Speech by Sir Howard Davies 7th October 2013: 'Emerging thinking: aviation capacity in the UK' Consultation response from Friends of the Earth

In addition to this submission Friends of the Earth has also contributed to the joint NGO letter of 31st October but this response sets out our detailed and specific position. Our recommendations or suggestions for the Commission are highlighted thus; some 15 are proposed. Quotations from the speech are in full quotation marks ("").

Introduction

- 1. In this submission we wish to continue our dialogue with the Commission concerning the relationship between aviation emissions and existing/proposed capacity in order to increase the effectiveness of the Commission's analysis and subsequent policy process. The value of these environmental NGO contributions is noted in the speech's opening paragraphs. We also value the Commission's "open and consultative approach", and agree that it has "lived up to that commitment."
- 2. Firstly we welcome a number of significant statements included in the speech, which provide a positive response to questions we have asked previously. Recognition of the climate change issue in the Commission's thinking is strongly visible. The framework provided by the Climate Change Act 2008 and of the CCC 2009 report is explicitly accepted.
- 3. Therefore the particular advice provided by CCC in their letter to the Commission of July 2013 should be at the top of your mind when shaping your proposed interaction between aviation capacity and climate: "Reducing emissions in other sectors by 85% in 2050 on 1990 levels is **at the limit of what is feasible**, with limited confidence about the scope for going beyond this. It is of course possible that there may be scope to reduce emissions more in other sectors, which would allow aviation demand to grow by more than 60% in 2050. However, **this may well be the limit**, here and in other developed countries, compatible with achieving the internationally agreed climate objective. Given the need to limit aviation demand growth in a carbon constrained world, we recommend that this should be reflected in your economic analysis of alternative investments. For example, for each investment, you should assess whether this would make sense if demand growth were to be limited to 60% by 2050." *FOE emphasis*
- 4. Most importantly, in recommendation c) of our previous Climate Change submission we suggested that: 'In terms of its overall policy task the Commission must ensure first that the airport capacity 'envelope' is interacted with the aviation emissions 'envelope', and second that the former is appropriately constrained by the latter'; and then in paragraph 46 that: 'The Commission will somehow have to quantify the amount of available existing capacity that is likely to come into use over the future period, and the mechanisms by which government can manage the increment from existing capacity so that total capacity (existing + new) remains within an emissions threshold.'
- 5. Sir Howards's speech contains statements which are substantially aligned with these two FOE suggestions (our emphasis added):

"We do not believe it would be responsible for any government to accept a massive expansion of aviation with no reasonable expectation of being able to deliver commensurate carbon emission reductions."

"In our interim report, we will carefully assess the scale of new capacity needed, within the context of the UK's growth ambitions and **taking into account the potential constraints on expansion, including** both financial viability and **our commitments on carbon emissions.**"

"Our provisional view, therefore, is that additional capacity will need to be provided, alongside an overall framework for managing emissions growth, if we are to deliver the best outcomes in both environmental and connectivity terms."

"A mechanism for managing the carbon impacts of aviation will be needed if the UK is to achieve its statutory carbon targets – just as it will in other countries. But this is the case whether new runway capacity is provided in the south east or not."

