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Airline and railway integration and (the UK) air transport policy

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Aircraft and High Speed Train substitution

Air transport congestion and environmental problems => Support for substitution of aircraft by High Speed Train

=> But, introduction of HST services usually leads to competition between the railways and the airlines

Airlines do not give up aircraft services and might increase frequency in the face of competition

Mode substitution is not necessarily beneficial in solving the air transport industry problems

Airline and railway integration

In an airline's Hub & Spoke operation some destinations can be served by the railway

IF: a) railway services from the airport

b) fast and seamless transfer from the aircraft to the railway

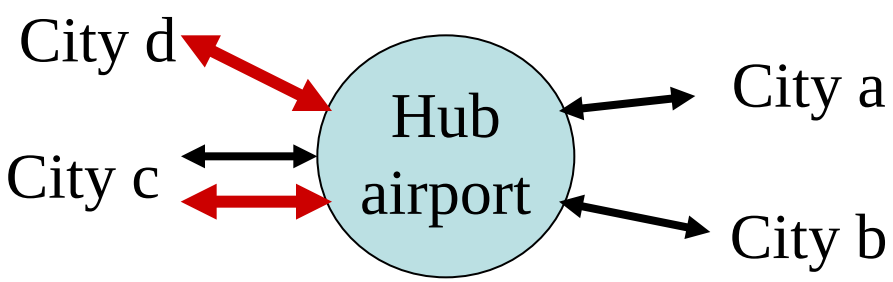
c) full cooperation between the airline and the railway =>

Airline and railway integration

Integration means that in a H&S network the railway can:

a) substitute and complement the aircraft (LH) and/or

b) complement the aircraft (LY)



The market for integration

Division of the market

Airline: Airport (city A) => City centre (city B)

Railway: City centre (city A) => City centre (city B)

- No need for high demand from the airport
- Depends on the airlines adopting H&S operation
- (disadvantage) End to the competition on the route
- Advantages of integration depends on the size of the transfer market from the hub airport

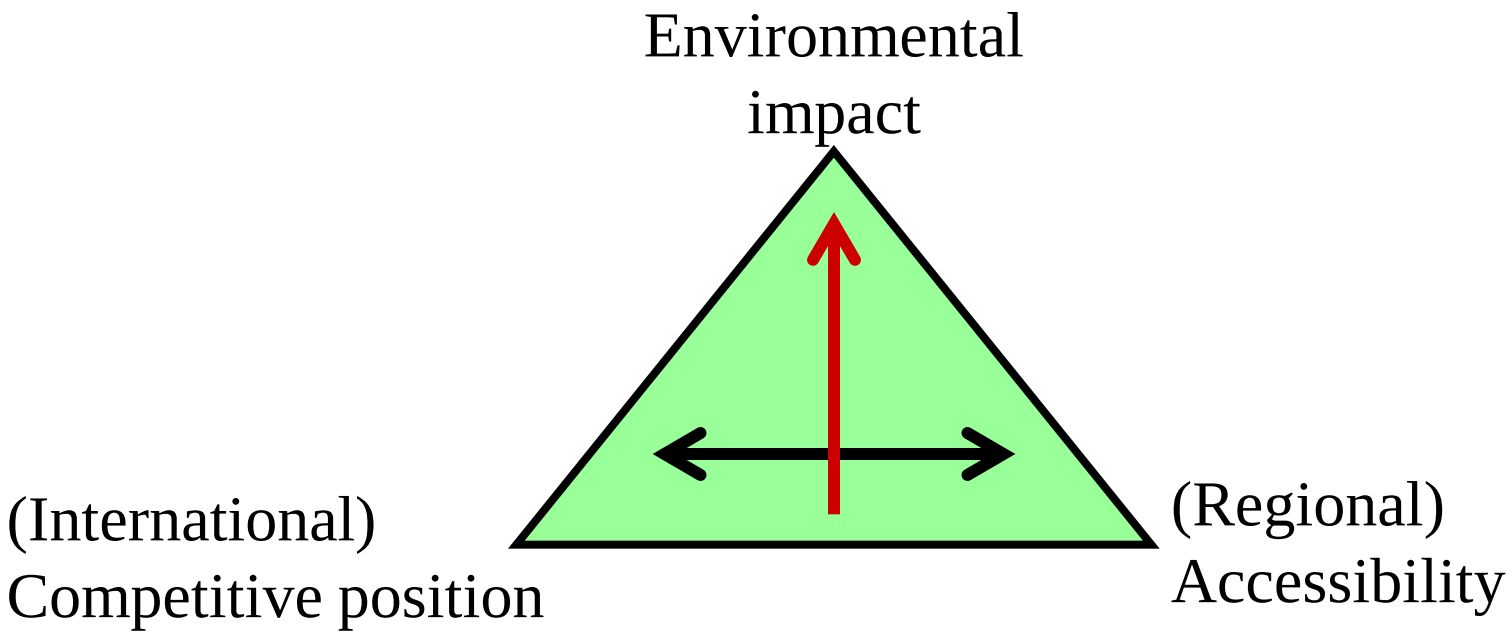
Airline and railway integration and the UK air transport policy

