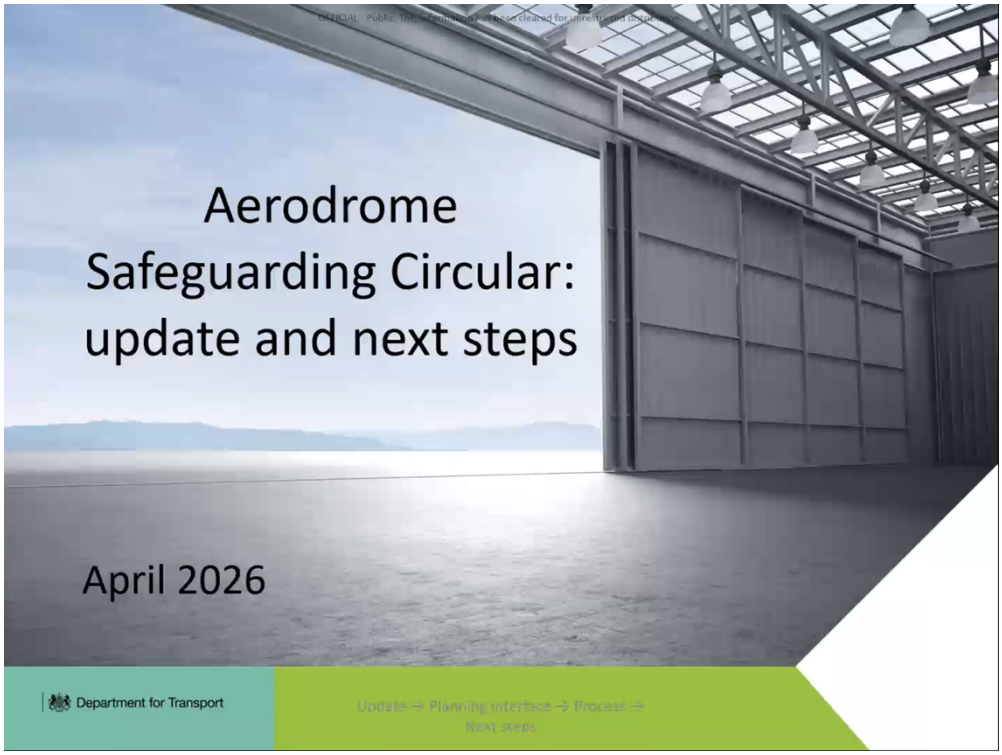
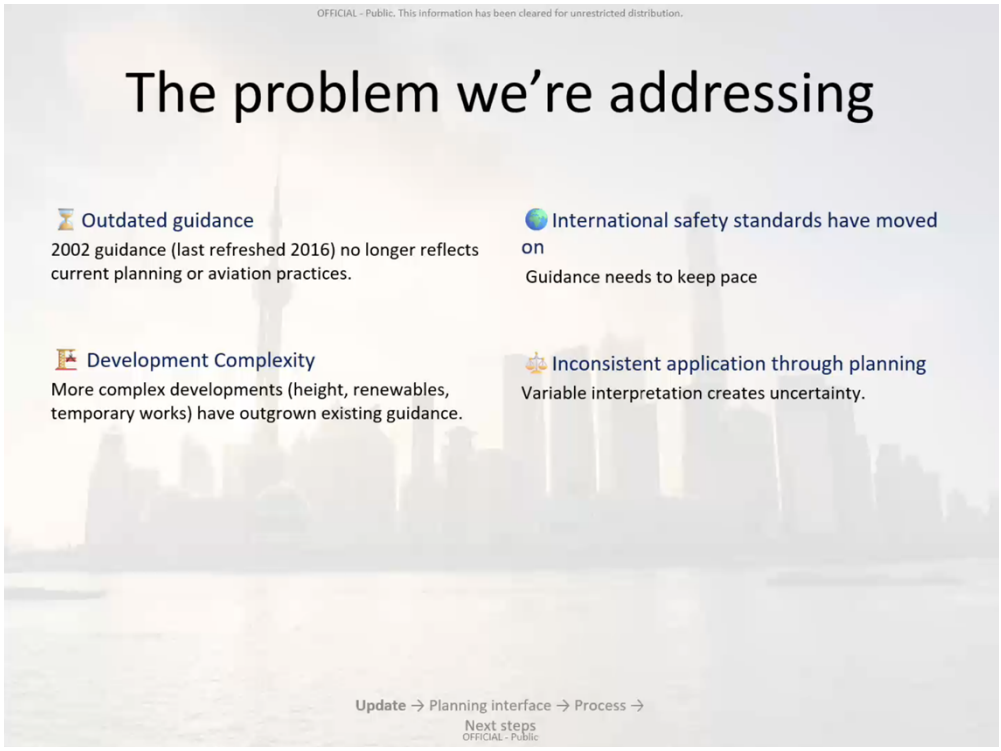
**ANNEX A:**

**SUPPORTING DOCUMENTS FOR ITEMS 3, 6 AND 9**


Aerodrome Safeguarding Circular: update and next steps
April 2026
Department for Transport
Update → Planning interface → Process → Next steps


OFFICIAL - Public. This information has been cleared for unrestricted distribution.
The problem we're addressing
Outdated guidance
2002 guidance (last refreshed 2016) no longer reflects current planning or aviation practices.
International safety standards have moved on
Guidance needs to keep pace
Development Complexity
More complex developments (height, renewables, temporary works) have outgrown existing guidance.
Inconsistent application through planning
Variable interpretation creates uncertainty.
Update → Planning interface → Process → Next steps
OFFICIAL - Public

# The planning law ‘hook’

### The Safeguarding Circular is the key planning-facing document

- Aviation safeguarding is primarily delivered through the planning system, with requirements triggered through planning applications and consultations rather than separate aviation consents.
- The Safeguarding Circular provides the practical interface between aviation safety policy and planning decision-making, explaining when consultation is required and how safety considerations should be factored in.

.

### Roles and ownership

- MHCLG is the formal owner of national planning guidance.
- DfT leads on aviation safeguarding policy and technical content, working with aviation stakeholders and planning colleagues to ensure guidance remains current and workable

### What this update focuses on

- Making the planning-aviation interface clearer in practice
- Supporting consistent application by LPAs and consultees
- Ensuring planning-facing guidance reflects current aviation safety standards and development pressures

# Policy Intent

### Protect aviation safety while supporting sustainable development

Ensure aerodromes can operate safely while enabling growth and development to proceed where risks can be appropriately managed.

### Improve clarity and consistency, not restrict growth

The aim is clearer, more consistent planning-facing guidance that improves predictability for industry and local planning authorities, rather than introducing new controls or consenting regimes.

# ✅ / ❌ What it will / won't do

### ✅ What the update will do

- Clarify roles, responsibilities, and expectations at the planning–aviation interface, including when safeguarding consultation is required and how advice should be considered
- Support more consistent application of safeguarding guidance across the planning system
- Encourage earlier and clearer engagement between developers, LPAs, and aerodrome operators
- Improve clarity for practitioners, reducing uncertainty and late-stage issues in planning decisions

### ❌ What the update won't do

- Introduce new planning powers, duties, or a new consent regime
- Change who makes planning decisions, which will remain with the relevant Local Planning Authority or Secretary of State
- Change the statutory framework for safeguarding, or in itself alter which aerodromes are safeguarded as a matter of law
- Override national planning policy or existing legislative requirements



# How we get there

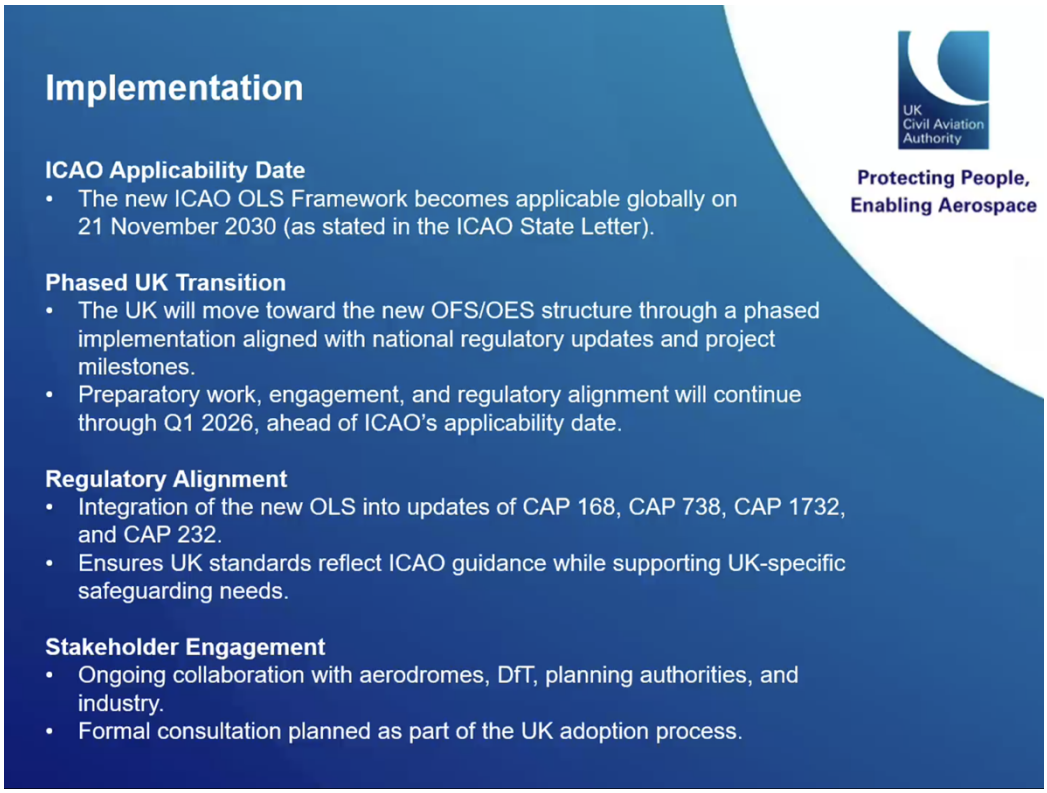
Indicative delivery over the next 12 months

| Draft | Consult | Publish |
|---|---|---|
| • DfT leading, working with the CAA and relevant government departments<br>• Early scoping to clarify approach, scope, and practical application<br>• Cross-government engagement, including MHCLG and Defence | • Public consultation on clarity, approach, and impacts<br>• Engagement used to refine guidance and implementation. | • Guidance finalised post-consultation<br>• Published as updated planning-facing guidance<br>• Operates alongside national planning policy |

Work is at an early scoping and planning stage, focused on approach, scope, and engagement needs. Opportunities for industry engagement and formal consultation will be set out as the work develops.

# NEW ICAO OLS


New ICAO OLS
UK Civil Aviation Authority
Protecting People, Enabling Aerospace
Updated Safeguarding Requirements
• Aerodromes will need to adopt the new OFS and OES structure, replacing the legacy OLS surfaces. Safeguarding maps and local safeguarding processes will require revision to reflect new ICAO definitions
Impact on Planning and Development Control
• Local planning authorities may need updated guidance to reflect the modernised criteria.
• Aerodromes may experience changes in the types and frequency of consultations due to more proportionate safeguarding triggers.
Transition and Change Management
• Existing obstacles and developments may need review under the new criteria.
• Staff training, updated policies, and communication with stakeholders (LPAs, developers, industry) will be essential.


Implementation
UK Civil Aviation Authority
Protecting People, Enabling Aerospace
ICAO Applicability Date
• The new ICAO OLS Framework becomes applicable globally on 21 November 2030 (as stated in the ICAO State Letter).
Phased UK Transition
• The UK will move toward the new OFS/OES structure through a phased implementation aligned with national regulatory updates and project milestones.
• Preparatory work, engagement, and regulatory alignment will continue through Q1 2026, ahead of ICAO's applicability date.
Regulatory Alignment
• Integration of the new OLS into updates of CAP 168, CAP 738, CAP 1732, and CAP 232.
• Ensures UK standards reflect ICAO guidance while supporting UK-specific safeguarding needs.
Stakeholder Engagement
• Ongoing collaboration with aerodromes, DfT, planning authorities, and industry.
• Formal consultation planned as part of the UK adoption process.

# NEW ICAO APPROACH TO SAFEGUARDING OBSTACLE LIMITATION SURFACES (OLS) AND ITS IMPLICATIONS FOR UK AIRPORTS AND LOCAL AUTHORITIES

## Introduction

ICAO's revised **Annex 14 obstacle limitation surface framework** puts aside the *old obstacle-safeguarding model*, that it considers had become too blunt, outdated, and poorly aligned with how aircraft actually operate today, and requires a move to **Obstacle Free Surfaces (OFS)** and **Obstacle Evaluation Surfaces (OES)**

ICAO's core rationale can be summarised as follows:

1. **The legacy OLS concept is old and no longer well matched to modern operations.** ICAO material notes that the Annex 14 Chapter 4 OLS provisions were developed before the 1970s and were "not addressing capabilities of the modern aircraft operations." (ICAO)
2. **"One size fits all" no longer works.** ICAO's 2025 Assembly paper says the existing common OLS standards no longer adequately addresses the different aircraft types and operations conducted at aerodromes, and consequently that it may not be reasonable to enforce them uniformly at all aerodromes. (ICAO)
3. **Aircraft, avionics and instrument procedures have changed.** ICAO's OLS Task Force explicitly considered advances in navigation equipment, aircraft avionics and modern instrument flight procedures. (ICAO) A related ICAO presentation lists the drivers as modern aircraft performance, improved flight procedures and technology, and the need for a more efficient obstacle/terrain assessment. (ICAO)
4. **The new system is meant to be more performance-based and operation-specific.** ICAO's quick reference guide says *Amendment 18 introduces a performance-based approach, with OFS and OES, adaptable to the type of operations at the aerodrome and aligned with the new Aeroplane Design Group categorization*.
5. **ICAO wants to protect the airspace that is actually needed, not unnecessarily sterilize land.** The 2025 ICAO Assembly paper says the revised approach aims to *safeguard operations more effectively while freeing up airspace not required for aircraft operations for non-aviation uses such as land development*. (ICAO)
6. **Obstacle assessment is becoming more evidence based.** ICAO says the review used flight-track data to determine containment surfaces needed to safeguard runway operations, then split surfaces into OFS—critical near-runway surfaces that should be kept obstacle-free—and OES, which protect flight procedures and operations and trigger assessment. (ICAO)
7. ***The rules distinguish between "must be clear" and "must be assessed."*** Annex 14's revised Chapter 4 states that OLS will consist of OFS and OES; *OFS preserve aerodrome accessibility and operational safety*, while *obstacles penetrating OES may be permitted only after aeronautical study shows they do not adversely affect safety* or significantly affect operational regularity.

**Bottom line:** ***ICAO is moving from a largely geometric, conservative, legacy safeguarding model to a more risk-based and performance-based model***. *The change is driven by modern aircraft capability, PBN/instrument procedure evolution, better flight-track data, pressure from urban/land-use development, and the need for clearer aeronautical studies that assess*

*the actual operational impact of obstacles rather than treating every surface penetration the same*.

## Why move away from common, conservative and established rules?

**ICAO concluded that the old conservatism was not always 'safety-efficient'**.

The legacy OLS were largely fixed-dimension surfaces, applicable broadly across aerodromes. ICAO's amendment material says the old OLS were first introduced in the 1950s and provided fixed dimensions applicable to all aerodromes. (slcaa.gov.sl) ICAO's quantitative studies using aircraft track data found that some existing OLS dimensions were "over-conservative"; for example, the inner edge width of the approach surface for instrument runways was considerably larger than observed aircraft deviations at threshold. ICAO also identified gaps between Annex 14 aerodrome-protection surfaces and PANS-OPS flight-procedure design surfaces. (slcaa.gov.sl)

That mattered because a very conservative geometric rule can be both **over-inclusive** and **under-targeted**: it can sterilise airspace or land that is not materially needed for the intended operation, while not necessarily aligning neatly with the actual procedure-specific obstacle risks that matter for modern operations.

## Who has been driving it?

The pressure for change came through **ICAO's Member States**, not directly from developers or airports alone. The trigger was the **Twelfth Air Navigation Conference in 2012** and the **38th ICAO Assembly in 2013**, which called for a comprehensive review of OLS criteria. ICAO then established the **Obstacle Limitation Surfaces Task Force**, under the **Aerodrome Design and Operations Panel**, to review and update the rules. (slcaa.gov.sl)

The 2013 Assembly discussion appears to have been prompted in part by **India**, which asked ICAO to review Annex 14 OLS criteria in light of current aircraft navigation and performance capability; the Technical Commission agreed that the Council should initiate work on the subject. (ICAO)

The actual technical work was then carried out by the ICAO OLS Task Force. ICAO says it included experts from States and international organisations, with members including Australia, Austria, Brazil, China, Canada, France, Germany, Italy, Japan, Korea, Spain, the United States and the United Kingdom, plus ACI, EASA, IATA, IFALPA and ICCAIA. (ICAO) So the "drivers" included regulators, airport interests, airlines, pilots, aircraft manufacturers and safety/procedure specialists.

## Is this driven by aviation industry demands for greater flexibility

**Partly, but not only.** Airports, airlines and manufacturers were involved through ACI, IATA and ICCAIA, and the new system plainly gives aerodromes and States more flexibility. ICAO says the revised surfaces allow States to adopt surfaces based on the type of operations at each aerodrome and that the revised SARPs "require less airspace" while still ensuring aviation and air navigation safety. (ICAO)

But the ICAO documents also argue against a simple "industry deregulation" explanation. ICAO's impact assessment says the new approach may, depending on the aerodrome and Aeroplane Design Group, result in a **more stringent template** than the existing one. The new framework is therefore not simply "less restrictive everywhere"; it is intended to be more tailored.

## Will it help airport estate development, renewables, or nearby urban densities?

**Land-use pressure is explicitly acknowledged** as one reason behind the changes.

ICAO's 2025 Assembly paper says the Task Force was assigned to review the existing SARPs because they dated from the 1950s and also "to address the growing pressure faced by States to intensify land developments around their aerodromes." (ICAO) The same paper says the review aimed to free up airspace not required for aircraft operations for non-aviation uses such as land development. (ICAO)

So the policy bargain is explicit: protect the airspace that is genuinely needed for current and intended operations, but stop sterilising airspace that the evidence suggests is not needed.

Renewables are not usually named in the ICAO rationale as the headline driver, but wind turbines, cranes, tall buildings and infrastructure development are exactly the types of obstacles that national planning systems must assess around aerodromes. The ICAO language is broad enough to include those pressures.

## What about optimised routes, noise, or capacity?

More indirectly. ICAO's stated rationale is not primarily "let airports design quieter or higher-capacity departure routes." The documents frame the issue around **modern instrument procedures, aircraft capabilities, flight tracks, obstacle assessment and land-use proportionality**. ICAO says the review considered navigation equipment, aircraft avionics and modern instrument flight procedures. (ICAO)

However, the new OES concept is tied to the **actual flight procedures and operations** at the runway. ICAO says OES protect the flight procedures and operations conducted at the runway, and the new surfaces are selected based on runway type, Aeroplane Design Group and instrument flight procedures. (ICAO) That means route design, procedure design, operating mode and obstacle safeguarding become more connected than under the old geometric model. Noise and capacity may benefit in some local cases, but they do not appear to be the central official reason.

## Summary

The change is not really from **safe conservative rules** to **looser risk assessment**. It is from:

**"Assume this whole geometric volume must be protected in broadly the same way everywhere"**

to:

**“Keep the critical near-runway and high-consequence volumes obstacle-free, then use formal assessment for wider areas where the operational impact is variable.”**

That distinction is important. ICAO says **Obstacle Free Surfaces** apply near the runway where obstacle impacts would be unacceptable, and those volumes are to be kept free from obstacles. (slcaa.gov.sl) The more assessment-based part is the **Obstacle Evaluation Surface**, where ICAO says operations may vary significantly from one aerodrome to another, the impact of an obstacle may be highly variable, and applying hard OFS-type protection over wider areas would be “costly” and “over-conservative.” (slcaa.gov.sl)

## Secretariat’s View

At the heart of the change seems to be the concept of **“Safety efficiency” (i.e. achieving the intended safety protection with fewer unnecessary constraints on operations, land, airspace or development)**. In other words, a rule is “safety-efficient” if it protects the genuinely safety-critical volume of airspace, but does not sterilise land or airspace that is not materially needed for the operation being protected.

ICAO itself usually separates the ideas: it talks about **safety impact**, **financial impact**, **environmental impact** and **efficiency impact**, not “safety efficiency” as one combined concept. In the Amendment 18 impact assessment, ICAO says the OLS change has a positive safety impact because OFS and OES together mean the “airspace of concern” is covered by one surface or the other; it separately says there may be efficiency benefits through reduced go-arounds and improved runway throughput.

The best explanation for what is a substantive change in approach to a safety critical issue which falls firmly within the orbit of LA responsibilities and interest is that ICAO has responded to **three converging pressures**:

1. **Technical obsolescence:** aircraft performance, avionics, PBN and instrument procedure design had moved on, while the OLS framework was still rooted in mid-20th-century assumptions.
2. **Planning and development conflict:** States were facing increasing pressure to permit development around aerodromes, and the old surfaces were seen as sterilising more land/airspace than could always be justified.
3. **Regulatory defensibility:** a blanket conservative rule is easy to administer, but harder to defend when challenged by sophisticated developers, infrastructure agencies or airport master planners. A data-based, procedure-linked assessment framework is more contestable, but also more explainable.

The real risk is that a “risk-based” system becomes, in practice, a **permission-based system**: if a developer can produce enough modelling, enough expert reports, and enough mitigation language, taller or closer development may be accepted where a simple conservative surface would previously have said “no.”

The risk is that this creates more discretion, and discretion can be used well or badly. The safety outcome will depend heavily on the quality and independence of each State’s approach (in the UK’s case this rests with CAA/DfT/MHCLG) to aeronautical studies, obstacle data, procedure-design capability and planning governance. **ICAO itself recognises that**

**implementation will require resources, guidance and a "paradigm shift" by States**. (ICAO)

That does not make risk assessment inherently unsafe. Aviation already uses risk-based safety management. But the approach is dangerous if it is used to replace hard safety buffers in places where low-probability, high-consequence events dominate: overruns, undershoots, engine-out after take-off, veer-offs, unstable approaches, belly landings, bird-strike emergencies, mis-flown approaches, wrong-mode automation, ATC conflict, and loss-of-thrust events.

To address these concerns:

**OFS should remain conservative and hard-edged.**
Near-runway and runway-end environments should not become negotiable planning space.

**OES can be assessment-based, but the assessment must include abnormal and emergency cases.**
It should not be based only on average flight tracks, nominal procedures or "most aircraft are here most of the time."

**OLS/OES is not a substitute for Public Safety Zones.**
Obstacle clearance protects aircraft from hitting things. Public-safety land-use controls protect people on the ground from aircraft accidents. They are related but not interchangeable.

## Implications for Local Authorities

The risk is that this creates more discretion, and discretion can be used well or badly. The safety outcome will depend heavily on the quality and independence of each State's approach (in the UK's case this rests with CAA/DfT/MHCLG) to aeronautical studies, obstacle data, procedure-design capability and planning governance. **ICAO itself recognises that implementation will require resources, guidance and a "paradigm shift" by States**. (ICAO)

**Developer challenge will almost certainly increase.**
In the UK, aerodromes are statutory consultees for safeguarded aerodromes, LPAs must consult them using safeguarding maps, and the aerodrome may request amendments or planning conditions. (GOV.UK) The CAA also says developers may be asked to fund IFP assessments where a development may affect instrument flight procedures. (Civil Aviation Authority) A more assessment-based regime gives developers more room to commission contrary expert evidence and challenge assumptions in planning appeals or inquiries.

Overall, the new ICAO approach is defensible only if implemented with strong regulatory guardrails. Without those, it could shift risk and liability from a clear conservative rule to aerodromes, consultants, local planning authorities and ultimately communities under flight paths.

**ICAO adoption is not the same as unavoidable domestic implementation in one particular form**. States are expected to implement ICAO Standards and Recommended Practices, but the UK can still decide **how**to implement them, whether to retain stricter

national safeguards, and whether to file a difference if it does not intend to comply exactly. The UK Government has acknowledged in aviation rulemaking that ICAO-derived provisions still require domestic implementation choices, and that the UK can file a difference where it does not intend to comply with an agreed international standard. (Legislation.gov.uk)

**Implicitly, therefore, there will be a significant additional burden on LA's who own airports and LAs affected by the safeguarding redesign. It is also likely there will be far more challenges to OLS from developers seeking to exploit the new rules to promote commercial and residential development. This raises the question of how LAs are to be remunerated for the additional administrative burden being imposed upon them.**

Issues to Raise with CAA/DfT

For SASIG member purposes, discussions with CAA should focus around **implementation safeguards**, not opposition to ICAO Amendment 18.

Useful questions to put to them include:

1. **Will the UK consult publicly on the policy choice to adopt the new OFS/OES framework, or only on technical drafting?**
   The CAA's own rulemaking process says aviation policy development should consider safety issues, technological progress, accident investigation findings, and wider policy impacts. (Civil Aviation Authority) So there is a strong argument that this should not be treated as a purely technical transposition exercise.
2. **Will the UK retain any more conservative national safeguarding criteria where local third-party risk, runway-end development, terrain, dense populations or complex operations justify it?**
   ICAO's revised SARPs are applicable from **21 November 2030**, and the UK CAA's own OLS update indicated a UK rulemaking task running through **Q4 2026**, so there is still an implementation window. (ICAO)
3. **Will the CAA publish a UK-specific impact assessment?**
   The ICAO material states that the revised OLS are intended to ensure only required surfaces are adopted and to make them performance-based and adaptable to operations. (ICAO) But that does not answer the UK-specific question: what happens at Heathrow, Gatwick, Manchester, Birmingham, Edinburgh, Bristol, London City, smaller licensed aerodromes, and aerodromes surrounded by dense urban development?
4. **Will the CAA distinguish obstacle safeguarding from third-party risk?**
   This is crucial. A building can be below an obstacle surface and still be an unacceptable concentration of people near a runway end. The current safeguarding system is about protecting aircraft operations; public-safety-zone policy is about limiting ground casualties. Those should not be allowed to collapse into one "surface penetration" analysis.
5. **Who carries liability if an aeronautical study accepts an encroachment that later proves unsafe or operationally restrictive?**
   Under a more discretionary, risk-assessment-based regime, responsibility shifts onto aerodromes, consultants, LPAs, and ultimately the regulator's oversight system. That deserves explicit treatment.

6. **Will developers be able to challenge aerodrome safeguarding assessments with their own aeronautical studies?**
   In practice, yes, that risk increases. The current UK safeguarding framework already relies on aerodromes being consulted on planning applications within safeguarding maps, and the CAA notes that developers may be asked to fund instrument flight procedure assessments where development may affect procedures. (Civil Aviation Authority) A more assessment-based regime creates more room for competing expert evidence.

There is a pattern in technical regulation where a policy choice is effectively settled internationally, then domestically presented as “implementation.” But in this case the domestic questions are real: the UK can adopt ICAO’s framework while still deciding how conservative to be, what national differences to retain, what evidence to require, what public consultation to run, and how to protect third parties on the ground.

The best challenge is probably:

The CAA should not implement Amendment 18 merely as technical harmonisation. It should publish a UK-specific safety, planning, third-party-risk, environmental and liability assessment, consult affected communities and planning authorities, and explain whether the UK will retain stricter national protections where ICAO’s new performance-based surfaces would otherwise permit closer or taller development near runway ends and flight paths.

Public Authority for Civil Aviation

# GUIDANCE FOR OBSTACLE MANAGEMENT

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## List of Effective Pages

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# Table of Content

# FOREWORD

The safe and regular operation of airports requires that certain precautionary measures be adopted in order to ensure that no obstacles can hinder the takeoff, holding and approach procedures, that navigation aids and communications equipment can work without interference. In order to deal with these issues the common practice is to establish what are known as "safeguarded areas" in which special measures are adopted. Those zones called Obstacle limitation Surface was defined by The Basic Aviation Law, Royal Decree No (93/2004) N° 94/2004 in the articles 6 and 7.

The documents covered are the Civil Aviation Law, Ministerial Decision No. 44/T/2007 (Executive Regulations of the Civil Aviation Law) and CAR 139 “Aerodromes Certification, Design and Operation”.

This manual is effective from 12 June 2018.

Anwar Bin Abdullah Al Raisi
Director General of Civil Aviation Regulation

# 1 Purpose of this guidance document

This guide is intended for the competent departments of the Public Authority for Civil Aviation (PACA) in charge of the management of the obstacles limitations Surfaces (OLS) and also to the aerodrome operators responsible for the periodic control of the obstacles inside and outside the aerodrome. It aims to provide a practical interpretation of CAR 139 provisions and to propose a common methodology for the development of obstacles limitation surfaces in order to harmonize the practices.

# 2 Definitions

When the following terms are used in this DOCUMENT they have the following meanings:

**Aerodrome.** A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

**Aerodrome elevation.** The elevation of the highest point of the landing area.

**Aerodrome reference point.** The designated geographical location of an aerodrome.

**Balked landing.** A landing manoeuvre that is unexpectedly discontinued at any point below the obstacle clearance altitude/height (OCA/H).

**Clearway.** A defined rectangular area on the ground or water under the control of the appropriate authority, selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height.

**Displaced threshold.** A threshold not located at the extremity of a runway.

**Frangible object.** An object of low mass designed to break, distort or yield on impact so as to present the minimum hazard to aircraft.

**Instrument runway.** One of the following types of runways intended for the operation of aircraft using instrument approach procedures:

**a. Non-precision approach runway**. A runway served by visual aids and a non-visual aid(S) intended for landing operations following an instrument approach operation type A and a visibility not less than 1000m.

**b. Precision approach runway, category I**. A runway served by visual aids and non-visual aid(s) intended for operations following an instrument approach operation type B with a decision height

(DH) not lower than 60 m (200 ft.) and either a visibility not less than 800 m or a runway visual range not less than 550 m.

**c. Precision approach runway, category II**. A runway served by visual aids and non-visual aid(s) intended for landing operations following and instrument approach type B with a decision height (DH) lower than 60 m (200 ft.) but not lower than 30 m (100 ft.) and a runway visual range not less than 300 m.

**d. Precision approach runway, category III.** A runway served by visual aids and non-visual aid(s) intended for landing operations following and instrument approach type B and along the surface of the runway and:

A. Intended for operations with a decision height (DH) lower than 30 m (100 ft), or no decision height and a runway visual range not less than 175 m.

B. Intended for operations with a decision height (DH) lower than 15 m (50 ft), or no decision height and a runway visual range less than 175 m but not less than 50m

C. Intended for operations with no decision height (DH) and no runway visual range limitations.

**Obstacle.** All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that:

a. Are located on an area intended for the surface movement of aircraft; or

b. Extend above a defined surface intended to protect aircraft in flight**;** or

c. Stand outside those defined surfaces and that have been assessed as being a hazard to air navigation.

