour due to security measures. These estimates also do not calculate time to city centre.



Interurban 300km: <https://ec.europa.eu/transport/sites/transport/files/modes/rail/studies/doc/2016-04-price-quality-rail-pax-services-final-report.pdf>

Slot and path allocation

Air

Slots are only allocated at airports where there is insufficient capacity for the number of aircrafts looking to land, these are called coordinated airports. In the UK these airports are: Heathrow, Gatwick, Stansted, Manchester, Luton and London City. The slots are allocated through Airport Coordination Limited (ACL) every 6 months (Summer/Winter allocations). Given the number of factors which dictate the price a company pays for a slot (time/season/location/Size of airline) and the difficulty in accessing prices paid it is impossible to determine some sort of market value for airport slots.

If airlines do not use their slots- many of which are 'grandfathered'- then they lose the slot. To comply with the "use it or lose it" rule, many airlines resort to artifice—flying smaller planes than necessary in order to spread capacity across their slots, for example, and even running empty "ghost" flights to ensure that the runways are busy at the appointed time. So instead of slots being recycled from established carriers to new ones, they are clung to. One analysis showed that only 0.4% of London Heathrow's total slots and 0.7% of Paris Charles de Gaulle's were allocated to new entrants during the period under study.

Rail

Part D of the Network Code details how railway timetables are produced for the bi-annual timetable change and ad-hoc requests. Railway undertakings have certain rights of appeal in

respect of decisions made by Network Rail during the timetabling process. These appeals are heard by a specialist Timetable Panel established by the Access Disputes Resolution Committee, an independent body with a majority of members elected by railway undertakings and others appointed by Network Rail. The slots given in the timetable will reflect access rights which a train operator has in its track access agreement with Network Rail (approved by the ORR). There are also "use it or lose it" provisions, which are designed to ensure that any un-used capacity is not "locked up". However, given that the vast majority of passenger services are required by franchise agreements and freight services are reviewed from time to time, recently there has been no use of these provisions to any significant extent.

Rail

	No. of companies	Central government body	Public corporation	Private sector	Monopoly activity	Competitive activity	Comments
Train operators	> 20		✓	✓	✓	✓	Mostly private-sector companies. LNER is currently a public corporation.
Infrastructure providers	< 10	✓	✓	✓	✓		Companies other than Network Rail are responsible for relatively small pieces of infrastructure.
ROSCOs	< 5			✓		✓	
Train manufacturers	< 5			✓		✓	

Aviation

	No. of companies	Central government body	Public corporation	Private sector	Monopoly activity	Competitive activity	Comments
Airlines	< 20			✓		✓	NB: domestic travel market only
Airports	> 50		✓	✓		✓	
Air navigation services provider	1			✓	✓		NATS is 49% government owned
Aircraft leasing companies	< 20			✓		✓	
Aircraft manufacturers	< 10			✓		✓	

Companies in the aviation sector are almost all privately owned. The exceptions are:

- a small number of airports that are owned by local authorities
- the government's minority stake in the National Air Traffic Services (NATS)

There is more public ownership in the rail industry, notably via government ownership of Network Rail.

There is only one pure monopoly in the aviation sector – i.e. NATS. All other companies face competition.

There is much less choice for companies and passengers in the rail industry, partly due to problems of natural monopoly (e.g. in infrastructure) and partly due to policy decisions.

Companies across the aviation and rail industries must comply with safety regulation, competition law and consumer law. Otherwise, state intervention in the aviation sector is limited mainly to the regulation of three companies (Heathrow, Gatwick, NATS) with significant market power and the development of an overall government strategy for the development of airport capacity in the south east of England. By contrast, the government contracts for most passenger train services via franchises. The government also builds/purchases infrastructure and purchases trains directly. ORR's reach as regulator covers all infrastructure and train service providers. The government also takes on responsibility for devising and delivering a strategic vision for the rail industry.

Rail

	Safety certification	Franchising	Other government procurement	Licensing (economic)	Economic regulation	Competition law	Consumer law	Industry strategy	Comments
Train operators	✓	✓		✓		✓	✓	✓	
Infrastructure providers	✓		✓	✓	✓	✓		✓	
ROSCOs							✓		
Train manufacturers			✓			✓			

Aviation

	Safety certification	Franchising	Government procurement	Licensing (economic)	Economic regulation	Competition law	Consumer law	Industry strategy	Comments
Airlines	✓				✓	✓			
Airports	✓			✓	✓	✓	✓		Only Heathrow and Gatwick are subject to economic regulation
Air navigation services provider				✓	✓				
Aircraft leasing companies					✓				
Aircraft manufacturers					✓				

Commercial freedoms

	Service levels / timetables	Fares	Service standards	Passenger information	Passenger compensation	Aircraft / train choices	Capacity allocation	Terms of access agreements	Comments
Airlines					X				
Train operators	X	X	X	X	X	X	X	X	Limits come via franchising and ORR economic regulation