Dear Manston Airport Case Team. Thank you for you prompt and informative reply.

I am unable to attend an OFH my disability related accessibility issue (which is unpredictable) could mean I would be unable to express myself properly.

Please see this as a draft written submission to the Examining Authority setting out the representation I would have made orally at an OFH.

I assume that as part of your accessibility support you will run through it, send me any comments and corrections and then present it in my behalf. Is that correct?

## Draft Submission

The underlying problem with the DCO consultation so far has been one of communication with the applicant. I attended all of the consultation events, the first unofficial one and the subsequent two official ones.

Email communication wise the applicant seems happy to reply only to selective questions, with answers to technical questions seemingly routed via pr reps. This makes communication very difficult and very time consuming.

In a recent series of communications I pointed out that there had been an error in the environmental statement, which boiled down to the applicant not allowing for the fact that smaller particles remain airborne for longer than larger ones.

It seems as though once the applicant has realised there is on may be an error in their submission they stop all replies and seem to have no desire to move forward seeking solutions.

So for example my last email to them was a month ago and they still haven't replied to it although it doesn't ask for information the shouldn't already have, here it is>

"Original Message	
From: michaelchild	
To: manston <manston@communityrelations.c< td=""><td>o.uk&gt;</td></manston@communityrelations.c<>	o.uk>
CC: manstonairport <manstonairport@pins.gsi< td=""><td>.gov.uk&gt;; manstonconsultation</td></manstonairport@pins.gsi<>	.gov.uk>; manstonconsultation
<manstonconsultation@bdb-law.co.uk></manstonconsultation@bdb-law.co.uk>	-
Sent: Mon, 3 Dec 2018 13:07	
Subject: Re: clarification about the dispersion	

Hi RiverOak, Manston Airport Consultation Team.

Many thanks for your prompt reply.

I have already studied these documents and assumed there must be something else I had missed elsewhere in the application.

I am assuming that you understand that there is a very large difference between the distance pm10s and pm2.5s travel when airborne.

Any simple non scientific explanation will express this.

Here is a link to the explanation on the US Environmental Protection agency website

https://cfpub.epa.gov/roe/indicator\_pdf.cfm?i=19

And the relevant quote from it.

"Particles within the two size ranges behave differently in the atmosphere. PM2.5, or fine particles, can remain airborne for long periods and travel hundreds of miles. Coarse particles, or the subset of PM10 that is larger than 2.5  $\mu$ m, do not remain airborne as long and their spatial impact is typically limited because they tend to deposit on the ground downwind of emissions sources."

The various figures you quote for PM2.5s seem to take the dispersion distance from the fuel burn to be about 1 km max i.e. the distance for PM10s.

So to repeat with further clarification.

"I am seeking clarification about the dispersion figures you are using for airborne particulates, this would normally be expressed as  $\mu g/m3$  against km from source, often presented in the form of a graph, could you kindly give me the figures you are using both for PM10 and PM2.5 particulates."

I will be happy with the figure you are using for both PM10s and PM2.5s in km from the point of burn to 10% above background level if you are unable to provide dispersion graphs for both particle sizes.

Please note I have disability related accessibility issues that make it difficult for me to use the telephone or write on paper, so email or face to face is my preferred form of contact.

### Best regards Michael"

In simple layman's terms the applicant has based their particulate air pollution dispersion figures on something like a world where if you drop a brick and a feather out of the window at the same time they would both land at the same time.

Here in Thanet we recently had a fairly large industrial fire at Westwood near to Manston, another useful layman's example which is close to the difference between the PM10 and PM2.5 particulates behave, is that while the smoke had dispersed within about 100 metres from the fire, the smell of the fire was apparent in different parts of Thanet on different days, depending on the prevailing wind direction and made worse at the coast because of the onshore winds.

This is not a very precise example as PM2.5s are less than 2.5 micro metres in size while the molecules responsible for the smell are much smaller, although my guess is that the aftertaste left in people's mouths was probably particulate.

# Commercial case

I questioned the viability of Manston as an airfreight hub for the southeast and found the applicant's meaning of the southeast of the UK didn't seem to be defined in the normal economic and infrastructure terms that I understand from having a business in Ramsgate since 1987.

