

Comments on BIA Economic Impact Report

Stop Bristol Airport Expansion Ltd (SBAE) make the following comments as part of our objection to the planning application 09/P/1020/OT2 by Bristol International Airport (BIA).

Summary of shortcomings in economics report

BIA's economic arguments in favour of expansion are fundamentally flawed: the true costs are hidden and the benefits of the proposed project are exaggerated.

BIA commissioned Roger Tym and Partners (Tym) to prepare an "Economic Impact Report" on the draft and final Masterplans. This has been updated and included in the planning application in Appendix A of the Community section (volume 6) of the Environmental Statement.

The EIR¹, on which the economic arguments for BIA's expansion is based, has several faults which serve to hide the true costs and exaggerate the benefits for the proposed project.

In addition, faults lie in the non-monetized arguments used to justify the project. Taken together, these failings mean that the report as it stands is inadequate to be used by a planning authority as a basis for approving the project.

An overview of the problems with BIA's economic reasoning is summarised here, whilst the key faults are explained in greater detail below.

Note is made below of some failings against the standard set out in ODPM circular 04/2006 on Economic Impact Reports (EIR), even though this project may not qualify as a "major infrastructure project" in those terms. The fact that BIA's economic report was given the EIR title implies that it should be aiming to largely comply with the methodology of those guidelines.

Economics shortcomings:

1. BIA uses mixed base line/base cases. For instance the climate change costs are measured from the increase in emissions from 7.3m to 10m passengers, but the jobs and other benefits are measured from 6.2m to 10m passengers. This violates EIR guidelines.
2. The expansion is predominantly to accommodate an increase in outbound overseas leisure flights by local residents. Of the extra capacity, 79% goes to this type of passenger, and only 3% to business travellers. Clearly, significant economic benefit would arise for the destinations in France, Spain etc who would receive these additional 1.5m British tourists from BIA each year [3m passengers = 1.5m round trips] but it is questionable whether an economic benefit arises for the UK or the local region. Much of the benefits, particularly the induced ones would actually be realised outside the UK. BIA fail to mention this.
3. Many of extra passengers would be diverted from using Cardiff, Exeter, Bournemouth or Southampton airports, hence there is no net benefit to the wider region as these trips would have occurred anyway. Of the additional trips, most would be generated outbound leisure trips that would not otherwise have occurred, and these would be to the detriment of the region as the money spent on the trip might otherwise have been spent in the local economy. BIA do not quantify this factor.
4. Almost all "cost" items are dismissed (climate change, outbound tourism, external infrastructure, noise and traffic impacts) whereas all "benefits" are counted even when these are merely displaced from other places. EIR guidelines require other environmental costs to be included, and costs and benefits to be correctly attributed to relevant administrative areas.

¹ Roger Tym & Partners: Bristol International Airport – Economic Impact Report, Final Report 2009 (Entec: Development and Enhancement of Bristol International Airport, Environmental Statement, Chapter 6, Appendix A, p108 of PDF)

5. The “benefits” are dominated by new user benefits, yet these are mostly for outbound tourists and no separation is made for tourists, business and foreign travellers. This violates EIR guidelines.
6. A large fraction of the jobs total are induced jobs, and even induced jobs from tourism spending, but it is in no way clear whether these jobs are induced locally, nationally or abroad. This can only be a benefit to the extent that it can be shown that this spending is additional and that the jobs are local or national. The lack of clarity on where benefits occur again violates EIR guidelines.
7. The totals arbitrarily mix local and national benefits and appear to assume that all benefits will be local. This is particularly the case for Air Passenger Duty (APD). EIR guidelines require quantification of costs and benefits at sub-regional, regional and national levels.
8. APD revenue to the government is counted as a benefit yet it is also an exactly balancing cost to the same users for whom benefits are included. Thus APD revenue should be excluded altogether, and should not count as a local benefit.
9. Jobs and income from the proposed hotel(s) are included yet they are not part of this planning submission and therefore are not benefits of this project.
10. Projection of jobs created per million passengers in 2020 in the airlines are significantly more than were seen within Ryanair in 2008, and yet the report states productivity should increase 3% per year. This is inconsistent and makes the projections highly doubtful.
11. Carbon costs are ignored despite government policy stating that aviation emissions *must* be below 2005 by 2050. To achieve this whilst accommodating the projected increase in passengers and flights, and the more than doubling of emissions by 2020 implies a heavy reliance upon technological changes which themselves will impose costs. Use of blended-wing aircraft may require radical redesign of terminals and replacement of aircraft fleets. This cost must be included irrespective of the application of the ETS as the government target is independent of the ETS.
12. Government policy has changed in 2009 on costing of emissions, giving prices for traded and non-traded emissions. As the central value rises by a factor of 3.3 by 2030, this makes a very significant change to the stated costs. This is not reflected in BIA's EIR and therefore the costs calculated are invalid.
13. Job creation is only a net benefit when the jobs are additional and not due to a displacement of opportunity elsewhere in the economy. The UK labour market is highly efficient, so much so that it needed to import extra labour from Europe during the boom years. Despite the economic downturn, there is no indication that major infrastructure schemes are required to generate jobs. The EIR gives no national figure for job generation and without this it is largely meaningless. As it asserts that most of the outbound passengers are merely displaced from other airports, it is clear that the same will be true for the jobs involved and hence the net national job benefit will be near zero.

Other shortcomings:

1. BIA's EIR places great reliance on unrepresentative surveys, and unreliable conclusions drawn from them

An Economic Impact Report should objectively and impartially assess costs and benefits at local, regional and national levels, should exclude irrelevant “benefits” and account for all implied costs of the project. National policy has a bearing and in this case the carbon targets for aviation in 2050 imply costs that have not been accounted for, and the costs of emissions have been excluded even though the ETS does not fully cover them.

BIA's economic arguments dismiss the costs associated with outbound tourism by assuming that 95% of it would happen anyway, which is a highly dubious assumption. But if that assumption was true, then most of the benefits stated (apart from possibly any due to a shorter surface journey or lower fares relative to using another airport) should also be excluded to the same ratio as the benefits would merely be moved from one airport to another.

This illustrates how the EIR has not been prepared in an objective manner and cannot be used to support the case for expansion.

North Somerset Council cannot approve the BIA planning application because no credible evidence has been presented for its net benefits beyond the profits of the applicant.

NSC should instruct a competent body which is independent of the aviation industry to examine the full set of costs and benefits to a standard that complies with the ODPM EIR guidelines and which is open to public scrutiny and peer review.

Issues in more detail

Mixed baselines

The report generally measures all benefits in terms of increases in revenues or jobs between 2008 (6.2m passengers) and 2020 (10m passengers). However at least some of the “cost” items are measured versus the assumed “no development” case of a growth to 7.3m passengers. This is applied in the case of climate change impacts, before they are dismissed as being irrelevant (which is a separate issue).

Costs and benefits should be measured against the same dates and passenger numbers – either this development is required to increase the passengers from 6.2m or it is required to get beyond 7.3m, it cannot be both. SBAE believe that this is further evidence of BIA's disingenuous treatment of the walkway development which was stated to allow them to be more efficient but not to increase capacity. The EIR states the airport was operating at full capacity in 2008 (at 6.2m passengers). The only significant change to happen from that point up to the new proposed expansion is the approval of the walkway. It is obvious from this that the walkway adds over 1m passengers in capacity.

Lost costs

The EIR ignores the costs of climate change, congestion, external infrastructure improvements beyond the limited junctions works to which BIA will contribute, noise and its productivity and health impacts, and the outbound tourism spend. It does this by various sleights of hand and the treatment is incomplete and inconsistent.

Who benefits?

The majority of benefits are to new outbound tourists. The benefits to existing users are negligible, and the savings to business users are also very small, calculated at around 45p each. Further, the share of passengers that are on business is projected to fall to less than 10% by 2020. The expansion project seems to be a very inefficient way to give a small benefit to business users. The main beneficiaries are new outbound tourists and BIA itself.

Induced jobs

A large fraction of the total jobs counted by the EIR are “induced” ie created by the spending of the people filling the more directly created jobs. This is blindly lumped into the regional benefits yet there is very little justification for this. The EIR are remarkably inconsistent on the use of induced jobs, for instance they happily add induced jobs to the benefits side of the calculation, but do not try to calculate induced jobs for jobs created (abroad) by outbound tourism. Induced jobs are created by spending on goods and services by those people whose jobs depend upon the development, yet it is clear that those goods and services may be sourced from anywhere in the world and hence many of these jobs will be induced abroad.

