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Competition & Open Access: The economic equilibrium test

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Competition for the market vs competition in the market



100% competitive passenger market:

- 2% Open Access Operators
- 98% Public Service Operators (competitive franchise)



Benefits, limitations & risks of open access

Potential benefits:

- Open new routes, grow the market and improve passenger choice.
- Innovation in service and pricing to improve customer satisfaction.
- Raise operational efficiency.
- Enable better use of the network.

Potential limitation of open access:

- Not suitable for metro services.
- Not viable on unprofitable 'public service' routes.

(Parallel or overlapping franchises *could* still be considered in both of these areas)

Potential dis-benefits:

- Opportunity cost of capacity usage for current or future franchises.
- Abstraction of revenues from franchise system.



Competition in passenger rail services in Great Britain

A policy document

8 March 20



Role of the regulator in awarding access rights

How do we make our decisions on track access? When we consider track access applications, we must do so in accordance with our statutory duties. These include: Protecting the interests of Promoting the use of the network users of railway services. for passengers and freight. Taking into account the Secretary Promoting competition for of State for Transport's funds and the benefit of rail users. guidance. Where these duties do not align we must balance them so that we reach Promoting improvements in a result that is in the best public railway service performance. interest overall.



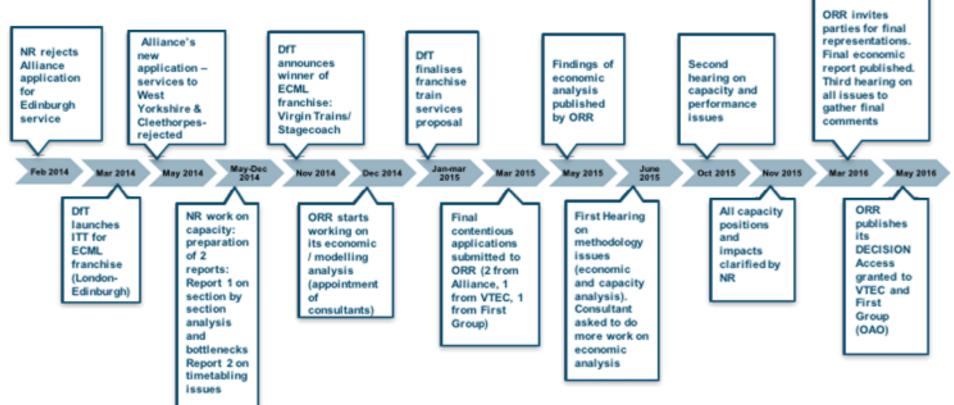
Kings Cross to the North: 4 applications, from 3 companies including the incumbent (Virgin)

	Status	Destinations	Benefits?	Risks?
ALLIANCE RAIL HOLDINGS	Open access	New Service to Cleethorpes / West Yorkshire	New services to under-served destination.	Abstraction risk from franchise revenues?
ALLIANCE RAIL HOLDINGS	Open access	- New 'fast' Edinburgh service	Lower journey times between London-Edinburgh, using tilting trains.	Less efficient use of capacity overall?
Virgintrains	Incumbent franchise operator	 New 2-hourly service to Middlesbrough. Run-on services to Bradford, Lincoln & Harrogate. 	New services to under-served destination	Would not generate competitive benefits?
First 7	Open access	- New 5-day Edinburgh service	Direct competition against incumbent operator. <u>Lower fares</u> .	Abstraction risk from franchise revenues?



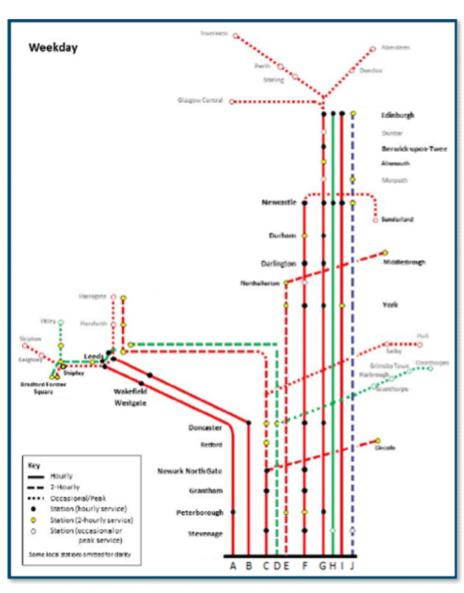
5-stage process for considering Open Access applications

- This case took 1.5 years from application until decision.
- The process is complex, lengthy, open, consultative and independent of the incumbent or infrastructure manager.
- Included 3 public hearings.





Stage 1: Test feasibility of each application against available capacity & impact on performance



Applicants believed that up to 2 train paths per hour existed.

ORR examined: rolling stock choices, infrastructure works, power supply issues, resilience risk, and planned network changes.