- 6. The Commission will be aware that at the moment no such 'overall framework for managing emissions growth' or 'a mechanism for managing the carbon impacts of aviation' is at present established in government policy (including in the DfT *Aviation Policy Framework*), and aware also that this mechanism will have to apply to both existing and new capacity; yet both are essential prerequisites for a long-lasting aviation policy framework worthy of that name. It is for these reasons that Friends of the Earth regards a commitment to include these as cornerstones of the Commission's proposed approach as highly significant developments.
- 7. Of course the second statement quoted also includes the Commission's initial judgment that 'additional capacity will need to be provided' and we will provide some comments on this conclusion later but to be clear about the Friends of the Earth starting point, it is not that the Commission axiomatically "should rule out any expansion of capacity for the foreseeable future" but rather that aviation emissions had to be constrained within an acceptable UK carbon budget (UKCB) all the way to 2050 'acceptable' that is in terms both of its size, allocation to other sectors, and management of future delivery risk. And in paragraphs 17-19 of our consultation response we noted our one disagreement with CCC 2009: that for its own good reasons it had constructed its analysis on the basis of the previous government's 2005-50 'target' which accorded aviation a hugely privileging 2005 baseline of Kyoto +122% and an eventual UKCB 2050 share (with shipping) of 25% at the expense of all other UK economic and social sectors.
- 8. The speech states that: "We are in the process of updating the Committee on Climate Change's analysis and will present our findings in our Interim Report." Can we now **suggest** that you should seek and publish their view that is to say, their advice independently and directly to the Commission as to the continuing validity in 2013 of the 2005-50 aviation emissions envelope which they were asked to use in their 2009 assessment in the light of the recent concerns clearly expressed in the 5th Progress Report about the increased risk of not meeting future reduction targets¹, and the quantified scale of any capacity increases up to a 2030 date which the Commission could **prudently** recommend.² If the Commission did not seek the CCC's advice on these critical questions then there is a danger that a tension, or even a gulf, could open up between the Commission's one-off recommendations in 2015 and the CCC's enduring responsibilities beyond this date. We would hope that the Commission would see the value to the credibility of its eventual decisions of marching in lockstep with CCC in this way.
- 9. Since CCC 2009/2012 is now an accepted common starting point we can note where they left off in relation both to specific airport capacity proposals not in their remit and possible constraint approaches: 'The key implication from our analysis is that future airport policy should be designed to be in line with the assumption that total ATMs should not increase by more than about 55% between 2005 and 2050, i.e. from today's level of 2.2 million to no more than around 3.4 million in 2050. This constraint could be consistent with a range of policies as regards capacity expansion at specific airports.' CCC 2009 p.151pdf

and: This restriction could be achieved through a range of different policies relating to taxes, capacity expansion or slot allocation at specific airports. Optimal decisions on specific airport capacity do not therefore mechanically follow from national aggregate demand, but need to

¹ "The UK has met the first carbon budget and our assessment is that we are likely to meet the second carbon budget. However, we are not currently on track to meet the third and fourth carbon budgets. Without a significant increase in the pace of emissions reduction, starting very soon, the costs and risks of moving to a lowcarbon economy in the 2020s and beyond will be increased. To meet its statutory commitments, it will be necessary for the Government to develop and implement further policy measures over the next two years." *CCC June 2013 p.10pdf* These 'further policy measures over the next two years' must include aviation capacity issues.

² The Commission has already started to think in this direction; see for example "And in some sectors, additional emissions reductions over and above what is already proposed may prove technically infeasible."

reflect a wide range of other factors such as customer preference, alternatives to air travel, local environmental impact, competition between UK airports and continental hubs, and economic impacts both local and national. It is not the Committee's role to assess these factors. The Committee's clear conclusion is, however, that the combination of future aviation policies (combining tax, capacity expansion and slot allocation decisions) should be designed to be compatible with a maximum increase in ATMs of about 55% between now and 2050, and that this should continue to be the policy approach until and unless technological developments suggest that any higher figure would be compatible with the emission target.' *CCC 2009 p.152pdf*

