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Dear Sir,

**RESPONSE FROM MANSTON AIRPORT TO CALL FOR EVIDENCE ON AVIATION  
DEMAND FORECASTING AND DFT 2013 NATIONAL FORECASTS**

I am writing on behalf of Manston Airport (MSE), of which I am the Chief Executive Officer, and its parent company Infratil Airports Europe Ltd, in response to the to the Airports Commission's call for comments on its *Discussion Paper No 1: Aviation Demand Forecasting*. We have already signaled in our "Intention to Submit Proposals" letter dated the 27 February, our wish to engage pro-actively with the Commission in its deliberation of options for meeting the long-term airport capacity needs of the South East. I have also written under separate cover, setting out our suggestions as to how the draft criteria the Commission set out in its *Guidance Note 1*, could be enhanced as part of the consultation on that issue which is being run concurrently with this one. We also intend to respond to the new *Discussion Paper No 2 on 'Aviation and Connectivity'* in due course.

Our interest in the issue of 'Aviation Demand Forecasting' is fourfold and this is set out in more detail immediately below. We then go on make suggestions as to how the DfT forecasts could be improved (in line with the Commission's invitation in its Discussion Paper), present analysis which we believe demonstrates that Manston could attract significant demand under future scenarios, draw attention to the absence of freight forecasts and the importance of developing these as an input to the Commission's work and then formally requesting that Manston be included as a core airport in future runs of the DfT models.

**Concerns with the DfT 2013 Aviation Forecasts**

**(a) DfT's 2013 Forecasts are too pessimistic**

Firstly, we have a generic concern that as a result of several downward revisions since 2003, the DfT's latest forecasts are too pessimistic and in danger of reverting back to the historical pattern of the period between the 1960's-1990's, when UK aviation policy was consistently predicated on forecasts which proved to be too low, resulting in investment lagging behind the sector's capacity requirements. Given the long lead times involved in bringing forward major infrastructure projects (eg terminal and runways) at airports, as opposed to incremental enhancements that deliver small increments of capacity, it is vital to get policy provision significantly better aligned with future capacity requirements for the good of the UK economy. The failure of successive Government's to tackle this political "third rail" issue allowed the capacity problem in the South East to build during the 1990s; the its 2003 White Paper sought to address the problem robustly only to be over-turned by the Coalition's Government's post-election agreement in 2010.

It is a fundamental axiom of airport planning that your planning horizons should be long and your forecasts err on the high side, whilst your investment decisions and financial commitments should be based on business plans which have much shorter timescales and more cautious growth projections. The UK has fundamentally failed to meet these basic tenants of long-term airport infrastructure planning because of the pivotal role that Government plays in what has become a highly politicised process. The result is that Airport operators, who are able and willing to invest private capital in new capacity, are frustrated in their ambition whilst the UK's leading position in critically important global industry is under threat much to the bemusement and delight of our key competitors. If the Commission relies on DfT's latest forecasts in coming to its conclusions, we are convinced that the current situation will simply be prolonged and exacerbated.

(b) The DfT 2013 Forecasts are 'policy' driven

There is clear evidence that the DfT's core demand projections have become 'policy' forecasts, rather than an attempt to understand likely outcomes based on external drivers of demand, which can then provide a framework within which to test different policy scenarios. So whilst as recently as 2009 the core '*unconstrained*' and '*maximum use*' of capacity forecasts were accompanied by (i) a range of sensitivity tests looking alternative input assumptions based on external factors which might influence demand (GDP, fuel prices etc), and (ii) different capacity options, or (iii) some combinations of both, thereby creating transparency and confidence in the forecasting process, since 2011 these are no longer provided. Instead they were replaced by two core policy-driven scenarios which 'internalized' a wide range of assumptions – including APD, carbon pricing, the completion of HS2 (Phases both 1+2), and most fundamentally '*market maturity*'. This means that there is no ability for the industry or other stakeholders to understand in detail the impact of alternative assumptions and their implications for different capacity options, even though no Government is allowed to fetter the policy position of its successor.

This is not only a dereliction of Government's duty to be objective, transparent and robust in the analysis that it undertakes to underpin its decisions, but has served to lead many interested stakeholders, including ourselves, to the uncomfortable conclusion that the policy outcomes have been already been pre-determined based non-aviation exigencies such as: Staying within Kyoto Targets, improving the business case for HS2, achieving increased tax revenues from APD and pricing off demand so that the current administration does not have to make a decision on new runways that could fracture the Coalition. Moreover, that as a consequence, the forecasts are merely being published as a part of the process of post hoc rationalisation needed to justify them. Since a future Government could change any of these assumptions, this is simply not the way to develop a robust understanding of potential future demand, on which well-informed and rational decisions can be made.

