

Towards a more sustainable air transport industry - using high speed train and larger aircraft on short haul routes

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Air transport provides important socio-economic benefits but it also imposes substantial environmental costs. The conflict between the socio-economic benefits of air transport and its environmental costs translates in the policy debate to the question of whether meeting growing demand is necessary, and in practical terms to whether new runways must be built. In this context, the seminar examines ways to meet future demand without building new runways underlining that although a trade-off between socio-economic benefits and environmental costs is unavoidable it can be reduced by meeting demand differently. Two ways, which can lead towards a more sustainable air transport industry, are examined. First, substitution of aircraft services by high-speed train services, the model of substitution that is suggested is one of integration. In this model, airlines use railway services as additional spokes in their network of services from a hub airport to complement and substitute for existing aircraft services, and is tested for Heathrow airport against the background of UK air transport policy. Second, using larger aircraft (and lower service frequency) on some routes. The current competitive environment in which airlines operate and the way runway capacity is allocated and priced is believed to lead airlines to offer excessive flight frequency and to use, on average, relatively small aircraft. This choice is investigated and explained and its main implications - higher congestion, operating and environmental costs - are discussed. The seminar aims to underline that current operation practices can be improved but this requires a fresh look on the operation of the air transport industry which must be from the policy makers' perspective. The conclusion made is that there are other, and maybe better, ways to meet future demand than by building new runways.



Moshe Givoni finished his PhD in 2005 at the Bartlett School of Planning, University College London. He was awarded his BA (Economics and Geography) and MA (Business Administration) from Tel Aviv University, Israel where he is originally from. Following his PhD he was awarded an EU Marie Curie Post Doctoral fellowship which he currently undertakes at the Vrije Universiteit, Amsterdam. Other than air-rail integration and air transport in general, his research interests include passenger rail transport, transport and the environment and evaluation practices issues. Currently, his main research activities focus on the "Integration Between Rail and Access-to-rail-station Modes" (IBRAM).