- 10. We will reference just one finding from CCC 2012: that and irrespective of the actual level in tonnes CO2E the planning assumption for aviation emissions should be flatlined at their existing level up to 2030 and by implication beyond *Table 1 p.11pdf* In other words that they should not continue to rise over future decades before (apparently) returning to the 2005 level in 2050. This is a significantly different constraint assumption from those displayed in the Commission's consultation document in figures 4.2 (the DfT CO2 forecasts) and 5.2 described as the Commission's own analysis. Both of these have aviation emissions approaching 50 MtCO2 per year in 2050, which is therefore hugely in excess of the CTC planning assumption of 31 MtCO2e per year. We **suggest** that in your discussions with CCC you clarify and then publish what is the Commission's determined 'planning assumption' for aviation emissions per year through to 2050, whether nett or gross. You will almost certainly need to set this assumption for the purposes of then devising the framework or mechanism for managing emissions that you are proposing.
- 11. The Commission now picks up the baton from CCC (see para.9 above) in attempting to complete the last stage of the sequence of fitting capacity within prescribed ATM and emissions limits. In terms of the overarching question that the Commission is posing, this "we need to ask whether growth in aviation is consistent with other obligations, for example to play our part in tackling climate change, and if so whether any significant expansion in airport or runway capacity is needed to accommodate future demand" is an interesting formulation. We **suggest** it would have been better expressed as '... and if so whether any significant expansion in airport or runway capacity **can be** accommodated **within those obligations**'. Whether expansion is needed to cater for demand is a separate question, to which we will return in paragraph 13.
- 12. In accepting the CCA 2008 and CCC 2009 frameworks the Commission has also correctly identified, as has Friends of the Earth, the major negative risk, and also the economically distorting impact, of higher abatement costs to the rest of the UK of treating aviation emissions preferentially⁴. It will be essential since the proponents of aviation expansion have so far been able to focus the argument on claimed trade connectivity benefits we **suggest**, that the Commission should seek to quantify which of these two 'benefit' from connectivity, 'disbenefit' from future cost risk is more significant particularly in the period approaching 2050 in order to allow both proponents of expansion and all other economic sectors to

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³ We **suggest** that there is an important technical clarification that the Commission needs to provide: what is the difference/relationship between the CCC 2009 threshold of 37.5MtCO2 and the CCC 2012 threshold of 31MtCO2e, so as to be precise about the quantified upper emissions threshold within which aviation has to live; the problem being that the lower 31MtCO2e figure is a nett figure and assumes that all aviation growth above this level can be offset under the EU ETS. So for planning purposes it doesn't limit aviation emissions with certainty and indeed gives the industry an incentive to attempt unsustainable growth. Please note in paragraph 43(i) of our Climate Change response the CCC advice that "over-reliance on credits should be avoided in the long term, as these are likely only to be available at very high cost.'

⁴ "Growth beyond that, unless current assumptions about fuel efficiency and the use of alternative fuels prove to have been overly pessimistic, would put great pressure on the rest of the economy to achieve further carbon reductions, which could be very costly." And "If we allowed unlimited growth in air traffic, that would impose high costs on the rest of the economy if the overall target is to be met, for example, pushing up domestic heating bills as the energy sector has to decarbonise more quickly. And in some sectors, additional emissions reductions over and above what is already proposed may prove technically infeasible."

understand the long-term and wider context which should determine infrastructure provision. The CCC framework also provides the Commission with a complete technical analysis process which it can now apply.

- 13. But it's at this point that the clarity of the Commission's thinking becomes challengeable, and the root of this lies in its analysis and response to future demand. The middle part of the speech contains a quite conventional but also contradictory treatment of forecast demand (and whether that will be realised or not). At the end of it the conclusion is reached allowing for "what our future aviation needs are likely to be and where passengers are going to want to fly to and from over the coming decades, in order to identify what configuration of airport capacity is most likely to facilitate those journeys" that "... doing nothing to address the capacity constraints in our current airport system would not be the right approach."
- 14. But our reading of the speech is that this conclusion is almost an assertion, disconnected from supporting evidence, and the remainder of this submission identifies a series of challenges.

