



## **AEF response to CAA [consultation](#) on revision of the DfT's Public Safety Zone Policy (December 2020)**

### **Introduction**

The Aviation Environment Federation (AEF) is the principal UK NGO campaigning on aviation's impacts for people and the environment. It was formed in 1975 to represent the interests of communities living around civil airfields and airports who were increasingly affected by the noise from a rapidly growing industry, and to seek solutions at a national and international policy level.

AEF has long believed that a policy along the lines proposed by the IPPR in 2003<sup>1</sup> would better serve the public health and safety interests of communities overflowed by aircraft operating in the take-off or landing phases of flight by combining protection from excessive noise, poor air quality and crash risk.

### **The Proposal**

Our understanding is that this policy has no status in statute. However, we consider it an important contribution to the government's general duty of care to communities which are subject to known crash risk. We are, therefore, disappointed that the proposal, by removing reliance on the model originating from the "Green Book"<sup>2</sup>, decouples the specified land use constraints from the available data on crash rates, crash locations and crash consequences. The two justifications for change given are:

- *"NATS have given notice to stop providing the risk modelling service"*  
NATS being unwilling to provide the modelling service does not justify the establishment of fixed annual individual risk contours. The DfT own the model, and there are a number of acknowledged experts able to provide the modelling service.
- *"The proposed standardised shape . . . will capture 90-95% of accidents shown to be located outside the aerodrome boundary."*  
This vague assertion, which we assume refers to global crash location data, does not constitute a rational basis for the new policy: unless it can be demonstrated that crash distance from the runway ends is correlated with the number of air traffic movements at an

<sup>1</sup> Institute for Public Policy Research, "The Sky's The Limit", 2003: "Public Safety Zones should be revamped as Public Health and Safety Zones. The health impacts of noise and air quality should be help to decide how much land use development to allow and how much money could be spent on local area mitigation and compensation projects"

<sup>2</sup> Department for Transport, "Third Party Risk Near Airports and Public Safety Zone policy", 1997

airport, there is no justification for applying shorter lower risk zones to airports with traffic below 45,000 movements per annum.

Paragraph 1 of the Annex to DfT circular 01/2010 states that “Public Safety Zones are areas of land at the ends of the runways at the busiest airports, within which development is restricted in order to control the number of people on the ground at risk of death or injury in the event of an aircraft accident on take-off or landing.” Paragraph 5 (4 in the proposed revision) states that “The Secretary of State regards the maximum tolerable level of individual third-party risk to public safety as a result of an aircraft accident as 1 in 10,000 per year.” Both of these statements are unchanged in the proposed new circular although the revised implementation of the policy abandons any direct linkage with a mechanism for applying the tolerability threshold stated.

Nevertheless, the proposed new zones, in almost all cases, will be much smaller than the model-based current zones despite the growth in air traffic which has occurred since these have been in place. It is probable, therefore, that the proposed zones will no longer encompass the land which is at or above the risk levels which are represented by the positions of the current boundaries. We, therefore, believe that, to achieve the objectives which are summarised in the quotations above without recourse to the risk models, the existing PSZs must be retained as the future fixed zones. We do not consider the release of the small areas of land between the existing and proposed zones from the constraints of the policy to represent a sufficient benefit to offset the likelihood of, at least in the short term, exposing people on the ground to inflated risk. It should be noted that individual risk does not fall significantly just outside the zone boundaries.

### **Naming of the zones**

If new permanent zones are not to be directly underpinned by modelling, it is inappropriate to apply the “1 in 100,000” and “1 in 10,000” risk labels to differentiate them. We suggest that the outer fixed zone be named the Restricted Zone (RZ) and the inner zone the Exclusion Zone (EZ). These designations are used in the remainder of our comments.

### **Other applications of the model**

As noted above, the amended circular confirms that the Secretary of State continues to regard the intolerable level of individual risk to be 1 in 10,000 per year notwithstanding the proposal hinges on the discontinuation of the risk modelling. In particular the proposal fails to acknowledge:

(a) that local planning authority’s (LPA’s) compliance with the Secretary of State’s tolerability thresholds cannot be demonstrated in the absence of a modelling service

(b) that The Planning Inspectorate, an MHCLG subsidiary, has accepted that in determining airport applications the length of modelled annual individual risk contours may be regarded as a proxy for third party risk. (See the appendix for an example of how this has been applied.)

(c) That the crash model will no longer be available for calculation of risk in other contexts (e.g. societal risk, risk to critical infrastructure and proposals for high-occupancy buildings close to the zones)

(d) That when proposals for transport infrastructure are being considered, the guidance in paragraph 18 "Transport infrastructure is . . . considered for Public Safety Zone policy purposes as if it is residential, commercial or industrial development" is often interpreted as a requirement to assess the exposure to individual risk of the most frequent user of the development (a bus driver, for example). This requires recourse to the use of the model.

Without updates, LPAs and others may rely on versions of the model which do not reflect the contemporary aviation safety record.

### **Uses of land beyond the zones**

As has already been observed, the level of risk to individuals does not change radically when a zone boundary is crossed. We suggest that the circular should include a paragraph pointing out that development proposals for high occupancy buildings just outside the RZ should be considered carefully on a case by case basis.