It has been clearly shown by Sewill² that the use of induced jobs to bolster development benefits is farcical and meaningless, and that projects should be judged solely on the direct and indirect (supply-chain) jobs that they genuinely create.

Tourist benefits

The major term in the calculated benefits is “new user benefits” ie cost and time savings for extra users of the airport above the current level. It is implied by expanding BIA that new users of the airport will be able to travel for a shorter time and pay less for tickets than would be the case otherwise. In addition, it is clear that the majority of these new users are outbound tourists (rising to 69% of the total by 2020, whereas only 9.5% business, 11.7% inbound tourists, 9.5% domestic leisure). Much of this treatment is economically dubious. For instance, the time savings of the outbound tourists is given a monetary value, yet they are not being paid by anyone to travel nor are they saving anyone else money by taking BIA rather than another airport (eg saving an employer's time).

As it is clear from CAA reports (and indeed the EIR) that the nearer an airport, the more attractive its services will be for consumers, by expanding BIA the total passengers flying from the UK would increase, not merely be displaced from another airport. The EIR tries to assert that 95% of flights would have occurred anyway but that does not fit with the data, nor the marketing of flights from BIA by the low cost carriers. If expansion causes a net increase in outbound tourists then these users benefits must be weighed against the increased tourism deficit.

Jobs: local, national, international

The EIR is inconsistent about its accounting for where benefits occur. They imply that the benefits are to the SW region, yet then include air passenger duty (APD) which is a nationally levied tax, and induced jobs that may be anywhere on the planet.

If the accounting is performed nationally then perhaps APD could be included (see below) but the net increase in jobs nationally would need to be used. In order to exclude outbound tourism spending, The EIR assume that 95% of all passengers would have flown anyway from other airports, but this then also implies that 95% of all the trade is merely being displaced from another airport to BIA.

This means that the net jobs created, and APD gathered, needs to be reduced by 95% as the EIR asserts it is merely displaced, and indeed the only national net benefits of such displaced trade would be the time savings to the new users.

The user benefits of time savings are made artificially high by assuming all travel would otherwise be through Heathrow, but it is clear that Cardiff, Exeter, Birmingham etc would be the airports of choice should the expansion not go ahead, and hence the time savings would be lower.

2 Brendon Sewill, “Airport Jobs: False Hopes, Cruel Hoax” available from <http://www.aef.org.uk/?p=627>

Air Passenger Duty

APD was created as a means for bolstering Treasury revenues and was never designed as an environmental tax. Its design, with higher charges for business class than economy class, show that it is in fact a luxury tax and not set proportional to any environmental impact. Even including APD, the tax cost of a flight per mile is still markedly lower than the tax cost per mile for driving (0.55p per mile vs 6.8p per mile for a 30mpg car). The Treasury recognise that APD is an excise duty but its levying might increase the cost of flying and hence reduce carbon emissions marginally – doubling APD from £5 to £10 per journey was projected to decrease emissions by 0.3 million tonnes in 2010 on a total of 42 million – a 0.7% reduction.

From this we can see that the environmental element of APD is weak and the increase in aviation emissions is not compensated by it. Despite this, the EIR ignores climate change costs partially because APD compensates for it.

Hotel

The EIR analysis of benefits explicitly includes the jobs and income from the hotels, yet the planning application does not cover the hotel as an item for which permission is sought. This means that the benefits of the current project have been artificially boosted by adding those from the hotel, despite the fact that the hotel is not included nor is even a necessary element of the development. In addition to this, it is asserted that no displacement of trade would occur from existing hotels and B&Bs by the establishment of the hotel. It is hardly credible that no users of the hotel would have otherwise stayed at any local B&B or hotel, or dined at any local restaurant.

Unrepresentative Surveys

The report depends on several surveys, some of which have problems:

The CAA passenger survey for 2008 carried out at BIA. Although this should be reliable information, the report itself will not be published until the Autumn and therefore the data drawn from it is not verifiable.

A survey of 6 shops, 11 B&Bs and a taxi company – this is then used to justify statements such as

7.54 The majority of local service businesses have had either no impact or positive impact from the proximity to the Bristol Airport and their forecasts for the future are even more optimistic. Only 1-3 accommodation providers have experienced difficulties.

Note only 25 companies were selectively approached, only 18 responded. The businesses do not by any means represent all of the business sectors in the area, and the means of selection for this survey is unclear. This form of poll is very unlikely to give a true and representative value for impacts or the views of the businesses of the area. The use of “majority” is deceptive, and the survey is of dubious value.

A survey of regional priority sector businesses carried out in 2005. For a survey of 320 businesses the response rate was 15.3%, meaning only 49 businesses even replied. From this small cross-section, the EIR draws conclusions such as:

7.28 In response to a survey a majority of priority sector businesses reported seeing a close and important link between BIA growth plans and their current and future businesses, especially those reliant on export markets or those reliant on business clientele and tourist visitors travelling to the South West from European and international destinations.

From this small sample in 2005, they conclude that 45% of the priority sector businesses plan to increase their use of BIA. When this is compared with the much more recent Worldwide Fund For

Nature (WWF) survey of 100 FTSE350 companies where 89% plan to be flying less in the next 10 years, it is clear that the value of conclusions drawn upon the BIA survey is doubtful.

In addition, at least one of the companies highlighted in the case studies does not want to be associated with the comments attributed to it as it does not reflect their current needs or policies and has been used without their consent.

UK Labour Market

Labour is a cost with a productive value elsewhere that is foregone if it is allocated to any particular project or activity (the opportunity cost). To consider job creation as a benefit can only be justified where there is an underlying long term unemployment problem and, in turn, this can only arise when a labour market is deeply flawed or going through a period of long term structural re-adjustment. The labour market in the UK is not deeply flawed; on the contrary it is one of the most efficient in the EU, being more closely modelled on the supply side flexibilities of the US labour market. As a result, notwithstanding the current economic downturn, the supply of labour within the UK has only been able to keep pace with growing demand from the UK economy by augmenting the indigenous workforce with labour imported from Europe and elsewhere.

It is worth noting that the EIR submitted by BAA for the Stansted G2 project, prepared by Tribal, a leading economics consultancy, recognises this argument and accepts that the G2 project would not result in any additional jobs at a national level. The jobs that would be created directly and indirectly by the project would be at the expense of jobs elsewhere in the economy. Put another way, the labour that would be absorbed by the G2 project would be at the expense of other productive activities.

The EIR for BIA does not provide a national employment impact figure and hence should not be used as a basis for planning approval. A full and independent study should be provided which contains local, regional and national figures for all benefits and costs.

Critique of EIR for BIA

Below are more detailed criticism of the business case, the costs and the benefits presented by the EIR.

Business customers

BIA claims one of its key aims is

“To play a leading role in the economic development of the South West region by providing an increasing range of frequent scheduled services to destinations required by business”

Yet in the last few years BIA has failed to attract and retain many business dedicated routes. British Airways left BIA in March 2007, the routes being sold to Flybe who then abandoned most of them routes including Düsseldorf, Edinburgh, Frankfurt, Glasgow, Paris, Milan, Munich and Zurich. Of these, Düsseldorf, Frankfurt, Munich and Zurich are no longer accessible.

BIA tried to replace some of these routes and attracted Lufthansa who started a route to Frankfurt in April 2008. But by May 2009 this route had been dropped due to lack of demand. Between March and December 2008 the route carried 72889 passengers on a schedule of 3 return flights per day, seven days per week for 39 weeks, for an average of 44 passengers per flight.

It is clear that in this case it was not a lack of frequency that prevented take-up of the seats, nor is the recession likely to have overly impacted the numbers (BIA did not see its big drop in numbers until November). The failure of the route was due to a simple lack of demand for outward business flights, and a lack of stimulation of any inward business or tourism custom as well.

There is no evidence that the addition of future business focussed routes will fare any better.