**Obstacle free zone (OFZ).** The airspace above the inner approach surface, inner transitional surfaces, and balked landing surface and that portion of the strip bounded by these surfaces, which is not penetrated by any fixed obstacle other than a low-mass and frangibly mounted one required for air navigation purposes.

**Outer main gear wheel span (OMGWS)**. The distance between the outside edges of the main gear wheels.

**Runway.** A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.

**Runway end safety area (RESA).** An area symmetrical about the extended runway centre line and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway.

**Runway strip.** A defined area including the runway and stopway, if provided, intended:

a) To reduce the risk of damage to aircraft running off a runway; and

b) To protect aircraft flying over it during take-off or landing operations.

**Take-off runway.** A runway intended for take-off only

**Threshold.** The beginning of that portion of the runway usable for landing.

# 3 Obstacle Limitation Surfaces

## 3.1 General

In order to protect aircraft against potential collision risk, it is necessary to implement rules regarding tall structures surrounding aerodromes. This is done via the implementation and safeguarding of Obstacle Limitation Surfaces or Protected Surfaces as detailed in the CAR 139 – Chapter 4.

The Obstacle Limitation Surfaces (OLS) are conceptual (imaginary) surfaces associated with a runway, which identify the lower limits of the aerodrome airspace above which objects become obstacles to aircraft operations, and must be reported to PACA.

**Note:** The term OLS is used to refer to each of the imaginary surfaces which together define the lower boundary of aerodrome airspace, as well as to refer to the complex imaginary surface formed by combining all the individual surfaces.

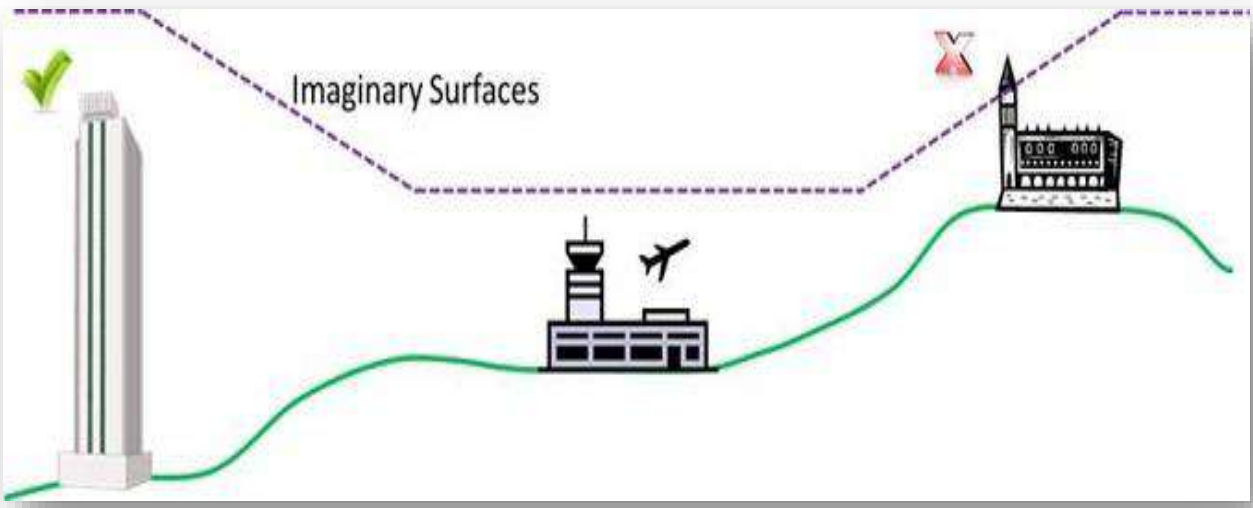



**Figure 1: Relevance of Obstacle Limitation Surfaces**

The OLS comprises the following:

(a) outer horizontal surface;

(b) conical surface;

(c) inner horizontal surface;

(d) approach surface;

(e) inner approach surface;

(f) transitional surface;

(g) inner transitional surface;

(h) baulked landing surface; and

(i) take-off climb surface.

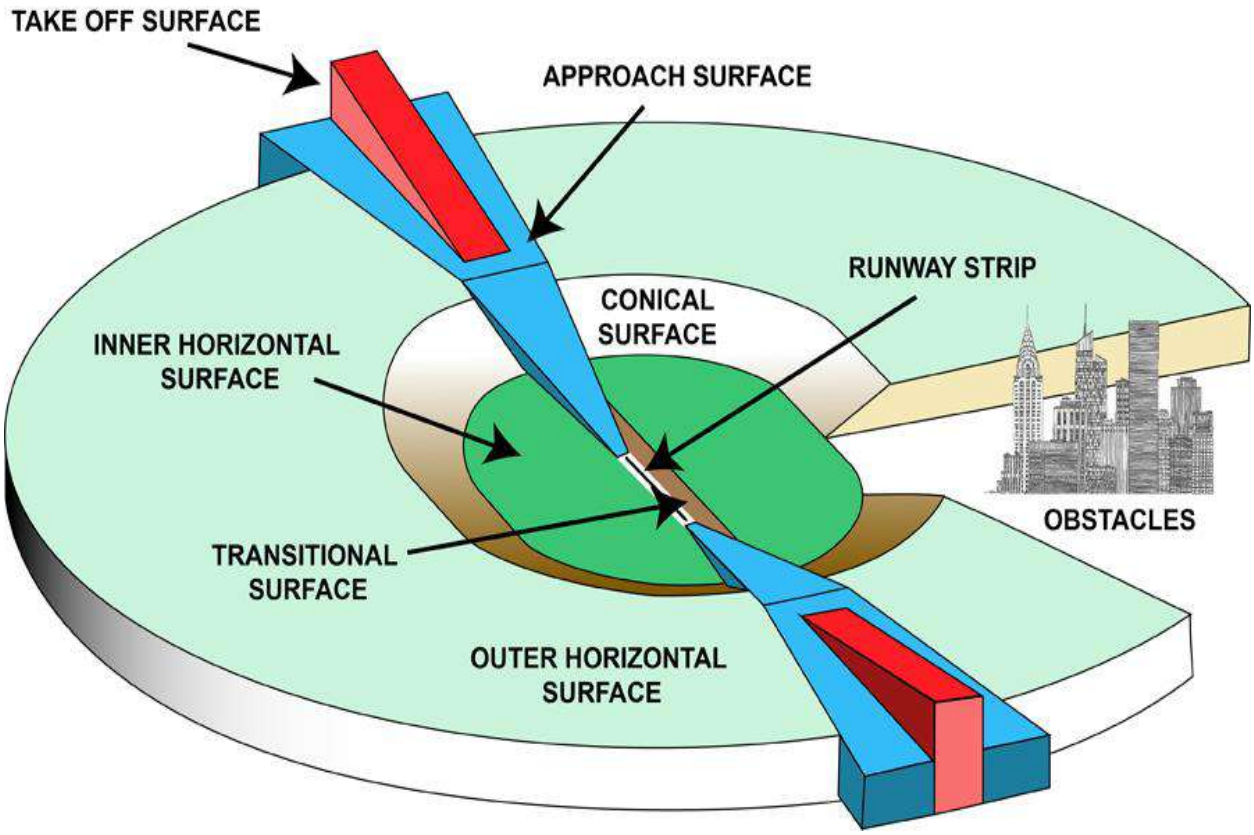



**Figure 2: Plan view of an approach surface**

## 3.2 Obstacle Restriction

Objects, except for approved visual and navigational aids, must not be located within the obstacle restriction area of the aerodrome without the specific approval of PACA.

Equipment and installations required for air navigation purposes are to be of minimum practicable mass and height, frangibly designed and mounted, and sited in such a manner as to reduce the hazard to aircraft to a minimum.

Obstacles on the obstacle restriction area must be taken into account when determining the obstacle clear approach or take-off surfaces.

## 3.3 Obstacles Limitation Surface

### 3.3.1 The Approach Surface

An approach surface is established for each runway direction intended to be used for the landing of aircraft. It is a wedge shaped surface that slopes upwards in stages from the end of the runway. The details of the dimensions and the angles are dependent on technical runway details. The figure below shows a plan view of an approach surface – not drawn to scale.

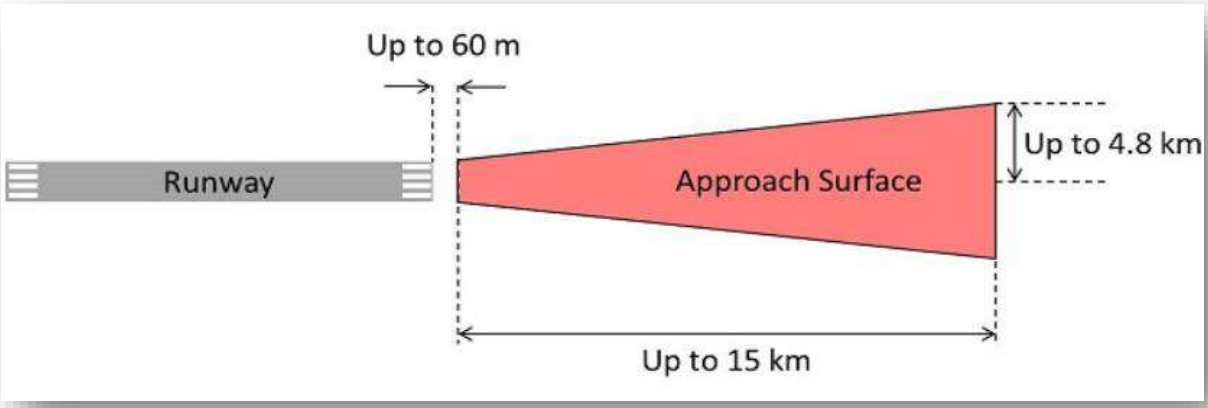



**Figure 3: Plan view of an approach surface**

The figure below shows a profile of an approach surface – not drawn to scale

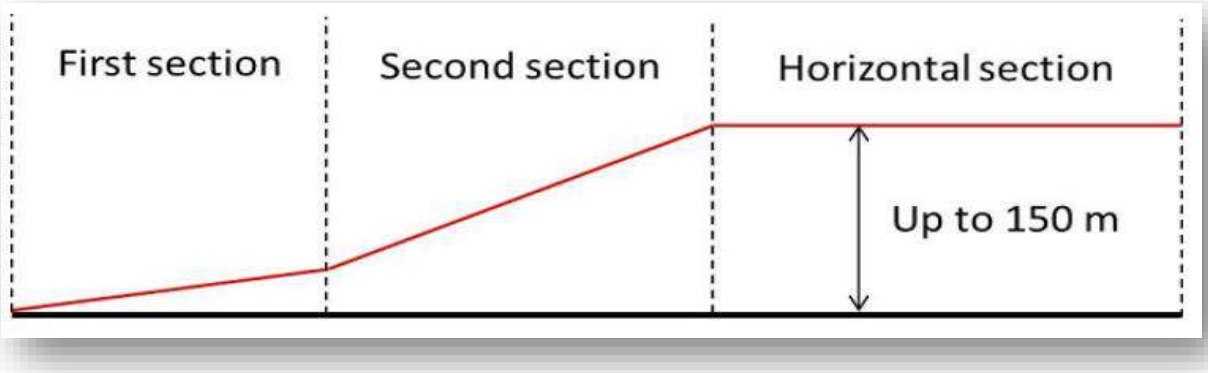



**Figure 4: Profile view of an approach surface**

### 3.3.2 The Take-Off Climb Surface

A take-off climb surface is established for each runway direction intended to be used for take-off. The figure below shows a plan view of a take-off climb surface – not drawn to scale.

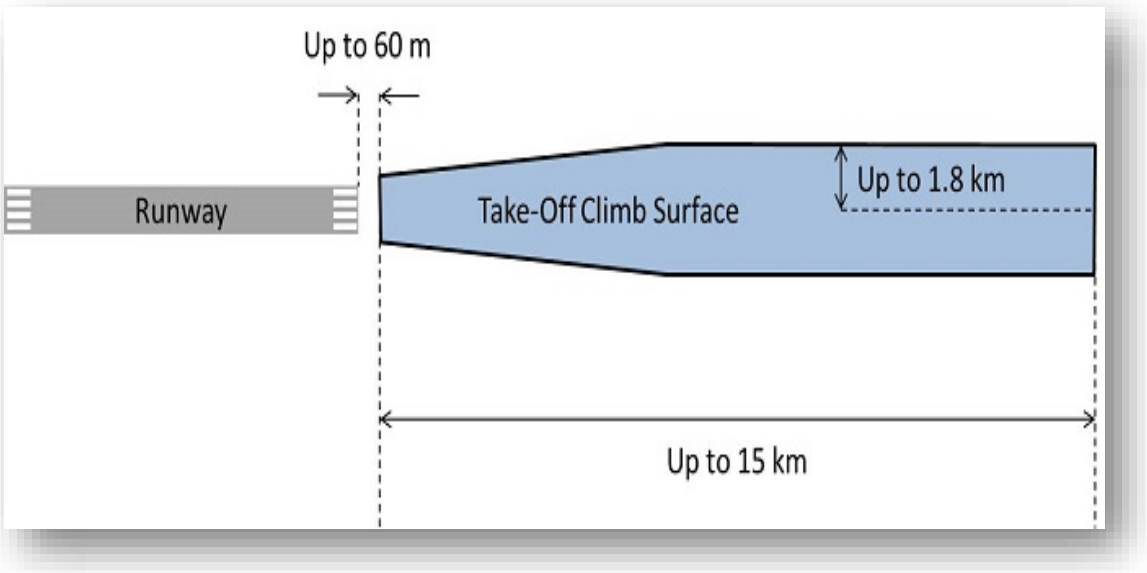



**Figure 5: Plan view of a take-off climb surface.**

### 3.3.3 The Inner Horizontal Surface

The inner horizontal surface is an imaginary flat plane that is established around every aerodrome. It can be circular or 'racetrack' shaped depending on the technical details of the runway. The figure below shows a plan view of an inner horizontal surface – not drawn to scale.

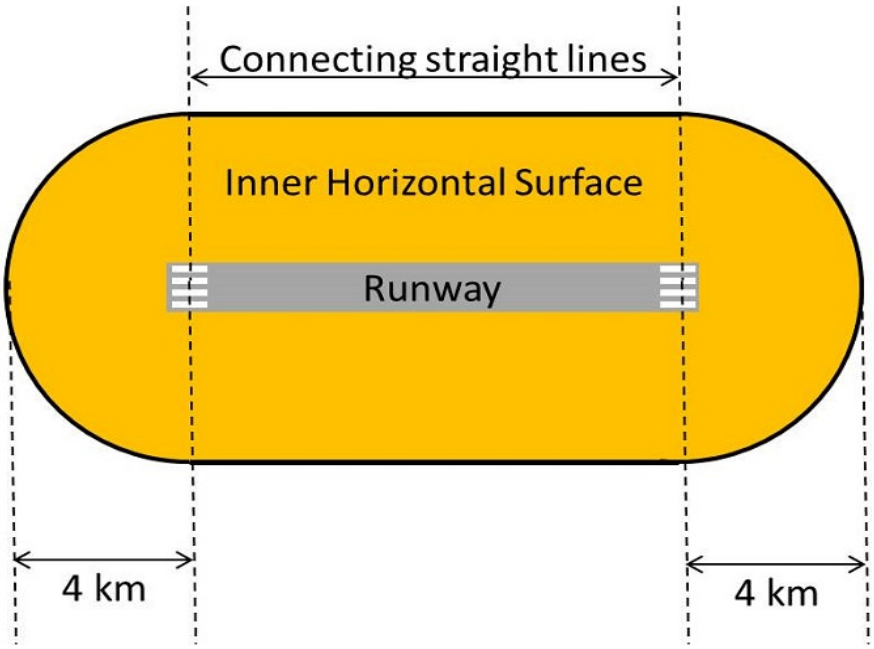



**Figure 6: Plan view of an inner horizontal surface**

The height of the surface is continuous and is defined relative to the lowest runway threshold at the aerodrome.

### 3.3.4 The Conical Surface

A conical surface extends outwards from the edge of the inner horizontal surface described above. The conical surface slopes upwards away from the runway at a uniform angle from start to finish.

The figure below shows a plan view of an inner horizontal surface – not drawn to scale.

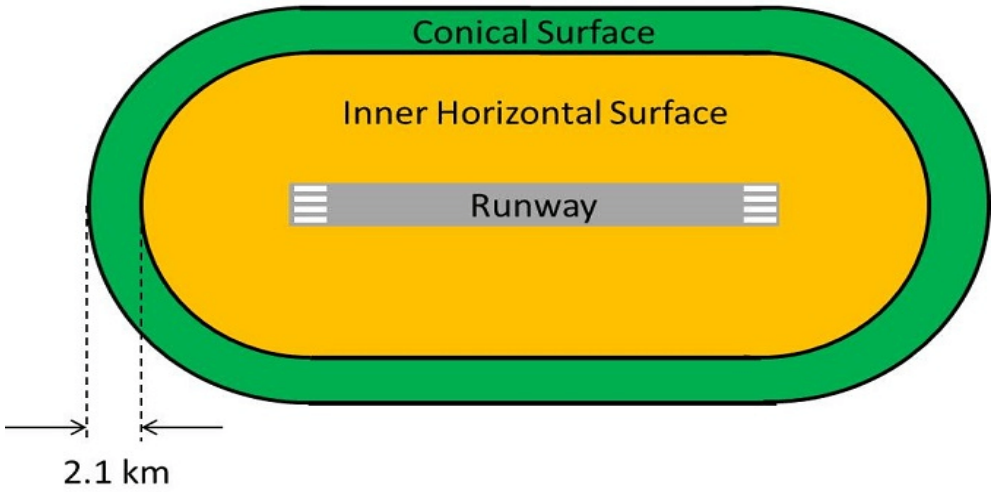



**Figure 7: Plan view of a conical surface.**

### 3.3.5 The Outer Horizontal Surface

The outer horizontal surface is an imaginary circular flat plane that is established around aerodromes. The figure below shows a plan view of an outer horizontal surface – not drawn to scale.

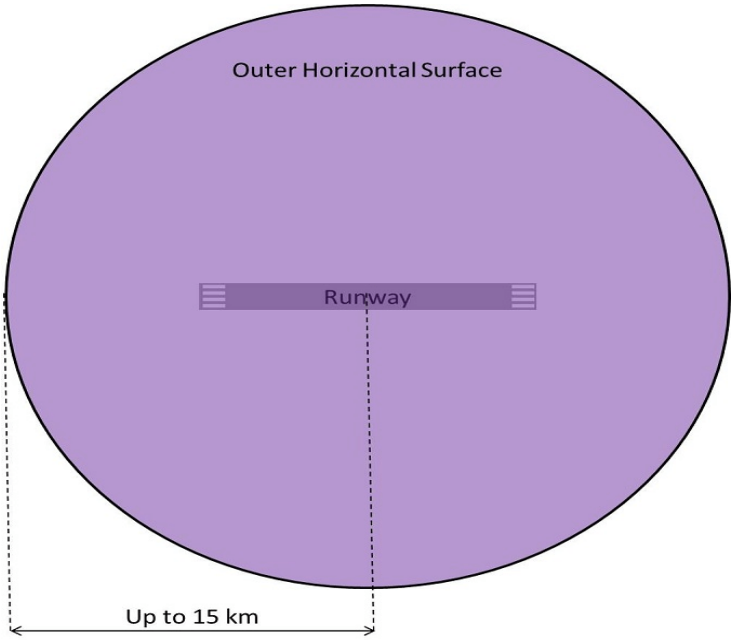



**Figure 8: Plan view of an outer horizontal surface**

The height of the outer horizontal surface is continuous and defined relative to the runway thresholds.

### 3.3.6 Obstacle-Free Zone

The inner approach, inner transitional and baulked landing surfaces together define a volume of airspace in the immediate vicinity of a precision approach runway, which is known as the obstacle-free zone. This zone must be kept free from fixed objects, other than lightweight frangibly mounted aids to air navigation which must be near the runway to perform their function, and from transient objects such as aircraft and vehicles when the runway is being used for precision approaches.

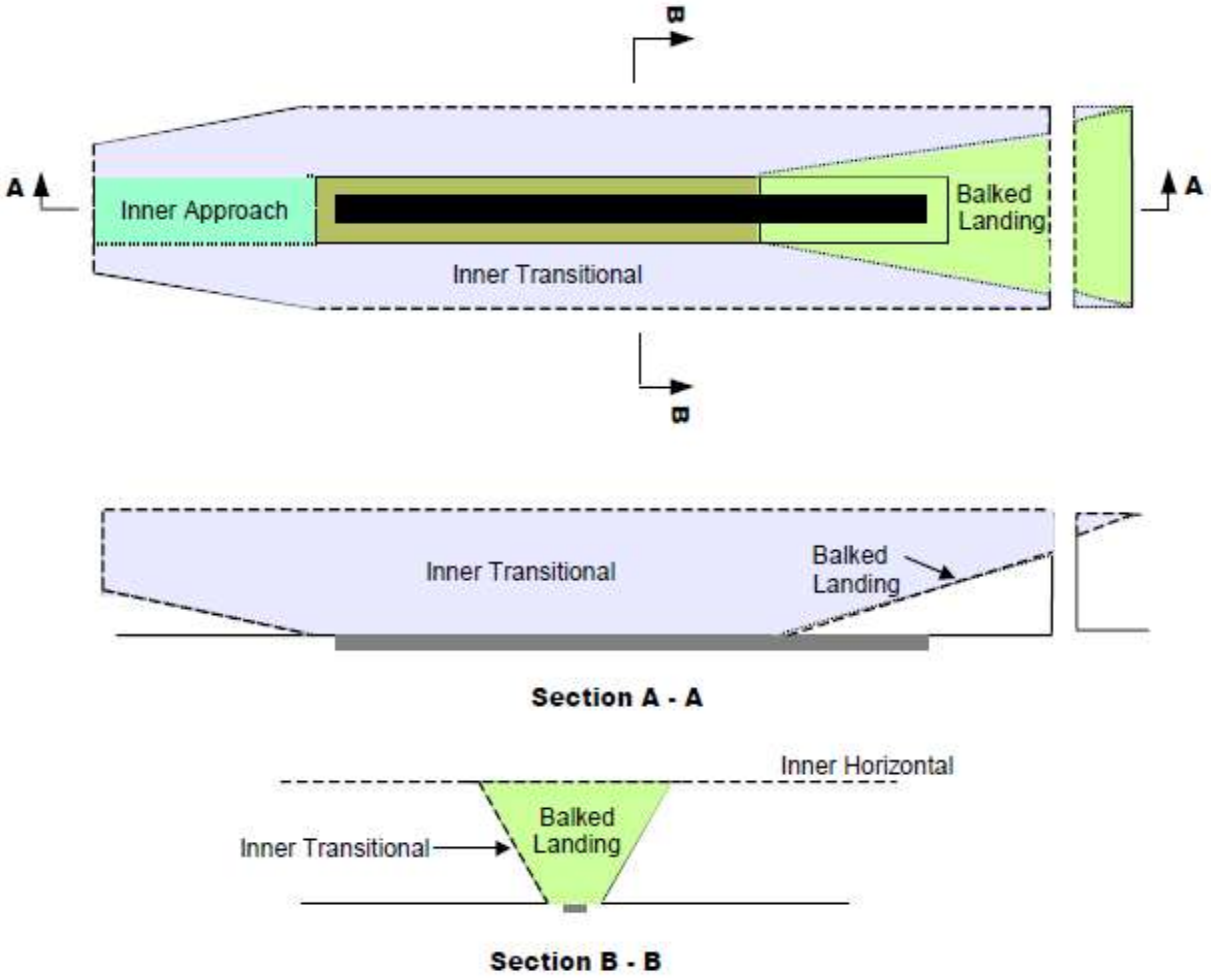



**Figure 9: Inner approach, inner transitional and baulked landing obstacle limitation surfaces**

### 3.3.7 Surface intersections

The general rule to be applied when there is an intersection between two or more Limitation surfaces is to retain in every point on the one hand the resulting surface corresponding to the most critical elevation and on the other hand, if necessary, the widest envelope (if there are different code tracks or operating modes).

## 3.4 Practical examples of calculating the maximum Elevation allowed by the OLS

### 1st Case: Obstacle in inner Horizontal Surface

If the obstacle is in the interior horizontal surface, the maximum elevation permitted in this position = aerodrome reference elevation + 45 meters


**Figure 10: case of an obstacle located in the inner horizontal surface**

### Case 2: Obstacle in the approach surface – Horizontal Section

If the obstacle is in Approach Surface-Horizontal Section, the maximum permitted in this position = aerodrome reference elevation + 150 meters.

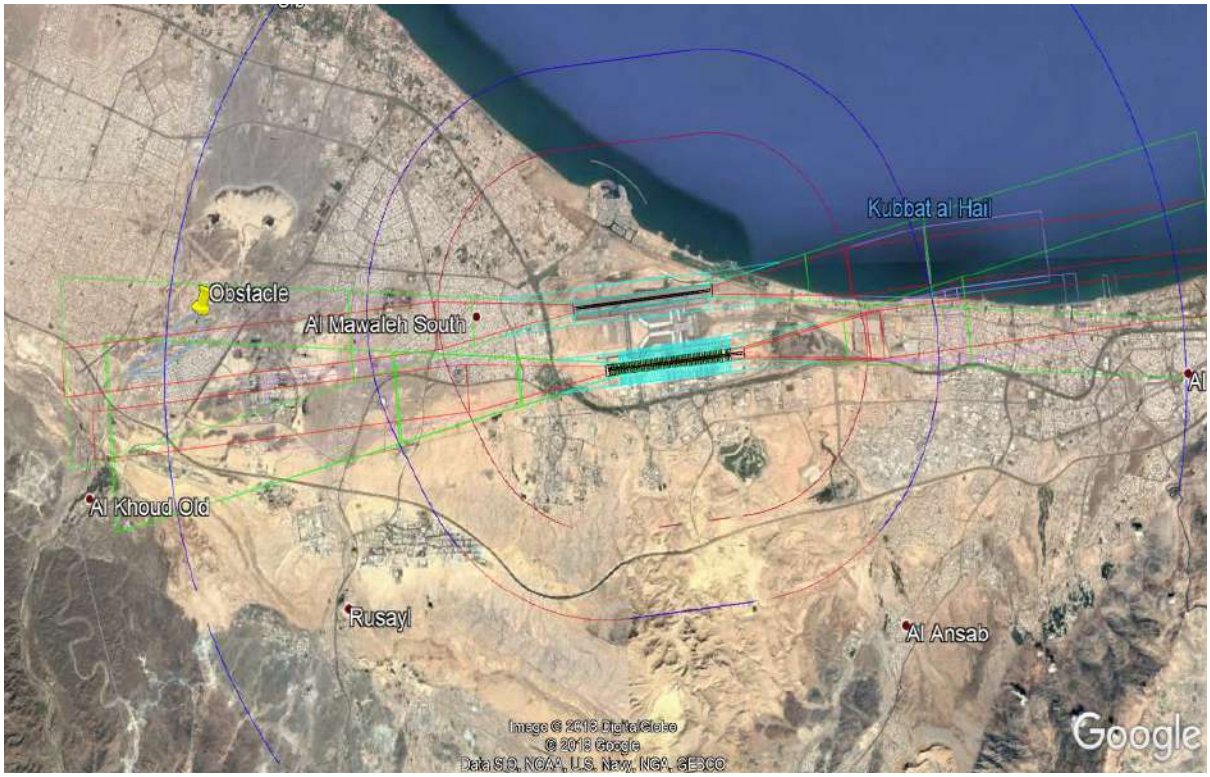



**Figure 11: case of an obstacle located in the approach surface – Horizontal Section**

### Case 3: Obstacle in Transition Surface

If the obstacle is in Transition Surface, the maximum elevation permitted in this position = aerodrome reference elevation + (slope * distance between the object and the limit of the runway strip)


**Figure 12: Obstacle in Transition Surface**

### Case 4: Obstacle in Conical Surface

If the obstacle is in the conical surface, the maximum elevation permitted in this position = aerodrome reference elevation + 45 + (slope * distance between the obstacle and the outer limit of the inner horizontal surface).

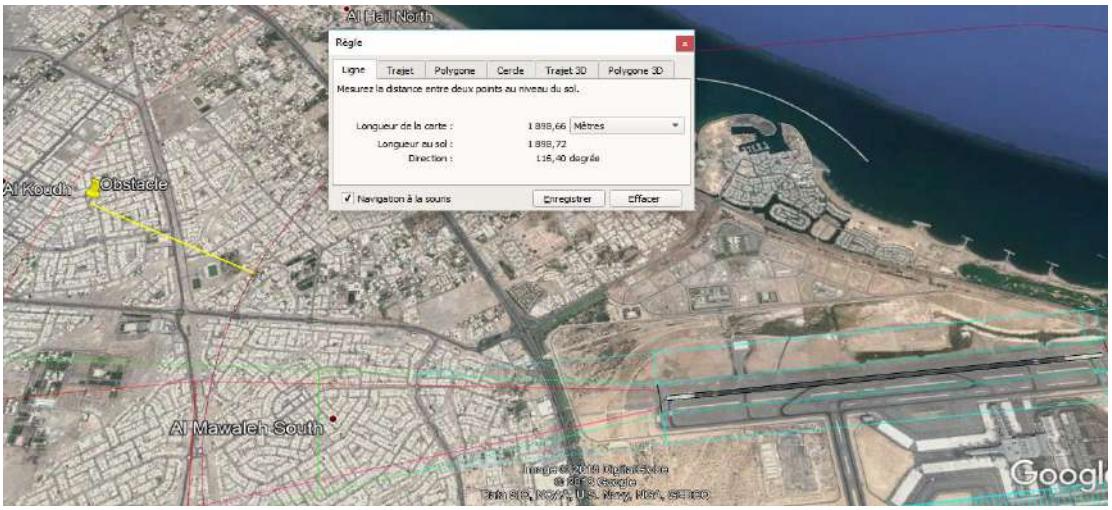



**Figure 13: Obstacle in Conical Surface**

**Case 5: Obstacle in Take-off and climb surface**

If the obstacle is in the conical surface, the maximum elevation permitted in this position = aerodrome reference elevation + (slope * distance between the obstacle and the end and Runway strip or end of CWY).