### **Content of the Proposed Circular**

As the revised zones remove the risk modelling underpinning the guidance in the Circular, we believe that the text requires much more radical revision than has been proposed. This should be aimed clearly at the target audience of local authority planners.

In particular

- Paragraphs 2 and 4: These should be re-drafted to recognise that the revised zones represent a simplification of the risk analysis which was embodied in the previous policy version (Circular 01/2010).
- Paragraph 3: In our experience, it is little understood that the "safety benefits" referred to here are quantified in the cost-benefit analysis as potential compensation for loss of life. We believe it is important that this point is understood by those making planning decisions within the policy guidelines.
- Paragraph 4: The sentence "The Secretary of State regards the maximum tolerable level of individual third-party risk to public safety as a result of an aircraft accident as 1 in 10,000 per year" must be revised to reflect the removal of any specific tolerability threshold from the policy.
- From paragraph 4 onwards: The references to the 1 in 10,000 and 1 in 100,000 risk levels and contours must be removed as they no longer apply.
- Paragraph 7: The sentence "This was in line with the ICAO approach area for an instrument runway" appears to be simply justification for the selection of one of the two zone lengths and is, therefore, irrelevant in the circular.
- Paragraph 8: This questionable justification for the particular zones selected (see our earlier comment) would more appropriately be included in the revision to paragraphs 2 and 4.

- Paragraph 13: In our experience, the DfT has been unwilling to advise LPAs on the application of this policy.
- Paragraph 18: Experience of proposals for new transport infrastructure in Public Safety Zones indicates that interpretations of this guidance vary widely, from direction to assess individual risk for the most frequent users to consideration of societal risk. The DfT may wish to clarify its intentions in the revised circular.

## **Appendix A: Rushmoor Borough Council Local Plan Policies based on the DfT's Upper and Lower Annual Individual Risk Thresholds**

### **Local Plan Policy SP4.4**

"Proposals to change the pattern, nature and/or number of business aviation movements will only be permitted provided that:

- a. The 1:10,000 per annum risk contour at either end of runway 06/24 does not extend to areas where people live, work or congregate, or beyond the area at the eastern end of the runway defined by the Farnborough Airport Planning Policy Boundary as set out in the policies map: and
- b. The consequences of any change should not exceed the maximum extent of the 1:100,000 per annum annual risk contour, being the area covered by this contour as defined in the 2010 appeal decision."

This policy is underpinned by the reasoning the Planning Inspectorate employed in its endorsement of the current Local Plan. Key extracts from the Local Plan Inspector's report are as follows:

#### "Safety

127. Policy SP4.4 relates to safety, again in relation to any proposal to change the business aviation permission. The policy uses risk contours rather than referring directly to Public Safety Zones (PSZ) as these are not specifically designed to inform decisions in the planning application process for significant change at the Airport. There is a review of the PSZ being undertaken by the Government but the results of this are not yet known.

128. The use of risk contours is clearly explained, and the use of the PSZ as a 'rough proxy' for risk contours established in the 2010 permission remains a robust approach based on the evidence. In general terms, the approach to safety and the planning regime for the Airport has been consistent for a significant period of time. It is consistent with planning decisions and based on evidence relating to safety (CD/06/01) and it is justified.

129. The lack of transparency in the modelling process relating to safety risk was a matter considered by the 2010 appeal Inspector, particularly in relation to commercially sensitive data, and this has not been resolved. However, this does not necessarily result in the policy as worded being ineffectual. Access to the use of alternative sources of data, particularly surrounding crash rates is not possible. Any specific reference to having to provide commercially sensitive data in this respect would not be effective or deliverable."

## **Extracts from Rushmoor's Local Plan**

### National Context

Paragraph 7.125 "Guidance on development in public safety zones (PSZs) is contained within DfT Circular 01/2010 'Control of Development in Airport Public Safety Zones'. The PSZ Policy set out within the APF and Circular 01/2010 focuses on circumstances where new development near existing airports is being considered. There is no formal national policy that deals explicitly with safety when a new airport, or significant development at an existing airport, is proposed, although the general principles on which the PSZ Policy is based can be applied to a proposal to establish (or expand) an airport. Such proposals fall to be considered within the context of the planning system. This requires that where a development causes 'demonstrable harm', the benefits associated with it would need to outweigh that harm if it is to be permitted."

### Local Context

Paragraph 7.128 "In applying the general principles on which PSZ policy is based, because of the proximity of residential and other development to the Airport, the Council considers that any business aviation flying proposals which would extend the 1:10,000 risk contour beyond the Airport Planning Policy Boundary, as defined on the Policies Map, or to encompass areas where people live, work or congregate should not be permitted. Moreover, the overall maximum extent of the 1:100,000 per annum annual risk contour should not change. The net effect of this policy approach is that were any applications to be received to change the pattern, nature and/or number of business aviation movements, the safety consequences should be no worse than those already found to be acceptable as a result of the grant at appeal in 2010 for up to 50,000 business aviation movements by 2019."

### **The Section 106 agreement**

The Section 106 planning obligation of 29th June 2010 between Rushmoor Borough Council, the Local Planning Authority, and the Farnborough airport operator is a legally binding agreement that requires the operator to submit an annual safety audit. This audit has to date been provided by NATS using the model to determine the extent to which the actual contours fall short of the stated limits.