Many businesses have decided to cut back on business travel, with 62% of FTSE350 companies already reducing their business travel footprint and a further 24% planning to do so. In addition, 89% of the companies expect to be flying less over the next 10 years and to be using video conferencing to help achieve this. (see

http://www.wwf.org.uk/what_we_do/campaigning/one_planet_mobility/new_report_travelling_lig ht/)

The reasons for aiming to cut back are as follows:

- 1) cost of travel is likely to rise due to oil prices rising (see below)
- 2) cost impact of trips even higher when time away from office and productive work is included – little of this is reducible by using a more local airport (see below)
- 3) video conferencing can increase productivity by allowing meetings with widely separated locations to happen within one working day with no dead-time due to travel
- 4) many companies are conscious of the environmental damage caused by travel and flying in particular and have policies to reduce this

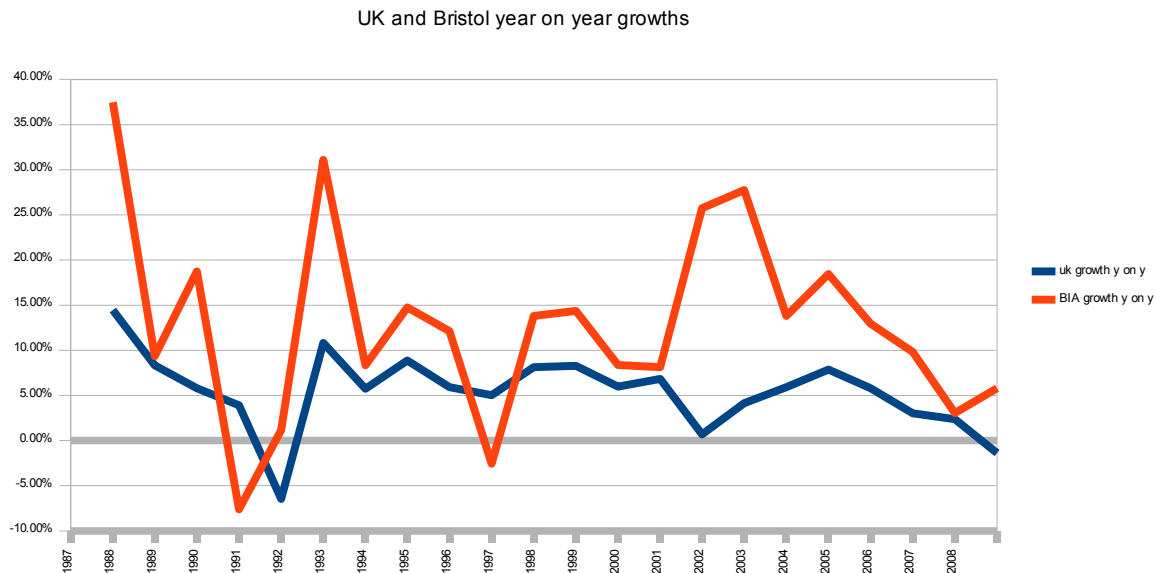
CAA surveys have shown a reducing share of business passengers: 21% in 2000, 19% in 2003 and reportedly 13% in 2008 (from the unpublished numbers mentioned in the EIR). Not only does this indicate that expansion is not driven by business passengers, but also that a large increase in business passengers could occur without any significant increase in the total eg a 60% increase in business fliers would only add 486000 to the total yet BIA is planning an increase of almost eight times this amount.

The EIR quotes SWRDAS: “The region’s relatively low critical mass, resulting in a lack of frequency of flights and choice of routes. This fails to provide sufficient demand within the region for a wide selection of air services (especially medium to long haul) and passengers must therefore travel elsewhere to access them;”

It however implies this can be fixed by offering more long haul services, where as it seems clear that the underlying demand for such services is too low to sustain them, particularly for business destinations.

Passenger Demand

Passenger growth at BIA has been very large in the past, a factor of 12 since 1986, with a trebling since 2000. However, the rate of growth has been dropping since 2003, well before the current recession and at the same time the airport was handling half of the number of passengers seen in 2008. It is clear that the reason for this slowing of growth is market saturation and not a physical capacity limit at the airport.



The spike in growth in 2001 was due to both the new terminal opening and the consequent expansion of low-cost flights available at the airport. However, the market for this form of flights has saturated, and at airports which started with the no-frills airlines sooner (eg Stansted) passenger numbers have levelled out or even fallen – they have been falling at Stansted for 2 years, starting at the height of the “boom”.

In the last year, passengers numbers have been falling across the UK due to the recession. The factors that have caused this are:

- 1) less disposable income;
- 2) fear for job security; and most importantly
- 3) weak pound

The last of these has meant that the cost of trips has increased even though the cost of flights may have fallen due to cheaper oil prices. In January 2008, £1 bought 1.34 euros, but in July 2009 it buys only 1.16 euros.

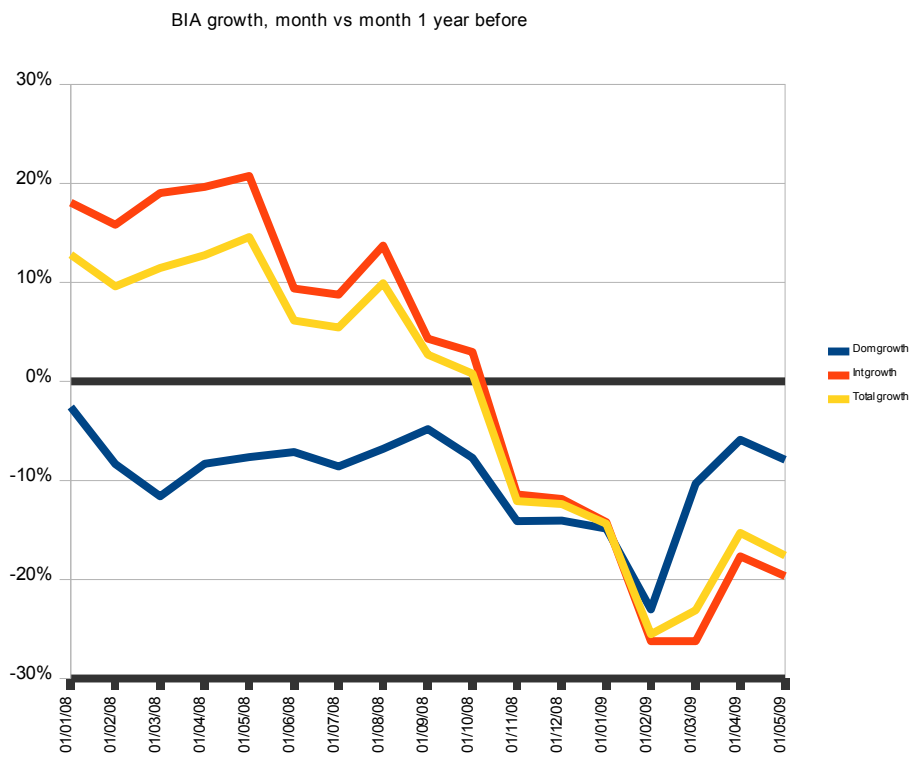
In 2007, the average spend per visit to an EU27 country was £427 at an average exchange rate of 1.46 euros to the pound. The fall of the pound since then means that the same expenditure in euros would now cost £537, and increase of £110 or 25%. Note that this spending excludes the cost of flights.

The following chart shows the passenger growth at BIA over the last 18 months. This measures the growth between the passengers in one month and that same month a year before. The main effect of the recession occurred around November with all months since then seeing negative growths ie less passengers than 12 months before. The dip then spike in the curve between March and April is largely caused by the difference in the date of Easter in 2008 and 2009, the underlying trend is that international passenger numbers are 20% down and domestic passengers 10% down.

The larger drop in international passengers is due to the exchange rate change, and will be slightly masked by a increase in inbound tourists, but as inbound is such a small fraction of the total this

makes little overall difference. The smaller drop in domestic passengers is due to a rise in “staycations”, but even so most people choose to use road or rail to access domestic holidays.

The drop in international passengers is almost exactly what would be predicted by the increased cost of trips ie a 10% increase in cost will reduce trips by 10%. This is borne out by research performed by the CAA while passenger numbers were growing.



In future, it is unlikely that the cost of flying will continue to decrease and the cost of oil is likely to cause the price of tickets to increase. In addition, the costs of APD and the EU ETS will marginally increase the cost of flying.