(c) The DfT airport forecasting model (NAPAM) is not suited to accurately forecasting future demand at small and medium sized airports

Whilst we do not wish query the technical integrity and validation of the NAPAM model, which has undergone continuous improvement since it was first developed for the 2003 White Paper, we do question its functional capability to make accurate long or even short term forecasts for small airports. This problem is inherent in the model structure, which grows extant traffic demand (derived from CAA survey data), to each of its 48 destination groups within each of its district zones, in line with the varying growth rates for 21 different types of traffic and allocates it to modeled airports based on surface access times, capacity and service frequency. But this means if there is no extant demand being generated within zones close to a small airport, because a particular destination is not served by that airport, forecast demand will remain minimal. And yet there is substantial evidence that demand can be stimulated at such an airport, based on an airline deciding to offer a destination which it

knows local passengers will want to visit. In other words, demand becomes supply led, rather than the other way around, and that is something NAPAM simply cannot model well even when 'seeding' of new routes is introduced as an external input to the model.

All of which means, the growth of new airports and small airports, tends not to be forecast well, because the model cannot anticipate airline route development behaviour as this is heavily influenced by their own business models and operational parameters, rather than a perfectly rational allocation of resources based on a perfect understanding of demand (as assumed by the model). So, for example, decisions to open or close airline bases are difficult to capture (eg Southend). Typically, this results in the model forecasts that underestimate growth at this kind of airport, although occasionally it does work the other way around.

(d) Manston has been inexplicably excluded from the forecasts

We are aware that the NAPAM model has 31 airport 'slots' in its functionality, and other than when it was used to forecast demand for new airports during the 2003 White Paper, only 30 of these have ever been used. We note that Plymouth has been replaced in the most recent forecast outputs from DfT for Southend, whereas Coventry, which has had no scheduled traffic since 2009, has remained as one of the 30 modeled airports when Manston, which has had scheduled traffic more recently, has not been included. Given the role that our analysis (reported later in this response), suggests Manston could play in a constrained South East system, we believe this is an important oversight that needs to be addressed as soon as possible.

**Improving the DfT Forecasts**

In terms of strategies for improving the forecasting base available to the Commission to inform its deliberations, we agree with the basic premise put forward in the Discussion paper, that the DfT suite of models is the best comprehensive set of tools that is readily available and not requiring disproportionate new development work. Although NAPAM has some structural limitations (as set out above), the other components of the model suite work well. Rather it is the *input assumptions* that DfT have chosen to use which we would urge the Commission to examine critically. That said, we do agree with the Commission's assessment that the DfT models have weaknesses that need to be addressed, but in our view it is not just in the area of International interlining and the impact of competition from alternative hubs, but also a number of others where technical fixes or other solutions need to be found.

National Demand

To address the impact of the policy driven assumptions that have repeatedly driven down forecast future levels of overall UK demand, there are three separate but complementary approaches that could be adopted:

- i. The first is to neutralize the 'policy pre-dispositions' inherent in the model outputs that DfT have published, by for example holding APD at current levels, similarly carbon pricing etc and other factors which have been used to underpin the 'market maturity' assumption which DfT readily admits is driving down the future UK demand projections. This could then be presented as a truly unconstrained forecast, with the current unconstrained forecast being re-labelled as an unconstrained 'policy' forecast.
- ii. Second the Commission could ask DfT to produce a series of sensitivity tests, with alternative input assumptions on key parameters such as oil price rises, APD, Carbon

Pricing, reductions in non-fuel costs and price elasticities, that represent a more optimistic outcome than they have assumed. So for example:

- New sources of oil, or other forms of energy generation, may mean the price of oil does not rise as fast as DfT have assumed.
- The percentage of sustainable biofuel (eg bio-degradation of organic waste, jatropha and camelina cropping or algae) in future fuel mixes could quite plausibly be higher (DfT have assumed 5% and it could be more like 50% - ie half of the fuel burnt would not therefore require emissions permits and would reduce exposure to oil price rises).
- There could be other technological breakthroughs that could radically improve seat/KM costs (eg the cost and weight of material used in aircraft manufacture, hydrogen based fuel, passenger processing and security technology in airports, gate to gate ATM).
- The relative cost of other modes competing with air for short-haul travel could rise faster or not receive current levels of subsidy.
- A new Government could decide that once the national debt is more under control, the scale of contribution aviation is make to repaying that debt through APD could be reduced or does not require inflation level increases, and that as the ETS is internalizing aviation's external environmental costs, such reductions would help stimulate demand and wider economic activity. There are few in the industry that would not agree that APD is a major factor suppressing domestic demand because of its 'double-whammy' structure – or that if capacity were provided at a London hub, there would be more regional services.
- Slot capacity is also probably suppressing that demand currently, as for the largest long haul markets such as North America, Middle East and India, Heathrow is a materially better hub than its European competitors.
- There appears to be no allowance for changes in the structure of O/D demand patterns over time. So rather than developing countries, where there is faster economic growth and demand for aviation, becoming a bigger percentage of the total market influencing overall demand upwards, it remains broadly constant.
- A review of the literature will also demonstrate that the income and elasticities adopted by DfT are more conservative than adopted by other reputable organizations such as IATA.