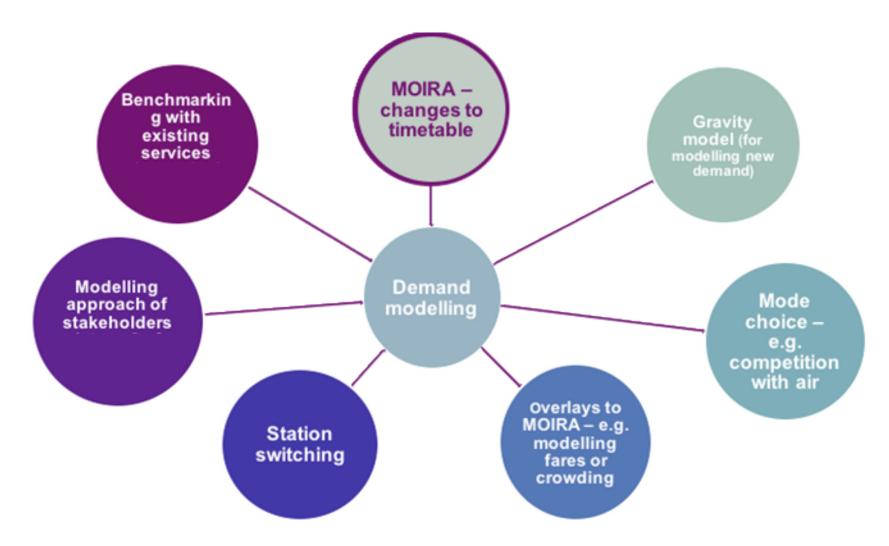
We concluded that:

- There is potential new capacity from Kings Cross station – approximately 1 train path per hour on weekdays.
- This is available from end 2020 when planned upgrade work is completed.
- Risks to performance meant that we rejected proposals for an extra 2-hourly train path.

So we moved on to Stage 2...



Stage 2 – Detailed demand modelling (to inform Stages 3 & 4)





Stage 3 – The 'Not Primarily Abstractive' (economic equilibrium) test

- New services should generate <u>at least 30p</u> of new rail business for every £1 they abstract from an existing rail business.
- Passing the NPA test is a necessary condition, but not an absolute condition of an application being successful.
- The NPA test informs our decision, but it is only one factor that ORR must balance.

Option	Annual applicant revenue per annum (2014/15 £m)	Absolute annual abstraction per annum (2014/15 £m)	Annual generation (whole industry) (2014/15 £m)	NPA ratio
Alliance (Yorkshire / Lincolnshire)	60.6	44.1	16.5	0.37
Alliance (Edinburgh)	188.6	133.9	54.7	0.41
Virgin (Middlesbrough, Lincoln, Bradford)	90.0	30.1	59.9	1.99
FirstGroup (Edinburgh)	34.4	24.3	10.1	0.42

Stage 4 – Cost-Benefit Analysis on applications (NPV per path)

- NPV per path is a good proxy to judge the most effective use of the available capacity. We take into account:
- Quantitative impacts: journey times, differential fares and overcrowding.
- Qualitative impacts: service changes, new rolling stock or service attributes.
- Incremental investment and depreciation costs for rolling stock or infrastructure.
- Benefits from reductions in road congestion, road accidents and carbon emissions, and improved air quality. (and any tax consequential from these).

Option	NPV (2014/15 £m)	NPV per path
Alliance (Yorkshire / Lincolnshire)	185.0	10.3
Alliance (Edinburgh)	46.1	1.4
Virgin (Middlesbrough, Lincoln, Bradford)	379.6	9.7
FirstGroup (Edinburgh)	77.4	7.7



Stage 5: Apply ORR's Statutory duties to make final decision.





REJECTED (BOTH APPLICATIONS)

- New Edinburgh fast service Rejected because costs likely to exceed benefits and benefits low relative to the alternative uses of capacity proposed (application likely to have a zero or negative NPV when the costs of tilting were taken into account)
- New Cleethorpes/West Yorkshire Rejected because although positive NPV significant absolute levels of revenue abstraction (£44m p.a)



APPROVED

- Included the Extension of services to under-served cities of Bradford, Lincoln and Harrogate. There was clear evidence of net benefits of extensions from better serving these communities (to start in May 2019).
- <u>New 2 hourly service to Middlesbrough from 2020</u> Also an under-served market, and approved given the modelled benefits and potential for additional crowding benefits.



APPROVED

New off peak 5/day return Edinburgh service- Approved from 2021– not novel as no new destination served, but offering passengers more choice. Modelling showed these trains might abstract ~£24m p.a. from VTEC in the last 2 years of its franchise, but we judged the benefits of extra competition were worthwhile.

The future of Open Access 1

- Conducting a through economic equilibrium test can be highly administrative, takes time and imposes costs and uncertainty.
- However, a structured open process forces the revelation of information from all parties. Leads to better applications and better outcomes for passengers.
- Open-access provides useful information about market opportunities, business models and service innovations that government can incorporate into future franchising agreements.
- Now generally accepted that On-Rail competition also improves outcomes from franchising. CMA study (2015) recommends growing Open Access as well as competition between franchises.



The future of Open Access 2

- Potential for much more Open Access in the UK:
 - recent investment in new rolling stock is likely to free up old rolling stock for new entrants.
 - digital signalling (ERTMS) will increase capability of the network, albeit in ways that are difficult to predict.
 - High-Speed 2 will free up infrastructure capacity on the existing network.
- However, we need to reform our charging system first:
 - Open Access only pay marginal costs to the Infrastructure Manager (not fixed costs) – intended to promote capacity usage.
 - Greater use of open-access competition would need to be supported by reforms to the charging framework to require OAOs to pay an appropriate share of fixed track access charges.
 - We are working with UK government on a new levy for new Open Access Operators on the basis that a fairer charging structure could support an expansion in Open Access in the future.