The exchange rate is unlikely to return to former levels (see below), and the costs of holidaying in the UK may possibly fall due to recession. When combined, these reduce the attraction for the most important of previous growth sectors - the short international city break.

The previously strong pound was based upon several factors : strong banking sector, oil exports, relatively high interest rates, strong stock market. The reputation of the UK banking sector is now damaged and the measures put in place to achieve recovery are likely to remove the ability for the banks to produce the returns that made them attractive in the past. The UK is now a net importer of oil and gas and thus oil no longer strengthens the pound. The bank base rate is now near zero and unlikely to move significantly above that of the US for a long time. The stock (and housing) markets have tumbled and the rate of recovery will be slow.

It is hard to see how the pound/euro and pound/dollar exchange rates will approach the levels of 2007 for many years, and hence the cost of trips to the major destinations from BIA will remain high. This will act to limit or even reduce passengers, in the same way that a strong pound acted to increase passengers.

BIA implies that it aims to have more long haul services to the US and to the Middle East. It bases this on the success of the Newark route. But this route is down 7.5% for the last 12 months versus a year before, and 13% for the first five months of 2009. This does not show a positive growth trend if the pound remains weak versus the dollar or the petro-currencies.

The prime destination in the Middle East was Dubai, but the recession has significantly impacted the economy there and the vibrancy and viability of a route from Bristol to Dubai seems exceedingly dubious.

BIA states that a large amount of the rise in passengers recently has been due to the “visiting friends and relations” category, and try to exclude this from what otherwise would count as tourism. They state that demographic trends show no sign that this growth will slow, and imply that it is an unquestionably good thing and an unalienable right. Closer examination will show, however, two major components of this rise in VFR: economic migrants and those UK citizens who own property abroad. The first of these groups rose sharply on the enlargement of the EU and removal of barriers to those new EU citizens working in the UK. At the time, the UK economy was booming, near full employment existed and the economy required a ready supply of cheap labour.

The weaker economies of the new EU countries coupled with the strength of the pound meant that it was easy to attract an influx of workers who would be willing to live a low standard lifestyle in the UK as long as they could send home or save enough to make a better life back home. But over the last couple of years, and particularly since the credit crunch, the flow of workers has reversed – many have now returned home either to make use of the money they saved, or because the pound is so weak that it no longer compensates for the low wages and living standards, or because the jobs have disappeared. Whilst the pound was strong and flights were cheap many of these workers would visit or be visited by their relatives from home. But this trend has weakened. This can be illustrated by the number of routes to Poland: 1 in Summer 2007, 7 in Winter 2007-8, 7 in Winter 2008-9, 4 in Summer 2009.

In 2007 there were 102,000 passengers to Poland, in 2008 283,000 passengers, which shows the strong growth before the start of the credit crunch. But the figures later on, for instance May 2008 versus May 2009 show a very different story with a 39% drop in passengers, which is significantly worse than the average drop for BIA as a whole.

For UK citizens with properties abroad, there are two types – those who own a second home or holiday villa and those who have moved or retired abroad. During the boom, around 50,000 second homes abroad were being bought each year – often financed by re-mortgaging the main property based on expected house price rises. Such second homes led to many flights, often six trips a year per person. Those who retired abroad were taking advantage of the strength of the pound providing a good standard of living from a pension when converted into euros and spent abroad. Much of this market has now ceased, with many people now suffering from the collapse in house prices and the reduced spending power of their pensions. A sizeable fraction are having to move back to the UK. This again implies that the flights to visit friends and relations will be curtailed.

It would seem that contrary to BIA's assertions, the VFR sector is likely not to grow at anything like the rate seen in 2007-8, and in fact is likely to contract.

The projections in the EIR imply the following growths from 2008 to 2020:

	2008 CAA survey	% of total	2020	% of total	% growth
UK business	655000	10.5	759000	7.5	15.9
UK outbound leisure	3943000	63.3	6962000	69.2	76.6
UK domestic leisure	755000	12.1	957000	9.5	26.8
Foreign business	175000	2.8	203000	2	16.0
Foreign inbound leisure	699000	11.2	1180000	11.7	68.8
Total	6228000		10062000		
Business share		13.3		9.5	

It is clear that the main aim of the expansion is to increase both inbound and outbound tourism, and the largest growth will be in outbound tourists. It is not at all clear how this benefits the South West economy.

Direct User Benefits

The updated EIR states that benefits would include time savings for business and leisure travellers, increased Air Passenger Duty (APD) raised, and income to the airport operator.

It is worth pointing out that the major element of the time savings is to the outbound leisure traveller, who is not being paid to travel so this is not saving employer's funds but actually enabling a more rapid and larger spend of cash abroad. Thus the calculated £10.6m benefit to the leisure traveller is enabling a outbound tourism spend in the hundreds of millions of pounds – money lost from the UK economy. As it is clear that proximity to an airport offering a route is a stimulus to demand, this “time saving” is directly related to an increase in outbound spend.

The EIR states that the shadow cost benefits of the BIA expansion are zero to 2020 – this means that there is no benefit from avoiding use of a more congested airport elsewhere in terms of relative ticket pricing caused by that congestion.

In addition, time savings are only relevant where the overall journey time is shorter. If the destination airport is further from the desired destination than would be the case if the passenger flew through Heathrow, say, then the benefit of travelling from a local UK airport is reduced. Ryanair is famous for flying to more remote locations, for instance.

The time savings to business travellers seem insignificant – currently BIA handles around 1m business travellers per year, so their £454,000 time saving benefit amounts to just 45p per traveller!

APD cannot be calculated as a net benefit to the South West as it is a direct transfer of funds from the traveller to the Government – the benefit to the Government is directly compensated for by the disbenefit to the passenger. So the £23m annual benefit stated must be ignored.

The EIR states that the benefits to existing passengers of expansion are negligible in money terms, and the same is true for freight customers.

The user benefits of reduced travel time to Heathrow are unfairly estimated. Because Heathrow is more easily accessed by public transport than BIA is, it is highly likely that the travel mode choice

would change and thus the comparison might have to be between driving and parking charges at BIA versus coach to Heathrow.

It is not clear why the time savings for leisure passengers (costed at £4.15 per hour) are included – where is this time saved from, who is avoiding paying for it?

It is also not clear that Heathrow is a fair comparison. Business travellers use Heathrow to access a variety and frequency of services that will never be available from BIA, either due to its physical limitations (runway too short) or the lack of catchment to make routes viable. As the majority of passengers are on low-cost leisure flights, which are not served by LHR, it again is an unfair comparison. For many in the South West region, the real alternatives are Birmingham, Cardiff, Exeter, Bournemouth.

The workings for the fare cost differential are not given and the EIR does not question the 10% price difference that BIA state. It is hard to see, therefore, how passengers taking 3.1m trips in 2008 could save £230m by using BIA versus other airports, this being £74 per trip. It is then confusing that the benefits to the additional passengers amount to only £14m in 2020, or around £7 per trip. In addition, 40p per mile is to compensate people for all the costs associated with use of their car on business. It is not a fair reflection of the cost of accessing Heathrow by public transport, for instance which costs nearer 30p per mile by coach.

The EIR calculates that the benefit to BIA of the expansion will be £3.9m annually in 2020. It seems hard to know how this can justify the expenditure of £150m on the development – it certainly would not cover the interest payments on borrowing that sum!

To summarise, these direct benefits are:

Direct User Benefits	BIAEIR : annual £m in 2020	SBAE corrections £m
Existing users	0	0
New users – shadow cost	0	0
New user – travel and time cost savings	11.1	?
Benefits to BIA	2.6	2.6
Losses to other airports	0	(95% assumed displaced) -2.5
Benefits to Govt - APD	17	(balanced by loss to users) 0
Total	30.7	

In addition, standard treasury guidelines state that benefits to foreign citizens should not be counted unless the benefits to UK citizens already outweigh the costs.

As £10.6m of the £11.1m benefits to new users is due to leisure passengers, it is obviously key to understand how much of this benefit is due to the assumptions about costs per mile and costs per hour that the EIR makes. However this detail is not presented. If we assume that the 40p per mile number is used for travel cost and Heathrow adds 100 miles to the journey (on average), then this amounts to £40 per leisure passenger. There are 3.7m extra leisure passengers so this would total £148m per year. Therefore it is impossible to see from the figures presented how the EIR gets its benefits to new passengers, and how much is due to time savings. As it takes around 2 hours to drive from Bristol to Heathrow, this would imply £8.30 of time cost versus £40 of travel cost, but again there is insufficient information to judge what a fair value for this benefit would be.