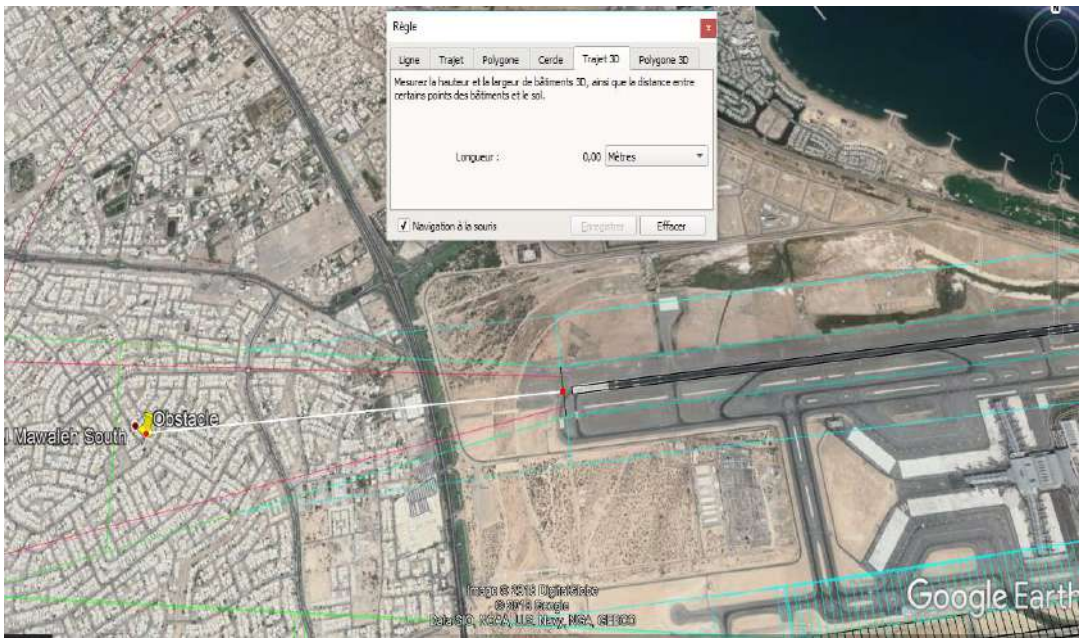



**Figure 14: Obstacle in Take-off and Climb Surface**

**Case 6: Case of Approach Surface-Oblique Section**

If the obstacle is in the approach surface-Oblique Section, the permitted in this position = aerodrome reference elevation + Maximum Elevation permitted in previous section (slope in this section * distance between the object and the limit of the previous section).


**Figure 15: Obstacle in Approach Surface-Oblique Section**

# 4 Infringement of the Obstacle limitation Surfaces

The CAR 139-Part1 (Chapter 4) states that if an obstacle infringe the Obstacle Limitation Surface (OLS) shall not be authorized except when, in the opinion of PACA, the object would be shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aeroplanes.

## 4.1 Principles of Shielding

The principle of shielding is employed when a substantial and permanent object or natural terrain already penetrates an obstacle limitation surface. When it is considered that such an obstacle is permanent, objects of equal or lesser height around it may, at the PACA's discretion, be permitted to penetrate the surface.

A new obstacle located in the vicinity of an existing obstacle and assessed as not being a hazard to aircraft is deemed to be shielded. Unless specifically directed by PACA, a shielded obstacle does not require removal or destruction and should not impose any additional restrictions to aircraft

operations. Only existing permanent obstacles may be considered in assessing shielding of new obstacles.

In assessing whether an existing obstacle shields an obstacle, PACA will be guided by the principles of shielding detailed below.

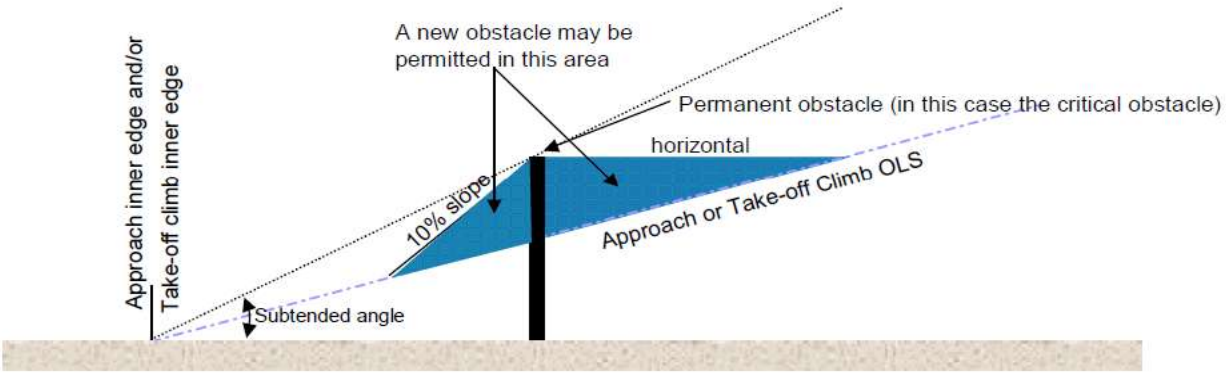
### 4.1.1 Obstacles penetrating the approach and take-off climb surfaces

4.1.1.1 An existing obstacle within the approach and take-off climb area is called the critical obstacle. Where a number of obstacles exist closely together, the critical obstacle is the one which subtends the greatest vertical angle measured from the appropriate inner edge.

4.1.1.2 As illustrated below, a new obstacle may be assessed as not imposing additional restrictions if (see figure 16):

a) when located between the inner edge end and the critical obstacle, the new obstacle is below a plane sloping downwards at 10% from the top of the critical obstacle toward the inner edge;
b) when located beyond the critical obstacle from the inner edge end, the new obstacle is not higher than the height of the permanent obstacle;
c) Where there is more than one critical obstacle within the approach and take-off climb area, and the new obstacle is located between two critical obstacles, the height of the new obstacle is not above a plane sloping downwards at 10% from the top of the next critical obstacle.

4.1.1.3 The width of these planes will be the width of the obstacle (measured in the plane normal to the extended centreline of the runway at the obstacle), decreasing with sides parallel to the sides of the relevant protecting surface (see figure 17), until the point where these projected lines converge, or intersect the take-off climb surface or the approach surface. Thus either the profile or plan view may take the form of a truncated triangle (see figures 4.14 and 4.15).



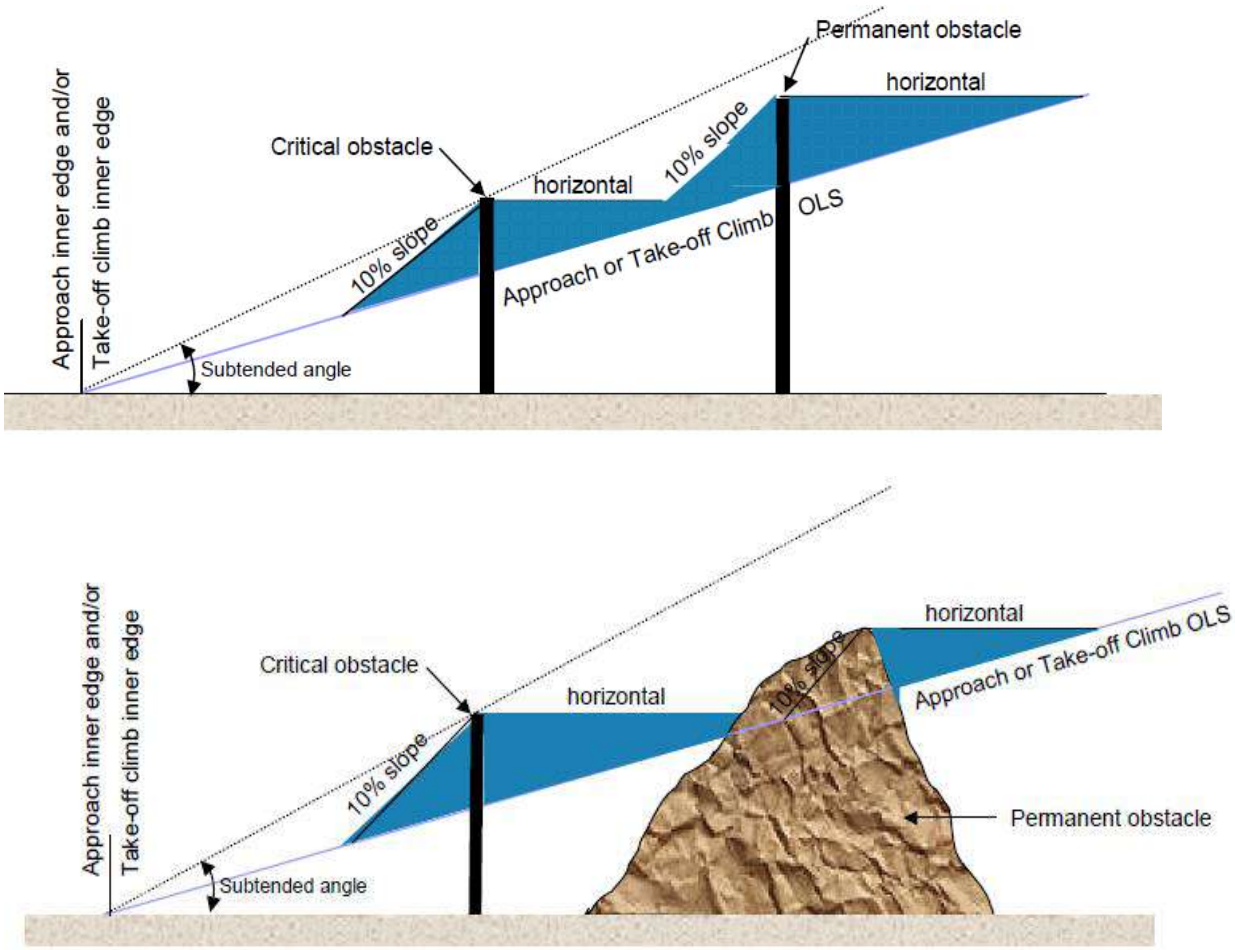



**Figure 16: Shielding of obstacles penetrating the approach and take-off climb surfaces**

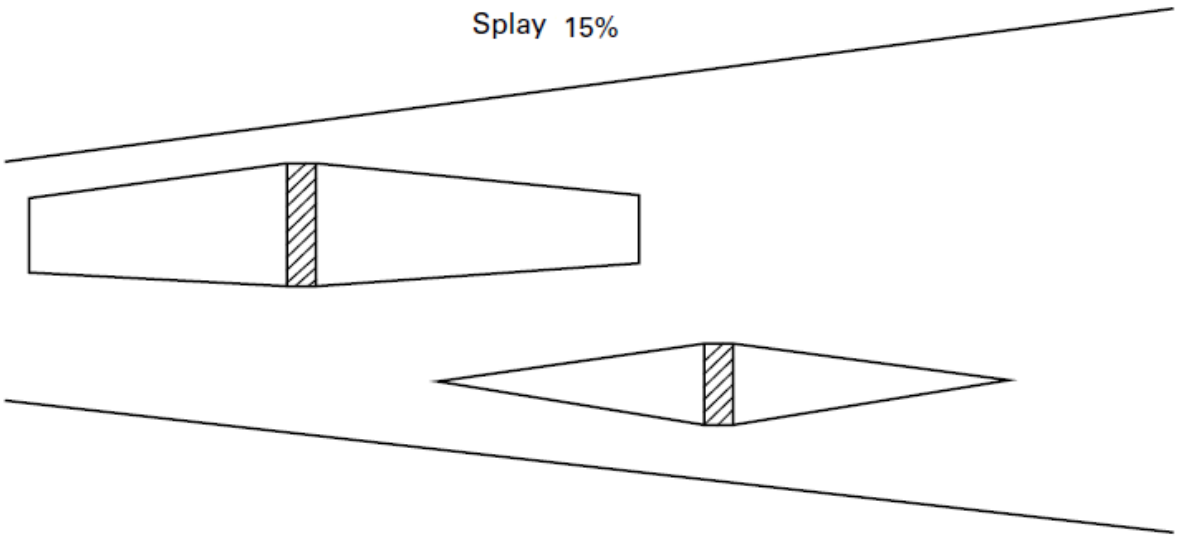



**Figure 17: delimitation of the zone shielded by an obstacle by the approach and take-off climb surfaces**

### 4.1.2 Obstacles penetrating the inner and outer horizontal and conical surfaces

The new obstacle may be accepted if it is in the vicinity of an existing obstacle, and does not penetrate a 10% downward sloping conical shaped surface from the top of the existing obstacle, i.e. the new obstacle is shielded radially by the existing obstacle.

### 4.1.3 Obstacles Penetrating the Transitional Surfaces

A permanent obstacle which penetrates a transitional surface may be regarded as shielding any other obstacles which lie beneath a negative slope of 10% extending from the top of the obstacle except that no obstacle can be considered as shielded that is situated closer to the runway than the shielding obstacle (see figure 18).

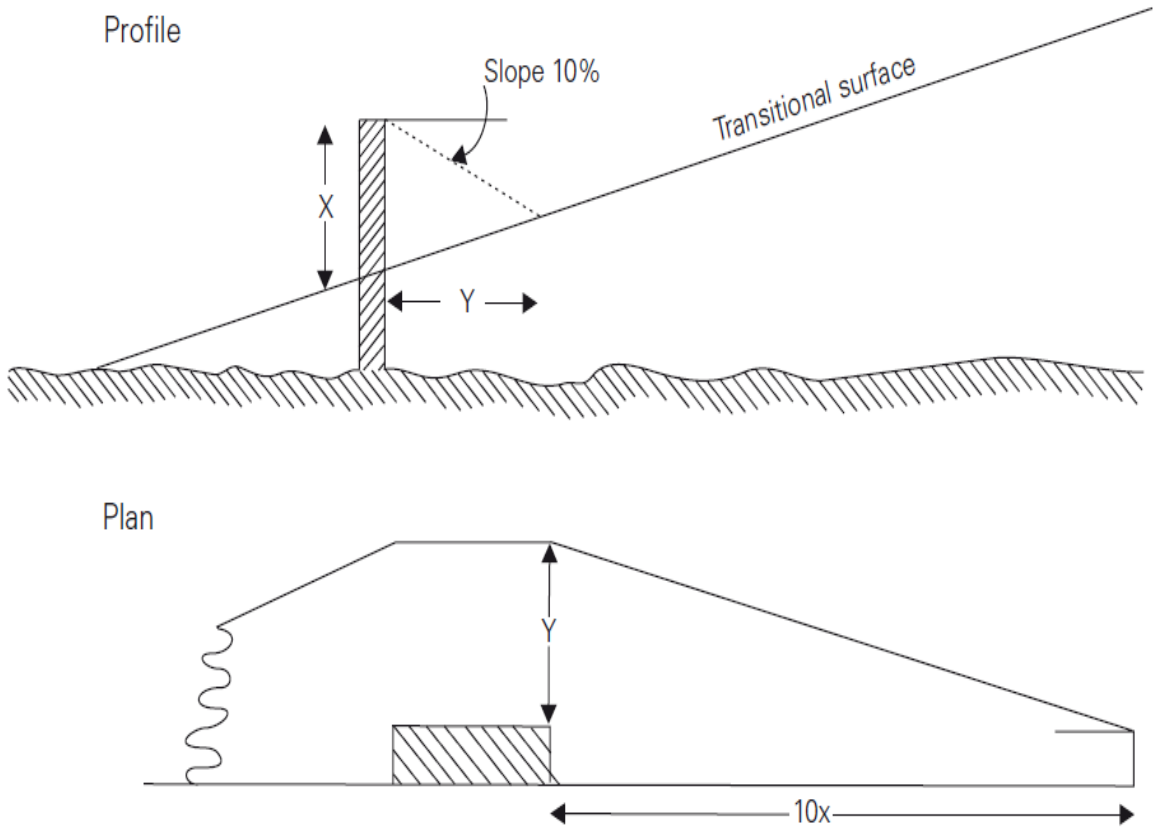



**Figure 18: Shielding of obstacles penetrating the Transitional surface**

## 4.2 Aeronautical Study

When the shielding principal mentioned in the paragraph 3.1 cannot be satisfied, the Obstacle Owner must conduct an aeronautical study in order assess the potential impact that this obstacle may have on aircraft operations as it is shown in the figure 19. For this purpose, the minimum items listed below will be considered:

- Obstacle limitation surfaces (OLS), including the Obstacle Free Zone (OFZ);
- PAPI obstacle protection surface;
- ICAO type A surface assessment: Any restrictions, that would be imposed on aircraft operations shall be considered and mitigated;
- Significant effect on radio altimeters (if the obstacle in the Inner approach surface): demonstration should be made (flight control system is not affected);
- Effects on communication, navigation and surveillance facilities: Two assessments shall carried out whit regard to CNS facilities:
    - Analysis of CNS facilities Building restricted areas (BRA).
    - Radio electric simulations for those CNS facilities whose BRA are infringed (and, when deemed necessary, also for facilities whose BRA are not infringed).
- Airport flight procedures;
- Safety Risk Assessment.

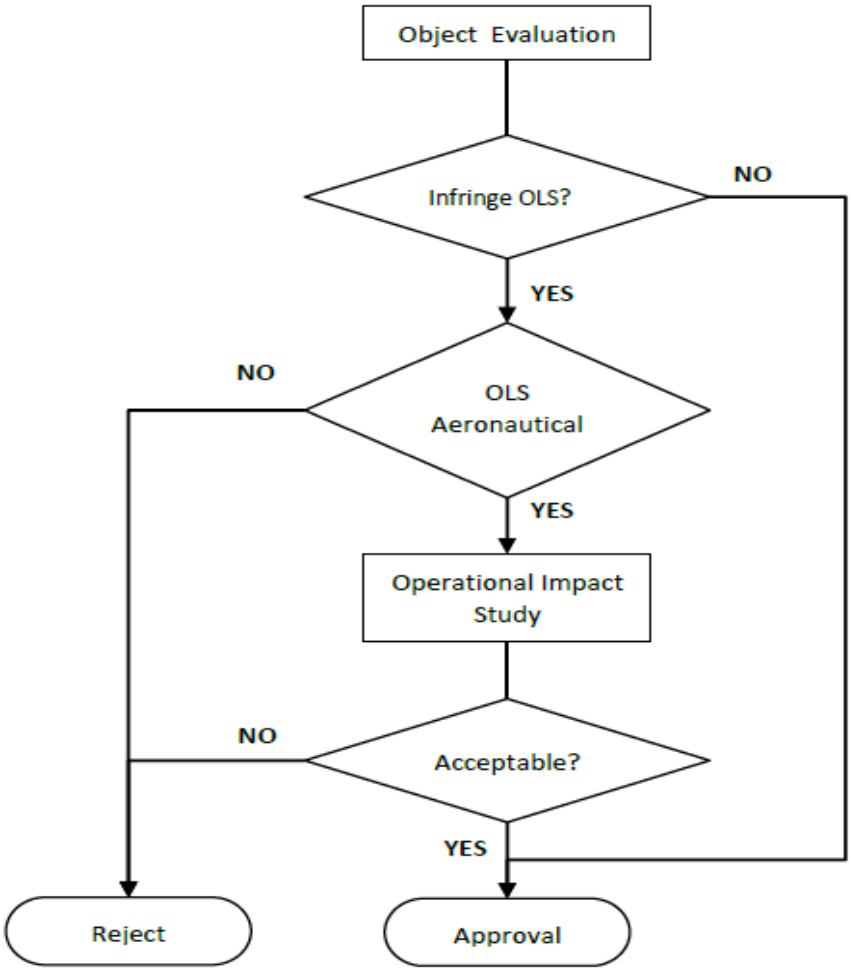



**Figure 19: Aeronautical study process**

### 4.2.1 Obstacle limitation surfaces (OLS) Assessment

The assessment of OLS will include the calculation of the Obstacle Limitation Surface (including OFZ). All surfaces will be calculated according to CAR 139. In this study, the new obstacles will be evaluated to answer the following questions:

- Are the OLS infringed?
- What individual surfaces infringed?
- To what extent are the OLS infringed?

### 4.2.2 PAPI protection surface Assessment

The assessment of PAPI's Obstacle Protection Surface will include the calculation of the PAPI's Obstacle Protection Surface according to the CAR 139 – Part 1 ,chapter 4. In this study, the new obstacles will be evaluated to know if they infringe the surface.

According to CAR 139-Part1-Chapter 5, in case of PAPI's Obstacle Protection Surface infringement the obstacle must be shielded and an additional safety risk assessment is required. The safety risk assessment process will be detailed in other guidance material and will include:

- Analyse the risk of the infringement and assess the severity and probability of the risks identified ;
- Propose the measures to mitigate the risks identified;
- Development of an implementation plan for the mitigation measures and conclusion of the assessment;
- Determine the level of safety after mitigation.

Where an aeronautical study indicates that an existing object extending above an obstacle protection surface (OPS) could adversely affect the safety of operations of aeroplanes, one or more of the following measures shall be taken:

a) remove the object;

b) suitably raise the approach slope of the system;

c) reduce the azimuth spread of the system so that the object is outside the confines of the beam;

d) displace the axis of the system and its associated obstacle protection surface by no more than 5°; and

e) suitably displace the system upwind of the threshold such that the object no longer penetrates the OPS.

### 4.2.3 ICAO type "A" surface assessment

The study must calculate the ICAO Type "A" surface and assess the infringement of this surface. Any restrictions, that would be imposed on aircraft operations shall be considered and mitigated.

### 4.2.4 Significant effect on radio altimeters

The airworthiness certification of aeroplanes for Category II operations demands that the approach guidance system includes, among others, a radio altimeter with displays at each pilot's station the radio altitude, and the selected decision height.

The ground profile before the runway considering the new ramp will be examined to determine the effects of the slopes of the terrain and the irregularities on the performance of the automatic landing system due to the impact of the radio altimeter.

### 4.2.5 Effects on communication, navigation and surveillance facilities

The Ministerial decision N° 44/t/2007 (executive regulations of the civil aviation law) and the ICAO's EUR DOC 15 "European guidance material on managing Building Restricted Areas" proposes harmonized protection zones and defines for the most common facilities a building restricted area (BRA). The BRA is defined as a volume where buildings have the potential to cause unacceptable interference to the signal-in-space in the service volume of CNS facilities. All CNS facilities have BRAs defined, which are not limited to actual site boundaries of the facility but extended to significant distances from the facility.

The general procedure to assess the effect on the CNS facilities is a two-step process (see Figure 20) for the approval of buildings that may adversely affect CNS facilities. The analysis carried out under both processes should be formally recorded. The intention is that Step 1 should be an expedient evaluation and Step 2 should involve in-depth analysis.

**For Step 1- BRA INFRINGEMENT ANALYSIS**: This analysis will be conducted by the appropriate authorities (for example: Airport, Planning, Local Official, PACA Department who conduct the initial review of building applications) in order to ascertain whether approval can be given directly or it should be passed to the appropriate engineering authorities (PACA - CNS Department).

**For Step 2- RADIOELECTRIC IMPACT STUDY:** A Radio-electric Impact Study will be performed for those CNS systems whose BRA would be infringed. In fact, the appropriate authorities (CNS Department, Airport Planning, and Local Official) should carry out detailed analysis. This should cover all aspects of the CNS facility to be protected and the possible effects of the proposed building on the signal in space

provided by these facilities. This analysis must be reviewed by the PACA-CNS Department if it was made by an external organisation.

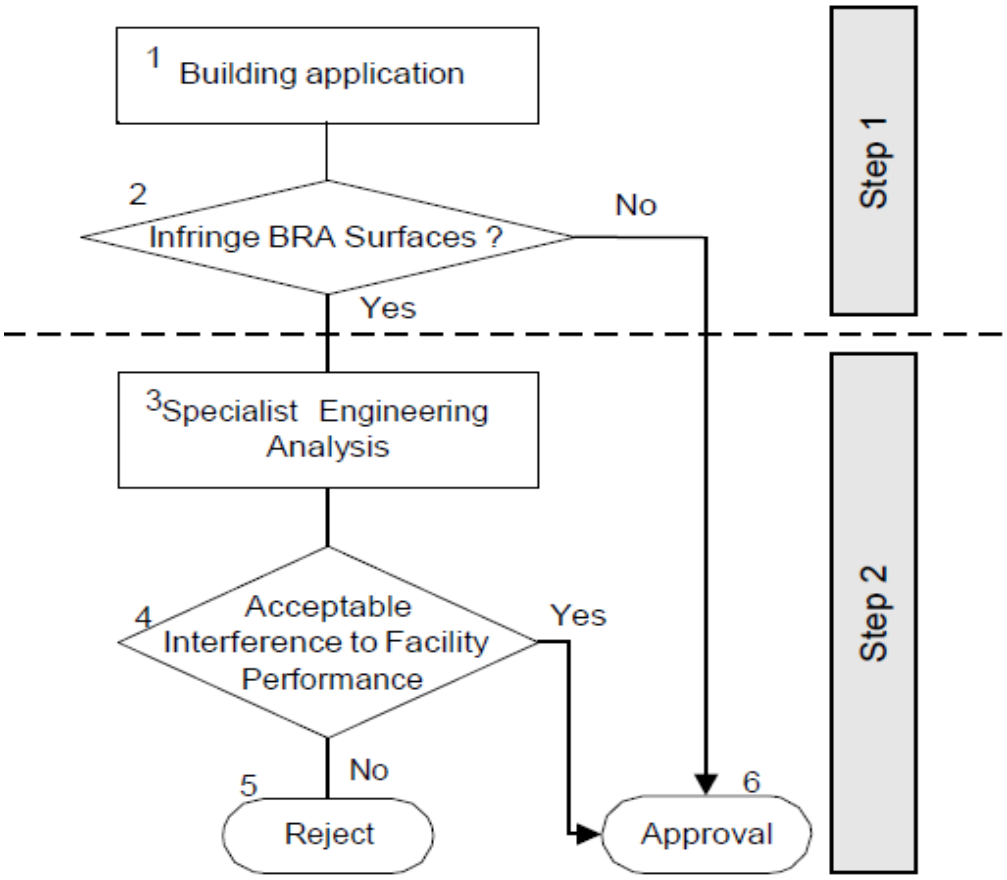



**Figure 20: Guidance review process**

### 4.2.6 Airport flight procedures

An operational impact study should evaluate the impact of an obstacle's erection on the instrument and visual flight procedures.

**a)** **Instrument Flight Procedures:** In this type of study at least instrument approach procedures, standard instrument departures and standard arrivals should be evaluated. This evaluation shall cover:

- Instrument procedures currently published in AIP;
- Those planned for Air Navigation or within the aerodrome Master Plan;
- Visual Segment Surface (VSS) of each approach procedure.

**b)** **Visual Flight Procedures:** Visual flight procedures currently published in AIP gathered within The Visual Approach Chart (VAC), should be checked. The study should check if an aircraft in visual conditions, on an aerodrome traffic circuit or through the visual tracks with destination/departure to/from the aerodrome, at the notification points determined within the VAC, could be affected by the obstacle.

### 4.2.7 Safety Risk assessment

The primary objective of a safety assessment is to assess the impact of a safety concern such as a design change or deviation in operational procedures or provisions at an existing aerodrome.

Such a safety concern can often impact multiple stakeholders; therefore, safety assessments often need to be carried out in a cross-organizational manner, involving experts from all the involved stakeholders. Prior to the assessment, a preliminary identification of the required tasks and the organizations to be involved in the process is conducted.

The safety risk assessment process will be more detailed in other guidance material (see Figure 21) and will include at least:

- Analyse the risk of the infringement and assess the severity and probability of the risks identified.
- Propose the measures to mitigate the risks identified.
- Development of an implementation plan for the mitigation measures and conclusion of the assessment;
- Determine the level of safety after mitigation.

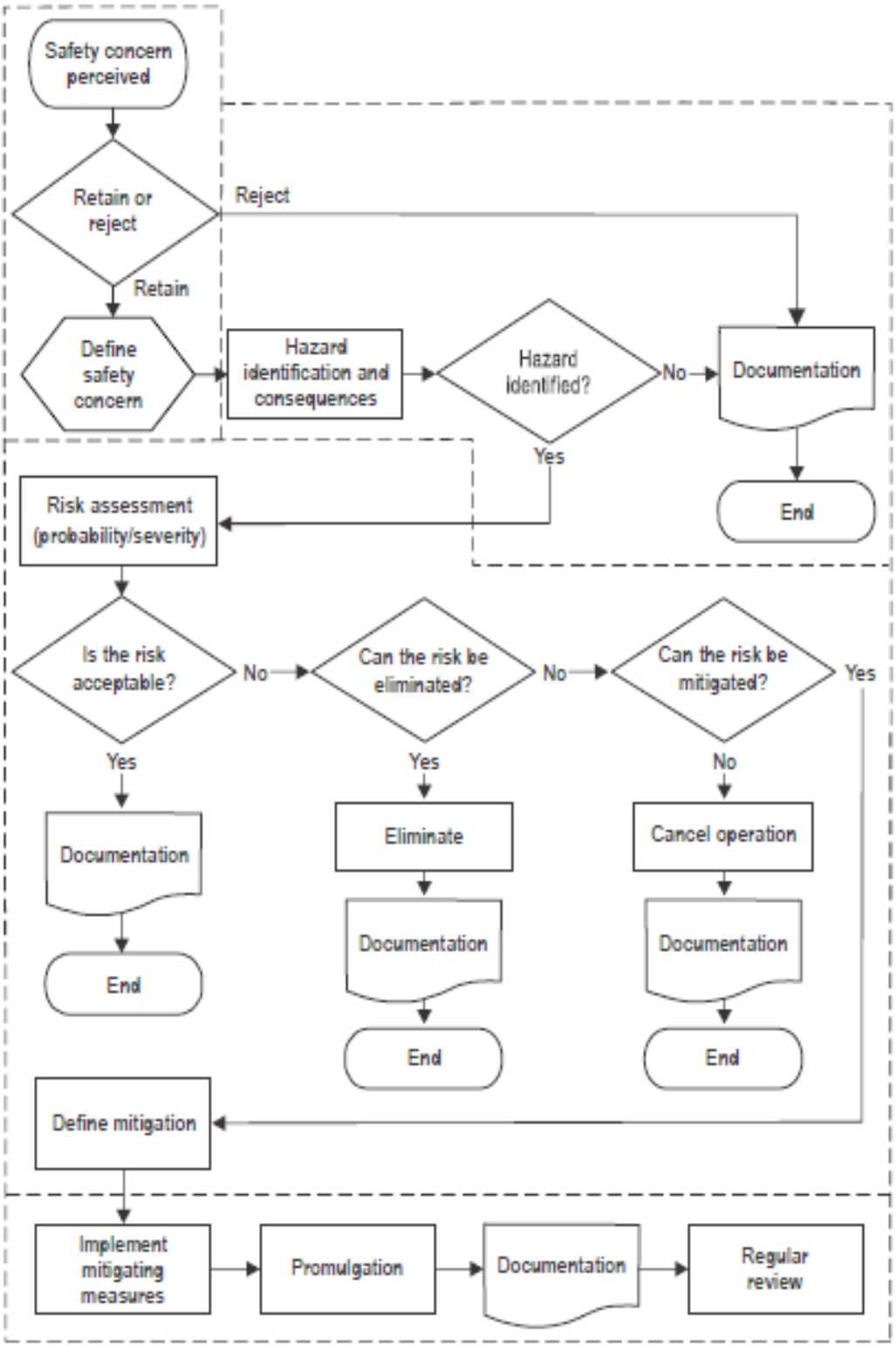



**Figure 21: Safety assessment flow chart**

# 5 Visual Aids for denoting obstacles

The CAR 139 PART 1- Chapter 6 requires that pilots be informed of the presence of obstacles by marking and/or Lighting of each obstacle that may constitute a hazard (see figure 22). The opportunity of marking/Lighting an obstacle is not limited to areas defined by the clearance surfaces and is to be assessed according to local conditions, the nature of the obstacle and air navigation procedures.

