



Belfast City Council

Report to:	Health and Environmental Services Committee
Subject:	George Best Belfast City Airport Runway Extension – Further Health Impact Assessment Work.
Date:	4 th August, 2010
Reporting Officer:	Siobhan Toland, Head of Environmental Health, ext. 3281
Contact Officer:	Julie Allen, Environmental Health Officer, ext. 3697

Relevant Background Information

During discussion at the Health and Environmental Services Committee meeting of 2nd June 2010, it was agreed that the merits of whether any additional information in relation to previous Health Impact Assessment reports on the George Best Belfast City Airport (GBBCA) runway extension should be considered in preparation for the proposed public enquiry.

It was noted that the applicant (Belfast City Airport) had conducted a Health Impact Assessment (HIA) through consultants, RPS, as part of their planning application and some Members had attended a workshop on 19th October as part of that exercise. It was also noted that Belfast Healthy Cities, supported by the Council, had commissioned an independent review, carried out by Ms Erica Ison (HIA expert), of the applicant's HIA. This report had been comprehensive and submitted to the Planning Service along with a Council response to the planning application in November 2009. A copy of the Council's response is attached.

Following discussion, this Committee agreed at its last meeting that a report on the merits or otherwise of Belfast Healthy Cities undertaking a further Health Impact Assessment, including a timeframe for completion and anticipated costs, be submitted to its next meeting. This report is in response to that request.

Belfast Healthy Cities (BHC) has advised that the costs of a Health Impact Assessment depend on the amount of work which is required. It can vary from a desk top HIA at around £5,000 to over £20,000 for a more significant piece of work. Following further discussions with Belfast Healthy Cities and indirectly with the HIA expert it was considered that the main gap in the HIA report that existed was community engagement workshops.

Belfast Healthy Cities have contacted the Ms Ison who conducted the HIA review and requested information regarding:

- 1) what, in addition to the reports that have already been produced, would be required to add value and
- 2) What would be the full overall costs of any additional work?

Key Issues

Members are advised that the Council has submitted a response on the HIA carried out by the applicant. It is unlikely that a full new HIA would add value as it is likely to revisit many of the areas already covered in the existing HIA report and the review report.

The Health Impact Assessment expert Ms Erica Ison who carried out the previous review has advised the following three main areas would add value:

1. The previous work would benefit from a revised community profile - this may not mean a lot of work because as part of the URBACT II Project, a profile for East Belfast was put together in 2009 by Christine McMaster (HPA), Jonna Monaghan (BHC) around regeneration. Ms Ison has suggested working to get data from **local GPs** about hypertension, mental health issues, etc to further add value to this work.
2. There needs to be stakeholder consultation particularly with the communities affected by the flightpaths, together with other stakeholders who need to be involved.
3. A report needs to be written that brings together not only the rapid literature review and critique Ms Ison did of the consultant's report, but also the stakeholder findings and important points from the community profile.

In addition to the above work, Ms Ison would need supported locally to assist with collation of data, as well as additional support with facilitation and organisation of the stakeholder workshops. Belfast Healthy Cities suggest that additional community engagement could be supported through their office. This work would take in the region of one month to complete but would be dependent on the availability of the consultant over the next number of months.

A HIA report, if commissioned, would be used to inform the position taken or views expressed by the Council in their "statement of case" for the public enquiry. However as it was not carried out as part of the original work and response to the Planning Service in relation to the application it would be at the discretion of the Planning Appeals Commission as to what and how much new and additional information could be introduced.

It is also unknown as to the weight and value the Planning Appeals Commission will attach to information from a Health Impact Assessment or indeed community engagement workshops. The advice we have received is that any additional information is only likely to be admissible as an appendix for the amplification of a point made in the body of the Council's "statement of case". Again this would only be applicable if the additional information supported a substantive point raised by the Council in its "statement of case".

Resource Implications

The costs for engaging the HIA expert with support from Belfast Healthy Cities to complete the additional work detailed above are:

- £3,200 for the work of the Consultant, plus
- £1,500 for Belfast Healthy Cities.

This has not been accounted for in the revenue estimates.

Recommendations

The Committee should consider the content of this report and the previous Council submission to the Planning Service in relation to the Health Impact Assessment work already completed (as attached) and, based on the merits of further work at this stage in the planning process, decide either:

- To engage an HIA consultant and Belfast Healthy Cities to complete additional HIA work; or
- That further work should not be undertaken at this stage.

Key to Abbreviations

HIA – Health Impact Assessment
HPA- Health Promotion Agency
BHC- Belfast Healthy Cities
URBACT- Urban Development Network Programme EU

Document Attached

Letter of response from the Council to Planning Service regarding the HIA within the airport planning application (10th November 2009).