The assumption that the competing airport is Heathrow artificially increases the stated benefits – the time and distance savings of diverting to Cardiff, say, would be considerably smaller. As Heathrow is the UK's dominant long-haul business airport, it is not clear that expansion of BIA will in fact be

diverting customers from Heathrow at all, but instead be stimulating more growth in the outbound short haul tourism market.

The time savings are too simply expressed. If a flight from Heathrow would directly access the destination but one from Bristol had to go through a hub, or involved a long transfer time at the far end, these extra delays would have to be subtracted from any time savings made by reaching Bristol more quickly. This is especially the case for business travellers where the cost per hour is much larger in the calculations.

In addition, there are other alternatives to using Bristol to fly. Businessmen could use the train to access Paris and the near continent and be working for most of the journey, thus making some of the time savings for car travel irrelevant. In addition, many businesses are moving towards video conferencing and the time and cost savings there are far higher than using even a local airport. The benefits need to be gauged against the most efficient way to do a particular piece of business, not some hypothetical alternative flight from a distant airport.

It is not made clear whether this list of direct benefits is intended to be national or regional. If APD is included then it must be national, but then the traffic diverted from Heathrow is a loss to Heathrow as much as a benefit to BIA, hence this term should be largely cancelled out. If it is regional, then APD should be excluded.

Wider economic benefits

The EIR contests that expanding BIA might help to reduce the balance of trade between the South West region and the rest of the world, but is exceptionally vague as to how this might occur. No significant freight travels through the airport, business travellers are a shrinking portion of the trade and the countries that we have a large trade imbalance with (eg India, China) are not directly reachable from BIA. Previous passenger trends increased the imbalance – BIA actively marketed shopping trips to New York and Christmas markets in Europe, for instance.

Connectivity

The “Wider Benefits” section ties itself in knots. It starts by arguing that connectivity by air is vital, then quotes the South West Response to the Eddington study³ where it cites connectivity to London and the Midlands as areas to where connectivity needs to improve. There are no flights from BIA to London or to the Midlands and it would be impractical to provide them. This clearly shows that the main connectivity benefits would be through improved high-speed rail infrastructure. The arguments for access to labour markets can only now be applied to jobs within the area or the rest of the UK – the market for inbound economic migrants has largely collapsed due to the weakness of the pound. The text clearly shows that access to European and international markets is definitely in third place behind better links to London and the Midlands, and hence airport expansion should be well behind investment in rail and video-conferencing to reduce peripherality.

The conclusion that “ports and airports attract inward investment and stimulate tourism” is over simplified in this context. As the airport already exists and already allows connectivity to the whole world either directly or through key hubs, it is important to know what additional benefits expanding its network of short haul leisure flights will bring. The EIR states that inter-regional connectivity is more important than intra-region, but this is used to imply the need for an expanded airport. In fact, the domestic air sector at Bristol has been shrinking for several years and continues to do so even though 'staycations' have slowed the rate of shrinkage.

The real benefits of inter-regional connectivity are the movement of goods and customers to buy those goods, and this is at the unglamorous consumer end of the market where the transport mode of choice is the car for consumers and the HGV for the goods. There is no real impacts for aviation

3 Eddington Transport Study 2007, from <http://www.dft.gov.uk/about/strategy/transportstrategy/eddingtonstudy/>

here other than the mass import of food from far-flung locations. This is a trade dominated by East Midlands Airport (EMA) and Heathrow, and one in which BIA has no presence.

All the discussion about connectivity and access to markets is used to imply flying, but in fact it means surface access to nearby customers eg the catchment area of a supermarket or shopping mall.

The discussion of exports is largely irrelevant – no real volume or value of exports goes through BIA. The use of the airport by sales personnel to land export orders may be important, but that sector is 13% (and falling) of the total passengers – there is no evidence here that a 60% increase in passengers is required.

Although the discussion on trade deficits is interesting there is no evidence that expansion of BIA would make any material difference. The major deficits are with Asia and North America – it is not clear why expanding BIA should make us buy less from these areas or even be able to sell more to them.

A survey is mentioned, but no reference is given so the reader cannot verify the assertions made or even who were surveyed, and whether the claimed majority is of respondents or the whole survey group. As such, this statement is inadmissible.

Again the business benefits are calculated in terms of business travel time savings versus using Heathrow. For all the reasons mentioned before, this is not a good comparison. For business users, there are very many routes directly available from LHR that will not be available directly from BIA. If the businessman has to change at a hub then this extra delay should be taken into account, as should any extra transfer time at the far end, and any extra delay due to infrequency on the routes. Because of LHR's catchment it will always be able to offer more choice and frequency to more destinations than any regional airport. If use of BIA forces an extra day to be spent at the far end due to infrequency of service, this should be subtracted from the time savings. None of this calculation is mentioned in the EIR's treatment.

In addition, the EIR appears to be trying to count the user benefits for business users twice, once in the direct user benefits and again in the “wider economic benefits”. This cannot be done!

The survey of local businesses appears to be half-hearted – only 25 were asked and only 18 answered, and of these 7 said the airport was of no importance to their business. It is hardly surprising that the taxi company (presumably the one with exclusive pickup rights at the airport) is in favour of expansion and has a dependency upon the airport. This does not mean that this is true of the transport sector in general. The B&B's currently pick up business because of the airport, but will this be the case in future when the car park expands and there is an on-site hotel? Were the details of the plans revealed to the businesses before asking their opinions? Without this, the opinions are not very relevant. There is no attempt at quantification of any negative effects of the airport upon local retailers – for instance the effect of heavy traffic on streets past the shops deterring customers, or the drawing of disposable income abroad rather than it being used for weekend purchases in local shops.

Certainly no survey of this size can be used to draw any representative conclusions on the impact of the airport and its expansion upon the hundreds of local businesses. To conclude “*Our analysis has revealed that the **majority** of the local service businesses have not suffered any adverse effect from Bristol Airport's presence but the contrary*” on the basis of 18 responses is heavily flawed, especially as the only businesses represented were grocery shops, B&Bs and a taxi firm. This does not reflect the cross-section of businesses in the area, and is too small a sample to be representative.

Jobs

The estimation of direct jobs at the airport is fair, although the jobs per million passengers is quoted

at the summer peak and not for the full-time equivalent (FTE) jobs across the whole year. This gives a current value of 434 jobs per millions passengers. It is also inferred that this applies to extra jobs per extra millions passengers, which is not borne out by the data. The direct jobs were 2693 in 2008.

The indirect jobs section clearly shows that the use of a multiplier gives no indication of the jobs added in the region. The bottom-up study implies that there are only 72 indirect jobs in the region in 2008.

The induced jobs are irrelevant – any business pays its employees and their spending induces jobs elsewhere. There is no clarity that these jobs are induced around the world, for instance when a Chinese made computer is purchased by a BIA employee, that is inducing jobs in China not the UK. A large fraction of the disposable income will not be inducing jobs in the UK. The EIR does not even attempt to define how many induced jobs occur within the region, but just uses the total estimate of 702. This is intellectually flawed. We would argue that induced jobs are irrelevant in the matter of the expansion and should certainly not be included in any estimate of the regional jobs.

From this we would estimate that the total (direct and indirect) jobs in the region in 2008 were 2765.

The projections for airline jobs growth work on a basis of 115 jobs per million passengers – yet Ryanair has only 104 jobs across its entire operation per million passengers in 2007. As the expansion is dominated by low cost short haul operators, and the EIR already accept there should be a 3% per annum efficiency improvement, it is not unreasonable to assume that by 2020 there should be a 31% improvement in productivity. This would imply that airline jobs are more likely to be nearer 72 jobs per million passengers than 115. This would reduce the total airline jobs in 2020 to 720 which is one less than employed in 2008. It can easily be seen that the predicted 279 extra direct airline jobs may not materialise. Ryanair is aggressively removing checkin and baggage handling jobs, the walkway eliminates bus driving jobs, and the push by Ryanair to get passengers through the terminal in 35 minutes means that any retail will occur on its planes and not in the terminals. This may reduce some of the thinning of aircrew jobs, but will damage prospects for increased jobs in the terminal. Depending on the basing of the planes, some or many of these added jobs may not be within the region.

