



Exploring the Concept of Fair and Equitable Distribution to Minimise Social Unacceptability of Airspace Design Options

NACF PBN Deep Dive

FAIR AND EQUITABLE DISTRIBUTION RESEARCH - OVERVIEW

Research team – Nicole Porter, Paul Hooper, Andy Knowles, Fiona Raje, Robin Monaghan



Purpose

To understand how airspace design options influence those **features that impact perception of fairness and equity to inform more socially acceptable** airspace modernisation.

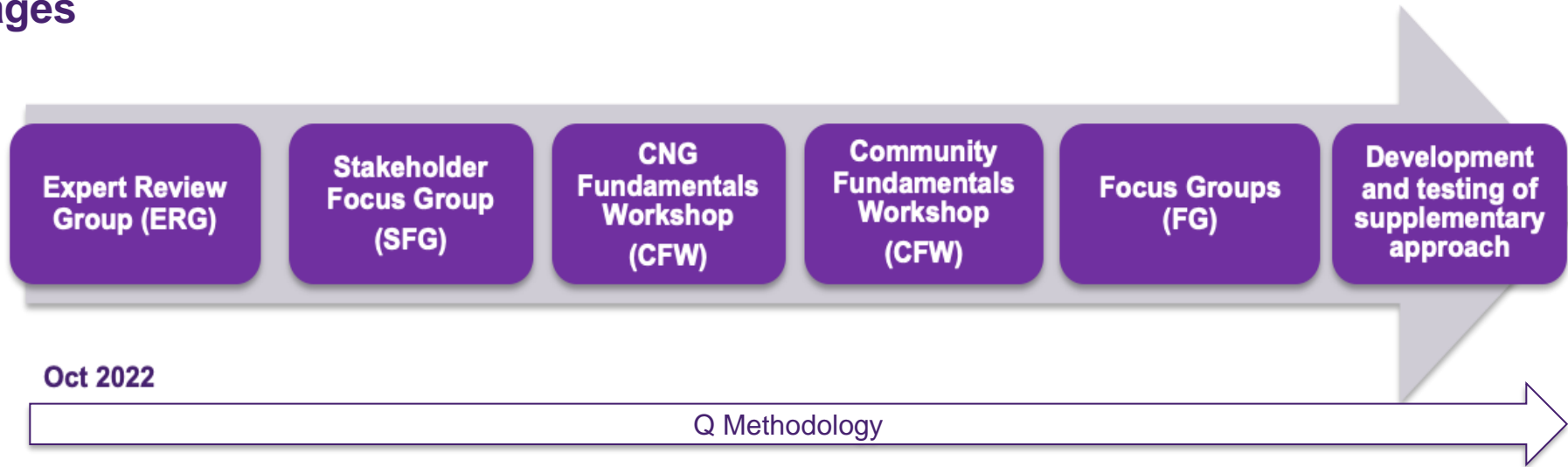


Objective

To conduct an in-depth qualitative assessment, working directly with aviation and community stakeholders, to define the **performance features and their metrics that influence perception of concepts of fairness.**

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Key work stages



- **ERG** - Four members with diverse experience reviewing tasks, progress, outcomes, additional considerations, and project report.
- **SFG & CFW** – Workshops gathered feedback from key stakeholders on features, concepts, and barriers to mitigating aircraft noise. Used to develop test material for FG's.
- **FG** - 13 community focus groups, engaging over 130 members, and used a virtual airport to explore concepts.
- **Q Methodology** - An innovative approach helped to reveal the influence of attitudes, including understanding potential groupings of common attitudes, and preferences on the perception of fairness
- **Report** - Reviewing stage, estimated release by end of summer 2024.

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High level outcomes

The focus group outcomes demonstrated that, at least in the context of airspace change where there is an existing distribution of aircraft, change in the spatial distribution of aircraft noise (events) lies at the heart of perceptions of fairness. The challenge for the researchers was therefore to devise a means by which the use of N65 and PEI data could complement the existing CAP1616 process which currently is dominated by the assessment of total/aggregate change (using L_{eq} metrics), by illustrating more explicitly the extent of change in the distribution of noise events (N65) and the populations affected by that change (PEI change metric) and provide the opportunity to better understand the relative risk of social unacceptability of options.

Next stages

Publication of final report

Dissemination and feedback of the findings to both the industry and communities

Testing of approach across a number of airports in their airspace modernisation programme.