The obstacles lighting which, by reason of its intensity, configuration or colour, might prevent, or cause confusion in, the clear interpretation of aeronautical ground lights shall be extinguished, screened or otherwise modified so as to eliminate such a possibility. In fact, after receiving any notifications from the pilot related to high intensity of obstacles lighting or another lighting, which can cause confusion, the aerodrome operator shall take the necessary action to mitigate this hazards.

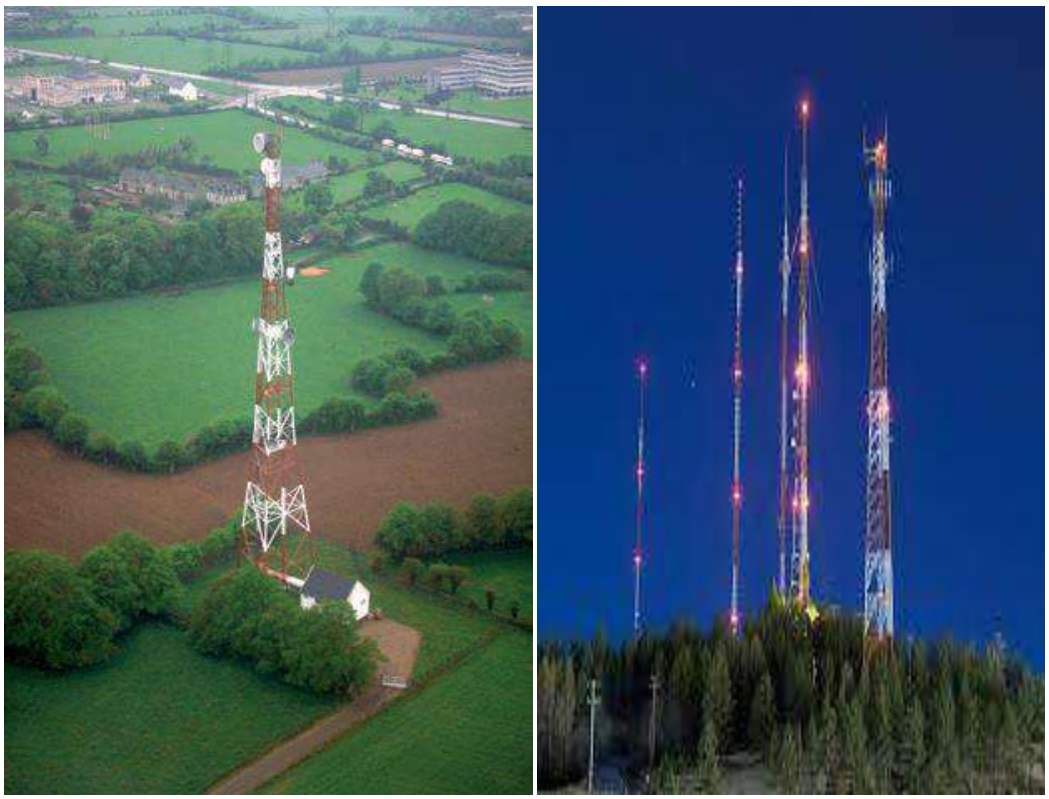


**Figure 22: Visual obstacles for denoting obstacles**

# 6 Procedures for Aerodrome Operators to Deal with Obstacles

## 6.1 Responsibilities

### 6.1.1 Obstacle Control

The aerodrome operator must monitor the OLS applicable to the aerodrome and report to PACA any infringement or potential infringement of the OLS. In fact the Aerodrome operators need to liaise with appropriate planning authorities and companies that erect tall structures, to determine potential infringements. Every effort should be made to implement the OLS provisions and limit the introduction of new obstacles.

Since the area to be controlled is large, the aerodrome operator may set the frequency of obstacle control by taking into account the following elements:

- Type of surface (approach, conical, ...)
- The topography of the area (sea, mountain, urban area, desert ....)
- The history of the results of previous inspections.

When a new obstacle is detected, the aerodrome operator must ensure that the information is passed on to pilots, through NOTAM, in accordance with the standards for aerodrome reporting procedures detailed in the aerodrome manual. The information on any new obstacle must include:

a) the nature of the obstacle — for instance structure or machinery;
b) the geographic coordinates in WGS-84;
c) Elevation (MSL) and height of the obstacle in relation to the aerodrome elevation;
d) If the obstacle is marked / lighted; and
e) If it is a temporary obstacle — the time it is an obstacle.

### 6.1.2 Obstacles marking and lighting Control

The aerodrome operator must also check if the owners of the obstacles comply with regulations relating to marking and lighting obstacles (CAR 139 - Chapter 6), both on the aerodrome and in the vicinity of aerodromes, which could otherwise present a hazard to aircraft. The aerodrome operator must implement and update an obstacle database in order to achieve this mission.

The obstacle database would contain the list of the obstacle contain in the AIP and the obstacle authorized by PACA witch obstacle marking and/or Lighting. In fact the Aerodrome Safety Department should inform the Aerodrome operator about the obstacle authorized witch need marking or lighting in order to plan their control.

## 6.2 Training

The aerodrome operator shall designate a qualified officer to achieve obstacle control mission. This officer must receive specific training on the obstacle limitation surfaces and he must have the ability to use the necessary equipment to accomplish his mission.

## 6.3 Duties

When the officer detects an object could become an obstacle, he shall provide to PACA (Aerodrome Safety Department) in coordination with the owner of this obstacle:

- the geographic coordinates in WGS-84 of the obstacles;
- Elevation (MSL) and height of the obstacle in relation to the aerodrome elevation;

The Aerodrome Safety department will evaluate the obstacle in coordination with the Air Navigation Safety Department and CNS department in order to assess his impact on the OLS and on the Airport operation (Flight procedure and CNS Facilities).
After this study:

- The aerodrome operator will be informed in order to take the necessary action.
- The Aerodrome Safety Department will inform the PACA-Legal department in order to take the necessary action in coordination with the Government Authorities according to Civil Aviation Law, Royal Decree No (93/2004) - Article N° 7 that stipulate ***"The Civil Aviation Authority shall have the right to remove any installations or buildings in these areas that have been erected without permission or in violation thereof. The violator shall bear the cost of removal. The Civil Aviation Authority shall remove any installations or buildings if deemed necessary."***

### 6.4 Reporting to PACA

The aerodrome operator shall send a periodic report to PACA (twice per year). This report contains a summary of the obstacle inspection mission and the follow up about the obstacles detected and the actions taken.

## 7 References

- Civil Aviation Law, Royal Decree No (93/2004)
- Ministerial Decision No. 44/T/2007 (Executive Regulations of the Civil Aviation Law)
- Civil Aviation Regulation CAR-139
- Civil Aviation Regulation CAR-100
- ICAO Annex 14 – Volume 1- Aerodrome Design and Operations
- ICAO Annex 19, Safety Management
- Airport Services Manual (Doc 9137) - Part 6 — Control of Obstacles
- Manual on Certification of Aerodromes (Doc 9774)
- Safety Management Manual (SMM) (Doc 9859)
- Procedures for Air Navigation Services — Aerodromes (PANS-AERODROMES) (Doc 9981)
- ICAO EUR DOC 015 - European guidance material on managing building restricted areas
- World Geodetic System — 1984 (WGS-84) Manual (Doc 9674)

**--- End ---**





# Managing Changes

# Overview

- Aim and Objectives
- Introduction
- Changes and Regulatory Requirements
- Regulatory approval process
- Summary

# Aims

The aims of this session are:

- To provide an overview as to the EASA and National aerodrome requirements and the processes in gaining regulatory approval for changes.
- To provide an overview of the management of safety and control of aerodrome works in progress.

# EASA and National Requirements

## EASA

ADR.OR.B.040 Changes

Any change:

1. Affecting the terms of the certificate, its certification basis and safety-critical aerodrome equipment, e.g. infrastructure.
2. Significantly affecting elements of the aerodrome operator's management system
3. Other changes including RFFS Category, Low visibility Procedures.

Shall require prior approval by the Competent Authority.

## National

An aerodrome licence condition requires that changes in the physical characteristics of the aerodrome, including the erection of new buildings and alterations to existing buildings or the visual aids, shall not be made without prior approval of the CAA.

# Infrastructure

Examples of infrastructure changes that would require approval:

- New runway
- Runway extension
- Runway threshold re-location
- New AGL installation
- New buildings/structures
- Installation of new Navaids
- A new taxiway or change to an existing taxiway
- A new apron area or increase in size of existing apron
- A new visual control room (ATC tower)

More guidance in CAP 1168 and CAP 791

# Management System

EASA requires that significant changes to an aerodrome's management systems also require prior approval:

- Changes to the overall airport organisational structure
- Changes to the operating philosophy or safety policy of the airport
- UK CAA does not approve the aerodrome accountable manager but a change should be notified to us

# Changes

The Inspecting Officers are responsible for:

- Receiving and reviewing change applications
- Passing change requests to aerodrome inspectors for assessment and approval
- Preparing change approvals for aerodrome inspectors and issuing approvals when signed
- Issuing amended certificates
- Coordinating the process
- Filing the records

# Changes

Aerodrome Inspectors are responsible for:

- conducting a technical assessment of change applications
- authorising and signing Change approvals
- deciding if any Special Conditions are required
- authorising the revised Certification Basis document
- authorising the revised Terms of the Certificate document

# Change Management

- Change will impact aerodrome operations and its business
- Typical changes for an organisation include:
  - Organisational change (a new Accountable Manager, organisational restructuring, significant IT projects, mergers, staff redundancies etc)
  - Operational change (a new aircraft type, a new contracted organisation, new systems or equipment)
  - Physical change (a new base, moving office, runway extension or new taxiway layout)
- Needs a documented process to identify changes which may affect established processes and services

# Management of Change

- Formal process to identify changes which may affect established processes and services
- A documented risk assessment
  - Describes the change and arrangements to ensure safety performance before and during implementing changes are maintained ALARP
  - Involves all stakeholders
  - Justified with supporting data
  - Considers all possible hazards
  - Signed off by an appropriate person (accountability)

# Questions to Ask

- Is what the scope of the change is?
- What is the impact of the change?
- Have the hazards been identified and risk assessed?
- Who has ownership of the risk assessment?
- Is the language, risk matrix and process appropriate?
- Who has taken part/ contributed to the risk assessment – devil's advocate?
- Is the risk assessment objective?
- Have assumptions been made?
- Does the risk assessment have a conclusion and been signed off by the appropriate stakeholders?
- ….Is it reasonable?

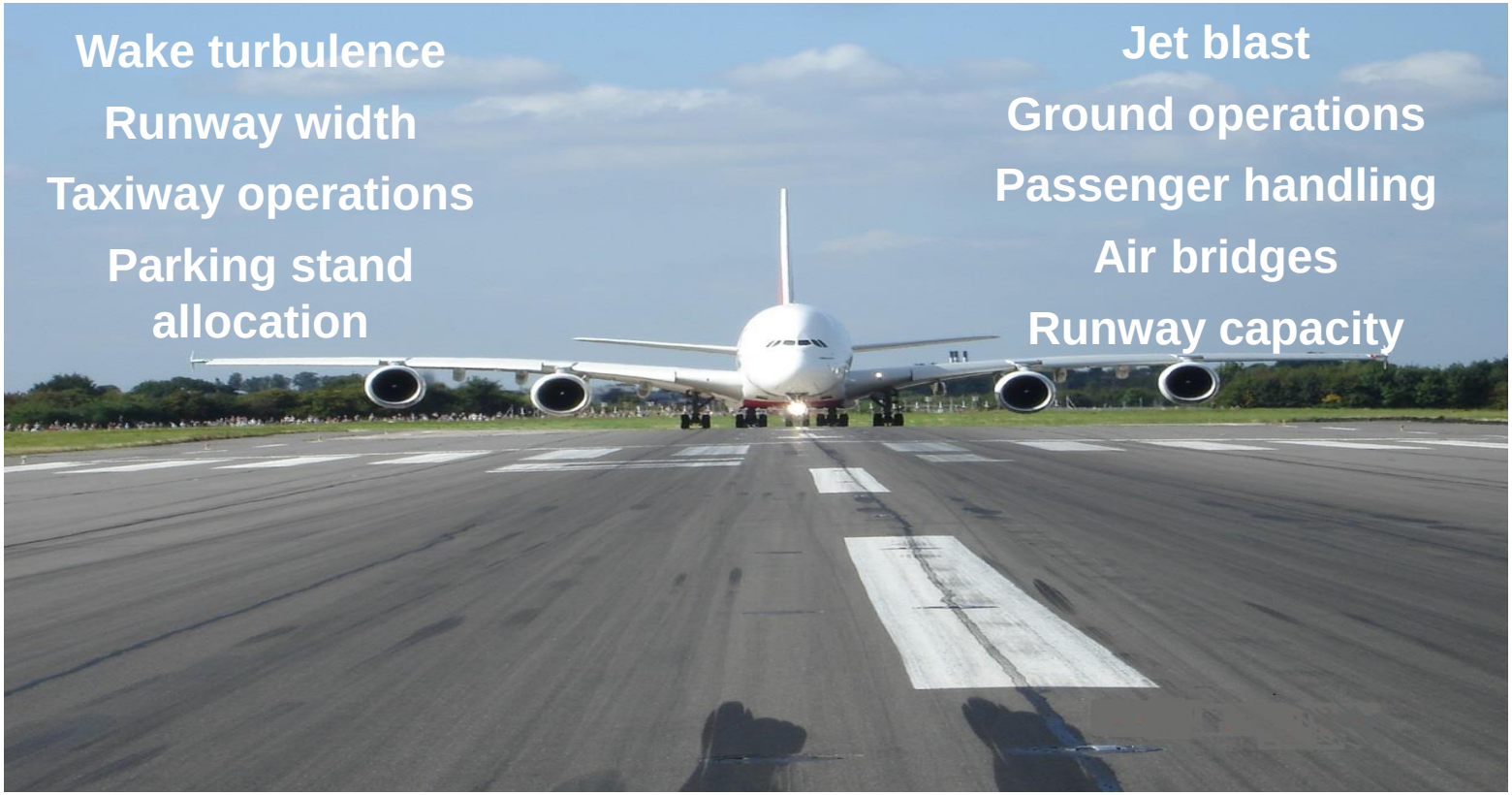
# Change Management

- Action Plan: what, by whom and by when
- What follow up action is needed? (assurance)
- Is the Change safe to implement? (sign off)

- ….Is it reasonable?

- A380 risk assessment

# Airbus A380 Operations



# Assessing Change Management

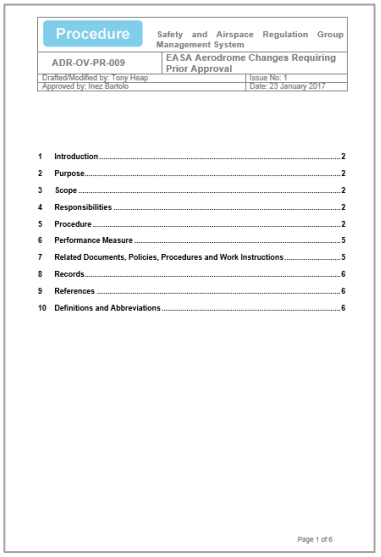
- Is a change management process in place?
- Check its use for major changes:
  - Operational, organisational, key personnel
- Are all stakeholders involved in the change?
- Have hazards and risk assessments been reviewed?
- For operational and organisational changes:
  - Safety accountabilities, authorities and responsibilities should be reviewed as part of the change
- How does the entity verify the success of the change?
- Need to use the safety risk management system to assess changes

# Assessment of Changes

The Aerodrome Inspector will:

- Assess the information provided on the application form and decide if the proposed change is within the scope defined within the legislation for changes that require prior approval
- Review the submitted Safety Assessment and other supporting documentation and consider the impact of the chane.

ADR Changes
uiring Prior Appro



Procedure — Safety and Airspace Regulation Group Management System

ADR-OV-PR-009 — EASA Aerodrome Changes Requiring Prior Approval

Drafted/Modified by: Tony Heap — Issue No: 1

Approved by: Inez Bartolo — Date: 23 January 2017



Page 1 of 6

# Regulatory Approval Process

The process for gaining regulatory approval for both EASA certificated and National licensed aerodromes is detailed in Civil Aviation Publication CAP791. It is a three stage process:

- Part 1: Compliance
- Part 2: Control
- Part 3: Completion

For EASA aerodromes Form SRG2011 and for National Form SRG2006 should be submitted together with supporting documentation

# Regulatory Approval Process

**SRG2011 EU (UK) 139/2014 Certificated**

https://www.caa.co.uk/publication/download/15254

**SRG2006 National Licensed**

SRG2006Issue03 (caa.co.uk)

- For the Part 1 process (compliance) submissions should be supported with outline plans and detailed design drawings in order for CAA teams to evaluate and assess the compliance of the development/change.
- For the Part 2 process (control), method statements/works instructions etc should be provided in order to demonstrate that the works will be managed safely
- For the Part 3, on completion of the change, the aerodrome operator should confirm to the CAA that it meets the agreed design criteria and is fit for purpose

# Works in Progress – Control and Safety Management

EASA Requirement

ADR.OPS.B.070 Aerodrome works safety.

The aerodrome operator shall establish and implement procedures to ensure that:

- aircraft safety is not affected by aerodrome works; and
- aerodrome works safety is not affected by aerodrome operational activities.

# Management Works in Progress – Control and Safety Management

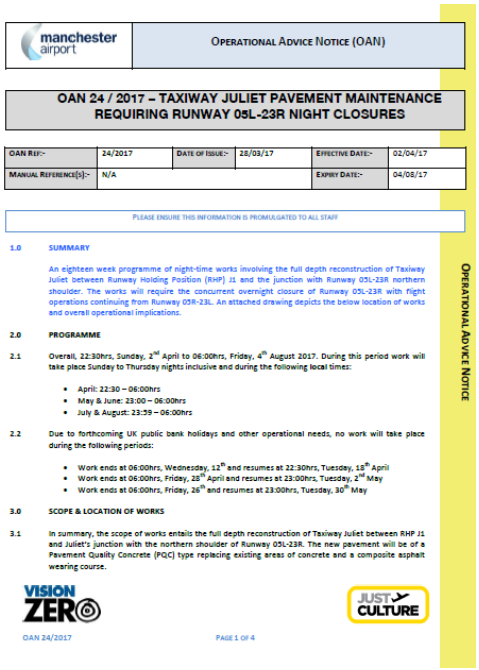
Issues to consider:

- A clear statement of the supervisory structure for the safety management and monitoring of works.
- Who has overall accountability for the project.
- Airfield Operating Procedures during the development, including contingencies such as effect on emergency procedures and impact of low visibility or adverse weather.
- Arrangements for liaison meetings/briefings between the aerodrome management and the contractors.
- Communications procedures between the aerodrome operating units (e.g. ATC, Airfield Operations) and works teams
- Work timings (day or night) and procedures following completion of each session.
- Access to the site and control measures if crossing a taxiway or runway.
- Lighting and marking.
- FOD control.
- Notification of the works to stakeholders: Safety Instructions, Notams, AIP amendments etc

# Works in Progress – Control and Safety Management

## Communication – Internal and external examples

MAN Ops Advice Notice



manchester airport

OPERATIONAL ADVICE NOTICE (OAN)

**OAN 24 / 2017 – TAXIWAY JULIET PAVEMENT MAINTENANCE REQUIRING RUNWAY 05L-23R NIGHT CLOSURES**

| | | | | | |
|---|---|---|---|---|---|
| OAN REF:- | 24/2017 | DATE OF ISSUE:- | 28/03/17 | EFFECTIVE DATE:- | 02/04/17 |
| MANUAL REFERENCE(S):- | N/A | | | EXPIRY DATE:- | 04/08/17 |

PLEASE ENSURE THIS INFORMATION IS PROMULGATED TO ALL STAFF

OPERATIONAL ADVICE NOTICE

**1.0 SUMMARY**

An eighteen week programme of night-time works involving the full depth reconstruction of Taxiway Juliet between Runway Holding Position (RHP) J1 and the junction with Runway 05L-23R northern shoulder. The works will require the concurrent overnight closure of Runway 05L-23R with flight operations continuing from Runway 05R-23L. An attached drawing depicts the below location of works and overall operational implications.

**2.0 PROGRAMME**

2.1 Overall, 22:30hrs, Sunday, 2nd April to 06:00hrs, Friday, 4th August 2017. During this period work will take place Sunday to Thursday nights inclusive and during the following local times:

- April: 22:30 – 06:00hrs
- May & June: 23:00 – 06:00hrs
- July & August: 23:59 – 06:00hrs

2.2 Due to forthcoming UK public bank holidays and other operational needs, no work will take place during the following periods:

- Work ends at 06:00hrs, Wednesday, 12th and resumes at 22:30hrs, Tuesday, 18th April
- Work ends at 06:00hrs, Friday, 28th April and resumes at 23:00hrs, Tuesday, 2nd May
- Work ends at 06:00hrs, Friday, 26th and resumes at 23:00hrs, Tuesday, 30th May

**3.0 SCOPE & LOCATION OF WORKS**

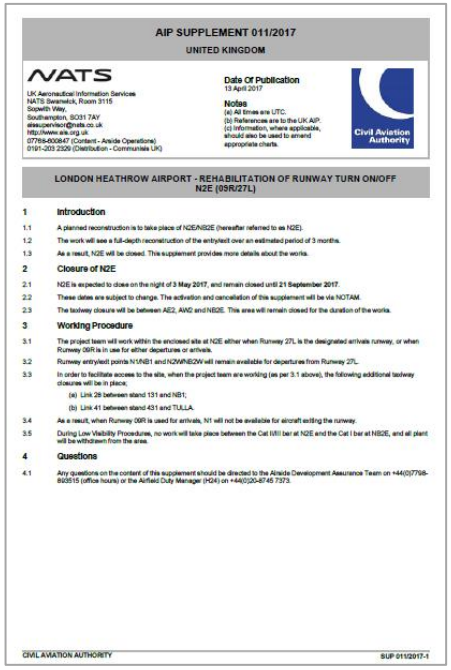
3.1 In summary, the scope of works entails the full depth reconstruction of Taxiway Juliet between RHP J1 and Juliet's junction with the northern shoulder of Runway 05L-23R. The new pavement will be of a Pavement Quality Concrete (PQC) type replacing existing areas of concrete and a composite asphalt wearing course.

VISION ZERO

JUST CULTURE

OAN 24/2017 PAGE 1 OF 4

LHR AIP Supplement



AIP SUPPLEMENT 011/2017

UNITED KINGDOM

NATS

UK Aeronautical Information Services
NATS Swanwick, Room 3115
Sopwith Way,
Southampton, SO31 7AY
aisesupervisor@nats.co.uk
http://www.ais.org.uk
07788-60084? (Content - Airside Operations)
0191-203 2329 (Distribution - Communiels UK)

Date Of Publication
19 April 2017

Notes
(a) All times are UTC.
(b) References are to the UK AIP.
(c) Information, where applicable, should also be used to amend appropriate charts.

Civil Aviation Authority

**LONDON HEATHROW AIRPORT - REHABILITATION OF RUNWAY TURN ON/OFF N2E (05R/27L)**

**1 Introduction**

1.1 A planned reconstruction is to take place of N2E/N52E (hereafter referred to as N2E).

1.2 The work will see a full-depth reconstruction of the entry/exit over an estimated period of 3 months.

1.3 As a result, N2E will be closed. This supplement provides more details about the works.

**2 Closure of N2E**

2.1 N2E is expected to close on the night of 3 May 2017, and remain closed until 21 September 2017.

2.2 These dates are subject to change. The activation and cancellation of this supplement will be via NOTAM.

2.3 The taxiway closure will be between AE2, AW2 and NB2E. This area will remain closed for the duration of the works.

**3 Working Procedure**

3.1 The project team will work within the enclosed site at N2E either when Runway 27L is the designated arrivals runway, or when Runway 09R is in use for either departures or arrivals.

3.2 Runway entry/exit points N1/NB1 and N2/WNB2W will remain available for departures from Runway 27L.

3.3 In order to facilitate access to the site, when the project team are working (as per 3.1 above), the following additional taxiway closures will be in place;

(a) Link 28 between stand 131 and NB1;

(b) Link 41 between stand 431 and TULLA.

3.4 As a result, when Runway 09R is used for arrivals, N1 will not be available for aircraft exiting the runway.

3.5 During Low Visibility Procedures, no work will take place between the Cat II/III bar at N2E and the Cat I bar at N52E, and all plant will be withdrawn from the area.

**4 Questions**

4.1 Any questions on the content of this supplement should be directed to the Airside Development Assurance Team on +44(0)7788-693515 (office hours) or the Airfield Duty Manager (H24) on +44(0)20-8745 7373.

CIVIL AVIATION AUTHORITY SUP 011/2017-1

# Aerodrome Operations
# Regulatory Approval Process

## Oversight Visits

For major infrastructure changes such as runway works, taxiway and/or apron extensions the CAA may carry out additional oversight visits to the aerodrome to verify that the design and safety management of the works is in accordance with the approvals given.

Any non-compliances or safety issues identified from these visits will be communicated to the accountable manager in the form of an audit report detailing the Findings or Observations at the time of the visit.

# Managing Changes - Summary

- Infrastructure developments require CAA approval in accordance with National and EASA regulatory requirements.
- Process for gaining CAA approval is detailed in CAP791 and is in three Parts:
  1. Compliance
  2. Control
  3. Completion
- Many issues to consider in the planning process and controlling the works
- Communicating the details internally and externally
- Appropriate works site markings/lighting
- Additional oversight visits may be carried out





# Any Questions?

# Airspace and Noise Engagement Group (ANEG)

*Wednesday 25 February 2026, 13:00 – 16:00 (online via MS Teams)*

Agenda

| No. | Item | Lead | Time |
|---|---|---|---|
| **0** | Introductions and apologies | Joe Delafield (Chair) | 13:00 – 13:05 |
| **1** | Minutes of last meeting and matters arising | Tim May | 13:05 – 13:10 |
| **2** | DfT updates<br>• Noise research publication<br>• Night Flight Regime from Oct 28<br>• Heathrow Expansion<br>• Airspace Modernisation | Tim May, Alice Philipson, Adam Spalding (DfT)<br><br>Darren Rhodes (CAA) | 13:10 – 14:05 |
| **3** | MHCLG updates<br>• House Buying and Selling Reform consultation next steps<br>• National Planning Policy Framework consultation | Tim May | 14:05 – 14:15 |
| **4** | DEFRA update | Ruth Waite | 14:15 – 14:25 |
| **-** | **Break** | **-** | **14:25 – 14:30** |
| **5** | CAA updates<br>• Noise envelopes<br>• Noise insulation | Darren Rhodes, Liji Mohan | 14:30 – 14:50 |
| **6** | Presentation from Sustainable Aviation (SA) on their second Noise Road-Map | Michael Glen | 14:50 – 15:30 |
| **7** | Community Update | Charles Lloyd, Andrew Lambourne | 15:30 – 15:50 |
| **8** | AOB | Chair | 15:50 – 16:00 |

## Attendance

| **Attendees** | **Apologies** |
|---|---|
| Joe Delafield (DfT) | Maddy Bauer (MHCLG) |
| Tim May (DfT) | Solange Baena (Airbus) |
| Adrian Eaton (DfT) | Paula Street (UKACCs) |
| Matt Payne (DfT) | |
| Georgia Court (DfT) | |
| Birgit Wosnitza (DfT) | |
| Meera Sharma (DfT) | |
| David Corinda (DfT) | |
| Alice Philipson (DfT) | |
| Adam Spalding (DfT) | |
| Ruth Waite (DEFRA) | |
| Ian Jopson (NATS) | |
| Chris Carter (BA) | |
| Rob Griggs (Airlines UK) | |
| Duncan Smith (Stansted Airport) | |
| Andy Sinclair (London Gatwick) | |
| Charles Lloyd (AEF) | |
| Darren Rhodes (CAA) | |
| Liji Mohan (CAA) | |
| Paul Beckford (HACAN) | |
| Andrew Lambourne (LADACAN) | |
| Peter Barclay (GACC) | |
| Samuel Harris (AICES) | |
| Chris Cain (SASIG) | |
| Michael Glen (SA) | |
| Guido Liguori (UKACCs) | |
| Benjamin Fenech (UK HSA) | |

## Minutes

### Item 0 – Introductions and apologies

- **JD** introduced himself for newcomers as Deputy Director for Aviation Decarbonisation and Environment at DfT.
- **MP** ran through apologies.
- **JD** summarised the planned agenda.

### Item 1 – Minutes and actions

- **TM** noted minutes from the last meeting had been circulated and comments received. This have been taken on board and minutes will be revised. Both actions from the last meeting have been completed.
- **BF** raised they are reviewing feedback to the consultation on the proposed new British Standard for residential acoustic design and this was expected to be published in the summer at the earliest. He would endeavour to keep the group updated on progress.

### Item 2 – DfT updates

***Noise research publication***

- **TM** updated on the Aviation Night Noise Effects (ANNE) study and the Impacts of Night Flights study (the York Aviation study). Both parts of ANNE were expected to be published in the first half of this year, subject to ministerial decisions. The first part of the York study was completed but the second part was still underway and due to be completed in Spring 2026. DfT would offer follow ups on these, possibly in June's ANEG meeting, but would consider a separate session if there is appetite from members.
- **DR** updated on the Aviation Noise Attitudes Survey (ANAS). Peer reviews resulted in further analytical work and amendments. The CAA anticipated a final report would be ready in mid-March, subject to publication clearance processes.
- **TM** noted the upcoming pre-election period for local elections which may impact publication.
- **JD** opened to points or questions.

- **CL** noted the ANNE study was overdue. Also felt that DfT had not responded fully to his last email on the York study. He did not think it should be used for policy making purposes.
- **PB (GACC)** endorsed Charles' comments.
- **PB (HACAN)** echoed comments. Noted lack of clarity from DfT over how research will be factored into ANPS review and airspace modernisation.
- **AS (GAL)** asked how confident DfT was that ANNE and ANAS would be published in first half of year? Useful to know for programming follow on work.