The extra non-airline direct jobs are given as 629, but the pressure mentioned above to get passengers onto the planes more rapidly will threaten this.

It is clear that well under 1000 extra direct jobs will be created, and the indirect jobs created within the region are stated by the EIR to be 29.

The EIR estimates 208 construction jobs, but as these are temporary jobs they should have little bearing upon this case, and may well be awarded to contractors from outside the region or country (as is common with large projects). They appear in the summary table but do not seem to be included in the total FTE jobs.

Again, the induced employment should be ignored – all projects induce jobs so they should be judged on their local direct and indirect benefits, not induced benefits which may be in another region or country.

Thus it appears that the total extra jobs due to the expansion in the region is 1000 or less, possibly as low as 650.

The hotel is stated to not compete with any local establishments and not to displace jobs, but the local Cadbury Court hotel and others commonly used by passengers in Bristol are of similar standards and undoubtedly would lose custom, as would restaurants. It is remarkable that no survey is presented of where passengers stay before using the airport and hence which hotels might be affected by the on-site hotel. According to one website, there are 3-4 star hotels at Chewton Place, Winford Manor, Holiday Inn Redhill, Miltons Hotel, Cadbury House, Town and Country Lodge,

Redwood Country Club, Plush Hotel as well as many within Bristol. Several of these give themselves “Bristol Airport” as a distinguishing name on Google maps. Surely some of these would be impacted by a 3-4 star hotel on the site of the airport, and hence not all of the jobs and benefits for the hotel would be additional to those already present.

Currently only 15% of employees come from the deprived wards of South Bristol and Weston-super-Mare. It is not clear if this can significantly increase given the access problems (not likely to be relieved by the BRT) and antisocial hours. BIA represents 0.53% of all jobs in the West of England so although it is large it is by no means a pivotal or key player that needs to have special treatment.

The conclusion that BIA will be an important player because it is growing faster than employment in the region as a whole is based on the questionable job number mentioned before, and also is not surprising. A similar result would be found for any expanding business versus the general status quo.

It is interesting to note that Jobcentre Plus thinks that recruitment for the airport will compete with more attractive, higher paid (and less antisocial hours work) closer to the deprived areas and that the airport may need to find other sources for the low level jobs that are the bulk provided by the airport (cleaning, security, parking, catering, retail). Some of these have been dominated by foreign workers in the past, but the weak pound may make this source less available in future too. The low pay also casts doubt on the “induced” jobs mentioned before – the disposable income from such jobs (to induce others) will be significantly lower than for jobs generated in other sectors eg in manufacturing and creative media.

Key barriers include travel to work – but this has been identified for several years and no effective solution has been put in place and none is proposed in the current plan.

Inward Investment

The EIR states that increased connectivity will improve the “inward investment offer” yet produces no evidence or quantification of this. As is shown by the SACTRA⁴ study, Whitelegg⁵ etc, connectivity is a double edged sword – investment can flow both ways. Once a place is accessible, increasing the width of that access has a limited affect, and certainly diminishing returns. If investment cannot reach here with six million passengers, will it reach here with 10 million ?

The EIR states that “The majority of local service businesses have had either no or positive impact from the proximity to the Bristol Airport and their forecasts for the future are even more optimistic.” This is a very strong reading of facts. BIA has no positive benefit for most service companies and this is unlikely to change. This “most” comes from the same flawed survey of 18 respondents (6 grocery shops, 11 B&Bs and a taxi firm) – this can hardly be seen as a thorough or representative survey.

The EIR cites York Aviation on inward investment, which was unable to quantify any benefits but in turn cited the factors defining business siting decisions. The Cushman & Wakefield UK Cities Monitor report for 2008 makes it clear that the key reasons for siting a business are:

- 1) easy access to customers and clients
- 2) value for money of office space
- 3) ease of recruiting qualified staff
- 4) cost of staff

4 Standing Advisory Committee on Trunk Road Assessment, 1997, *Transport Investment, Transport Intensity and Economic Growth*

5 Prof John Whitelegg: The Economic Importance of Bristol International Airport, A report for the Parish Councils Airport Association, Eco-Logica Ltd, October 2005

- 5) availability of office space
- 6) transport links with other cities
- 7) availability and cost of car parking
- 8) transport links internationally
- 9) quality of life of employees
- 10) ease of travelling around the city

York Aviation and the EIR like to imply that both (1) and (6) mean international travel, but in fact it is clear in the CW report that these are local and national surface access and not international flying, which is covered by (8). In fact most businesses site themselves based on the availability of local customers, local staff and a cheap and suitable site (think of B&Q and Tesco – how many of their sites are relevant to airport access?). It is clear that trying to attract new businesses is to do with offering good sites with trained employees and good surface access for customers. None of this requires airport expansion.

Viability

The report does not examine the viability of the project from any angle. BIA currently has debts of over £400m and debt repayments of £30m per year. This is sufficient to mean that BIA makes a net loss (and does not pay any corporation tax). To fund the expansion, BIA must borrow another £150m, and this means its interest repayments will grow to a level where it needs at least the passenger numbers seen in 2008 to just cover the interest payments.

Passenger numbers in 2009 are likely to be at least 10% below those of 2008 due primarily to the increased cost of travelling abroad (through the weak pound). The cost of travel is likely to increase considerably in future years through taxation, increases in oil prices and emissions trading costs. In addition, the costs of borrowing may increase considerably from their current lows.

BIA makes 58% of its revenue from non-aeronautical revenues, ie from car parking and retail concessions. BIA's main airlines are focussed on minimising costs and maximising their own retail income. This means that the growth in retail revenue at BIA is not assured in future. Ryanair aim for passengers to be processed by the terminal in 35 minutes, which leaves precious little time for the purchase of food, drinks, sunglasses etc in the terminal, and means that these will be purchased aboard the plane.

It is quite possible that BIA will not be able to bring in sufficient revenue to remain a viable business.

Tourism

The EIR states that inbound tourism will create 1974 jobs (included in the 3500 mentioned as the total impact) but that outbound spending will only take £47.7m from the region and none of this can be counted due to the “to other associated benefits arising from international travel”. Not only is this a spectacular use of double-think but also is a massive miscalculation. In 2003, 58.2% of BIA passengers were outbound international tourists and only 5.5% inbound. The average spend per visit to EU countries in 2007 was around £430 per trip. This means that the outbound tourism spend at BIA in 2008 was likely to be £775m if the proportion of passengers remained the same as in 2003, or at least £660m if that outbound share fell to 50%. The number used by the EIR implies that each outbound passenger spent less than one tenth of the average for UK visitors to the EU.

The discussion of revenue and direct jobs created from inbound tourism is reasonable, but again the accounting for induced jobs (due to the spending of those jobs created by tourist spending) is unreasonable. This means that the created/supported jobs is closer to 2600 than the 3300 claimed.

But of course this is ignoring any outbound effects (see below).

It is asserted that this development will primarily be at the expense of airports in the South East, but this is of course at odds with the previous discussion of catchment area defined by travel times and classes of flights. The plain fact of the matter is that enlarging BIA is founded on generating extra business, not just shifting it from other airports. After all, as BIA has expanded over the last decade, so have all other airports including Heathrow – where is the evidence that expansion will displace demand rather than stimulate new demand? Certainly any cost-benefit analysis should negate any benefit where it is merely moving customers from one airport to another.

It is not clear that expansion of routes from the US into BIA will in fact produce viable routes – many American visitors primarily want to visit London. The falling numbers on the existing route do not encourage the view that excess demand is present.

It seems unlikely that the hotel proposed could not compete with existing nearby hotels of similar qualities. The jobs created during construction should be ignored, especially as the hotel plans are NOT part of the current submission. Even so, the total number of construction jobs is only 24.

The total jobs claimed therefore needs to ignore induced jobs, ignore those for the hotel and its construction, this amounts to a total of 1500. But still this ignores outbound spending.