I understand the southeast to mean the area on this map as taken from Wkipedia's prime article:-



Obviously if one takes population and economic figures for the southeast then it looks very good. Particularly if you ignore the fact that the majority of journeys from the majority of economic centres in the southeast are going to take you past and existing major airport and that this will impact on viability. However even travelling form major towns like Brighton which is close to Manston as the crow flies, involves a rail and road journey which passes and an existing major airport.

In terms of the southeast and viewing a hub as meaning predominantly road freight moving along the spokes towards this hub, it would be difficult to choose a worst site than Manston. I assume that this is part of the reason for the long history of commercial failures at Manston, starting with Air Ferry in the 1960s.

Other factors like not being on the aviation fuel pipeline network, lack of manufactured items to export from the area closer to Manston than existing airports, passenger flights moving more to; train, underground, departure gate and away from, car and walking across the airport, well they haven't helped either. The last significant operator had a business focussed around tax differences between European and UK airports.

I have tried on, numerous occasions, to engage in meaningful discussions with the applicant about how this would work, as a businessperson in this area I look forward to other viable businesses. The other side of this coin is that Thanet is a deprived area and with low real estate prices and we have a history of offshore land banking schemes disguised as investment.

## Environmental issues.

## Sound

The main issue that is peculiar to Manston is Ramsgate's position at the end of the runway. With Ramsgate having one of the largest conservation areas in the UK, and a great many more listed buildings than most towns.

I had expected the application to have a considerable section devoted to addressing this issue and there to be considerable preparatory work with the conservation department and planning department at the local authority. I can't find this in the application. I am assuming that issues like the major schools in listed buildings would need a comprehensive listed building compensation scheme related to whether the schools would have to be moved or if it was possible to sound insulate them within listed building regulations.

## Air

I think the most demanding aspect of the Manston freight hub project relates to the large jet fuel burn in a relatively small area surrounded on the upwind side by the sea with opposing onshore breezes.

My understanding is that the minimum criteria to qualify for a DCO would be an increase of 10,000 airfreight movements per year. Taking a ground movement as burring 1 tonne of fuel and landing and takeoff on the ground as burning another 2 Tonnes of fuel I am assuming that means 3 tonnes of fuel burn on or near the ground at Manston per movement. I have been told this is a fairly conservative estimate.

I had a great deal of difficulty getting the reps I spoke to at the consultations sessions to equate with figures in this ball park, they seemed only to be able to relate fuel consumptions to their cars and to be able to think in miles per gallon.

I will give the figures I put to them for comparison. A freight plane burns about a gallon of fuel per second, a movement including ground to air, landing or takeoff

would burn more fuel than a family car would use circumnavigating the equator or three such movements the amount of fuel a family car would burn in its entire life on the road between manufacture and scrappage.

More recently I have had great difficulty trying to get the applicant to follow the basic scientific rule that smaller particles travel further through the air than larger ones do.

I think it is pretty obvious that while PM10s are going to have dispersed to within 10% of background levels by the time they reach the airport site perimeter and so don't represent much of a public health threat PM2.5s will travel much further and will be at significant levels in most parts of Thanet at different times dependent on the wind direction.

At the moment the main airport where research into PM2.5 dispersion has been measured by a reputable origination is LAX with the research carried out by University of Southern California (USC), the prevailing wind direction at LAX is similar to that in Thanet which makes the research easier to understand. Also the figures are given as a proportion, so given the much higher levels of background air pollution and airport activity in Los Angeles this makes the map from the study much more applicable here.



Obviously the applicant has stated that a rise in the level of PM2.5s would lead to increased mortality, heart and lung disease and the early onset of dementia. And while this is generally accepted around existing sources of PM2.5s with mitigation planned and ongoing. In the light of a completely new facility expected to damage people's health and life expectancy, has the applicant made any provision for compensation?

DCO threshold qualification.

My understanding is that the applicant is treating this as a totally new airport from the perspective of qualifying for a DCO.

The DCO prayer is.

"Plans to reopen and develop Manston Airport into a dedicated air freight facility able to handle at least 10,000 air cargo movements per year whilst also offering passenger, executive travel, and aircraft engineering services." I assume this would have to be an increase.

I don't full understand how this equates to Manson currently having a capacity of zero movements, or does this mean that the DCO would increase the existing capacity, which I think is already around 10,000 movements without a major infrastructure project to 20,000 movements? Or does this mean that reopening Manston using the existing infrastructure as opposed to a major infrastructure project would produce different capacity and if so what would that capacity be?