

AIRPORTS COMMISSION

Inner Thames Estuary Airport Phase 1B Surface Access Impacts Study (Study 4)

Comments by David Quarmby, member of the Expert Advisory Panel (July 2014)

Introduction

This note amplifies certain of the comments I made at the Commission meeting on Tuesday 7 July as part of the discussion about the Surface Access Impact Study, and takes into account the version of the study report published on Friday 10 July. It concerns the question of transition and the assumptions and analyses in the report.

The estimated geographical pattern of passenger trips to the ITE airport is based on an assumed relocation from west to east of people who fly more and firms whose employees fly more; this will not happen immediately and only in the medium/long term – say up to 10 or 15 years (and may not happen completely at all). The impacts on journey times and costs, and on the loading of road and rail networks, as estimated by the consultants are based on full relocation; they have not therefore taken account of the long transition time for this relocation to take place. In the early years, people will be travelling to and from their current places of work or current homes, and will incur total journey times and costs getting to and from the ITE airport which are significantly greater than those estimated in the report, which are based on full relocation. As people and firms do relocate over time, the excess journey times and costs will diminish. A similar transition applies to the loading of the road and rail networks, which will also be different in the early years from that shown in the report. There is a brief recognition in the report of this transition effect, the consequence of which is shown below.

Here is the reason for saying this. The consultants have used a ‘gravity model’ to estimate how the geographical pattern of passenger trips will change in response to the hub airport moving from Heathrow to ITE. The model has been calibrated using the current pattern of travel of airline passengers to Heathrow from a large number of different zones across southern England and the rest of Britain. The calibration is a good fit. In effect, it is saying that people who travel by air more frequently live or work nearer to Heathrow – for example in west London, Berkshire, Surrey, Hampshire and so on. Conversely, those who travel by air less frequently live or work further away from Heathrow. And firms whose employees travel more frequently by air will tend to locate either in central London or in west London, along the Thames Valley or otherwise within easy reach of Heathrow.

When the gravity model is run for the ITE, it shows a new pattern of travel – those who live or work nearer to the Isle of Grain will travel more frequently by air, and those who live or work further away from the Isle of Grain will travel less frequently by air. In reality, how does this happen? If you are a resident of (say) Dartford, do you suddenly start travelling by air more because you are nearer the new airport than you were to Heathrow? If you work in a firm in Maidstone, do you suddenly start travelling by air more frequently on business because you are nearer the airport? The answer is no (except perhaps to a very small extent).

The changed pattern of travel which the gravity model forecasts arises because people who are more frequent air travellers are *presumed* to relocate nearer the ITE airport – perhaps in Essex,

Kent, East or South East London. Likewise, the model *presumes* that firms whose employees travel by air more frequently – if they are not in central London or (for example) Canary Wharf – will tend to relocate to the east side of London and the eastern and southeastern counties.

It is reasonable to suppose that such relocation of firms and of where people live would take place over a period of time (though perhaps not wholly). This could be 5, 10 or even 15 years. But it is certainly incorrect to presume that this relocation of more frequent air travellers will take place as the ITE airport opens (in say 2030) – even though a few people and firms may have done so in advance.

On the day that ITE airport would open, a simple assumption is that the geographical distribution of trips to the ITE airport *would be the same as it would be to Heathrow*; and would only begin to approximate to that forecast by the gravity model after a long period of transition.

Therefore the travel times and costs for air passengers would be greater initially than at the end of the transition. The consultants' report shows the impact of this transition period, but only in relation to rail travel times (not travel times by other modes), not taking account of higher travel costs, and not in relation to the loading of the rail and road networks.

Paras 4.8.1 to 4.8.14 (pp 86-90) discuss this effect so far as concerns journey times by rail (including interchanges – called “rail clock times”). This shows that

Average rail clock time for air passengers using Heathrow 73 minutes

Average rail clock time for air passengers using ITE (assuming Heathrow trip distribution)

92 minutes

Average rail clock time for air passengers using ITE (after transition with new trip patterns)

86 minutes

This means that the average rail clock time increases in the short term by 19 minutes – that is by 26% compared to Heathrow; and only after the transition period, when full relocation of home and firms is assumed to have taken place, does the increase in average rail clock time fall to 13 minutes (an increase of 18% compared to Heathrow).

No equivalent estimate was made on those using car to travel to ITE.

This must have a bearing on the overall attractiveness of the ITE airport to UK-based air passengers, travelling for business or leisure; and by implication the overall attractiveness of ITE to airlines facing choices of where to develop their hubs.

I am unable myself to estimate the impacts of the early years of the transition period on the loadings of road and rail networks, but it is possible that the traffic on the London rail and underground networks from the south west and west into and through central London, connecting with the fast services to ITE, will be a little higher than shown in the report; and that loadings on the M25 from north and south of London are likely to be a little higher.