- **TM** noted DfT was pushing to get ANNE Part 1 published as soon as possible. Some factors outside of our control. CL's comments on the York report had been noted and passed to York Aviation who have taken them on board. The evidence would feed into the next policy review of the night flights regime.
- **JD** emphasised the importance of the reports in key upcoming ministerial decisions. Ministers had to make judgement calls around how to balance the evidence before them with other priorities.
- **CL** noted he did not believe the York study was only about the benefits of night flights and was ignoring economic disbenefits. He then raised another point on an SIMetrica report that he believed DfT should have published and not doing so put into question whether the conclusions to airport expansion planning inquiries should be allowed to stand.
- With regards to the SIMetrica report, **TM** set out that due to reprioritisation of work during the COVID-19 pandemic, the report was not taken forward to publication. We considered that the methodological approach taken in the upcoming ANNE and ANAS studies would provide a more robust, comprehensive and up-to-date evidence base on the impacts on aviation noise.
- **JD** noted that this is the Department's position on the matter.
- **GL** asked if CL could share the SIMetrica report with him.
- **PB (GACC)** noted recent DCO decisions at Gatwick and Luton and felt there could have been data with a direct impact on the decision that could have been presented to the planning authority.
- **JD** noted these points and moved to the next agenda item.

***Night Flight Regime from Oct 2028***

- **TM** provided an update on timelines around the next review of the night flight regime which would kick off later this year. ANNE and the Impact of Night Flights studies would form key evidence. A prior question would first be examined on whether ministers were still comfortable with government regulating night flights at designated airports. Assuming yes, we would start work on the next review. We were working towards a consultation in spring 2027. The timetable was assuming the completion of legislation going through Parliament to reduce the notice period for new noise-related operating restrictions at UK airports, following EU Exit and it being no longer necessary to allow six months for the EU Commission to provide its view. The next night flight regime would therefore need to be announced by February 2028 to come into force in October 2028. At June's ANEG we could discuss what engagement members would feel is appropriate on this.
- **CL** noted that communities thought there were gaps in what the Department had done. He was keen to understand what research and analysis was going into planning and to have the opportunity to comment.
- **JD** noted we would be happy to talk this through in June.

***Heathrow Expansion***

- **AP** set out the timelines of Heathrow Expansion decisions. The ANPS Review was underway. We recognised the noise impacts and noise was one of the government's four tests. We were updating our evidence base. We were reviewing the mitigations set out in the existing ANPS and whether these were still appropriate. Any changes would be subject to public consultation and parliamentary scrutiny. Expect to publish consultation in July. The Appraisal of Sustainability would be consulted on alongside the ANPS which would also include noise impacts.
- **JD** opened the floor to points and questions.

- **PB (HACAN)** asked how communities and noise groups could feed into the department on the ANPS as they were keen to engage. They would appreciate a forum to allow communities to share views.
- **AS (GAL)** asked for clarification of what would be published in July.
- **AP** noted she was happy to take comments offline. There would be a package of documents published in July.

***Airspace Modernisation***

- **AS** noted this would be the same update that was given at the Airspace Modernisation Stakeholder Engagement Group yesterday. We were analysing consultation responses for updates to the Air Navigation Directions (AND) and Guidance (ANG). Noise featured heavily in responses. There was a call for greater prioritisation of noise as part of the airspace change process. We received commentary from everyone regarding altitude-based priorities. Noted the key headlines and next steps being to complete analysis of responses, considering this alongside the noise studies. A government response document and updated AND/ANG would be published in the summer.
- **JD** opened the floor to points and questions.

- **GL** noted a proposal previously made in relation to involvement of community engagement. What was DfT's response to that proposal?
- **AL** noted the importance of timing around publication of the noise research and AND/ANG consultation government response as information ought to inform the ANPS consultation in the summer. Also raised that there were enabling technologies that could assist industry/communities with airspace modernisation.
- **CL** raised that at the AM Stakeholder Engagement Group yesterday no one supported the proposal to deprioritise noise between 4000 and 7000ft including airports represented at that meeting. What analysis had the department done on this? Also raised that the UKADS advisory board in summer had no community representation. Would like to understand why and whether the department will reverse the decision.

- **AS** noted the consultation was an initial proposal of proposed changes to gain feedback and that any future publication would be aligned with the broader work underway by the department. On the points around emerging technology, the purpose of the guidance was to set the high-level framework so that both the CAA and airspace change sponsors had the flexibility to design airspace structures how they sought best to meet their operational needs, including on the use of technology. On the points raised on what analysis had been undertaken on the change in altitude based priorities, AS stated this was underway and would be considered alongside the consultation responses and any further data received as part of the process including from the CAA and NATS. AS stated that the SEG forum would address CL's points on the UKADS advisory board. **JD** noted an **ACTION** for DfT to revert to CL on this via the SEG forum.
- **AL** noted that communities were struggling with engagement on airspace modernisation and would like to ensure his previous point on departure management systems and the potential to assist in delivering efficient design is not lost. **AS** noted this.

**Item 3 – MHCLG updates.**

- **JD** noted that Maddy Bauer informed us today she was unable to join to provide an update on this item. TM would update but would need to take comments away to MHCLG.

***House Buying and Selling Reform consultation next steps***

- TM noted the consultations closed on 29 December and MHCLG were currently analysing responses. Subject to the outcomes of this work, the government will publish a roadmap setting out further details of our reforms later this year.

***National Planning Policy Framework (NPPF) consultation***

- TM noted the consultation proposed the most significant rewrite to the NPPF since its introduction over a decade ago, with clearer, 'rules based' policies for decision-making and plan-making, designed to make planning policy easier to use and underpin the delivery of faster and simpler local plans.
- The wording relevant to housebuilding near airports was largely consistent with existing documents. There were opportunities here to make comments on the wording and its clarity whilst the consultation was still open. TM called for ANEG members to please respond with their views.
- **JD** opened the floor to points and questions to take away for MHCLG.

- **PB (HACAN)** asked how involved are MHCLG in the ANPS process? Councils were being asked to accommodate thousands of new homes.
- **GL** noted that in relation to House Buying and Selling consultation, UKACCs made recommendations about house buying. Will that not be covered by other consultation? **TM** noted that GL would not need to make same point in the NPPF

consultation as that covered different policy but may wish to respond to this anyway.

- **AP** noted DfT was working across government including with MHCLG. We'd had engagement on local plans and were aware of the different trade-offs.

**Item 4 – DEFRA update.**

- **RW** introduced herself, having recently taken on the role that Rhian Thomas previously held, and updated on staffing changes in DEFRA.
- The Interdepartmental Group on Costs and Benefits (Noise) (IGCB(N)) met in September last year. They were preparing a report to summarise progress since 2021 and it was intended to be published in the middle of this year.
- DEFRA were reviewing the CAA Noise Action Plan (NAP) report and meeting with DfT in the near future to discuss the CAA's recommendations and how to take these forward. A more substantial update would be provided to the next ANEG meeting.
- **JD** opened the floor to points and questions.

- **AL** asked if DEFRA were still carrying out reviews of NAPs?
- **CL** noted that the NAPs CAA report could be referred to as a missed opportunity and disappointing piece of work and that community groups had been disregarded. He would welcome the opportunity to speak to colleagues about how NAPs can be improved.
- **PB (HACAN)** asked whether the progress report on work since 2021 would include assessment of ANAS or ANNE. Would it be a summary report or would there be actions for transferring research into policy?
- **RW** noted DEFRA was planning on taking forward NAPs. Also, that we had not yet discussed the CAA review in detail but were still open to hearing community views on NAPs. On PB's point, DEFRA could not say exactly what the report would encompass but we would take an **ACTION** to consider the timings of such work with DfT.
- **AL** asked whether additional resources had been committed to enable the continuation of NAPs reviews. **RW** noted this was important work that we should give time to but could not comment on resourcing.

**Item 5 – CAA updates.**

***Noise envelopes***

- **DR** noted the CAA was asked by DfT to review their CAP1129 on noise envelopes. This was first published in December 2013. An update would need to take account of developments such as EU Regulation 598 and the use of envelopes, e.g. in the Gatwick DCO.
- The CAA were ready to update the document now and were currently making it more accessible.

- **JD** opened the floor to points and questions.

- **CL** noted this was important work. Community groups wanted to engage with the CAA on it. He made an observation that recommendations in CAP1129 had been extensively ignored in most planning processes. DfT had not endorsed CAP1129 as policy. An example being that the report said there should be a suite of metrics and no reliance on a sole metric. This had been ignored by planning inspectors and airports. He asked to speak to the CAA about what had worked and what had been ignored, and what could make the guidance work in the way it was intended to.
- **AL** endorsed CL's comments. He felt the CAP had been swept aside as not mandatory.
- **DR** acknowledged their comments and noted the CAA was happy to engage on this. **ACTION**

***Noise insulation***

- **LM** updated from the slides (**Annex A**).
- The project was looking at what changes need to be made to the noise insulation scheme policy. There was a steering group and workshop to look at the focus areas. Aimed to look at effectiveness of an airport's scheme and how it was implemented. Data collection had now been completed, and the CAA were currently collating the results. They hoped to get draft report to DfT by the end of March.
- **JD** opened the floor to points and questions.

- **CL** noted there was nothing raised about compensation policy here. People living under intensified flight paths would not be compensated. Why was this not in scope of the review?
- **PB (HACAN) –** asked if it looked at effectiveness of interventions or were there plans to do so? What were next steps?
- **LM –** stated that the scope started broad. It initially looked at effectiveness and relocation schemes and implementation. It was not looking at the effectiveness of interventions.
- **TM** drew a link between this and DR's update on noise envelopes. Both pieces of work related to extant policies dating back to 2013. This work would provide an evidence base on how well the policy was being implemented and help decide how it might be updated in future, should ministers want a policy refresh. We did not currently have any policy on a compensation scheme. This was a review of what airports were expected to do and not what they might be expected to do in future. The work already had a broad scope and it was not appropriate to extend it.
- **JD** noted this would be a useful one to return to.

**Item 6 – Sustainable Aviation's second Noise Road-Map.**

- **MG** introduced himself – Head of Airspace and Noise at AGS Airports Group.
- This roadmap was published in February 2025 and was an update of their first Roadmap published in 2013. He set out that the roadmap was a national picture and not based on individual airports.
- Headline finding was that UK aviation noise output was forecast to reduce by 35% in 2035 compared to 2019, despite a rise in air traffic movements. Alongside 'Necessary Actions' for industry and local authorities/communities, it also included these for the government such as accelerating airspace modernisation, delivering noise research, supporting R&D in aerospace technologies, supporting local authorities' ability to enforce land use planning controls around airports, and using operational restrictions as a last resort.
- *The slides for this update can be found at **Annex B**.*
- **JD** opened the floor to points and questions.

- **AL** raised concerns around continuous climb/descent operations (CCO/CDO) with regards to airspace modernisation. On new technologies he raised that some of these which can deliver benefits have had problems – noted that these potential issues should be mapped into future aspirations. Also, that from the community perspective whilst engagement with airports had increased, the power to influence had not increased. The valuable guidance the CAA produced was not mandated. Finally, raised the tension between industry desires and the wellbeing of local communities during the shoulder periods.
- **MG** clarified he worked for two airports who were delivering proposals under AMS. Every airport across the UK monitors CCO compliance. Also EUROCONTROL did a lot of work on this. They took best practice across Europe on how to implement CCO/CDO. This was a focus for industry as it provided noise benefits as well as reduced fuel consumption. Also noted that roadmaps would consider technologies issues. Also that from the airports' perspective they went above and beyond on community engagement. Finally, with regards to operating restrictions, what they see come out of the noise studies would be vital. Restrictions were a blunt tool but would provide benefits to communities on night noise – they needed to see the studies before implementing restrictions.
- **AL** alleged that CCO is not achieved by Luton and would hope this situation would not continue after airspace modernisation. **MG** noted the Roadmap covers all airports.
- **BF** noted that non-acoustic factors are relevant and queried whether ICAO may change the balanced approach to include this as a fifth pillar? Also raised issues around land use planning.
- **IJ** introduced himself as an SA representative for the Quieter Group. Noted the roadmap is a brilliant piece of work and technically backed. Queried AL's comments on refusing to compromise on CCO/CDO on airspace design process.

- **AL** noted CDO had been changed to only apply at 5000ft downwards. He did not want airspace designs by UKADS to continue that. It had been caused by interactions with other airports' flightpaths.
- **IJ** noted there were always trade-offs for maintaining safe airspace which was the number one priority. CCO and CDO were also priorities for airspace. Where interaction happens was where there would be trade-offs, with mind to noise and emissions. With regards to BF's point – this was subject to IACO WG2 which IJ was part of. He thought industry would like something more formal in there.
- **MG** noted there was lots going on across industry to understand non-acoustic factors. This feedback would be taken back to SA.
- **IJ** noted that as the roadmap was evidence based, non-acoustic factors were too difficult to quantify.
- **TM** noted this was a useful piece of work. Was there plan to monitor progress against this in interim? Was there scope for incorporating this with the CAA's environmental reporting work?
- **MG** noted the point. Work for a full refresh took a long time and they had already started to discuss how to keep this up to date.
- **JD** noted the importance of understanding whether progress was happening. He thanked MG for updating members on this.

**Item 7 – Community update.**

- **CL** felt communities were increasingly frustrated with the threat of more aircraft with government approving airport expansion as well as concerns about the consequences of AMS. He felt that this had become less about providing community benefits and more about increasing capacity for industry, with communities not being listened to. Also frustration that the noise studies were not being assigned high enough priority with ANNE/ANAS being published late and a lack of meaningful action on noise.
- **AL** noted he would provide an update on noise monitoring. He thanked DR for communication on this and that a common position had been reached. AL raised points regarding the process of monitoring aircraft noise and how raw data was collected and analysed to properly inform planning decisions and enforcement of planning conditions. He believed erroneous results were being produced. The CAA had produced CAP 3150 which addressed these issues. However, the note was described as best practice guidance that airports should follow. Noted it is arguable that it was in the best interest of all that the data was good and there should be a regulatory role particularly in the case of major airports.
- He then raised the A321 issue. He felt it was worth getting more data from Gatwick and doing a wider study with airlines and aircraft and looking back at noise certification data. Asked DR if he would like to add anything.
- **DR** noted the CAA were supportive of more data, however there was a need to develop a scope to make it proportionate. If they did more work it would need to be sponsored by DfT and they would need to consider resource implications.

- **AL** noted he hoped DfT will consider.
- **JD** noted DfT would take this away to consider. **ACTION.** Given limited funding, we needed to make decisions on most effective way to deploy that funding. Also, we did reflect community views in advice to DfT ministers.
- **CL** refuted the idea that ministers understand communities' views and noted he was not aware that the Secretary of State or Aviation Minister had spent time speaking to communities.
- **JD** noted his team tried to encourage engagement, however ultimately minsters decided the use of their time. We would take this point away. **ACTION.**

**Item 8 – AOB**

- **JD** asked if there was any AOB from members.
- **GL** asked if it would be possible for DfT and DEFRA to engage with MHCLG on a specific recommendation from the CAA NAP review. **JD** noted this as an **ACTION**.
- **JD** thanked members for their continued engagement and noted DfT were always open to feedback on how these meetings were run. He noted the next ANEG would take place on Thursday 25 June from 10:00 – 13:00.

UK Civil Aviation Authority

# UK Airports Noise Insulation Schemes Review

February 2026





# Background information – Noise Insulation Schemes

## Introduction to noise insulation schemes

The Department for Transport (DfT) has commissioned the UK Civil Aviation Authority (CAA) to conduct a comprehensive review of airport noise insulation schemes currently in place across the UK.

Noise insulation schemes aim to mitigate the adverse impacts of aviation noise on residential and other noise-sensitive building in close proximity to airports. They provide physical improvements in the form of sound insulation measures to maintain acceptable internal noise levels.

Airport noise insulation policies in the UK are primarily shaped by the Aviation Policy Framework (2013) and updated guidance from the 2017 Airspace Policy.

These schemes are typically funded and administered by airport operators, and form part of their community engagement and noise management strategies. Airports have flexibility to tailor their schemes with regards to their operating environment. Many airports use the 63 dB $L_{Aeq,16h}$ contour in the current policy as a benchmark threshold for household insulation assistance, but many also choose to use a lower threshold as part of their own schemes. In practice, airports may modify their insulation scheme boundaries to reflect local geography, and some may implement supplementary schemes for night-time noise.

This review has come from a request to understand how airports are implementing Noise Insulation Schemes in the context of a policy framework set in 2013 (amended in 2017) and if revisions are required to this policy.

# Background information - Key policy context

The **Aviation Policy Framework** (2013) – Chapter 3 of APF covers noise:

*The impact of aviation noise must be mitigated as much as is practicable and realistic to do so, limiting, and where possible reducing, the total adverse impacts on health and quality of life from aviation noise.*



## Summary of thresholds:

≥69 dB LAeq,16h – *Relocation support*
≥63 dB LAeq,16h – *Insulation for schools/hospitals*
≥63 dB – *Insulation for homes*

**Common Benchmark**: 63 dB $L_{Aeq,16h}$

**Noise insulation and compensation**

**3.36** The Government continues to expect airport operators to offer households exposed to levels of noise of 69 dB LAeq,16h or more, assistance with the costs of moving.

**3.37** The Government also expects airport operators to offer acoustic insulation to noise-sensitive buildings, such as schools and hospitals, exposed to levels of noise of 63 dB LAeq,16h or more. Where acoustic insulation cannot provide an appropriate or cost-effective solution, alternative mitigation measures should be offered.

**3.38** If no such schemes already exist, airport operators should consider financial assistance towards acoustic insulation for households. Where compensation schemes have been in place for many years and there are few properties still eligible for compensation, airport operators should review their schemes to ensure they remain reasonable and proportionate.

**3.39** Where airport operators are considering developments which result in an increase in noise, they should review their compensation schemes to ensure that they offer appropriate compensation to those potentially affected.

**3.40** Any potential proposals for new nationally significant airport development projects following any Government decision on future recommendation(s) from the Airports Commission would need to consider tailored compensation schemes where appropriate, which would be subject to separate consultation.

**3.41** Airports may wish to use alternative criteria or have additional schemes based on night noise where night flights are an issue. Airport consultative committees should be involved in reviewing schemes and invited to give views on the criteria to be used.

# Project Aim and Objectives

**Assess how different UK airports interpret and implement the current noise insulation policy, focusing on the following areas:**

1. Eligibility criteria used by airports to offer noise insulation
2. Level and scope of insulation offered
3. Treatment of exceptional or complex cases (e.g. listed buildings, conservation areas)
4. Approaches to boundary issues (e.g. communities split by eligibility lines)
5. Financial implications for airports, including comparison of scheme costs relative to airport turnover, size, or activity levels (e.g. ATMs or passenger numbers)

# Project scope & Governance

## In scope

- a comparative analysis of different airports across the UK
- a literature review of equivalent noise insulation policy within the road and rail sector

## Out of Scope

- Noise insulation and their influence in public attitudes
- International comparisons
- Effectiveness of noise insulation schemes due to the complexity associated with defining and measuring effectiveness, this important aspect of the project will be considered at a later stage, subject to funding

# Project governance

**Sponsor** : Dept. for Transport
**Project Lead and management:** CAA
**Steering Group** : CAA, CAA's ERCD, DfT, UKHSA, Defra

# Methodology

- Literature review
- Establishment of a Steering Group
- Identifying the focus areas and development of project objectives
- Questionnaire design
- Data collection
- Results and conclusions

| Section 1: Introductory Questions | |
|---|---|
| 1 | Airport Details: |
| | |
| 2 | Please provide us with any links to your airport's current Noise Insulation Scheme(s). Please email any additional documents to: liji.mohan@caa.co.uk |
| | |
| 3 | Please specify the name of your Noise Insulation Scheme/Schemes: |
| | |
| 4 | What is the noise related eligibility criteria used? If other, please specify: |
| | - 63 dB $L_{Aeq,16h}$ |
| | - Other (please specify): |
| 5 | How many properties currently fall within the eligible boundary/boundaries? Please provide details for residential, noise-sensitive and non-residential including building types: |
| | |
| 6 | What is the total number of residential buildings insulated /proposed to insulate as part of this scheme? |
| | |
| 7 | Is the scheme ongoing or completed? |
| | - Ongoing: |
| | - Completed: |
| 8 | What is the scheme duration: start date and end date/proposed end date: |
| | |
| 9 | Is the scheme fully funded by the airport? |
| | - Yes |
| | - No |
| 10 | If not fully funded, how much is funded? Please provide percentage and/or value: |
| | |
| 11 | Is there a funding cap i.e. a limit payable to an individual residence or spending cap on an individual residence? |
| | - Yes |
| | - No |
| 12 | If yes, please specify: |
| | |
| 13 | Is this a glazing-only scheme? |
| | - Yes |
| | - No |
| 14 | Is this inclusive of heating and ventilation? |
| | - Yes |
| | - No |
| 15 | Is there a development consent order or other planning condition or agreement, i.e. section 106 in place legally binding the airport to provide insulation? |
| | - Yes |
| | - No |
| 16 | If yes, please specify: |
| | |
| 17 | Is there any follow up or post insulation inspection? |
| | |
| 18 | If yes, please specify: |
| | |
| 19 | Do you have a prioritisation mechanism in place for insulation of households? |
| | |
| 20 | If yes, please provide details of prioritisation process: |
| | |
| **Section 2: Financial Data** | |
| 21 | What is the noise insulation budget? Please specify if this is annual or overall budget: |
| | |
| 22 | Does this amount include administration fees? |
| | - Yes |
| | - No |
| 23 | How is the annual budget for noise insulation determined (e.g. fixed amount, index linked, linked to air traffic movement)? |
| | |
| 24 | What has been the total budget for noise insulation schemes each year for the past 5 years? |
| | |
| 25 | How does the airport forecast future insulation costs (e.g. inflation, material cost trends)? |
| | |
| 26 | Are there any penalties or incentives linked to under/over-spending? |
| | - Yes |
| | - No |
| 27 | If yes, please specify: |
| | |
| 28 | What is the average cost to insulate the property per year? |
| | |
| 29 | Do you have different schemes for residential, noise-sensitive and non-residential properties? |
| | - Yes |
| | - No |
| 30 | If yes, please specify: |
| | |
| 31 | What is the financial split between residential, noise-sensitive and non-residential properties? |
| | |
| **Section 3: Eligibility Criteria** | |
| 32 | What is the process for deciding the criteria regarding noise contours? |
| | |
| 33 | Are there any other criteria for eligibility (e.g. health consideration of residents)? |
| | - Yes |
| | - No |

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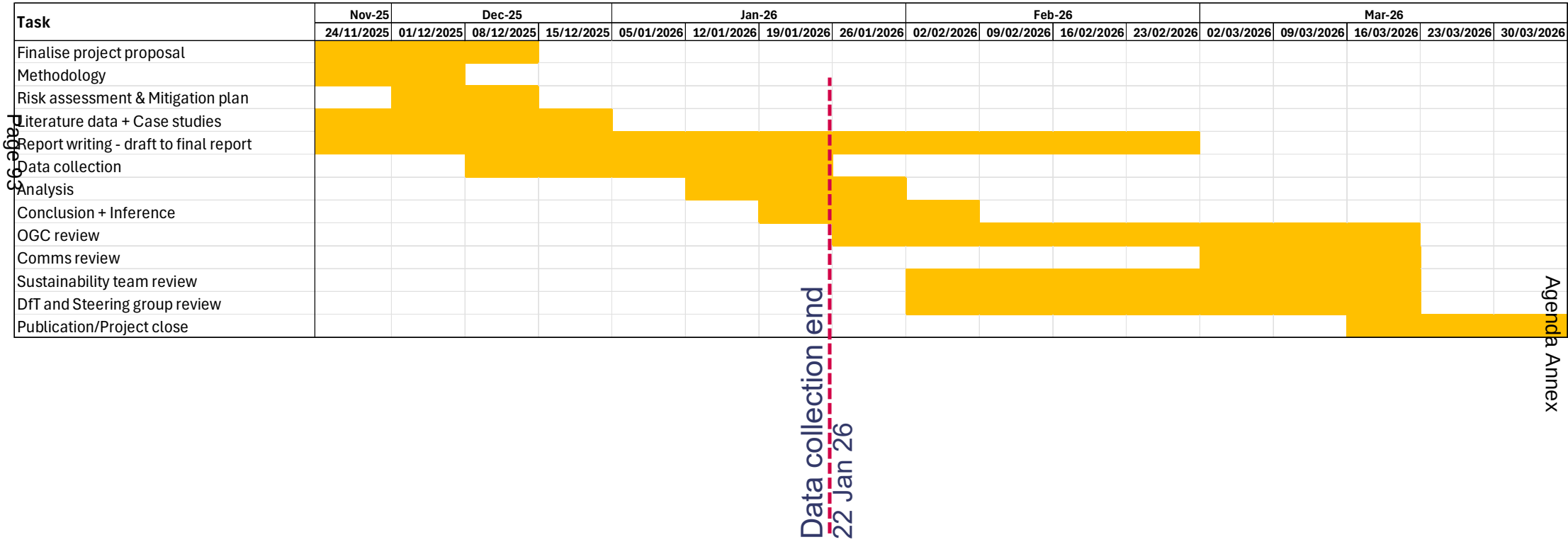
| | |
|---|---|
| 34 | If yes, please specify: |
| | |
| 35 | For residential properties that fall outside the eligible noise contour, is there a mechanism for provision of insulation under special circumstances such as residents dealing with health issues? |
| | - Yes |
| | - No |
| 36 | If yes, please specify: |
| | |
| 37 | If yes, how many residences outside the eligibility contour were provided noise insulation based on appeal via other criteria over the scheme period? |
| | |
| 38 | How often is the number of eligible properties updated and/or reviewed? |
| | |
| **Section 4: Level and Scope of Insulation** | |
| 39 | What is your standard noise insulation offer (e.g. ventilation + windows + loft insulation)? |
| | |
| 40 | What is the rate of uptake for fully funded schemes? Please give information per year or for a specific timeframe: |
| | |
| 41 | How many households declined the offer? Please give information per year or for a specific timeframe: |
| | |
| 42 | How does uptake vary by property type (flat, terraced, detached house, rental/owner occupied), property value or deprivation index? Please provide quantitative data where possible: |
| | |
| 43 | Does your airport have policies for listed buildings or conservation areas? |
| | - Yes |
| | - No |
| 44 | If yes, please specify: |
| | |
| 45 | Does your airport have an appeal or review mechanism for boundary cases? |
| | - Yes |
| | - No |
| 46 | If yes, please specify: |
| | |
| **Section 5: Relocation Schemes** | |
| 47 | What scheme do you have in place for houses in the 69 dB $L_{Aeq,16h}$ contour? |
| | |
| 48 | How many houses have you assisted with moving from within this contour since the scheme started? |
| | |
| 49 | What costs are included in the scheme? |
| | |

| | |
|---|---|
| **Section 6: Additional Questions** | |
| 50 | How has the scheme changed since its introduction? Or, if the scheme has been in place longer than 20 years, over the past 20 years? |
| | |
| 51 | Are there plans to change the scheme in the future? |
| | |
| 52 | Please provide any additional information you feel is relevant: |
| | |

UK Civil Aviation Authority

# Project Updates

- Data collection ended
- Currently collating results
- Draft results and report to the DfT by end of March



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# Sustainable Aviation Noise Road-Map

## Delivering a sustainable future for UK aviation since 2005

Mike Glen – Vice Chair for Sustainable Aviation Quieter
Head of Airspace and Noise – AGS Airports

# The Sustainable Aviation Noise Roadmap Purpose

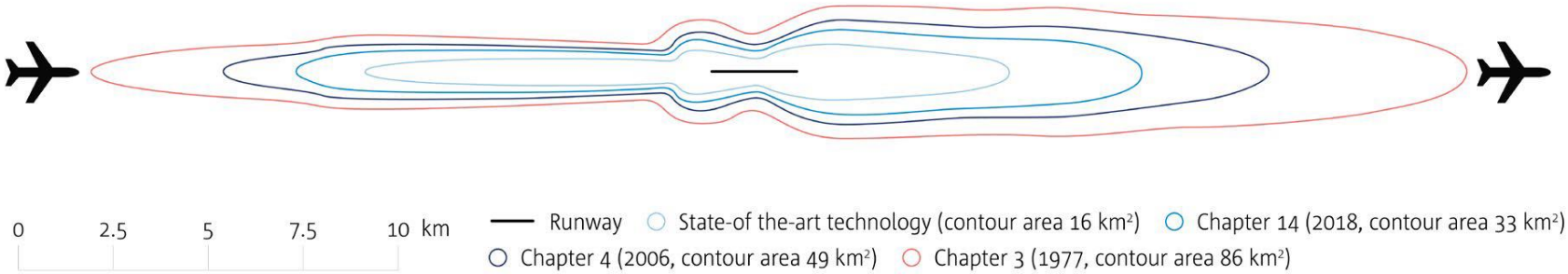
- Update on 2013 Roadmap
- Sets out the future trajectory of noise output
- Shares best practice amongst industry operators
- Sets out recommendations for future action
- It presents an overview of aircraft noise at a UK level. It does not, nor should it be interpreted as, providing details for any specific Airport.