Appendix

Ms. Cynthia Smith,
Chief Executive,
Planning Service Headquarters,
Millennium House,
17-25 Great Victoria Street
BELFAST
BT2 7BN

Dear Ms. Smith,

**Re: Planning Application - George Best Belfast City Airport –
Proposed Runway Extension.**

Belfast City Council's Health and Environmental Services Committee, at its meeting on 4th November, considered the following draft response to the Planning Service in respect of the Health Impact Assessment relating to the George Best Belfast City Airport:

“At its meeting on 7th January 2009, the Health and Environmental Services Committee of Belfast City Council was informed that your Department had applied Article 31 of the Planning Northern Ireland to this application and that this designated the application of ‘major importance’. It was also advised that this meant that prior to the application being determined, the Minister would either require a public inquiry to be held before the Planning Appeals Commission or issue the applicant with a notice of opinion advising on how the application should be dealt with.

After discussion at both the Health and Environmental Services Committee and the Town Planning Committee, the Council agreed on 4th February 2009 to write to the Department of the Environment recommending that a Public Inquiry be held. Although further discussions have subsequently taken place within the Council's Committee system regarding the submitted Environmental Statement, I can confirm that this is still the Council's position. A letter outlining the response to the Environmental Statement was submitted to your Department on 2nd July.

An outline of the Environmental Health response to the Health Impact Assessment (HIA) submitted by the applicant in July in support of this application is provided below. This response has been informed by a review of the HIA which was carried out on behalf of the Council Ms. Erica Ison, an independent expert on HIAs. Ms. Ison is affiliated to the Public Health Unit, Oxford and is now also the expert advisor to the World Health Organisation on HIA.

It should also be noted that, on 19th October, the consultants who carried out the HIA held a further stakeholder event to discuss the Health Management Plan, which was attended by a number of ward Councillors and members of the Airport Forum. The discussions at this event have also influenced this response.

Obviously a Public Inquiry would examine the full application and the Health Impact Assessment in much more detail and if the application is to be determined in this way, then the Council is likely to request to make a full submission to the Inquiry.

A summary of our main observations arising from the Health Impact Assessment review of the HIA, carried out by RPS on behalf of the applicant, is provided below:

Scoping and Methodology

The HIA was carried out based on the information provided in the Environmental Statement submitted as part of the planning application. As the airport did not release information to the Council or RPS on the projected aircraft mix, length of journeys etc, it should be noted that the HIA depends on the underlying assumptions and modelling being correct.

In addition, the HIA does not appear to contain any explicit statement of the 'values' used to guide the HIA. The determination of values is recognised as a key part of an HIA process as it sets the overall approach. We have particular concern as to the level of community engagement and representation during the process. The community profile was limited to the Sydenham ward, but in given the extent of flight paths over East Belfast, it is our view that other wards such as Ballymacarrett and Island could have been included in the whole scope of the report.

Also good practice when assessing the impacts of community noise would dictate that vulnerable groups are also identified and consulted. At the recent workshop hosted by RPS, it was pointed out that other stakeholders, missing from the groups consulted, included schools, Holywood Arches Health centre, residents groups, etc. However the consultation carried with stakeholders was limited to the Airport Forum, EHSSB, and the Institute of Public Health in Ireland, which may have limited the effectiveness of the exercise.

Literature Search and Review

In paragraph 5.1 of the HIA Report, it is stated that the 'best available scientific evidence' has been used to investigate 'health pathways'. However, when the references and/or citations in the HIA Report were analysed, out of a total of 40 references or citations, only 12 (30%) related to information about potential impacts on health. The review report provides much more detail on this and refers to additional research papers of relevance. Whilst it is accepted that there continues to be national debate in published literature about the work of several authors, we are concerned that the presentation of the effect of noise on the wider determinants of health and well being is limited in the HIA. In addition there do not appear to be detailed descriptions of potential pathways of cause and effect in the text and the potential for interaction between or among health pathways also does not appear to have been considered, including the identification of interdependencies among potential impacts on health and well-being.

Noise with Respect to Annoyance and Sleep Disturbance Annoyance

In the HIA Report, the calculation of the number of people likely to be 'highly annoyed' by noise as a result of the proposal to extend the runway has been undertaken using the Civil Aviation Authority Guidance. However, the CAA Guidance was produced before the results of the study on Attitudes to Noise from Aviation Sources in England (ANASE) were published in October 2007. Like any study of this nature it is acknowledged that the findings are challenged by other experts, however the studies does at least highlight a number of key considerations relevant to this HIA.

The results of the ANASE study, like other studies such as the United Kingdom Aircraft Noise Impact Study (ANIS 1995) reviewed in 2004, found that there is a relationship of increasing annoyance as sound level increases. However the *level* of annoyance was found to be consistently greater in the ANASE study than it was for ANIS, and the authors of the ANASE study concluded that for the same amount of aircraft noise (measured in LAeq), people were more annoyed in 2005 than they were in 1982. Details on the findings from the ANSE study are summarised in a table within the main HIA review.

Moreover, the ANASE study also found that the number of aircraft events may affect levels of annoyance as may the aircraft type. The HIA does not appear to have considered the 'effects' highlighted in this study, which could mean that the number of people 'highly annoyed' in *all* scenarios has been underestimated. In addition, the different sensitivities of people exposed has, in our opinion, not been fully explored, in particular the experience of noise annoyance on children.