Firstly, in a situation where:

- the Commission knows that unconstrained aviation demand promoted by the low-cost business model is extraordinarily high (see CCC 2009 figure 7.1 for the emissions consequences; and figure 7.4 for the situation with new runways at Heathrow, Stansted and Edinburgh), such that it has already rejected 'predict and provide' ...
- the existing UK high propensity to fly compared to other EU countries?; the social characteristics of 'frequent fliers'; the increasing social inequality in future expressed 'propensity to fly'; and the similarly pronounced regional inequality in that propensity are all known to be assymetrical drivers of air travel demand in the South East compared to the rest of the country ...
- and in the context where a potential 'battleground over carbon' if we can call it that in the 2030s and 2040s can barely yet be perceived, debated or adjudicated ...

the speech nonetheless seems still to be arguing that uncalculated but extremely high potential future risks for the entire UK economy should be allowed to be created in order to cater for demand being expressed in just one region of the country and for reasons which the speech quite rightly describes in pointed language: "there is no doubt that people value highly

¹⁰ Figure 21 GB resident international air passengers, per head of the population *CAA UK Airports Market - General Context Working Paper September 2011*

⁵ Here the advice of CCC is clear: "The fact that aviation emissions are in the 2050 target implies a trade off between emissions in this and other sectors of the economy: the higher the level of aviation emissions, the deeper the emissions cuts required in other sectors to meet the economy-wide target." *letter July 2013*

⁶ "The claim here is that we should not simply build airport capacity to meet whatever level of demand emerges - what has been known as the "predict and provide" model."

⁷ The UK has the largest single number of air passengers of all EU27 countries, and 26% of the EU total Eurostat http://bit.ly/17AWReV

⁸ "There are number of socio-economic and demographic trends affecting these drivers which may stimulate the growth of leisure travel over and above that which will come through an increase in household income alone. Among the key ones are: • Trend towards single households; • Increase in home ownership abroad; and • Composition of UK residents and its impact on VFR travel." Recent trends in growth of UK air passenger demand: Civil Aviation Authority January 2008 para.4.41 And see also CCC 2009 p.55pdf for similar breakdowns

⁹ *ibid* "The DfT survey indicates that 51% of adults had not flown in the last 12 months" *para.4.7*, contrasted with "It can be inferred that passenger growth in recent years is coming at least as much from an increased flying frequency by those that do fly, as from a diminishing pool of non-fliers" *4.8* and "Even if future growth of UK resident leisure travel does not come from that sizeable proportion of the population that still does not fly regularly, then, since nearly half of 'regular fliers' still only take one leisure trip per 12 months (and three-quarters take one or two), it is unlikely that demand growth for trips will be constrained by availability of leisure time in the foreseeable future. *4.14*

[&]quot;On average, a resident of Greater London takes 2.5 flights a year, compared to just over 1.5 for the country as a whole. This will always make it an attractive market for airlines"

the ability to travel abroad for leisure – whether to expand their horizons or simply to work on their tan."

- 15. But this conclusion depends on having a credible analysis of the extent to which demand should be met, and why, and if so by how much. Friends of the Earth believes that it would be a contentious and divisive position for the Commission to advance as a fundamental underpinning of its argument for capacity provision that future shares of carbon should be disproportionately and prematurely allocated to a privileged minority segment of the UK population so that they can "work on their tan", at the expense of a majority (depending on how you calculate it) who will always be 'less frequent fliers'. And that the carbon poor of the future shall be pushed back in the queue by a decision taken decades earlier in favour of the carbon privileged.
- 16. In the end this is as much a moral judgment as well as being an issue of social policy and intergenerational justice that the Commission needs to publicly debate.