These are all plausible variations which would impact on the rate of market maturity DfT has assumed, and prudence requires that their impact on demand be examined and understood.

- iii. Third it would then seem sensible, for the Commission to at least explore some kind of Delphic approach to aviation forecasts, to see if that confirms a consensus around a central case outcome for long term planning purposes, which is materially different than that suggested by DfT's policy driven assumptions; especially since the latter are clearly inherently at risk to policy changes over their lifetime.

#### Airport Specific Modelling

In terms of NAPAM, we would prefer that the Commission either relied on the airports own bottom-up forecasts, or perhaps asked DfT to aggregate them in some way geographically within the model so that their relative attractiveness is enhanced in order that they are not so materially disadvantaged as they are now vs medium and larger sized airports.

DfT also need to be asked to ensure access times to smaller airports reflect the faster car-park to terminal and terminal processing times they can achieve. Assumed capacities also need to be adjusted. At the moment they are crude annual max use figures which do not

reflect the loss of capacity arising from the seasonality of traffic at some airports, and the impact on their attractiveness to airlines if they can no longer offer peak period or shoulder period slots, as this materially affects new route formation. Essentially the current maximum capacities being used, do not reflect proper commercial capacity constraints that in an unconstrained environment would trigger investment in enhancements.

### The Potential Role of Manston

Using up to date CAA data, we have determined the extent of traffic leaking to other airports from Manston's potential inner and outer catchment areas. This currently amounts to nearly four million passengers (see Table 1 below).

Table 1: Leakage from Manston's Catchment

MSE	Leakage		
Outer catchment	Business	Leisure	Total
Dartford District	39,433	231,649	271,082
Gravesham District	31,236	158,594	189,829
Hastings District	26,554	135,992	162,546
Maidstone District	52,142	300,236	352,378
Medway	68,439	388,215	456,654
Rother District	15,862	109,763	125,626
Sevenoaks District	41,058	295,695	336,753
Tonbridge and Malling District	27,932	198,425	226,357
Tunbridge Wells District	79,579	254,615	334,194
<b>Grand Total</b>	<b>382,235</b>	<b>2,073,183</b>	<b>2,455,418</b>
MSE	Leakage		
Inner catchment	Business	Leisure	Total
Ashford District	33,918	193,472	227,390
Canterbury District	46,218	294,806	341,024
Dover District	20,628	164,176	184,805
Shepway District	19,251	125,768	145,018
Swale District	37,863	148,213	186,076
Thanet District	50,628	181,701	232,329
<b>Grand Total</b>	<b>208,504</b>	<b>1,108,138</b>	<b>1,316,642</b>
MSE	Leakage		
Total catchment	Business	Leisure	Total
<b>Total</b>	<b>590,740</b>	<b>3,181,321</b>	<b>3,772,060</b>

From the same analysis, we know that by far the largest percentage of this leaking traffic uses Gatwick and that much of it is leisure orientated. This is important, because in a maximum use scenario in which the cost of using premium airports such as Heathrow and Gatwick airports rises exponentially, it is short haul and low cost leisure traffic that will be the first to seek to move to alternative lower cost airports. And in Manston's case, a substantial element of the price sensitive mobile traffic currently leaking to Gatwick from its catchment area would fall into that category.

Based on 2% annualized average growth, Figure 1 illustrates the scale of potential demand Manston is well placed to capture out to 2050.