# The Sustainable Aviation Noise Roadmap

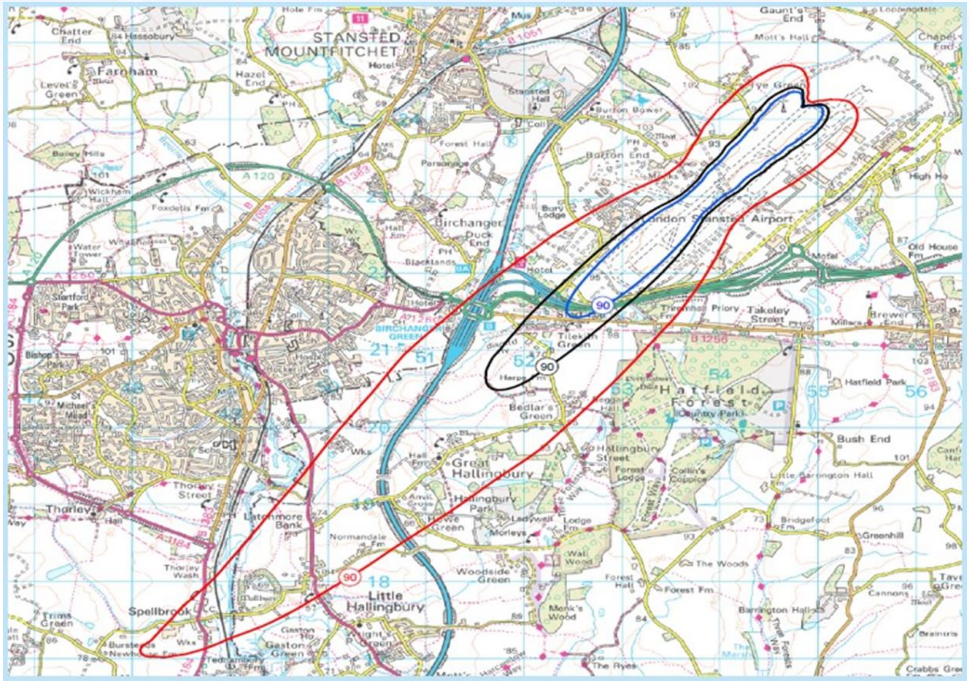
## Topics included

- Noise Output Scenarios and Forecasts
- Aviation Noise and Technology
- Operational Improvement Opportunities
- Land use Planning Opportunities
- Noise Communication and Community Engagement
- Operating Restrictions

**Figure 3.1** Single landing and take-off 80 dB noise contours for aircraft that just meet the noise limits of the Annex 16 Volume I chapters plus a state-of-the-art in-production aircraft



# Continually Improving Aircraft Technology




**B737-200**

**B737-800**

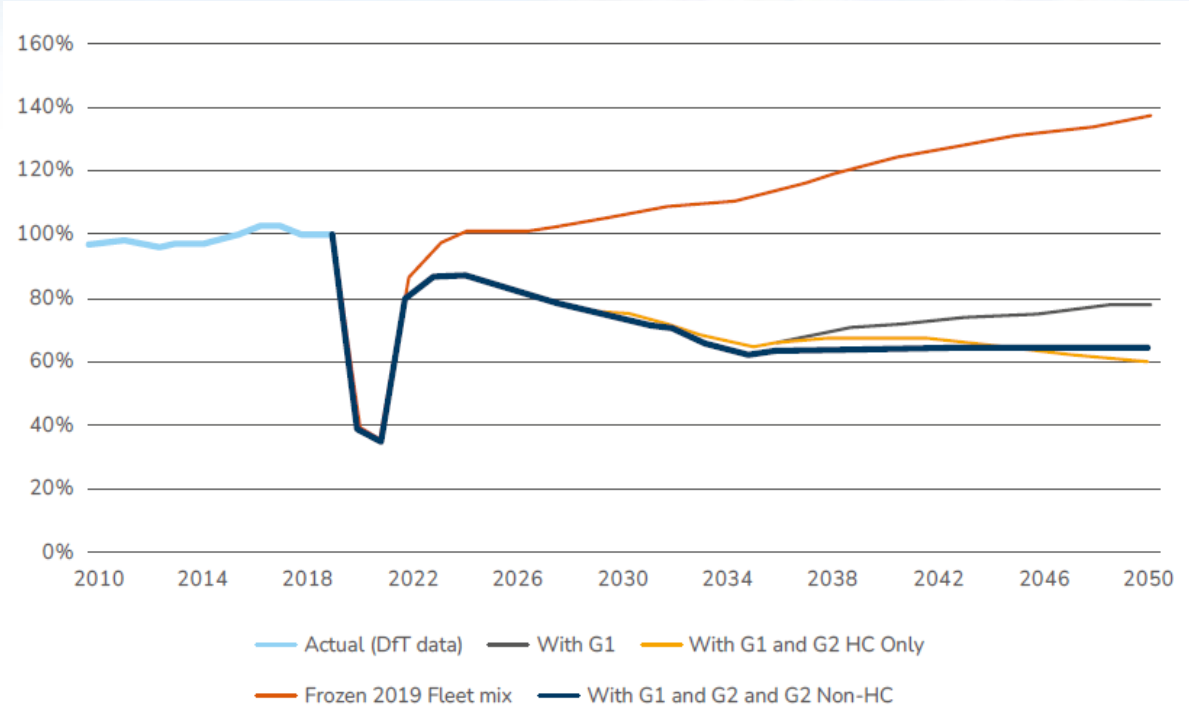
**B737-MAX**

# Continually Improving Aircraft Technology

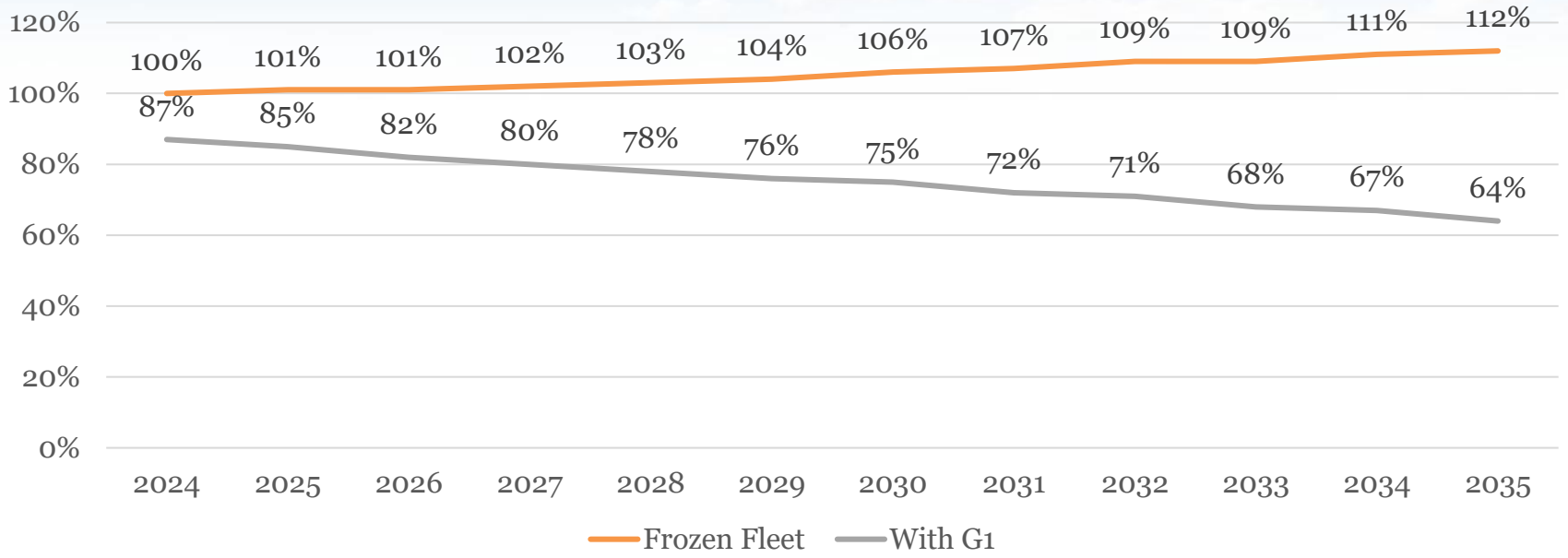
Departure noise data for 73H vs 737-8200 – January 2023 to September 2023 (inclusive)

| Destination | | | | |
|---|---|---|---|---|
| | 737-800 ( No of Ops / average dB) | 737-8200 ( No of Ops / average dB) | 737-800 ( No of Ops / average dB) | 737-8200 ( No of Ops / average dB) |
| Bergamo (BGY) | 287 / 76.39 | 101 / 73.00 | 466 / 72.59 | 220 / 69.03 |
| Dublin (DUB) | 539 / 76.01 | 194 / 72.46 | 975 / 74.72 | 334 / 71.67 |
| Krakow (KRK) | 152 / 77.24 | 112 / 73.92 | 240 / 73.19 | 196 / 69.51 |
| Modlin (WMI) | 141 / 76.85 | 137 / 73.58 | 275 / 72.71 | 235 / 69.23 |

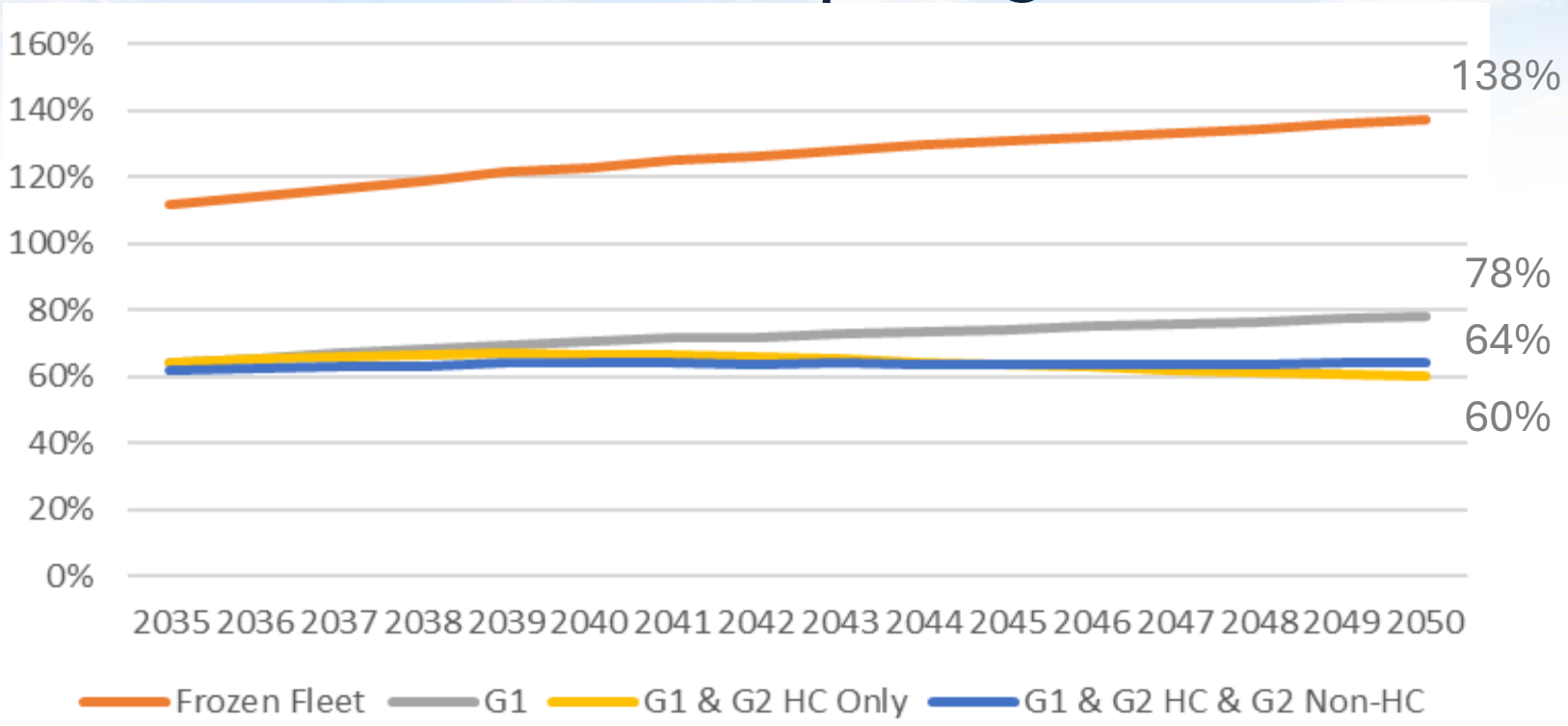
# Sustainable Aviation Noise Roadmap 2024



# Noise Roadmap included G1 fleet growth

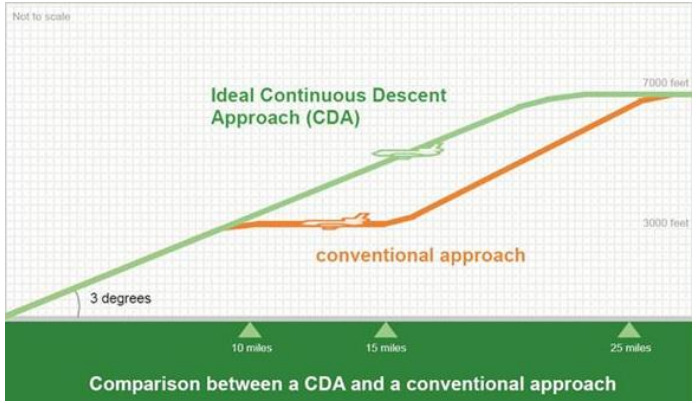


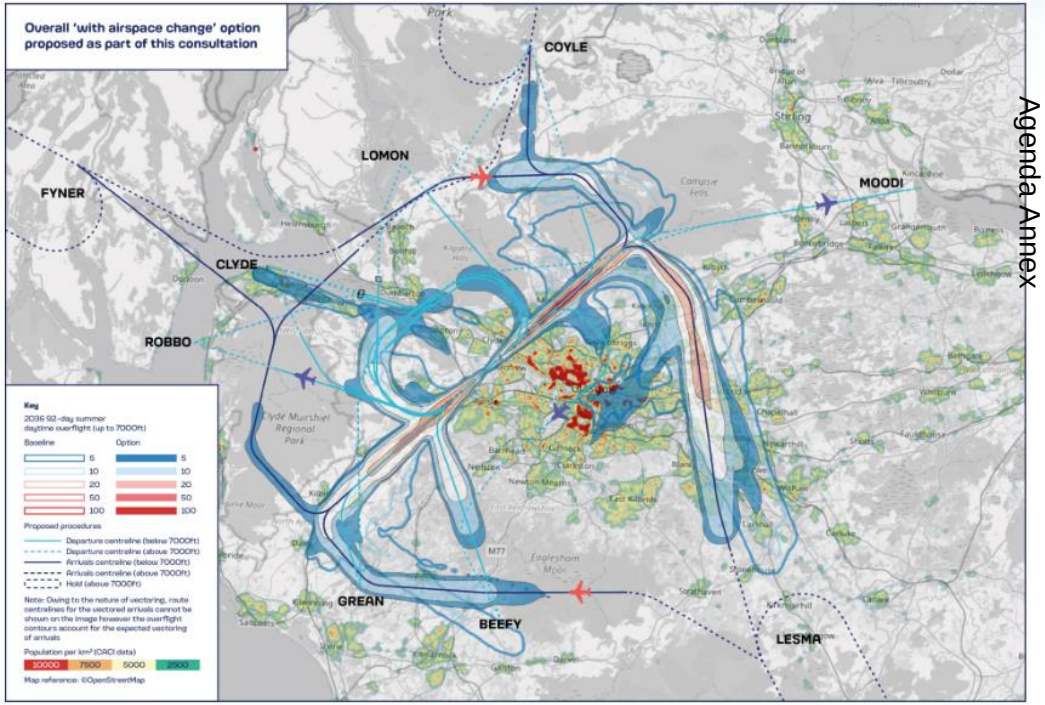
# Noise Roadmap long term forecast



# Using the Balanced Approach Operational Improvements

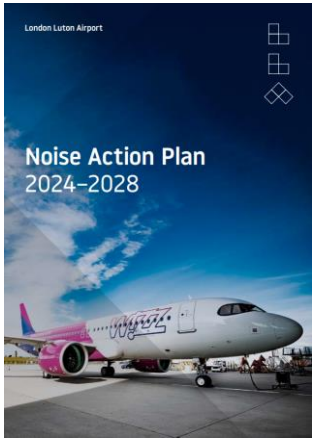
1 to 5 dB(A) reduction can be expected from operational improvements, most of these can only be realised fully through airspace change.



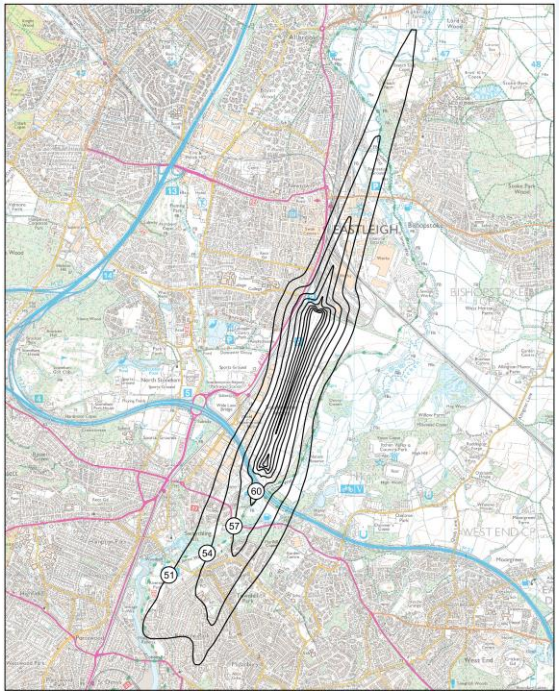



# Using the Balanced Approach Land Use Planning

Aviation Industry should be considered in local planning policy to help reduce the impacts of airport encroachment.





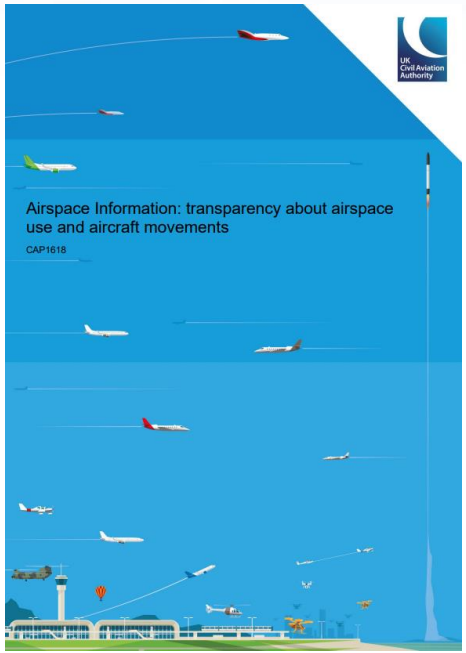


# Using the Balanced Approach
# Noise Comms and Community Engagement





Since the 2013 roadmap the industry has made progress in the range and type of engagement and communication.



# Using the Balanced Approach Operating Restrictions

Operating restrictions are a blunt way of reducing noise impacts from aviation. They do not encourage progressive holistic improvement in noise management. In line with the ICAO balanced approach, SA considers operational restrictions to be a measure of last resort. Where used they should focus on the noisiest remaining aircraft.

- Night Movement Limits
- Night Noise Quota Limits
- Noise Contour Area Limits
- Annual Movement Limits
- Runway use restrictions / preferential runway
- Aircraft type scheduling/operating restrictions
- Ground movement/stand activity/engine testing restrictions
- Planning Conditions (inc S106 agreements)

# The Way Forward

- SA is committed to developing ways to limit and where possible reduce the number of people adversely affected by aircraft noise.
- The Roadmap is a toolkit to help all parts of the UK Aviation Industry assess and implement strategies to reduce noise from aircraft operations.
- Continued investment into research into ways to reduce the effects of aircraft noise is required to ensure the downward trend for aviation noise continues from the mid-2030's onwards.
- This work needs to be in conjunction with delivering a reduction in greenhouse gas and local air quality emissions with the aircraft fleet.

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**Any Questions?**


COMMUNITY INVOLVEMENT IN AIRSPACE MODERNISATION
Aviation Environment Federation
24 February 2026
aef Aviation Environment Federation

# Summary

Recent DfT/CAA consultations have consistently proposed measures that would diminish the involvement of impacted residents and community groups in airspace changes and the airspace modernisation programme as a whole.

They have also assigned absolute priority to industry capacity maximisation objectives at the expense of environmental and community objectives.

Taken together these proposals would deprive impacted residents of any meaningful voice in the airspace modernisation process.

The programme would explicitly be delivered by the aviation industry, for the industry, with no serious account taken of community or other stakeholder views.

# ANG/AND consultation

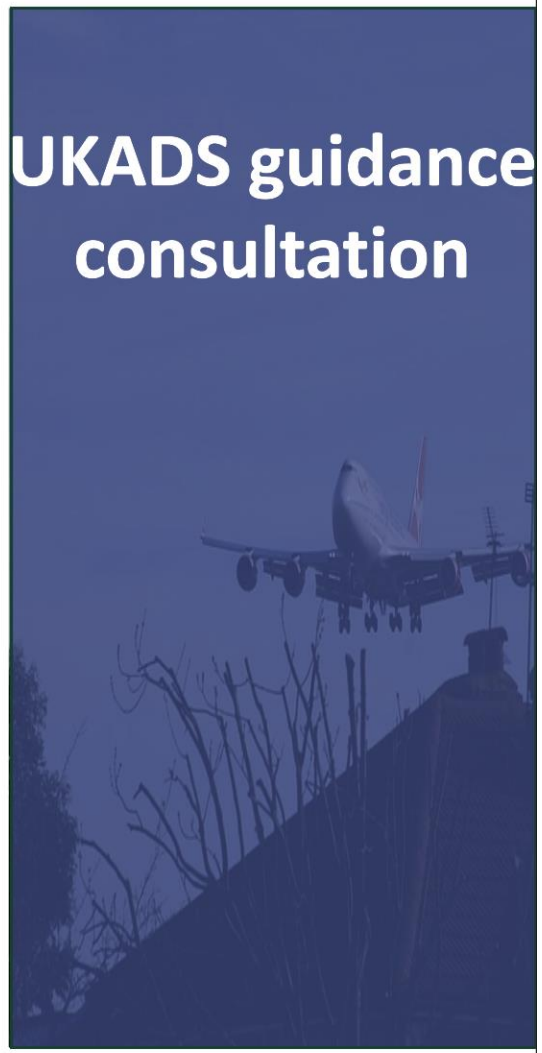
1. **Change to altitude priorities deprioritising noise from 4-7,000 feet**
   - Unsupported assertion that the current priorities are confusing and ambiguous, often requiring additional scenarios that take longer to assess, i.e. a perception that it slows the process down
   - No evidence of emissions (or other) benefits; benefits likely to be trivial whereas noise impacts could be significant
   - 4-7,000 feet is exactly the altitude at which noise minimisation could and should be meaningful and prioritised

2. **Proposal to concentrate noise in areas where it is currently experienced**
   - No assessment of the health, mental health and economic impacts of concentrated noise
   - No attempt to take account of the effects of projected ATM growth on those impacts

3. **No compensation for people whose properties are devalued by new or more intensive flight paths**
   - No serious or credible defence of the current policy position
   - No attempt to explain compatibility with the polluter pays principle

4. **Numerous other concerns including on trials, NPRs and use of local authorities in consultations.**

# UKADS guidance consultation



**1** **Exclusion of community representatives from UKADS Advisory Board**

- Government has reversed its position since UKADS 1 guidance in summer 2025 which expected the AB to include community representation
- No coherent reason for this change in position
- Community representatives have a strong interest in holding UKADS to account on overarching issues

**2** **Excessively narrow and partial engagement objectives**

- Engagement is "*to address the impact on stakeholders of the [introduction] of UKADS*" and to "*promote … the work of the UKADS …and the benefits of airspace modernisation*".
- Inappropriately focussed propaganda exercise
- No requirement to publish alternative approaches considered, assumptions used, or trade-offs made in developing proposals

**3** **FoI exemption**

- NERL should be subject to Freedom of Information Act 2000 or equivalent statutory disclosure obligations when exercising UKADS and UKACS functions.

# Airspace change process (CAP 1616) consultation

**1 Fewer gateways and appraisals**

- Less regulatory oversight, later
- Reduced opportunities for stakeholders to express views, potentially too late; likely to further diminish the account taken of community concerns
- Less transparency and accountability

**2 Proposal to focus on representative level engagement**

- Discriminates against local people and communities

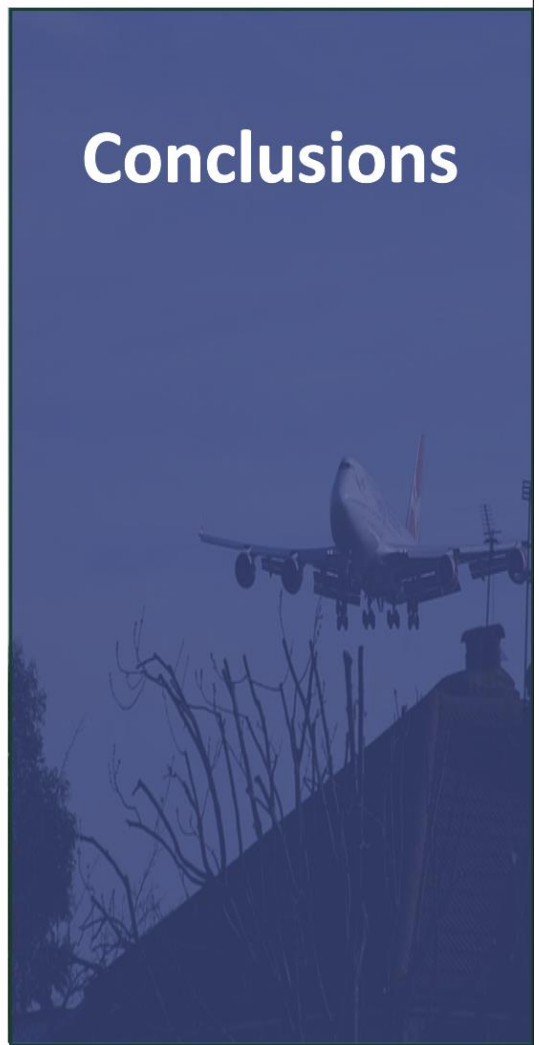
**3 Inappropriate metrics proposals**

- Airspace modernisation is primarily a capacity enhancement programme and will directly increase capacity at some airports; removing capacity metrics would deprive stakeholders of key data and should be unthinkable
- Use of LAeq metrics up to 4,000 feet only would exclude substantial community impacts

**4 Removal of PIRs**

- Verifying that a change has achieved its intended outcomes must be a fundamental part of the process
- Focussing the proposed airspace performance review programme solely on safety and efficiency is inappropriate. Noise must be a key criterion.

# Conclusions



**Absolute prioritisation of capacity maximisation**

**Growing hostility to community involvement:**

- DfT and the CAA appear to want to remove local people and communities as meaningful stakeholders in airspace modernisation and to impose significant costs on them
- Notable change in tone and substance since the election

**Current approach is storing up problems for the future**

**Still opportunities for a reset, but requires decisive action by government and the CAA now**

# Strategic Aviation Special Interest Group (SASIG)

4 Beacon Avenue, Kings Hill, West Malling, Kent ME19 4QL
Tel: 01732 220256 | secretariat@sasig.org.uk | www.sasig.org.uk

**FORMAL CONSULTATION RESPONSE**

Department for Energy Security and Net Zero

**Consultation:** Permitted Development Rights for Onshore Wind Turbines in England

**Consultation period:** 18 March 2026 – 10 June 2026

**Submitted by:** Strategic Aviation Special Interest Group (SASIG) of the Local Government Association (LGA)

**Date of submission:** June 2026

## Executive Summary

SASIG — the Strategic Aviation Special Interest Group of the Local Government Association — represents Local Planning Authorities (LPAs) across England that carry aerodrome safeguarding responsibilities. We welcome this consultation and support the Government's commitment to accelerating clean energy deployment and achieving Net Zero by 2030.

However, SASIG has significant concerns about the proposed expansion of Permitted Development Rights (PDRs) for onshore wind turbines and its implications for aviation safety, airspace integrity, and the established safeguarding framework that LPAs currently operate within.

Our principal concerns are:

- The proposed PDR framework, as currently designed, risks removing or significantly reducing the formal consultation mechanisms through which aerodrome operators are engaged in the assessment of wind turbine proposals.
- Aviation safeguarding — encompassing radar interference, obstacle limitation surfaces, and airspace protection — is insufficiently specified within the proposed conditions and prior approval criteria.
- Cumulative impacts from multiple small-scale turbines installed under PDR, which individually may appear low-risk, are not adequately addressed and could collectively compromise radar and aviation safety.
- Military aviation and Ministry of Defence (MOD) safeguarding considerations require explicit recognition within the PDR framework.

SASIG urges the Government to ensure that any new PDR for onshore wind turbines contains **mandatory aviation consultation, explicit safeguarding integration, proportionate radar impact assessment requirements, and robust cumulative impact mechanisms**. Aviation safety must not be compromised in the pursuit of renewable energy targets.

## About SASIG

The Strategic Aviation Special Interest Group (SASIG) is the national body representing Local Planning Authorities in England, Scotland, and Wales that hold statutory aerodrome safeguarding responsibilities under the Town and Country Planning (Safeguarded Aerodromes, Technical Sites and Military Explosives Storage Areas) Direction 2002 and related instruments.

LPAs with aerodrome safeguarding responsibilities are required to consult aerodrome operators on planning applications that could affect aviation operations. This includes development within defined safeguarding zones — typically 15 km (statutory) and up to 32 km (advisory) from designated aerodromes — that may affect radar systems, obstacle limitation surfaces (OLS), navigation aids, or flight paths.

Wind turbines represent one of the most technically complex categories of development from an aviation safeguarding perspective. They can:

- Cause primary surveillance radar (PSR) clutter, masking, and false returns;
- Affect the performance of secondary surveillance radar (SSR) and navigation aids;
- Penetrate obstacle limitation surfaces, creating physical hazards to low-flying aircraft;
- Affect instrument approach procedures and departure routes, particularly at smaller aerodromes.

SASIG member authorities include the LPAs responsible for safeguarding for major international airports, regional airports, general aviation aerodromes, and military airfields across England. Our response is informed by the collective operational experience of these authorities and the aerodrome operators they work with.

## General Position

SASIG acknowledges and supports the Government's ambition to expand onshore wind energy as a key pillar of the Clean Power 2030 Action Plan. Onshore wind is a mature, cost-effective technology that has a vital role in the transition to a low-carbon energy system, supporting economic growth, energy security, and decarbonisation.

We also recognise the specific rationale for extending PDRs to small-scale, non-domestic installations — enabling farms, businesses, and public sector organisations to benefit from microgeneration without the administrative burden of a full planning application is a reasonable and proportionate policy objective.

**However, SASIG has a fundamental concern:** the proposed PDR framework, as currently drafted, does not adequately safeguard aviation operations and airspace safety.

The transition from full planning applications to PDR represents a significant policy shift. Under full planning permission, LPAs routinely consult aerodrome operators as part of the statutory process. This consultation mechanism is a critical component of the safeguarding system. Under PDR — even where prior approval is required — the scope of matters to be

considered is more limited, and there is no guarantee that aviation safeguarding will be addressed at all.

SASIG does not consider this to be an acceptable outcome. Aviation safety is not a matter that can be left to chance, applicant self-assessment, or voluntary notification. The consequences of inadequate safeguarding — interference with radar systems, penetration of obstacle limitation surfaces, and conflicts with flight paths — can have irreversible safety consequences.