 We **suggest** that the Commission explicitly sets out and publishes its views on this matter.
- 17. Instead at this point in the speech what the Commission should have done, but did not, is to include an analysis of the components of demand for air travel that made a distinction between the 'need' for economic connectivity and the 'demand' for leisure connectivity¹². Since the intention of the Commission should be to identify a policy prescription that meets the needs of the entire country, of UK PLC, and not just the predominantly leisure activities of a wealthier (and more frequently flying) sections of just one region of it, this approach to the analysis of demand is insufficient and inadequate. So we **suggest** that the Commission needs to be clearer which is the policy driver it is working to meeting 'trade' *or* consumer demand; and for the benefit of the SE *or* for the UK as a whole because at the moment the speech seems to be advocating both of these alternates as if they can continue to exist side by side without a tension between them. They cannot and consequently the mechanism by which that tension will be resolved becomes key. The speech is however silent on this.
- 18. Arguments as to whether that demand can or should be reallocated (e.g to regional airports) are therefore secondary. The central question remains whether that demand should be met at all in relation to the potential future economic and social *disbenefits* that the Commission is well aware of but has not incorporated into its calculations. This is not a fundamentalist stance. The rest of the economy and society is having and will have its 'supply and demand' constrained by all sorts of '-80% by 2050' mechanisms (if we ignore for the sake of this analysis that emissions are also being exported and imported away from/into the UK carbon budget). But the aviation industry almost uniquely is not.
- 19. So we **suggest** that the Commission needs to introduce into its analysis a method of quantifying future longrun economic benefits versus disbenefits which will allow policymakers to distinguish between the fundamental needs of vulnerable sectors of the UK economy and society for reasonably priced carbon in the 2040s, and the wishes of wealthy frequent-fliers in the Greater SE to 'work on their tan' in the 2010s.
- 20. There is then a second reason why the Commissions's conventional approach to expressed demand is insufficient. If the Commission accepts that 'a mechanism for managing the carbon impacts of aviation will be needed' which ultimately and by whatever route will have to find its expression in higher prices and airfares then this 'demand management mechanism' will act to constrain the demand for air travel that the Commission at the same time is arguing will need to be met. This is contradictory and the speech does not acknowledge that such an internal feedback mechanism to manage demand will be taking effect.
- 21. It's also incomplete in its identification of the factors which act to constrain demand: lower

¹² Instead they are just yoked: 'As new trade links grow, new air links will be needed to support them, and vice versa. Equally, there is no doubt that people value highly the ability to travel abroad for leisure – whether to expand their horizons or simply to work on their tan."

economic growth and higher oil prices are mentioned but not fiscal or regulatory charges. But higher fuel and carbon charges on their own are insufficient to provide the necessary level of support: see figure 2009 fig 7.11 p.146pdf. Figure 3.2 of DfT Forecasts 2013 represents a real challenge to the design of the 'aviation carbon management mechanism' (ACMM) because - setting aside a detailed critique of its input assumptions – what it shows is that air fares will remain constant in real terms from now until 2050 whilst real wealth will continue to rise with economic growth. Today's levels of price constraint will therefore continuously weaken. The implication is therefore that constraint will have to applied by other means and therefore the Commission will need to set out the principles by which this ACMM will work, and then what will be its consequent impact to constrain demand. This is simply a fulfilment of the policy prescription that CCC 2009 suggested would be required: 'the combination of future aviation policies (combining tax, capacity expansion and slot allocation decisions)'