The air transport policy development targets for LHR

1. Air transport contributes to the British economy (1.4% of GDP, 480,000 jobs) => LHR plays a major role in this contribution due to its international position
2. Air transport has an important social role in the UK =>LHR is (supposedly) the main gateway to London and the world for the UK regions due to its level of services
3. Air transport has an adverse impact on the environment that must be mitigated

The development targets for LHR

Contradict each other!



Airline and railway integration at LHR

Integration = a railway station can substitute the runway

IF:

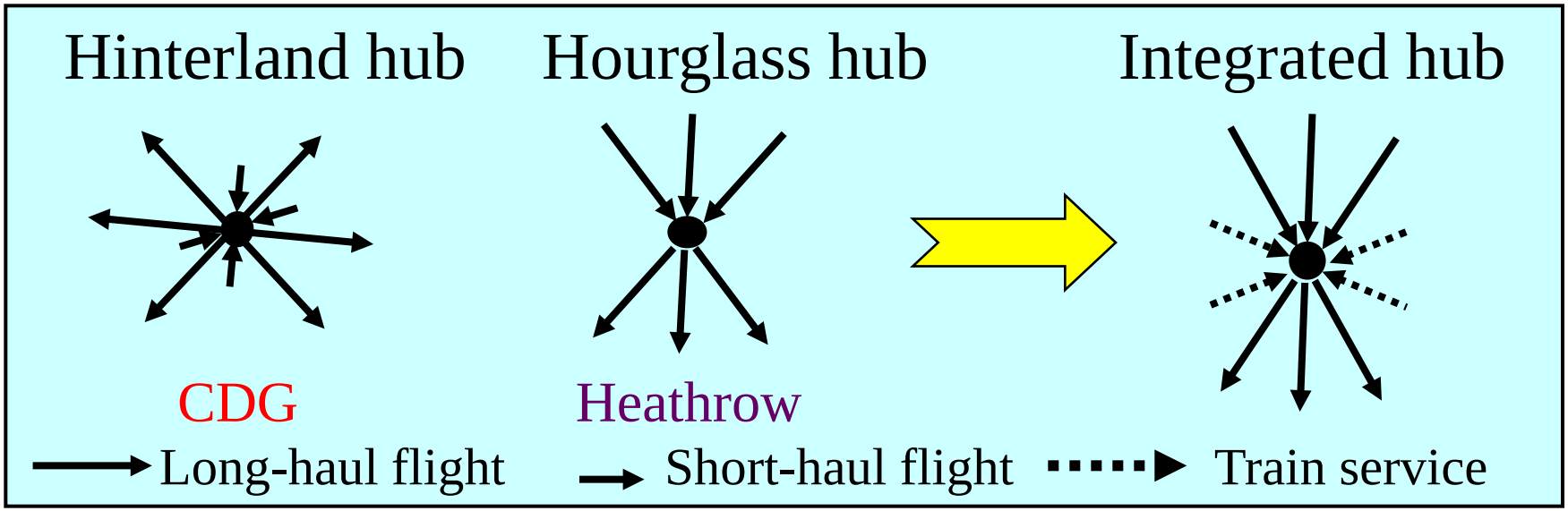
Fast and seamless transfer from the aircraft to the train