## Responses to Consultation Questions

### Question 1: Eligible Contexts

| **Question 1a: Do you agree that a new PDR should be introduced for a wind turbine in non-domestic settings?** | |
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| **SASIG Response:** | **Yes — with significant qualifications** |
| **Explanation:** | SASIG does not object in principle to the introduction of a PDR for small-scale, non-domestic wind turbines. The policy objective of supporting businesses, farms, and public sector organisations to achieve energy independence and decarbonise their operations is sound.<br>However, our support is conditional upon the PDR framework containing robust and mandatory aviation safeguarding provisions. The introduction of a PDR without such provisions would represent a significant and unacceptable weakening of the current safeguarding system.<br>In particular, SASIG considers it essential that: (i) aviation safeguarding is explicitly included as a matter for prior approval; (ii) development within aerodrome safeguarding zones triggers mandatory consultation with the relevant aerodrome operator; and (iii) the LPA retains full discretion to refuse prior approval on aviation safety grounds.<br>Subject to these conditions being met, SASIG supports the principle of PDR for small-scale non-domestic wind turbines. |

### Question 2: Number of Turbines

| **Question 2a: Do you agree that this PDR should be limited to a single turbine within the boundary of the curtilage?** | |
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| **SASIG Response:** | **Yes — but cumulative impacts must be separately addressed** |
| **Explanation:** | SASIG supports the proposal to limit individual PDR applications to a single turbine. From an aviation safeguarding perspective, this provides a degree of constraint on individual site impacts.<br>However, SASIG wishes to emphasise that restricting each application to a single turbine does not, of itself, address the cumulative impact risk. Multiple neighbouring landowners within a safeguarding zone |

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| | could each install a single turbine under PDR, and the aggregate impact of these installations on radar, airspace, and aviation safety could be substantial.<br>The consultation acknowledges this risk but does not propose a mechanism to manage it. SASIG strongly recommends that the PDR framework includes a national tracking and notification mechanism, and a requirement for cumulative assessment in defined safeguarding zones. This is discussed further in our response to Question 8 and our general recommendations. |

## Question 3: Size Limits

| **Question 3a / 3c: Do you agree with a maximum 30 metre tip height and 200m² swept area?** | |
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| **SASIG Response:** | **Qualified yes — but 30m tip height is not 'low risk' from an aviation perspective** |
| **Explanation:** | SASIG notes that the proposed 30m tip height limit aligns with other UK definitions of small-scale wind. However, from an aviation safeguarding perspective, a 30m structure is not inherently low-risk. At smaller aerodromes — particularly general aviation airfields and grass strip operations — obstacle limitation surfaces can extend across a wide area and may be penetrated by structures significantly lower than 30m, depending on proximity and orientation.<br>Furthermore, the relationship between tip height and hub height is relevant to EIA screening thresholds. As the consultation document acknowledges (Figure 2), a turbine with a 30m tip height could have a hub height in excess of 15m, triggering EIA screening obligations. LPAs and applicants should be clearly guided on this interaction.<br>SASIG therefore does not object to the proposed size limits per se, but recommends that: (i) the PDR framework explicitly cross-references aerodrome safeguarding zone boundaries in determining eligibility; and (ii) guidance is provided to applicants on how to assess whether a proposed turbine penetrates any safeguarding surface prior to making a prior approval application.<br>Aviation impact is not purely a function of height — location relative to safeguarding zones, radar line-of-sight, and proximity to flight paths are equally important factors. |

## Question 4: Additional or Larger Turbines

| **Question 4a / 4d: Should the PDR facilitate larger turbines or multiple turbines on a site?** | |
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| **SASIG Response:** | **No — not within the PDR framework** |
| **Explanation:** | SASIG strongly opposes the extension of PDR to facilitate either larger turbines (beyond 30m tip height) or multiple turbines on a single site beyond the proposed single-turbine limit.<br>From an aviation safeguarding perspective, larger turbines present greater radar, obstacle, and airspace risks. If there are legitimate |

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| | grounds for larger or multiple turbine installations, these should proceed via the full planning application process, which provides the appropriate level of consultation, scrutiny, and safeguarding review.<br>The suggestion of a proportional approach (e.g. one turbine per 100 hectares) is noted. SASIG considers that this approach would be difficult to administer consistently, could generate significant cumulative aviation impacts in safeguarding zones, and is not compatible with a PDR framework that lacks robust safeguarding consultation mechanisms.<br>We recommend that the PDR is restricted to the proposed single turbine per curtilage, and that any proposals for larger or multiple turbines are directed to the full planning process with mandatory aviation safeguarding consultation. |

## Question 5: Excluded Sites

| **Question 5a: Do you agree with the proposed list of areas where the PDR will not apply?** | |
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| **SASIG Response:** | **Partially — safeguarded land definition requires strengthening** |
| **Explanation:** | SASIG supports the principle of excluding safeguarded land from the PDR. However, we are concerned that the current definition of 'safeguarded land' in the consultation — land notified by aerodrome operators or the Secretary of State for Defence as necessary for aviation or defence purposes — is too narrow and may not capture all areas where aviation safeguarding concerns are relevant.<br>Aerodrome safeguarding zones, as defined in safeguarding maps submitted to LPAs, typically extend well beyond the physical boundary of the aerodrome and any formally designated 'safeguarded land'. Radar safeguarding zones, for example, can extend to 32km or beyond from an aerodrome.<br>SASIG strongly recommends that the excluded areas are expanded to explicitly reference: (i) all land within aerodrome safeguarding zones as defined by operators' safeguarding maps; (ii) areas subject to radar line-of-sight protection; and (iii) military low-flying areas and airspace structures.<br>Relying solely on the existing 'safeguarded land' definition risks creating significant gaps in protection — particularly for smaller aerodromes and airfields whose operators may not have formally notified the Secretary of State about all relevant safeguarding areas. |

## Question 6: Additional Siting Conditions

| **Question 6e / 6f: Do you think additional conditions are necessary to mitigate radar interference from nearby turbines? Please explain.** | |
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| **SASIG Response:** | **Yes — this is SASIG's primary concern and requires explicit, mandatory provisions** |
| **Explanation:** | This is the most critical question from SASIG's perspective. Radar interference from wind turbines is a well-documented and technically |

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| | complex hazard to civil and military aviation. The consultation acknowledges this risk but proposes only an exploratory approach ('we are currently exploring what this condition could look like').<br>SASIG considers this insufficient. The existing planning system provides effective safeguards through statutory consultation with aerodrome operators and NATS. The extension of PDR without equivalent protections represents a systemic weakening of aviation safety.<br>Specific radar concerns include: (i) Primary Surveillance Radar (PSR) clutter — turbine blades moving at high angular velocity can produce radar returns indistinguishable from aircraft, degrading picture quality and potentially masking real aircraft; (ii) radar masking — turbines can shield areas behind them from radar coverage, creating blind spots; (iii) impacts on Secondary Surveillance Radar (SSR), navigation aids (VORs, ILSs), and communications systems.<br>SASIG recommends that the PDR framework includes: a mandatory requirement for applicants to undertake a radar line-of-sight assessment prior to submitting a prior approval application, using standardised methodologies agreed with the Civil Aviation Authority (CAA) and MOD; an obligation on LPAs to consult relevant aerodrome operators and NATS where a proposal falls within a defined radar safeguarding zone; and the power to refuse prior approval where radar impact cannot be adequately mitigated.<br>We also recommend that the Government commissions updated national technical guidance on the assessment of radar impacts from small-scale wind turbines under PDR, in collaboration with the CAA, NATS, MOD, and aerodrome operators. |

| **Question 6a / 6b: Do you agree with the proposed additional condition to minimise visual impact on nearby heritage sites and important landscapes?** | |
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| **SASIG Response:** | **Yes — but equivalent conditions are needed for aviation assets** |
| **Explanation:** | SASIG supports the principle of additional siting conditions to minimise impacts on sensitive assets. The proposed condition requiring visual impact to be minimised where development is visible from a heritage site or important landscape is a reasonable precautionary measure.<br>SASIG strongly urges that an equivalent condition be introduced for aviation assets. Where development is sited within an aerodrome safeguarding zone, or may be visible from an obstacle limitation surface or within a radar line-of-sight corridor, equivalent assessment and mitigation should be required as a condition of prior approval.<br>The asymmetry in the current proposal — where heritage visual impact triggers an explicit condition but aviation safety does not — is not acceptable from a safeguarding perspective. |

| **Question 6c / 6d: Do you think the proposed conditions are sufficient to prevent impacts from turbines installed on land nearby designated habitat sites?** | |
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| **SASIG Response:** | **No — and the same deficiency applies to aviation safeguarding zones** |

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| **Explanation:** | SASIG notes that the consultation identifies that the prior approval process for siting could help address impacts on designated habitat sites, but acknowledges uncertainty about whether this is sufficient and seeks further views.<br>SASIG draws a direct parallel with aviation safeguarding. In both cases, the proposed prior approval criteria may not be sufficient to capture all relevant impacts. For aviation, the parallel concern is that the prior approval process as currently scoped (siting, amenity, contamination) does not include aviation safeguarding as an explicit consideration.<br>SASIG recommends that aviation safeguarding be added as a mandatory prior approval matter, with the same status as siting and amenity, and that LPAs be given clear guidance on how to assess aviation impacts within the prior approval process. |

## Question 7: Buffer Distances

| **Question 7a / 7c: Do you agree with the proposed buffer distances from curtilage boundaries and protected buildings?** | |
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| **SASIG Response:** | **Yes in principle, but aviation buffer distances are separately required** |
| **Explanation:** | SASIG supports the proposed buffer distances from curtilage boundaries and neighbouring protected buildings as reasonable measures to manage noise and shadow flicker impacts on neighbouring occupiers.<br>However, SASIG wishes to make clear that these buffer distances are entirely separate from, and no substitute for, aviation safeguarding buffer distances. The requirement for a turbine to be located at tip height + 10% from a curtilage boundary has no relationship to the question of whether that turbine falls within an aerodrome safeguarding zone or within a radar line-of-sight corridor.<br>SASIG recommends that the framework includes a separate and explicit set of aviation safeguarding distance requirements, cross-referenced to aerodrome safeguarding maps, to be assessed as part of the prior approval process. |

## Question 8: Separation Distance

| **Question 8a: Do you think this PDR should include a separation distance between turbines?** | |
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| **SASIG Response:** | **Yes — and this should be informed by aviation safeguarding criteria** |
| **Explanation:** | SASIG supports the introduction of a separation distance requirement between turbines. From an aviation safeguarding perspective, the clustering of multiple small turbines, even at separation distances that manage visual and acoustic impacts, can generate significant cumulative radar effects.<br>SASIG recommends that the separation distance is informed not only by visual and amenity considerations, but also by guidance from the CAA and MOD on the minimum separation distance required to prevent |

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| | cumulative radar impacts. This may require differentiated separation distances within and outside aerodrome safeguarding zones.<br>A national register of turbines installed under PDR should also be established, enabling LPAs and aerodrome operators to monitor cumulative installation patterns and trigger review where aviation thresholds are approached. |

## Question 11: Prior Approval

| **Question 11a: Do you agree with including prior approval in respect of siting, impact on amenity, and land contamination risks?** | |
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| **SASIG Response:** | **Yes — but aviation safeguarding must be added as a mandatory prior approval matter** |
| **Explanation:** | SASIG strongly supports the inclusion of a prior approval requirement. Prior approval is the critical mechanism through which LPAs can exercise oversight of PDR development, and its scope will determine whether aviation safeguarding concerns are adequately addressed.<br>As currently proposed, the prior approval criteria cover: siting; impact on the amenity of the area; and land contamination risks. SASIG considers this list to be materially incomplete. Aviation safeguarding is conspicuously absent.<br>SASIG recommends that the prior approval criteria are expanded to explicitly include: (i) aviation safeguarding — including assessment of impacts on radar, navigation aids, obstacle limitation surfaces, and military airspace; (ii) compliance with aerodrome safeguarding maps; and (iii) consultation with relevant aerodrome operators (civil and military) where the proposal falls within a defined safeguarding zone.<br>Without these additions, the prior approval process will not provide the safeguarding oversight that is currently delivered through the full planning application process. This gap must be closed. |

## Question 12: Other Matters and Likely Impacts

| **Question 12: Are there any other matters or likely impacts that should be considered if a new PDR is introduced for non-domestic wind turbines?** | |
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| **SASIG Response:** | **Yes — several critical aviation and safeguarding matters are not addressed in the consultation** |
| **Explanation:** | SASIG draws the Government's attention to the following additional matters:<br>1. Military Aviation and MOD Safeguarding: The Ministry of Defence is a key statutory consultee in wind turbine applications and has published clear guidance on the safeguarding of military aviation assets. Under the current system, MOD is consulted where proposed development may affect military radar, low-flying operations, or aerodrome operations at military aerodromes. The expansion of PDR must not undermine these established consultation processes. SASIG recommends that MOD is engaged in the design of the prior approval process to ensure military safeguarding requirements are met. |

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| | 2. Notification and Registration Systems: There is currently no national system for notifying aerodrome operators of PDR proposals. SASIG recommends that a national online registration and notification system is established as a condition of PDR, enabling aerodrome operators to receive automatic notification of proposals within their safeguarding zones. This system should be administered by a central body (e.g. the Planning Portal or the CAA) and should be free to use.<br>3. Cumulative Impact Management: The PDR framework should include a mechanism for assessing cumulative aviation impacts, both at the local level (LPA area) and the regional level. SASIG recommends that a cumulative threshold is established — for example, where the aggregate tip height of PDR installations within a defined radius of an aerodrome exceeds a specified threshold, a full planning application should be required.<br>4. Economic Growth and Airport Viability: SASIG recognises that airports are significant economic assets, supporting thousands of direct and indirect jobs and enabling business connectivity. Decisions that impair airport operations — through radar degradation, airspace conflicts, or obstacle encroachment — can have serious economic consequences for airport operators, their tenants, and the wider regional economy. The PDR framework should explicitly recognise this economic dimension and ensure that aviation safeguarding provisions protect the long-term viability and growth of airport infrastructure.<br>5. LPA Capacity and Resourcing: The expansion of PDR will increase the volume of prior approval applications that LPAs must process. SASIG is concerned that, without appropriate resourcing, LPAs may not be able to deliver adequate safeguarding review within the proposed 8-week prior approval determination period. Government should provide guidance and, where necessary, additional resources to support LPA aerodrome safeguarding teams in managing the increased workload. |

## Question 13: Environmental Impact Assessment

| **Question 13: Do you have any comments on the relationship between EIAs and PDRs for small-scale, non-domestic wind turbine installations?** | |
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| **SASIG Response:** | **Yes — EIA screening thresholds and aviation safeguarding must be clearly aligned** |
| **Explanation:** | SASIG notes that the EIA screening trigger for wind turbines (hub height exceeding 15m) may be met by turbines that fall below the proposed PDR tip height limit of 30m. This creates a complex interplay between EIA obligations and PDR eligibility that must be clearly explained to applicants and LPAs.<br>More fundamentally, SASIG is concerned that the prospect of EIA screening being triggered may incentivise applicants to design turbines that technically fall below the 15m hub height threshold, whilst still generating significant aviation impacts. Hub height is not the primary determinant of aviation risk — tip height, swept area, location relative to safeguarding zones, and radar line-of-sight are all equally or more important.<br>SASIG recommends that aviation impact assessment requirements are not contingent solely on EIA screening thresholds, and that the prior approval process includes independent aviation safeguarding |

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| | assessment criteria that apply regardless of whether EIA screening is triggered.<br>SASIG also notes the Government's commitment to transitioning to Environmental Outcomes Reports (EORs) and recommends that aviation safeguarding considerations are explicitly incorporated into the EOR framework as it develops. |

## Questions 15–16: Repowering and Community Energy Projects

| **Question 15a / 16a: Do you think government should introduce new PDRs for repowering or community energy projects?** | |
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| **SASIG Response:** | **No — these require full planning process with robust safeguarding** |
| **Explanation:** | SASIG supports the Government's position of not extending PDRs to repowering or community energy projects. Repowering typically involves larger turbines with greater and potentially different aviation impacts compared to the structures being replaced. The planning system, with its requirement for statutory consultation and full safeguarding review, is the appropriate mechanism for these developments.<br>SASIG notes the Government's commitment to delivering planning policy guidance to support repowering and life extension projects. We welcome this commitment and recommend that any such guidance explicitly addresses aviation safeguarding requirements, including the need for updated radar impact assessments where turbines are being replaced with taller or more powerful models.<br>Similarly, community energy projects — which typically require larger turbines — should proceed through the full planning process. The economic and community benefits of such projects should be weighed against aviation impacts through a transparent process that includes statutory aerodrome consultation. |

## Question 18: Further Comments

| **Question 18: Do you have any further comments on the proposals in this consultation?** | |
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| **SASIG Response:** | **Yes — SASIG has the following overarching observations** |
| **Explanation:** | 1. Policy Coherence: The Government's objectives of expanding renewable energy deployment and maintaining safe and viable aviation infrastructure are not inherently in conflict. However, they must be actively reconciled through policy design. The current consultation proposal, as drafted, does not achieve this balance. The absence of explicit aviation safeguarding provisions from the PDR framework and prior approval criteria is a serious omission that SASIG urges the Government to correct.<br>2. Engagement with SASIG and Aerodrome Operators: SASIG and its member LPAs have extensive expertise in aviation safeguarding as it applies to wind turbine development. We offer our continued |

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| | engagement with the Government in the design and implementation of the PDR framework, and would welcome the opportunity to participate in technical working groups or pilots as the policy develops.<br>3. Guidance and Training: The extension of PDR for wind turbines will require LPA planning officers to develop new skills and knowledge in aviation safeguarding. SASIG recommends that the Government commissions, in collaboration with the LGA, CAA, and SASIG, a comprehensive guidance note and training programme for LPA officers on how to handle prior approval applications for non-domestic wind turbines, including aviation safeguarding assessment.<br>4. Review and Monitoring: SASIG recommends that the PDR framework includes a formal review mechanism, to be triggered after a defined period (e.g. three years) or after a specified number of installations, to assess whether the safeguarding provisions are operating effectively and whether aviation safety has been compromised. This review should include input from aerodrome operators, the CAA, MOD, and LPAs. |

## Summary of SASIG Recommendations

SASIG makes the following specific recommendations to the Government:

| # | Category | Recommendation |
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| 1 | **Prior Approval Scope** | Aviation safeguarding must be added as a mandatory prior approval matter, alongside siting, amenity, and contamination. LPAs must retain the power to refuse prior approval on aviation safety grounds. |
| 2 | **Mandatory Consultation** | Automatic consultation with aerodrome operators (civil and military) must be required where a proposal falls within a defined safeguarding zone (15 km statutory / 32 km advisory as a minimum). |
| 3 | **Excluded Sites** | The definition of excluded sites must be expanded to reference aerodrome safeguarding zones as defined by operators' safeguarding maps, not solely formally designated 'safeguarded land'. |
| 4 | **Radar Impact Assessment** | A proportionate radar line-of-sight assessment should be required before prior approval applications are submitted, using methodologies agreed with the CAA and MOD. |
| 5 | **Cumulative Impact** | A national registration system for PDR turbine installations should be established, and a cumulative impact threshold introduced for aerodrome safeguarding zones. |
| 6 | **Military Safeguarding** | MOD safeguarding requirements must be explicitly integrated into the PDR framework and prior approval criteria, with MOD as a mandatory consultee within relevant zones. |
| 7 | **Economic Growth** | The PDR framework should explicitly recognise the economic value of aviation infrastructure and require that safeguarding provisions protect airport operational capacity and growth potential. |
| 8 | **Guidance & Training** | The Government should commission comprehensive guidance and training for LPA officers on aviation safeguarding within the PDR prior approval process. |

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| **9** | **No PDR for Repowering** | PDR should not be extended to repowering or community energy projects, which should continue to require full planning permission with statutory aviation consultation. |
| **10** | **Review Mechanism** | A formal post-implementation review should be built into the PDR framework, assessing aviation safety outcomes after a defined period or number of installations. |

## Conclusion

SASIG supports the Government's ambition to expand onshore wind energy as part of the transition to Net Zero and the Clean Power 2030 mission. Small-scale non-domestic wind turbines can make a valuable contribution to energy independence, decarbonisation, and economic resilience for businesses, farms, and public sector organisations.

However, SASIG has a clear and firm position: the expansion of PDR for wind turbines must not come at the cost of aviation safety. The current planning system provides an effective — though imperfect — framework for ensuring that wind turbine development is compatible with aviation operations. The transition to PDR risks dismantling these protections unless explicit and mandatory safeguarding provisions are embedded in the framework from the outset.

SASIG urges the Government to act on our recommendations, in particular: **adding aviation safeguarding as a mandatory prior approval matter; requiring mandatory consultation with aerodrome operators within safeguarding zones; and establishing a national registration and cumulative impact monitoring system.**

We would welcome the opportunity to engage further with the Department for Energy Security and Net Zero on these issues, and to participate in any technical working groups established to develop the detail of the PDR framework. SASIG and our member LPAs bring extensive operational expertise in aviation safeguarding and stand ready to contribute to a policy outcome that delivers both clean energy growth and continued aviation safety.

**Submitted on behalf of SASIG**

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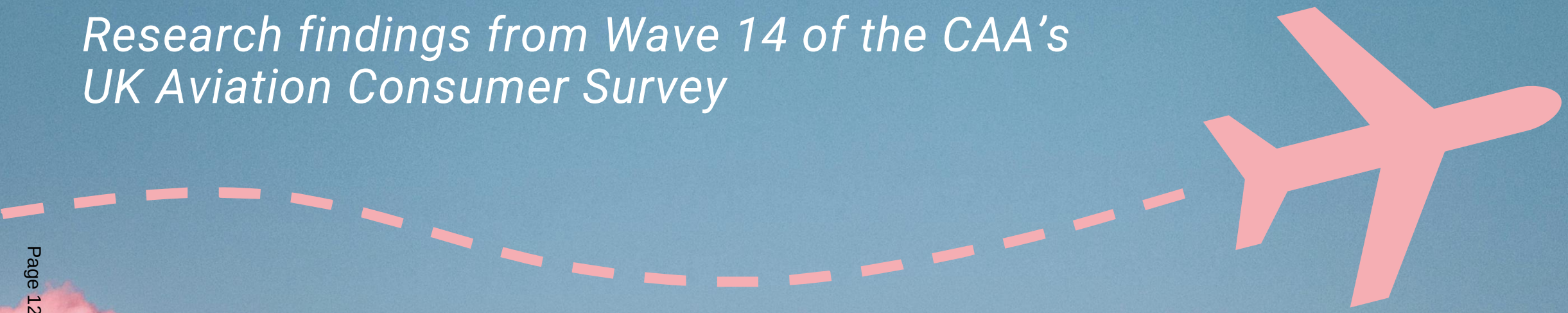
*June 2026*

# Flying in 2025 and beyond

*Research findings from Wave 14 of the CAA's UK Aviation Consumer Survey*







UK Civil Aviation Authority

Report by Savanta

# Executive Summary (slide 1 of 4)

## Section 1: Flying in 2025

### Flight behaviour and frequency

- Consumers continue to fly in the highest numbers since this survey began in 2016. With 62% having flown in the last 12 months, the flying rate has remained stable compared to last year, reflecting ongoing post-pandemic recovery.
- Recent flyers continue to skew significantly younger than before the pandemic, with younger people also remaining much more likely to fly frequently. Although the gap between younger and older consumers has narrowed slightly since 2024, this only points to a marginal increase.
- Looking ahead, more consumers plan to increase their flying in 2026 than to reduce it, with growth led primarily by younger age groups. In contrast, older consumers generally expect their flying habits to remain unchanged.
- Affordability remains the most frequently cited barrier to flying , with 36% of non-flyers referencing financial limitations as the main reason for not flying in the last 12 months.

### Overall satisfaction

- Overall satisfaction with the air travel experience is at an all time high with 88% saying they are satisfied with their experience. Satisfaction continued to rise in 2025, building on improvements reported last year and reaching the highest levels since tracking began in 2016.
- While satisfaction levels are high across all groups overall, satisfaction is slightly lower for certain vulnerable passenger groups* - such as those with accessibility or disability needs (82%), those facing digital barriers (80%), and those with financial constraints (80%).

**Consumer vulnerability can arise from various factors. In our report, we focus on digital access, language or communication barriers, personal circumstances, accessibility/disability needs, and financial challenges as key types of vulnerability. For more information on each group, please refer to slide 9.*



Agenda Annex

# Executive Summary (slide 2 of 4)

## The experience of vulnerable passengers and those with accessibility needs and disabilities

Despite high satisfaction with the travel experience, even among vulnerable groups, consumers with specific vulnerabilities and disabilities face different challenges when flying:

- Nearly six in ten (58%) of disabled consumers report difficulty accessing or using airports and flying, with the most common needs being help with walking, standing, or managing luggage. These persistent challenges contribute to a lower flying frequency compared to consumers who do not report having a disability.
- Complaint handling is the area with the largest disparity—only 66% of disabled passengers are satisfied, compared with 74% of non-disabled passengers.
- The need for support continues to act as a barrier to air travel participation, with those who have not flown in the last 12 months most likely to require help at the airport or during their flight:
  - Passengers with non-visible and physical disabilities are consistently the most likely to require some form of assistance.
  - 80% of digitally vulnerable passengers anticipate requiring support with technology, such as check-in kiosks.
  - 70% of those facing language or communication challenges are likely to need help understanding instructions or airport procedures.



Agenda Annex

# Executive Summary (slide 3 of 4)

## Section 2: The experience of consumers and passengers

### Consumer priorities, value for money and hidden charges

- The cost of flying remains the most widespread priority for consumers, with 52% rating it as their top concern. Over half of passengers also reported making use of lower cost options such as choosing a less convenient flight time or travelling with hand luggage only.
- While most passengers believe they understand what's included in their airfare, awareness for different products or services at the point of booking is uneven and reflects the varied ways airlines present and charge for extras. Notably, about a quarter of passengers remain unaware of specific additional fees, such as booking fees (27%) or charges for printing boarding passes at the airport (24%).
- Despite this inconsistency and the potential for unexpected costs, overall satisfaction with value for money is high (76%) and has returned to levels last seen before 2022, following a period after the pandemic when value for money ratings were lower.

### Travel disruption and complaint handling

- Experience of travel disruption has declined slightly this year from 58% of passengers in 2024 reporting experiencing a travel problem to 55% in 2025. However, 54% of passengers report not being informed of their rights by the airport or airline when they experienced a travel problem.
- Moreover, passengers show inconsistent understanding of entitlement terms related to air travel and disruption, highlighting uncertainty around the distinctions and correct application of "refund," "compensation," and "reimbursement."

# Executive Summary (slide 4 of 4)

## Travel disruption and complaint handling (continued)

- Support, guidance, and notifications continue to be inconsistent in the event of travel disruptions. Most passengers reported delay notifications as being delivered via passive channels such as airport screens (35%), while cancellations are usually communicated by email (45%). Although alternative flights are often offered, many passengers say they did not receive clear details about how to access further support when they experienced a delay (43%).
- Despite ongoing communication challenges, satisfaction with complaint handling has improved markedly (+10pp to 72% in 2025) – even as the number of complaints remained steady compared to last year. Passengers cited notable progress in the ease of reaching support, faster response times, and a smoother complaint process, leading to more positive outcomes overall. However, while satisfaction with complaint handling is on an upward trend, it continues to be an area with lower satisfaction relative to others such as the process of booking the flight.
- As seen in previous waves, older passengers are disproportionately affected by information gaps during travel disruption. They are less likely to report they were informed of their rights (11%) or refund options (17%) when they experienced a travel issue. This same group of passengers also report lower confidence in escalating complaints (23% vs 36% among 18-24 years old).



Agenda Annex

# An introduction to the Aviation Consumer Survey

This annual research – now into its fourteenth instalment – aims to provide an in-depth understanding of UK consumers' flying behaviours and their attitudes towards travelling by air over time. It surveys a robust, nationally representative sample of 3,500 UK adults on a variety of aviation-related topics, building a picture of ***how and why consumer experiences of aviation are changing over time.***

Previous instalments set out how the aviation consumer landscape has fundamentally changed following the COVID-19 pandemic. Although flying rates in 2025 have remained consistent with 2024 levels, research from this wave (and previous waves) reveals that the profile of flyers has become markedly younger between 2019 and 2024. Notably, while outcomes have improved for all passengers since the pandemic, the pace of improvement has been slower for older and disabled consumers compared to other flyers.

More specifically, this instalment aims to better understand the broader concept of consumer vulnerability and how it can manifest in an aviation context. Also examined is the **impact of travel disruption on passengers,** as well as **passengers' attitudes towards communication during disruption**.

Understanding the passenger journey should be a priority for policymakers and industry leaders. This report aims to equip decision-makers with insights to consider what more can be done to foster an aviation experience that aligns more closely with consumer priorities and expectations from various groups, such as those in vulnerable circumstances and other demographics.

This research is also designed to provide valuable insights for stakeholders beyond the policymaking sphere. Historically, this report's audience has included airports, airlines, public bodies, and the general public. Our goal is to deliver a rich understanding of consumer behaviours and attitudes, which readers can apply to their specific contexts.



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*Note: Flying rate(s) refers to the proportion of the UK population who have flown in the last year.*

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## Section 1: Flying in 2025

*Current perceptions and experiences of aviation*



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*Which areas do consumers want the industry to focus on?*



**Additional links:**

**Full methodology and sample information**

**Contact details**

**Full data tables** (Savanta website)

**Previous ACS reports** (CAA website)

# How to read this report

- Survey results are based on self-reported behaviour and attitudes, and may be subject to recall bias or social desirability bias. Caveats are noted where appropriate.
- Where relevant, differences between subgroups and additional demographic insights are included.
- When a chart or table includes these signs  , it notes that a result is “significantly higher/lower at 95% confidence”. This indicates that the year-on-year differences, or differences between sub-groups, are statistically robust.
- Results from questions or subgroups with a base size below 50 are excluded from quantitative analysis to maintain statistical robustness. Any reference to figures with a low base size of less than 100 are asterisked for clarity (*) and should be treated as indicative of this group only.
- Throughout this report the key subgroups of interest are:
    - **Consumers** are defined as individuals who are demographically representative of the UK by gender, age, region, and working status. Both those who have flown in the last 12 months and those who have not (or have never flown) are included within the definition of consumers.
    - **Vulnerable consumers** are defined as those who may become vulnerable due to individual characteristics, personal circumstances, environment, or business practices that make them especially susceptible to harm (see slide 9 for details).
    - **Passengers** are defined as consumers who have flown in the last 12 months.
    - **Flying rate** is used to refer to the proportion of the UK population who have flown in the last year.

For further detail on methodology, please refer to the Methodology slide at the end of the report.

# Consumer Vulnerability

A new area of focus for this wave is the broader concept of consumer vulnerability and how it can manifest in an aviation context. Consumers can become vulnerable from their individual characteristics, personal circumstances, the specific environment, or a particular business practices that make them especially susceptible to harm. This can include disabled consumers who may require assistance, but vulnerability can also be considered through a number of other lenses. It's worth noting that these groups aren't mutually exclusive.