On outbound tourism, the EIR decides to ignore it because although it causes a massive balance of payment deficit it appears to be Government policy to encourage it on the grounds that it is an unavoidable consequence of expansion. This however is not the whole picture. If the routes were focussed on flying to parts of Europe with which we can do business but which are unattractive to our tourists, the likelihood is that the flow of tourists on those routes would be predominantly inbound. However the route development at BIA has been and appears to continue to be dominated by routes attractive to the outbound tourist – this is borne out by the increasing share of outbound tourists and the shrinking share for business passengers both in the 2008 survey and in the projections for 2020.

The planning authority is being asked to judge the merits of the development on the basis of claimed economic benefits without seeing the balancing economic costs.

The EIR attempts to quantify the outbound spend by a reasonable method (number of trips times average price per trip from recent surveys) but then decide that 70% of those trips would occur anyway without the expansion and would merely displace to London airports. Again this wilfully ignores their own arguments as to why a local expansion will capture more passengers ie shorter travel time stimulates demand rather than displacing it.

The EIR further uses the “snowball” effect to assert that 25% of trips would have used another SW airport instead of BIA if BIA does not expand. This is a perverse use of the argument which actually states that word of mouth of local routes spreads and increases demand – exactly the stimulation of demand argument they ignored in order to justify the displacement theory in the preceding point.

This neatly means that they can ignore 95% of all outbound flights as they assume that they would occur anyway, despite ignoring that the same snowball effect is exactly what makes local flights more attractive than ones at a distance.

The EIR asserts that only 43% of the trips would otherwise have been in the South West rather than elsewhere. It ignores that other spending decisions are likely for shorter trips if cost or other factors prevent travel, eg spending in local retail and restaurant establishments – things that would not show up in travel survey by the CAA.

The EIR tabulates the total outbound spend in 2008 as £1bn (ignoring the domestic leisure spend) and this rises to £1.6bn in 2020.

Even using the gross assumptions that they make on displacement this amounts to £86m lost to the region in 2008 due to BIA growing to £133m in 2020. So the EIR assert that the increased loss to

the region is only £47m.

However it is in fact clear that these assumptions about the number of trips that would be made even without BIA expansion are gross over-estimates. The expansion at BIA is predominantly low-cost short-haul flights and this is not a market served by Heathrow, nor is it likely that the same volume of people would travel to Cardiff or Exeter to access an extra flight there instead. The marketing of the flights is very clearly local and trying to attract the large local customer base.

It is clear that the total extra loss to the UK economy due to the outbound travel is nearer £600m and a large fraction of that would be lost from the South West region. Even using the EIR's estimate of 43%, this amounts to £258m.

In jobs terms, this amounts to 4744 FTE extra jobs lost from the region and 11000 lost from the UK as a whole.

Even the EIR calculates that the increased outbound spend would cause another 877 jobs to be created elsewhere.

The EIR then tries to erase this by stating that the sector is growing and part of a global picture. However, it is clear that during the sharp drop in passengers going through BIA (18% down) the visitor numbers at destinations in the region are sharply up (by 10 to 15%). This does not gel with increasing outbound flows being good for local tourism.

It is also noteworthy that the estimation of impacts of the outbound flow has not been given multipliers for indirect and induced effects, unlike the benefits of the inbound tourists. This asymmetry is another example of a biased analysis.

The EIR asserts that increased domestic tourism may not be beneficial because it would displace inbound tourists – but this is a fallacious argument. There are plenty of hotels and B&B's with spare space that has been turned over to use for hostel facilities and other uses, because of lack of demand due to the outbound flow.

They also claim that outbound tourism creates intangible social benefits, yet because it is intangible it should not be used to ignore a real balance of payments loss.

The EIR states that the tourism sector in the South West was worth £8bn in 2003, and that foreign tourists and businessmen were responsible for £663m of this. This means that the domestic segment is 91.7% of the market, and yet it is exactly this section that the increase in outbound tourism reduces. It is very clear that the recent drop in air passengers has coincided with an increase in domestic tourism, and that this benefits the regional tourism industry far more than an increase in inbound tourists: a 10% rise in the domestic visitors might be expected to cause a £733m increase in revenues, whereas a 10% increase in inbound tourists would only create £66m of benefit. It might be expected, and in fact has been observed in 2009, that a 15% fall in air passengers has caused a 10% or more increase in regional tourism.

Overall, the EIR has tried very hard to discount and ignore a very large balance of payment number just to justify expansion on the basis of a very much smaller inbound benefit.

Carbon Costs

Tym decides to avoid including the carbon costs of the expansion on the assumption that this will be covered by the inclusion of aviation in the EU Emissions Trading Scheme (ETS). This ignores several important elements:

- 1) even the DfT SPASM⁶ assessment of the Heathrow third runway included the carbon costs in its cost benefit calculation (however flawed). As the EIR uses the DfT SPASM results, this seems to be an inconsistent and selective use of data. In the DfT analysis the cost of

6 <http://www.dft.gov.uk/consultations/archive/2007/consulstatusstansted/modellingresults>

emissions was given as £19 per tonne of CO₂. This would give the cost of the increased emissions as £10m per year. The higher value for carbon recommended by Stern would give a cost of £28m per year. Note that this does not include any factor for non-CO₂ effects which would probably double the cost again.

- 2) the standard DEFRA/DECC policy is for all plans to be measured against the social cost of carbon – there is no exclusion for industries covered by emissions trading
- 3) the increased terminal and surface access emissions are not covered by any of these get-out clauses

The EIR quantifies the carbon costs and again mix their baselines, choosing to use the emissions at 7.3m passengers rather than the current level, despite elsewhere claiming that the airport is operating at full capacity and BIA stating that the walkway does not increase capacity.

The EIR mixes carbon and carbon dioxide in their discussion, but still ends up stating the carbon dioxide costs as being £8.1m per year (above the 7.3m baseline). This is an underestimate because the benefits have been measured against a 6.2m baseline.

The EIR implies that aviation carbon emissions costs are covered by APD and the ETS. This is inconsistent with the view of the Treasury (which states APD is not an environmental tax) and the EU, which recognises that the non-CO₂ impacts of aviation are not covered by the ETS and in fact that the ETS is insufficient to cut emissions on its own and that a flanking tax may be required to support the price of carbon so that emissions actually fall.

The approach to carbon valuation in Government has undergone a major review, concluded in July 2009. The new approach moves away from a valuation based on the damages associated with climate change impacts, instead using as its basis the cost of mitigating emissions. This now gives the central value for “traded” emissions (ie those within the ETS) as £21 per tonne of CO₂ (at 2009 prices) today, rising to £70 by 2030, and for non-traded emissions (included much of the non-aviation emissions of BIA) as £50 per tonne now rising to £70 by 2030. BIA's EIR has not taken this into account but it is current Government policy.

The Government has announced that UK aviation emissions will be below 2005 levels in 2050 without any form of offsetting. How this can be possible with the projected growth in flights and no extant technologies that are significantly better than the deployed fleet is as yet unknown. For this reason the Climate Change Committee is reporting in December on how this may be achieved. It is premature to permit increase in aviation emissions when it is not known if this will cause a failure against the stated target.

The EIR then uses this as an excuse to exclude the carbon costs from the cost-benefit analysis of expansion – this is not a supportable conclusion.

The lead author for aviation on the Intergovernmental Panel on Climate Change states:

"The non-CO₂ effects of aviation emissions cannot be ignored and the likely consequence of those effects is to roughly double the impact of the CO₂ effects alone"

(Professor David S. Lee, Director, Centre for Air Transport and the Environment, Department of Environmental and Geographical Sciences, Manchester Metropolitan University)

As neither APD nor the ETS takes the non-CO₂ effects into account, they cannot possibly cancel out the full climate impacts of aviation.

APD and the ETS only cover aviation emissions and do not include the considerable growth in emissions from the terminal and the generated traffic. Therefore the climate costs of these should be included.

The economic impacts of the 2005/2050 target are as follows:

- It is not clear how the 2005/2050 target can be met. At the very least, radical advances in

technology are needed. The financial investment needed to achieve such advances is substantial and has not been accounted for.