Direct and high frequency rail services to many destinations => a through station on a main line

Travel time faster than or equal to the flight =>HST, direct service to city centre

At LHR unlike at FRA, CDG and AMS (its main competitors) there are only limited railway services

Integration: the way to reconcile between the air transport policy targets for LHR



Strengthening LHR's (international) competitive position

Increasing access to LHR and its international services from the UK regions

Reducing the airport environmental impact

The UK railway policy with regard to LHR

The Strategic Rail Authority – SRA

Limits the railway's role in air transport to access issues

Does not intend to suggest which airports are most suitable for growth

The Government: does not see potential in mode substitution, even less so for **passengers using London airports to join connecting flights**

Railway plans for LHR: branch from the future HST line, branch from the Crossrail line, a new line and station west to Terminal 5 (and not under)

In summary

Policy targets: to preserve LHR's socio-economic benefits and limit its environmental impact

LHR is losing in the competition with its rivals across the Channel

The British lose access to LHR (and from it to the rest of the world)

For environmental reasons a new runway at LHR was postponed

=> The UK air transport policy for the next 30 years did not consider airline and railway integration at LHR

A missed opportunity!

Airline and railway integration at LHR

Destination	Time saving	Daily flights	% of runway capacity (466,554)	
			Route	Accumulated
Manchester	48	15	2.3	2.3
Leeds	45	4	0.6	3.0
Brussels	39	13	2.0	5.0
Newcastle	23	4	0.6	5.6
Paris	8	27	4.2	**(45,864) 9.8**
Cologne	-6	6	0.9	10.8
Glasgow	-11	18	2.8	13.6
Amsterdam	-12	23	3.6	17.2
Edinburgh	-14	16	2.5	19.7
Düsseldorf	-16	8	1.2	**(97,552) 20.9**

Connecting passengers on routes from LHR (2001)

Manchester	57% (789 000)	Cologne	57% (109 000)
Leeds	48% (97 000)	Glasgow	36% (506 000)
Brussels	17% (175 000)	Amsterdam	19% (405 000)
Newcastle	55% (243 000)	Edinburgh	36% (561 000)
Paris	**27% (570 000)**	Düsseldorf	18% (101 000)

Connecting passengers on routes from Birmingham to European hubs (2003)

	LHR	AMS	PAR	FRA	BRU
Connecting pax. as % of total (number of pax)	Not served	47% (126 000)	22% (68 000)	39% (75 000)	24% (29 000)

Conclusions (1): a missed opportunity for LHR

1. The arguments for a new runway apply also to Integration

2. A failure of the planning system to recognize the importance of railway services at major airports

3. The air and rail industries also fail to see the potential and try to minimize the interaction between them

4. The White Paper secures LHR's future => any development elsewhere will contradict the policy targets

Conclusions (2): general

1. To ensure (a real) mode substitution, integration and not competition between the modes must be promoted
2. The definition of air transport infrastructure should include railway infrastructure (high-speed and conventional)
3. (In the UK) There seems to be an institutional barrier to Integration stemming from the uni-modal focus of planning

Conclusions (3): many limitations

1. Integration will not solve the congestion and environmental problems faced by the air transport industry
2. About 10% of LHR's capacity and no environmental benefits if freed capacity used to meet additional demand

Thank you!

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