- 22. Then the **Commission** will need to identify at least in outline (i) what it believes should be the components of this ACMM framework; (ii) how much constraint it will be able to apply; and (iii) with how much certainty it will need to work decades into the future because if new capacity has been provided very expensively there will be very large commercial pressures to get a return on it. In our discussion with Edward Pertwee FOE were asked about what constraint mechanisms (actually reallocation mechanisms) we would be in favour of, and we responded that this was 'not up to us' (ultimately it's a matter for government, should have been set out in the Aviation Policy Framework, but was not). But the onus to do so comes onto the Commission if it is arguing that capacity should actually be increased. If not then, to quote Sir Howard's own words, "... in the absence of a comprehensive emissions trading scheme, the best way to control air travel may, on this argument, be to constrain the growth of airport capacity."
- 23. As we stated in our Climate Change response (paras.44, 46) the ACMM will also need to be integrated with a parallel mechanism for constraining the use of existing consented capacity and planning applications being brought forwards at the decision of individual airport operators in whichever order they choose.
- 24. But, thirdly and finally, even if the answer to the Commission's own question "The question is whether the growth that the CCC has said is compatible with the UK's climate objectives implies an expansion in runway capacity" was to be 'Yes', we have previously suggested to you that in fact there simply would not be available any ATM 'headroom' to permit new capacity at an expanding London hub *FOE Climate Change response paras 26-28.*
- 25. That growth was limited by CCC 2009 as an increase in ATMs 'to no more than around 3.4 million in 2050', up from 2.2m in 2005; that is an increase of 1.2m ATMs in 45 years. The most recent DfT Forecasts project as follows: 2010 2.0m ATMs; 2030 2.72m; 2050 3.77m; that is a larger and faster increase of 1.8m ATMs in 40 years. Clearly the constraining effect of the combined input assumptions which include **no new runways** *Annex F.1 footnote 3* 'Modelled results from s02 scenario (maximum use of existing runways)' have not applied sufficient restraint to arrive at compatibility with the CCC maximum. We **suggest** that the Commission provides an explicit comment on this incompatibility to draw attention to and explain how it intends to respond to it.
- 26. And because ATMs are the mediating factor in the CCC modelling between demand inputs and emissions outputs the **Commission** will need to develop a 'CCC 2009 compatible' ATM trajectory that will allow it to identify what total UK ATMs will have to be constrained to at five yearly intervals; this is a critical planning assumption and tool. Unfortunately there was no such ATM trajectory in CCC 2009 (though no doubt it will be available in their unpublished data); and then actual ATMs did not display the anticipated increase from CCC's 2005 baseline of 2.2m but instead dropped to 2.0m in 2010. The DfT forecasts now do not anticipate ATMs

¹⁴ Box 2.2 'Demand is projected first in terms of passenger numbers. These are then converted into ATMs for each of the traffic lines represented in the model, reflecting for example airlines optimising behaviour, route profitability and load factors. The overall CO2 emissions are calculated by combining all the above steps, and accounting for any improvements in aircraft fuel efficiency and use of biofuels.'

¹³ "That is partly a function of lower GDP growth, which is a strong driver of demand, but also a result of higher oil prices, which have increased the cost of flying aeroplanes."

ATM trajectory will need to be rebased and reprojected. In its absence we cannot anticipate what it will show but, as a simple exercise, if we apply the same proportions that the DfT forecasts project for anticipated growth between 2030-2050 (63% of the total between 2010-2050) to an assumed CCC 2009 compatible trajectory then this might allow around 2.6 ATMs to be provided for in 2030. (For reference DfT forecasts project this as 2.724m ATMs).

- 27. (As we indicated previously we believe 2030 (rather than 2050) to be the Commission's key decision horizon. Dividing the full 2050 period into two parts (up to, then after 2030) is useful because it contributes to limiting the extent of pre-emptive seizure by aviation of the ever-reducing emissions space in the total UKCB. Choosing 2050 just massively increases both the emissions abatement costs and infrastructure investment misallocation risks. We **suggest** the Commission needs to publicly discuss which is the most appropriate decision horizon -2030 or 20 50? in terms of cost benefit and risk to UK PLC as a whole and not just for the aviation sector.)
- 28. With 2012 ATMs at 2.1m this would leave a headroom of around 500,000 ATMs to be allocated to airport capacity up to 2030 up to this assumed 2.6m threshold. The DfT 2013 forecasts record that Heathrow ATMs are already fully constrained at their maximum of 480th but Gatwick is projected to increase by 14.4% to 2030, Stansted by 85%, Luton by 75%, London City by 78%, and Birmingham by 91%; thus a 337,000 ATM increase at major airports serving the greater SE catchment within the 500,000 available. And with strong regional airports such as Manchester, Edinburgh, Bristol and Southampton forecast to add another 163,000 ATMs, these two groups of growing airports will expect to take up the entire headroom available within a CCC compatible 2030 trajectory; and consequently we reiterate that there does not appear to be ATM headroom available for an enlarged London hub. Of course there are complexities and movements within these totals: so ATMs at many of the peripheral regional airports are projected to fall, but as the Commission has already concluded, this increased headroom is not available to transfer to meet SE demand. And whilst if capacity at a London hub - the role at present occupied by Heathrow - was to be deconstrained in some way (including by the provision of an additional runway), then a fraction of the other London system airport growth would reallocate back to the hub, but this would only occur very late in the 'to 2030' period so consequently would be at the margin.
- 29. Therefore we **suggest** that the Interim Report must address how and to what locations it believes this contested ATM 'headroom' is likely to be allocated to 2030, and by what mechanism will the headroom be so allocated. This is the ultimate 'proof of the pudding'. The Commission is arguing that "we will need some net additional runway capacity in the south east of England in the coming decades", that is within a CCC-compatible ATM headroom (to be determined) but exactly how? You will be aware of the AEF/WWF analysis of adequate runway provision but SSE in their own submission on this speech provide a further statement to this effect. Finally CCC 2009 Table 7.1b *Projected runway capacity, utilisation and target compatible ATMs in 2050 (Likely scenario assumptions)* does not appear to offer much scope for new hub capacity within its 3.4m ATM limit.
- 30. As an additional point that we are sure SSE will put to you in detail, the speech has not adequately addressed their point that ['that over the past twenty years the number of passengers per aircraft had been increasing by 2% a year but that the forecasts only assumed a 0.2% annual increase in future'] which is a more appropriate way of achieving "an expansion