- In order to achieve an actual reduction in CO₂ emissions, technological advances will have to be coupled with a complete overhaul in terms of the fleet mix operating at BIA. This again requires a substantial investment, not yet accounted for, which will have to be borne by the aviation industry or the consumer. If by the latter, it is likely to have serious impacts on passenger numbers.
- Lord Turner, chair of the CCC, has stated that even if aviation does achieve the 2005/2050 target, other sectors of the economy will have to make a 90% cut in emissions if the UK as a whole is to achieve an 80% reduction by 2050, and this implies costs to those other sectors.
- If the 2005/2050 target is not met, this will place an even greater burden on other industries to meet the required reductions.
- The only other alternative will be to introduce capacity constraints on BIA, which will have further implications for the cost/benefit ratio of the proposed expansion.

None of the above considerations have been adequately accounted for by BIA in their economic assessment.

Other environmental impacts

Such impacts as the cost of noise and traffic are counted as not significant and as being entirely mitigated by the plans. This seems a bold statement when no quantification is made for the cost of lost sleep, for instance. For example, if being woken in the night makes an employee 10% less effective in his job the next day, which seems quite plausible, then the costs of this in terms of productivity would be large. BIA has not proposed any measures to eliminate the risk of such wakings, and indeed has proposed a cap on night flight numbers of 40% above the number of flights in 2008. The costs associated with increased traffic flows in terms of congestion, local air pollution, risks of accidents and stress also go unquantified.

Oil price

The cost of flying is strongly affected (in the long term) by the price of oil. Short term variations are smoothed out by advanced purchase contracts and hedging, but these normally only cover 60% of an airline's fuel usage and generally last no more than one year. Some airlines managed to miss the spike in oil prices to \$147/barrel in 2008, others with different contract timings were badly hit. Oil fell back to around \$30/barrel as the credit crunch hit, but are now around \$60/barrel. It is hard to predict short term movements in the oil price, but the International Energy Agency in its World Energy Outlook report for 2008 predicts that oil will average \$100 barrel between 2008 and 2015, rising to \$200 in 2030.

Almost all airlines are now making a loss due to reduced passenger numbers, and many also suffered losses due to high fuel prices in 2008. It seems likely that fuel prices will rise again to near \$100 as soon as the recession slackens.

Ryanair have stated that their current business model is not profitable at \$100/barrel, and it is clear that many more airlines will be struggling. It is not clear how expansion of flights can be possible against this background, nor how the low-cost model can continue to grow by lowering prices. It seems likely that major consolidation will occur in the industry, and that the low-cost players will

aim to increase revenue per passenger rather than passenger numbers. The founder of easyJet is already trying to stop its expansion of routes in favour of moving to profitability.

SWRDA

The EIR states that : “The South West of England Regional Development Agency (SW RDA) and South West Regional Assembly (SW RA) recognised that the current capacity and the future growth of air transport through the South West region’s airports are integral to its future growth and prosperity of its economy and businesses, and its attractiveness as a destination for leisure and tourism – so have included relevant policies in various strategy documents and reports.”

Yet the EIR neglects to mention that SWRDA commissioned a report on the economic benefits of the airports in the region and this found that there was no strong link between the target growth industries and air travel. SWRDA subsequently voted to make no further investment in expanding passenger.

Other

The EIR relies on use of the CAA Passenger Survey 2008. As this report is not to be published until the Autumn of 2009, and is not available to the public, all references to its data and inferences drawn from it should be treated with scepticism. Included in this is the assertion that 10% of passengers used public transport in 2008, a significant increase on the previous year. It seems extremely odd that BIA should rely on an unpublished report for this number when it has full access to ticketing information and knows that its own employees ride for free. Very few non-passengers use the bus, mostly because of its cost, so the calculation should be simple and more importantly easy to track month to month and not just updated every 3 to 5 years!

The EIR relies on case studies of certain priority sectors. At least one of the companies used confirms that the data was derived in an no-conventional and informal way and the statements shown were not with the full knowledge and agreement of the company. This shows a cavalier attitude to surveying, at the very least.

In the discussion on direct user benefits, the EIR states the current baseline as 7.3m passengers. As the airport has never handled more than 6.3m this seems an odd statement to make.

Inconsistent baselines are used – half of the sections imply that 2008 is the baseline in terms of passengers, jobs etc and the rest assume that 7.3m passengers is the baseline. The “counterfactual” assumes that jobs would not grow above the 2008 figure should the application be turned down “because the airport is already running at full capacity”, yet it is assumed that it can reach 7.3m passengers on the basis of the “no expansion” walkway. This approach aims to minimise the costs (by only showing the impacts of growing from 7.3m to 10m) and maximise the benefits (by showing the change from 6.2m to 10m). This is a dishonest and inconsistent approach.

Survey Evidence

The EIR makes a lot of mileage out of two surveys, one of 18 local businesses (6 grocery shops, 11 B&Bs and 1 taxi firm) and another survey of businesses across the South West. This second survey was sent to 320 businesses, but only 15.3% responded. This amounts to 49 businesses being used to represent thousands of businesses in the South West. The fact that so few even bothered to respond indicates how few believed that expansion of BIA, or even the existence of BIA, was relevant to the success of their business.

This survey was executed in 2005, the opinions of businesses have undoubtedly changed in the meantime. The far more recent WWF survey of the FTSE350 companies had responses from 100 companies, and in that case 89% stated that they planned to fly less over the next 10 years. This

casts serious doubts on the validity of the survey conducted for BIA.

This form of response survey is not representative – only those highly motivated by the subject respond, and this of course includes businesses that see growth of BIA being directly beneficial to themselves (including Airbus, travel agents etc). This is a flawed way to conduct a poll on this issue.

Business West recently conducted a poll of its 2500 members with a single question on the importance of BIA expansion to their businesses. So few (less than 50) responded that BW have decided not to publish the results. This again indicates how unimportant and irrelevant expansion of BIA is to the business community at large.

At least one of the priority sector case study companies does not agree with the views attributed to it, and this again shows how flawed this evidence base is.

Similarly the survey by BIA of businesses that use it is distorted because it ignores all the businesses that do not fly through BIA, which will include the majority of SME companies in the area.

Costs and Benefits

The EIR states that no public costs are involved, yet it is clear that even ignoring the external costs such as climate change, congestion and lost sleep, the airport's plans depend upon the extension of the Bus Rapid Transit (BRT) and other road schemes. As the contributions being offered by BIA to these schemes amount to 4% or less of the project costs and the projects themselves have not even been included in funding applications yet, it is clear that they are unlikely to happen and that if they did they would put a considerable cost on the public purse. For this reason we should include at least a £48m cost for the BRT extension in the costs column.

To exclude the massive deficit due to outbound tourism is, as explained before, unacceptable. The social benefits of outbound travel are not quantified yet are asserted to outweigh the very considerable payments imbalance – this is not rational.

The climate change costs are ignored as it is asserted these are fully covered by the ETS and APD. This is not the methodology applied by the DfT when measuring the cost-benefit of the Heathrow project and it is unclear how BIA can choose arbitrarily to ignore these costs.

APD revenue cannot be counted as a benefit as it is also a balancing cost to the consumer.

The hotel benefits cannot be counted here as it is not included in the plan and the benefits would have to be balanced against displacement from other existing hotels.

The direct user benefits overvalue the benefits to outbound tourists and ignore the outbound spend this enables. This largely cancels out all of the direct user benefits.

The EIR tries to imply that they can ignore the displacement of benefits from Heathrow, yet they do not back this up with details from the SPASM model which looks at exactly this kind of effect. The likelihood is that if the EIR's assertion of most passengers being displaced (rather than extra) then the benefits nationally are very much less than stated. If the passengers are generated rather than displaced then the outbound spending assessment is massively wrong. Either way the assessment made is incorrect.

The UK commitment to cut all greenhouse gas emissions by 80% by 2050 include those from aviation, whilst only guaranteeing that the emissions from aviation will be at 2005 levels at that time, means that the actions of the aviation industry will place extra costs upon all other sectors to achieve cuts of greater than 80%. These costs are not accounted for within the EIR, despite BIA planning to increase its own aviation emissions by 125%.

Conclusion

The significant flaws and inconsistencies in BIA's economic assessment of the proposed development mean that a planning authority has no rational choice but to reject the planning application. The EIR, which forms the basis of BIA's economic assessment of expansion, provides such a selective and incomplete picture that it can not be used to adequately appraise the proposed project. The EIR does not satisfy the quality of report required by the ODPM circular 04/2006 on Economic Impact Reports and is insufficient to be used in such an important decision making process.

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