**Figure 1: Demand in the Current Manston Based on 2% AGR**

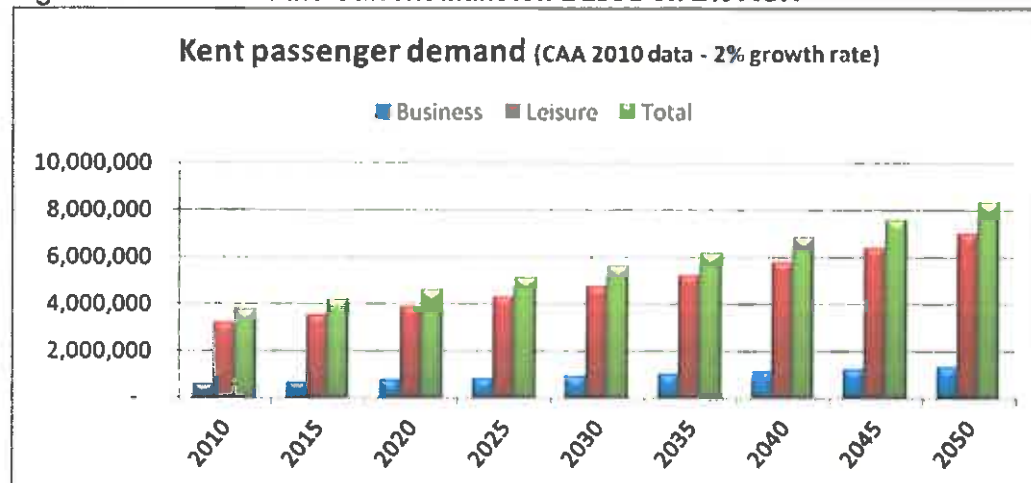
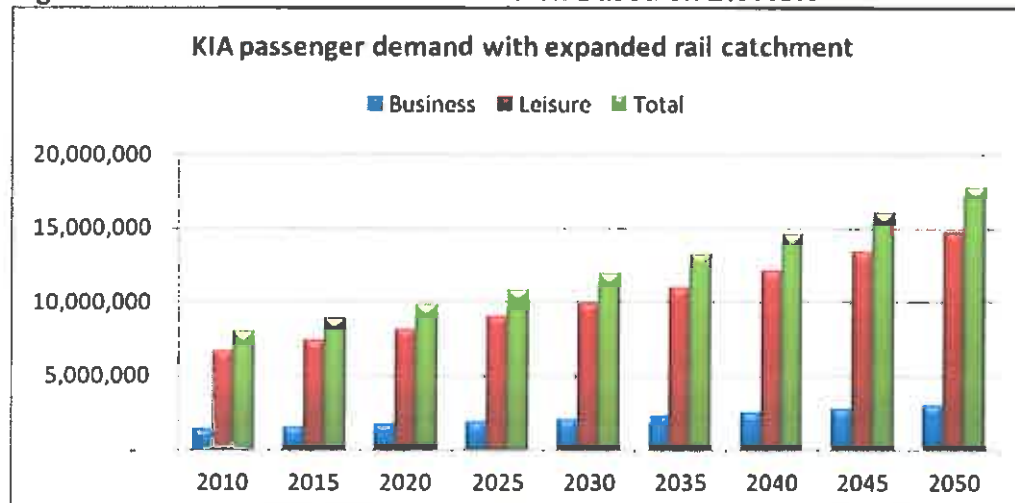


Figure 2 provides equivalent analysis based on an extended catchment area for the airport, created by extensions to the high-speed rail network in Kent reducing journey times to London St Pancras to around 40-45 minutes and to Stratford to 35-40 minutes and Bromley South and Victoria by 15-20 minutes. This would potentially greatly improve Manston's accessibility from East and South East London and therefore its potential to penetrate the large markets there.

**Figure 2: Demand in an Extended Manston Based on 2% AGR**



This scenario is supported by analysing of published DfT Forecast data which indicates that with improved rail access links, Manston is well placed to serve a material part of the surplus passenger demand there would be in London and the South East over these timescales, whether there were new runways at Heathrow and Gatwick or no new runways at all. It would not, however, be geographically compatible in demand terms with a hub airport in the Thames Estuary or at Stansted.

All of this points to a potentially significant role for Manston if surface access times are improved, but at the moment there is no way of knowing this as Manston has not been modelled by the DfT. We would, therefore like to use this submission to formally request that the Commission ask DfT to do this and that they discuss with us the input assumptions associated with the model run.

### **Freight Forecasts**

The 2003 White Paper was supported by freight forecasts generated by DfT; we note that the forecasting discussion document did not make any mention of such forecasts, and we believe that this is a gap in the forecasting information that will be available to the Commission that needs filling. In part because it will be needed to inform the optioneering assessment of the extent of the cargo traffic in the form of tonnages, dedicated movements, building footprints and associated lorry movements that will need to be accommodated. But also in part because it will impact on runway configurations (eg length and PCN's), capital costs and revenues in the financial appraisal, as well as the wider economic appraisal. For potential long term options like Manston it will form an important part of the business case for investment and modelling will be needed to understand when dedicated (ie non-bellyhold) traffic will be forced by capacity constraints to move to less congested airports in the London System unless additional provision is made for it.

### **Conclusions**

In summary, we have some substantial concerns with the current demand forecasts and modelling tools available to the Commission for use in its work. We would urge the Commission to address these before embarking on its option appraisal processes and we stand ready to engage with you on these generic issues or in relation to the specific need to ensure Manston is properly modelled as soon as your diaries allow.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'CB', followed by a long, horizontal, wavy line that extends to the right.

Charles Buchanan  
Chief Executive Officer