¹⁵ SEE "Table 2 shows that, if the upper limit recommended by the CCC is accepted (in order to hold aviation emissions in 2050 to their 2005 level), a 68% growth in UK passenger numbers could still be accommodated by 2050, compared to the level in 2012. Importantly, this level of growth could be accommodated without any new runways, including in the south east, where it would result in 232mppa by 2050, compared to an estimated capacity of the existing runway infrastructure in the south east of 245mppa." 2.15 and "The key messages which emerge from the above three tables are: If the CCC's upper limit of 370mppa is accepted, there is no need for any more runways anywhere in the UK, including in the south east" 2.17

in runway capacity", and one which we still find convincing 16.

31. We still do not accept the arguments about 'leakage' that are present at various locations in the speech. The Commission's framework appears to be proceeding (correctly) on the basis of 'national responsibility' for aviation emissions - rather than these being 'controlled' at a global level – and therefore for consistency it needs to assume that 'leakage' in either direction will be properly managed and will balance out at the national level in whichever country. Beyond this it is not appropriate to intervene in market reallocation between competing hubs on the unquantified grounds that there may or may not be emissions increases/ reductions/ 'leakage'.

Conclusions

The speech represents a significant advance in making a commitment to establishing a framework whereby aviation capacity has to be constrained by climate obligations (although what that 'mechanism' would comprise is not yet identified). However its Achilles' heel is its superficial and contradictory treatment of 'demand', which needs re-examination and more thoughtful development if the subsequent stages of the Commission's work are to be able to proceed on a coherent basis. Consequently the respective carbon claims and rights through to 2050 of UK Aviation v the Rest of UK PLC and Society are not quantified and properly balanced. The speech's 'provisional view' – "that additional capacity will need to be provided, alongside an overall framework for managing emissions growth, if we are to deliver the best outcomes in both environmental and connectivity terms." – is therefore not at the moment adequately supported by evidence.

Friends of the Earth 31st October 2013

Document prepared by Anthony Rae

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¹⁶ SSE submission on speech "Even a 1.0% annual increase in the number of passengers per PATM - i.e. just half the rate of improvement for the past two decades - would increase the capacity of airports in the south east to 330mppa in 205010 - almost 10% more than the DfT unconstrained demand forecast for the south east in 2050 (see Table 1 above). In other words, even in the 'do nothing' scenario, all unconstrained demand - as per the DfT's central estimate for 2050 - could be met by airports in the south east without new runways and without any redistribution of demand to airports in other parts of the UK. Some redistribution of demand within the south east would however be needed."