In addition, the potential effects of noise on mental health and well-being, do not appear to have been discussed in the HIA Report, nor does the effects of noise on blood pressure or the risk of cardiovascular disease.

In respect of the potential impact of aircraft noise on schools close to the airport, research would suggest that children and adults are equally **susceptible** to environmental noise effects on performance, but that children may be more **vulnerable** to these effects because for example they are more exposed to noise at a critical period of learning and they have a lower ability to understand environmental issues and stressors.. However the HIA does not go into such effects in detail. Further detail on this is cited in the review.

In relation to the above points, the Council would also like to draw your attention to the final report from its Acoustic Consultant, Mr Steve Mitchell, October 2009. His report clearly refers to the analysis of the impact of this extension on annoyance and sleep disturbance and the impact on schools. He highlights the inability to be fully confident around the noise modelling given that detailed fleet mixes and assumptions input into the model have-not been made available. This is considered essential to assess the future noise level and impacts and further corroborates the points raised through the HIA review.

Sleep Disturbance

Sleep disturbance is considered to be one of the most critical areas that needs to be controlled through effective management of the airport. It was stressed at the workshop that not only should the number of scheduled flights between 06:30 and 07:00 hrs not be allowed to increase, but that communities also need assurances and clarity in relation to scheduling of flights to ensure that the number of delayed flights after 21:30 is also not permitted to increase.

This point was also highlighted in the final report from Mr Steve Mitchell and he refers to the impact of night flights (in particular between the hours of 23.00- 07.00) has not been fully assessed, and he suggests that it should be addressed in detail during the HIA. This is not in our opinion dealt with effectively in the HIA or Health Management Plan.

In addition to this, there was a call at the workshop to review the level of fines applied and ensure there is transparency around this and the allocation of the community fund.

With respect to **sleep disturbance**, there are other characteristics of sound apart from time of day that affect people's response to noise which need to be considered, such as intensity; frequency; complexity; duration; and meaning, according to other research papers.. These elements do not appear to have been considered in the HIA Report, especially in relation to implications of the potential changes to the mix of aircraft that will be using Belfast City Airport following any runway extension.

Impact on Amenity

The potential impact of aircraft noise on residential or other **amenity**, especially during the summer, does not appear to have been considered in the HIA Report, in relation to:

- The enjoyment of people's gardens;
- The enjoyment of Victoria Park (although PM10 levels for Victoria Park have been modelled, see Table 4.1 in HIA Report). This park is owned by Belfast City Council and is there for the enjoyment of local people and wildlife.
- The effect on **tranquillity** as a determinant of health.

Low Frequency Noise

The potential impacts of **low frequency noise** do not appear to have been taken into account in the HIA Report. The start-of-takeoff-roll, acceleration down the runway and thrust reversal, all generate high levels of low frequency noise (below 200 Hz) at critical distances from the runway (around 3000 feet) which can be annoying to people living around airports.

Definitions

Within the HIA report it would have been helpful to have had definitions provided for some of the language used when describing impacts such as 'meaningful' and 'significant'. Without these definitions some of the conclusions are open to interpretation.

Health Management Plan

Many of the suggested actions in the draft Health Management Plan, included in the HIA report, in our opinion, consist of interventions already in place and actions related to good practice that would be expected. However to date, there appear to be few, if any, specific interventions that have arisen directly from the HIA. At the workshop held on 19th October, RPS stated that they would be providing a fuller Health Management Plan for the Airport to be considered as part of its Corporate Social Responsibility policies. However, this approach would mean that it is not connected with the planning approval process and therefore the confidence of communities in its comprehensiveness and implementation could be limited.

In conclusion I would point out that the specific references to the potentially limited research on the health impacts of noise highlighted above, combined with the concerns regarding the level of community engagement, raise questions as to whether there are potential actions that have **not** been considered that could help to enhance the benefits and reduce the burden of negative impacts on health. It is hoped that some of these will be included in the revised Health Management Plan, which should be informed by this and other responses as well as the workshop on 19th October.

I would again draw your attention to the Council's original submission in July 2009 in response to the Environmental Statement submitted as part of the planning application. The Council, without prejudice, recommended a number of conditions that we feel are **prerequisites** to any determination of this application.

We would also seek further consideration of how these conditions, particularly those relating to noise management and the scrutiny role mentioned in the new planning agreement (see previous Council responses) will be put into effect, before any determination is made. Also, given the level of community concern over noise control, the setting of the indicative contour and control measures to mitigate noise should be cited within the Health Management Plan, in order to maximise the health benefits.

As a final comment, Mr. Mitchell's report refers to the fact that if the extension to the runway goes ahead, the designation of this airport as a 'City' airport (under Directive 2002/30/ EC) may be changed. There needs to be further clarity on the effect and impact that will have on management controls on noise related operating restrictions at this airport, if this is the case."

After discussion, the Committee agreed the aforementioned response and agreed also that the Planning Service be advised that the control of flights during night-time should be of paramount importance and that the fines imposed as a result of late arrivals and departures after 21.30 hrs. should be reviewed. The fines should be made more realistic in order to act as a deterrent and should be imposed upon both the airline operator and the Airport."