The key groups in focus this year include:





**Digital vulnerability (8% of sample)**
Those who are not digitally confident/would need assistance using technology

**Language/ communication vulnerability (4% of sample)**
Those who need communication support (including translation) and help understanding airport instructions and procedures

**Personal circumstances (22% of sample)**
Those travelling with small children, elderly companions, while pregnant or those who would have difficulty obtaining travel documents

**Accessibility and disability* (21% of sample)**
Those with physical/non-physical, visible/non-visible disabilities and/or have difficulties managing on a flight/at the airport, and may require assistance

**Financial vulnerability (29% of sample)**
Those who have difficulty flying due to budgetary reasons or would struggle to pay an unexpected bill




*Please note previous waves make references to PRM/disabled consumers or passengers (or persons), this is now being included under the 'accessibility and disability' group

Section 1.1:

# *Flying behaviour and flight frequency*

***Key takeaways from this section:***

- The proportion of UK consumers flying during the year remains steady in 2025, matching 2024's record levels — the highest observed since this survey began in 2016.
- However, persistent gaps by age and disability suggest that patterns of air travel continue to vary among different demographic groups.
- Overall flight intentions for 2026 remain steady, mirroring last year's trends. More consumers are expecting to increase their flight activity next year than reduce it, particularly younger consumers.
- Budgetary constraints remain – by some distance – the most frequent reason given for *not* having flown in the last 12 months highlighting that affordability barriers remain.



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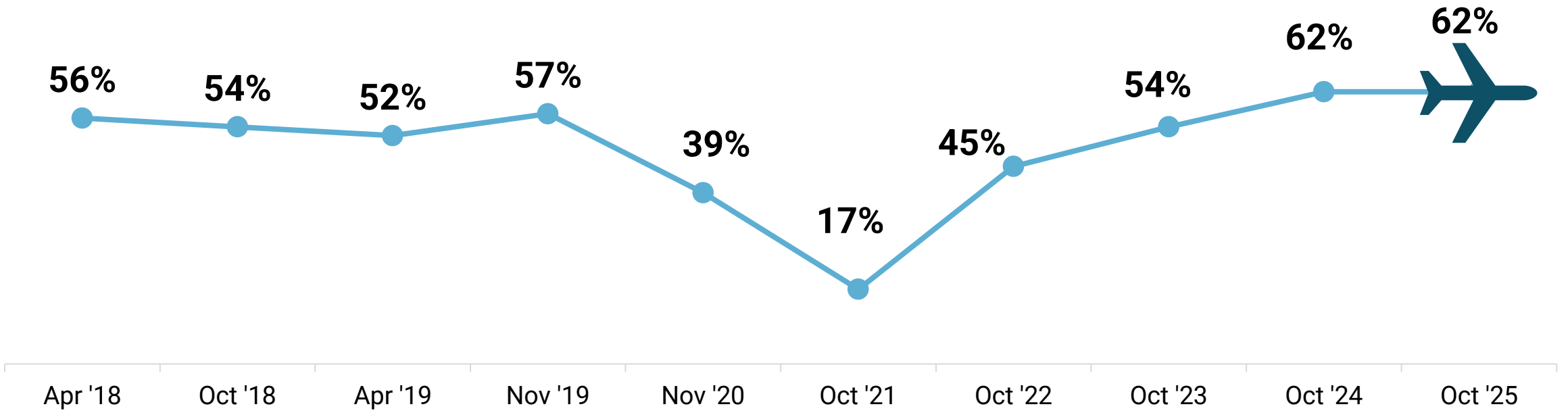
# Consumer flying rates remain steady in 2025, with the proportion of flyers unchanged from 2024. As observed last year, younger consumers continue to take more trips

## Showing % that have flown in the last 12 months

*Outward flights from an UK airport*




While overall participation in air travel is strong, a deeper look reveals subtle shifts in behaviour. The average number of trips taken has increased slightly from 3.2 to 3.4. Half of consumers have taken 1 or 2 trips in the last year (22% 1 trip, 28% 2 trips), the other half (50%) have taken 3 or more trips in 2025. Younger consumers are significantly more likely to take multiple trips in a year than their older counterparts, with 16% taking over 5 trips within the year compared to 12% of those aged 55+. Despite stable overall flying rates, key differences remain across age and disability groups with findings on the next slide highlighting how these gaps have continued.

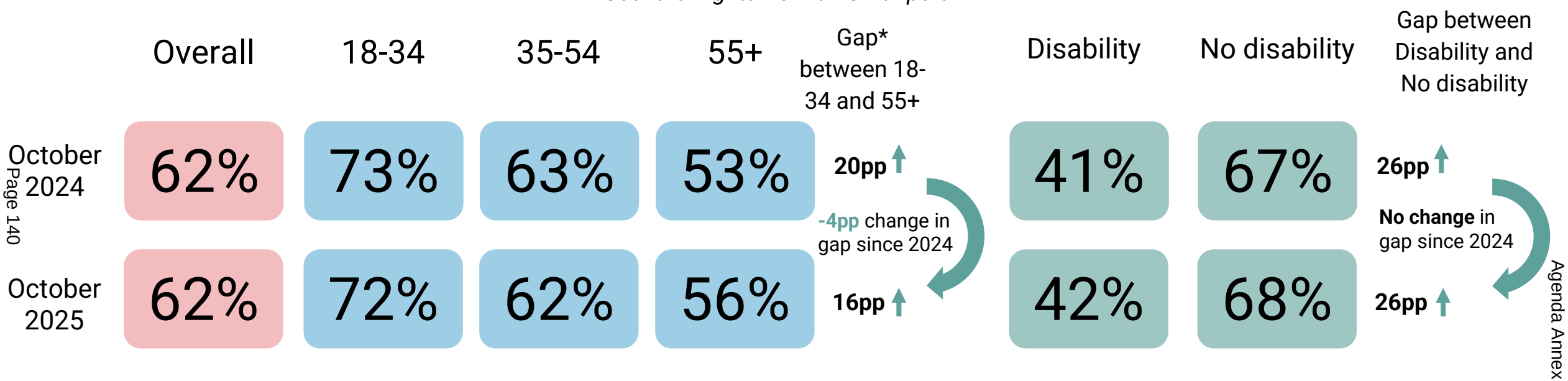
*Note: Flying rate(s) refers to the proportion of the UK population who have flown in the last year.*

Q1. When was the last time you flew from a UK airport? Base: All respondents, Oct-25 (n=3500); Q2. How many trips by air have you made in the last 12 months? Base: All who have flown in the last 12 months (n=2173)

# A notable variance in flying rate remains in key demographics, with no change between disability status, however the gap has closed slightly between young and older passengers

## Showing % who flew in the last 12 months by demographic group

*Outward flights from an UK airport*



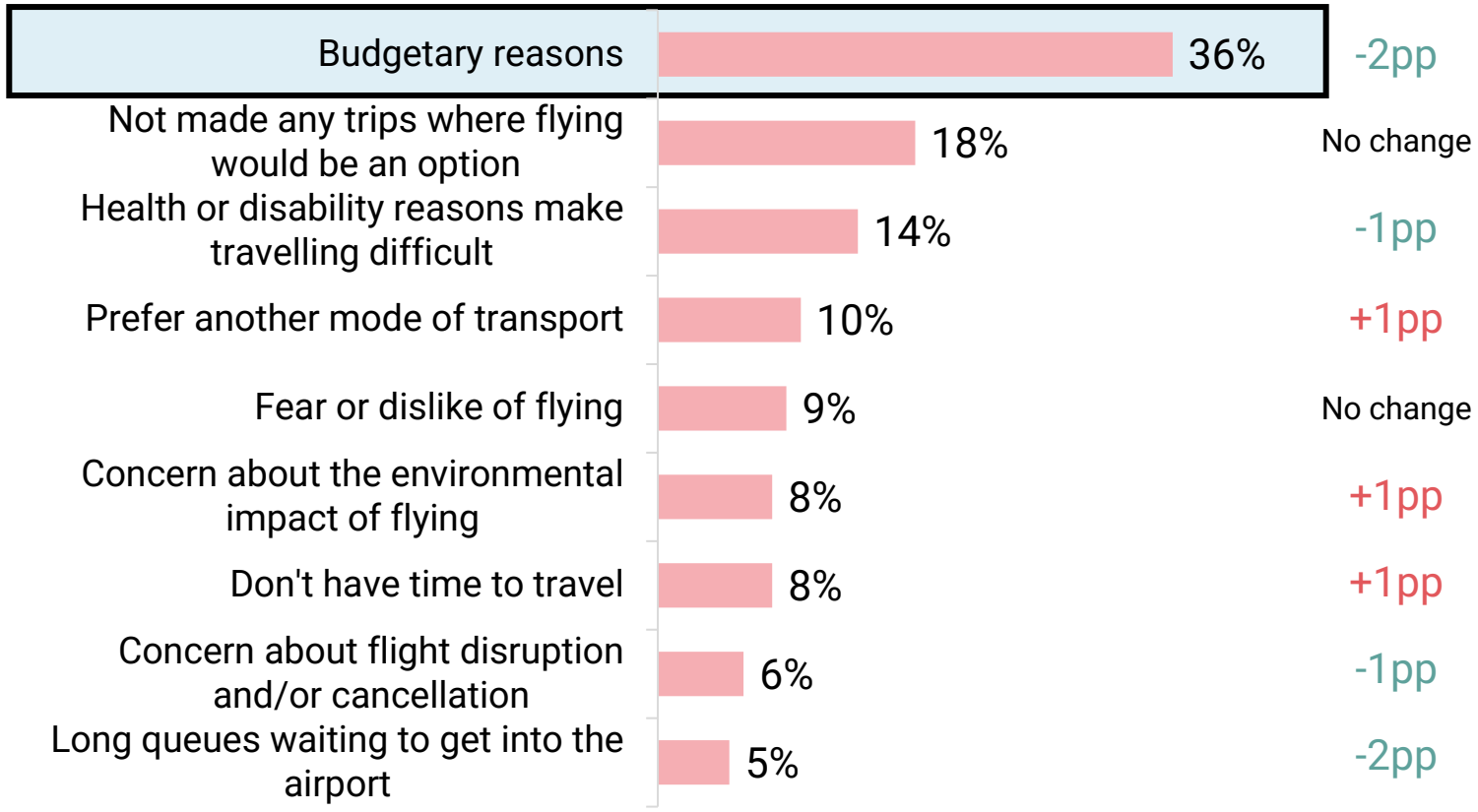

While overall flying rates have remained at high levels, the findings highlight ongoing disparities in air travel participation across both age and disability demographics. The gap in flying rates between younger (18–34) and older consumers (55+) has narrowed slightly, from 20 percentage points (pp) in 2024 to 16pp in 2025. However, this reduction is minor and not statistically significant. In contrast, the gap between disabled and non-disabled passengers remains unchanged at 26pp, mirroring last year's results.

*Note: Flying rate(s) refers to the proportion of the UK population who have flown in the last year.*

Q1. When was the last time you flew from a UK airport? Base: All respondents, Oct-25 (n=3500). *By 'gap', we mean the percentage difference between two specified groups. If the gap decreases year on year (shown as a negative percentage change), it indicates that the difference between those demographic groups is shrinking which in this instance is a positive sign.

# Reasons for *not* flying remain similar to 2024, with affordability continuing to be the top cited barrier

## Showing reasons that consumers give for not having flown recently*




Budgetary constraints are the most frequently cited barrier to flying across all age groups. However, these concerns are less pronounced among older consumers (29% of 55+) compared to younger consumers (41% of 18-34).

Health and transport preferences become more significant among older respondents. Those aged 55+ are substantially more likely to cite health or disability (19%) and a preference for other modes of transport (12%) as reasons for not flying.

For disabled consumers, budgetary reasons (35%) are their top cause for not flying in the last 12 months, followed very closely by health or disability reasons that make it difficult to manage at the airport or on the flight (33%).

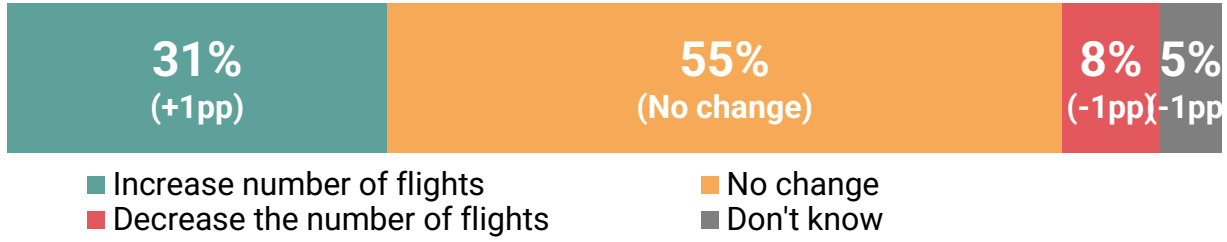
Q3. Why have you not flown in the last 12 months? Note: respondents could pick multiple barriers, so the sum of the percentages exceeds 100%. Base: All respondents who have not flown in the last 12 months (n=1309). *Showing the top 9 reasons for not flying.

# Momentum for increased flying continues in 2026 and is especially strong among younger consumers

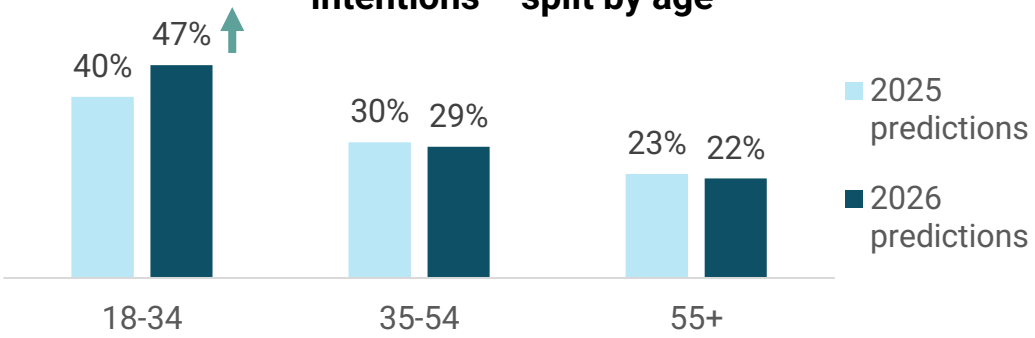
- Overall flight intentions for 2026 mirror the intentions reported last year. Most consumers (55%) expect their flying habits to stay the same, with nearly one in three (31%) planning to fly more. Increased flying intentions include 44% of consumers who haven't flown in the past year but who have flown in the last four years, highlighting demand even among infrequent flyers.

- Conversely, most who haven't flown in the past ten years or have never flown show little interest in changing their flying habits, with 67% and 70% respectively reporting no intention to fly more. But overall, there continues to be a higher proportion intending to fly more than fly less in the next year, reinforcing the pattern of stable and sustained demand seen in last year's ACS.

## Flying intentions for the next 12 months




## Showing those reporting an increase in flying intentions – split by age




- However, beneath this stability, younger consumers are driving momentum in the aviation sector. Nearly half (47%) of 18–34 year olds plan to take more flights in the next year compared to 40% last year, marking a notable jump. In contrast, intentions among older age groups have remained steady.

- This aligns with the finding that younger consumers are already significantly more likely to take multiple trips in a year than their older counterparts, and paired with this rising intent, are set to further increase their number of flights.

Q4. In the next 12 months, do you expect that you will fly more, the same amount or less compared to the number of times you have flown over the last 12 months?
Base: All respondents, October 2025 (n=3500).

Section 1.2:

# Satisfaction with the overall experience of flying

***Key takeaways from this section:***

- Satisfaction with the overall travel experience continues to rise since 2024, recording the highest score (88%) since 2016.
- This improvement is partly driven by a significant +10pp increase in satisfaction with complaint handling, which has historically been a clear pain point for passengers.
- However, passengers in certain vulnerable groups (digital, language/communication and personal circumstances) experience lower levels of satisfaction.
- Regionally, satisfaction scores have mostly increased or remained stable in 2025, sustaining the positive trend from 2024. Satisfaction rates are generally above 80% across all UK regions.
  - While the North-East and South-West saw slight declines – mainly related to passport control and transfer/connection issues – most regions have maintained or improved their scores.
  - Northern Ireland's significant increase last year has held steady; however, it continues to lag behind, remaining 8pp below the national average and further behind the best-performing regions.
  - In contrast, Wales, which saw a dip last year, has experienced a modest rebound in satisfaction.



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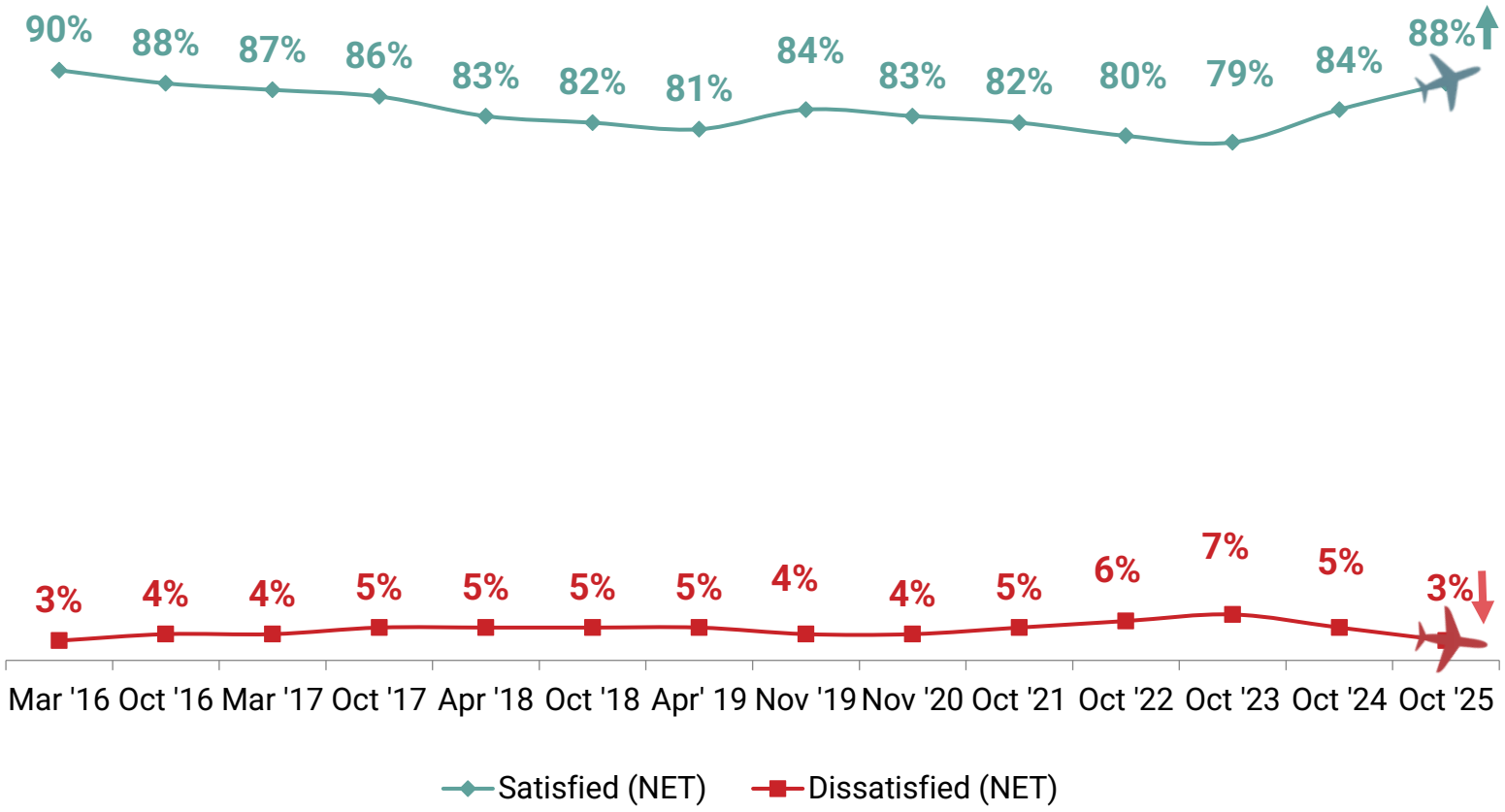
# Satisfaction with the overall travel experience has risen slightly, adding to the improvements seen in 2024. Satisfaction is now close to the levels seen when tracking began in 2016

## Last flight: Overall satisfaction with the travel experience

*All those who have flown in the last 12 months, excluding 'Don't know' and 'Not applicable'*




Satisfaction levels are now consistent across age groups (18-34: 87%, 35-54: 88%, 55+: 89%), a shift from prior years when notable gaps existed. This indicates a more universal experience regardless of age, indicating that the gap in travel frequency is likely impacted by other factors rather than overall satisfaction.

A standout driver of this improvement, as will be explored in section 1.3, is the notable rise in satisfaction with complaints handling, which has increased by 10pp this year. Previously, complaints handling was a clear pain point, often associated with lower overall satisfaction scores (62% in 2024). The latest results show passengers are now more positive about how their issues are managed (72%). While no single factor fully explains the increase in overall satisfaction, this change in complaints handling not only lifts overall satisfaction, but also indicates that improvements in how complaints are handled can directly boost passenger perceptions of the travel experience.

Q24.14. The overall travel experience: Thinking now about some more specific aspects of your most recent flight, please tell us how satisfied or dissatisfied you were with the following elements? Base: All who have flown in the last 12 months, excluding DK and NA responses (n= 2164)

# Passengers who remain dissatisfied cite flight disruption, overcrowding, accessibility issues, and high prices for some services as the main causes

Profile of those who are dissatisfied:
(Those significantly more dissatisfied than their counterparts ranked highest on dissatisfaction score)

- Experienced a flight cancellation or diversion (10% vs 1% of those that didn't experience a travel problem)
- Passengers who are not digitally confident (7% vs 3% of those who are)
- From Northern Ireland or the West Midlands (6% vs 3% from anywhere else)
- Passengers who have financial vulnerability characteristics, or accessibility or disability needs (6% vs 3% of those not vulnerable)

When asked about the reason for being dissatisfied with their overall travel experience, the following factors were the most referenced:

- **Flight delays (often several hours)** are the most cited source of frustration. Passengers report delayed notifications, last-minute cancellations, and lack of updates or clear communication during disruptions, resulting in stress, confusion, and inconvenience.
- **Overcrowding at airports and on aircraft** is consistently mentioned, with long queues for check-in, security, boarding, and baggage claim.
- Some passengers with disabilities, as well as some with mobility issues, reported that they found **airports and their processes inaccessible.** Main challenges included unclear information about available support during booking and boarding, a lack of assistance staff, and navigation difficulties.
- **High prices for food, drinks, parking, and airport drop-off/pick-up** are also an area of dissatisfaction, with several feeling that the experience doesn't match the cost.

> I am a wheelchair user but stood up before we boarded the plane to stretch my legs, and the airport assistance people whipped the wheelchair away as they needed it. I didn't know how I was going to get onto the plane, so my family went to find another one. The staff that we spoke to at the boarding gate were just not interested in helping. I felt dreadful, I am registered as disabled. I felt as if I should have been holding my disabled blue badge to show them I am real.
>
> **Female, Age 60-64, Disabled, North East**

> It was very expensive overall which made it quite inaccessible. The signage was poor and it is difficult to find out where you needed to be and the airport was noisy so we couldn't hear the announcements.
>
> **Female, Age 18-24, Financially vulnerable, South-West**

Q25. Why were you dissatisfied with the overall travel experience? Please tell us about any issues you had. Base: All who said that they were dissatisfied with their overall travel experience (n= 261).

# Passengers in certain vulnerable circumstances are less satisfied with their journey than those who are not vulnerable

At overall level, satisfaction remains high at +80% for all passengers and for consumers facing personal circumstances or language barriers. However, satisfaction is notably lower for those in other vulnerability groups– accessibility/disability (82%), digital (80%), and financial vulnerabilities (80%). These groups experience gaps of 7 to 9pp compared to their non-vulnerable counterparts, highlighting a significant difference in overall satisfaction.

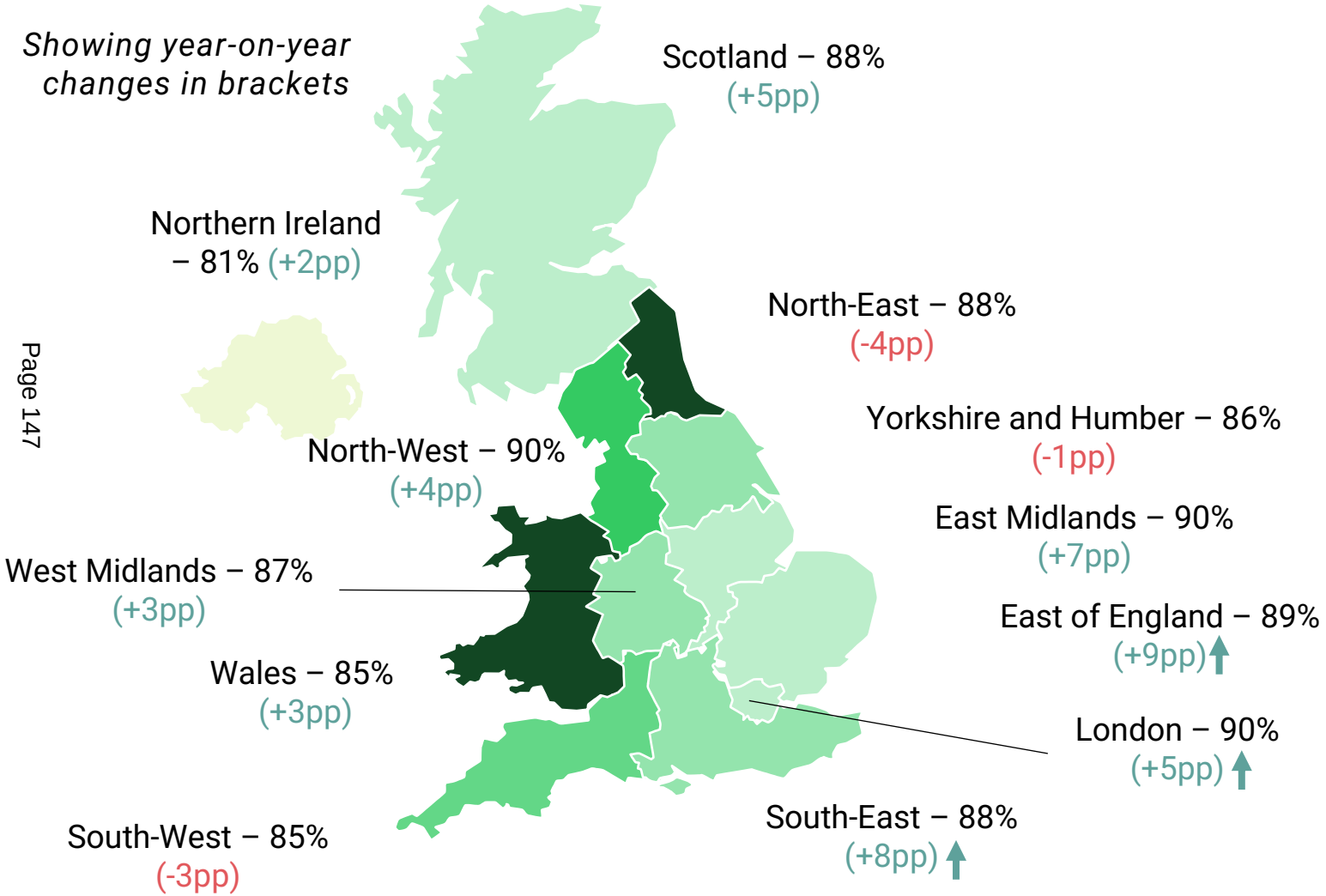
**Showing % who were satisfied with the overall travel experience on their most recent flight, by different lenses of vulnerability***

| Not vulnerable (Those who do not fall within the listed vulnerability groupings) | Personal circumstances (Those travelling with children) *Please note: for this question, this group only includes those who travelled with children on their last flight, as non-flyers in the past year were not asked this question.* | Language / Communication (Those who report needing communication support when flying) | Accessibility and disability (Those with a disability or have accessibility needs) | Digital (Those not digitally confident or who need assistance with technology) | Financial (Those who are unable to pay an unexpected bill) |
|---|---|---|---|---|---|
| 89% | 90% | 90% | 82% | 80% | 80% |
| Gap compared to those not vulnerable**: | +1pp | +1pp | -7pp | -9pp | -9pp |

Q24.14. Please tell us how satisfied or dissatisfied you were with the overall travel experience? Base: All who have flown in the last 12 months, excluding DK and NA responses (n=2,164). *Please note, these vulnerability groupings are new additions for 2025 therefore there is no year-on-year data comparisons. **A positive gap, where a vulnerability group scores higher than the non-vulnerable group, is highlighted in green text and a negative gap is shown in red text to clearly indicate a lower percentage compared to the non-vulnerable group.

# Despite a slight decline in the North-East and South-West, satisfaction scores have mostly increased or stayed stable in 2025 meaning satisfaction is +80% across all UK regions

*Showing year-on-year changes in brackets*




Last year, passengers in Northern Ireland reported a significant increase in satisfaction with their most recent flight (79%), with their satisfaction score increasing by +19pp since 2023 (60%). For 2025, satisfaction has stayed stable for Northern Ireland, a region that has fluctuated in satisfaction over the years of tracking. This stable increase in satisfaction for Northern Ireland means that satisfaction is +80% for all regions across the UK. Although an improving picture, Northern Ireland still lags behind other UK regions in terms of satisfaction.

Last year, Wales was an outlier being the only region to have witnessed a decline in satisfaction (-6pp from 2023). However, this year, that decline has reversed slightly with an uptick of +3pp since 2024.

In contrast, this year the North-East and South-West, are the only regions to see a notable decline in satisfaction. They continue to have a high score overall, but this dip might be a result of a decline in satisfaction with passport control and immigration (-9pp since 2024) for North-East and a decline in satisfaction with transfers and connections (-7pp since 2024) for the South-West.





Q24.14. The overall travel experience: Thinking now about some more specific aspects of your most recent flight, please tell us how satisfied or dissatisfied you were with the following elements? Base: All who have flown in the last 12 months, excluding DK and NA responses (n=2164). *Note: this diagram shows satisfaction by region of residence, not region from which consumers flew*

Section 1.3:

# Satisfaction across the passenger journey

***Key takeaways from this section:***

- Passenger satisfaction has increased across all areas of the passenger journey, with especially strong gains in complaint handling and consistently positive scores throughout the consumer experience. While the upward trend in complaint handling satisfaction—already seen in 2024—continues, it is worth noting that satisfaction in this area still falls short of many other aspects of the journey.
- The booking process continues to be the element of the travel experience which sees highest satisfaction, increasing by 2pp in 2025, though most passengers would still like more information around cost.
- This broad improvement is reflected in the overall flying travel experience, with satisfaction scores higher than in previous periods. Gains at nearly every stage of the journey – except for two areas that have held steady at their 2024 scores – are collectively driving the overall rise in satisfaction.
- However, it's important to note that consumers in specific vulnerable circumstances continue to report lower levels of satisfaction, especially due to ongoing accessibility concerns with airport navigation.



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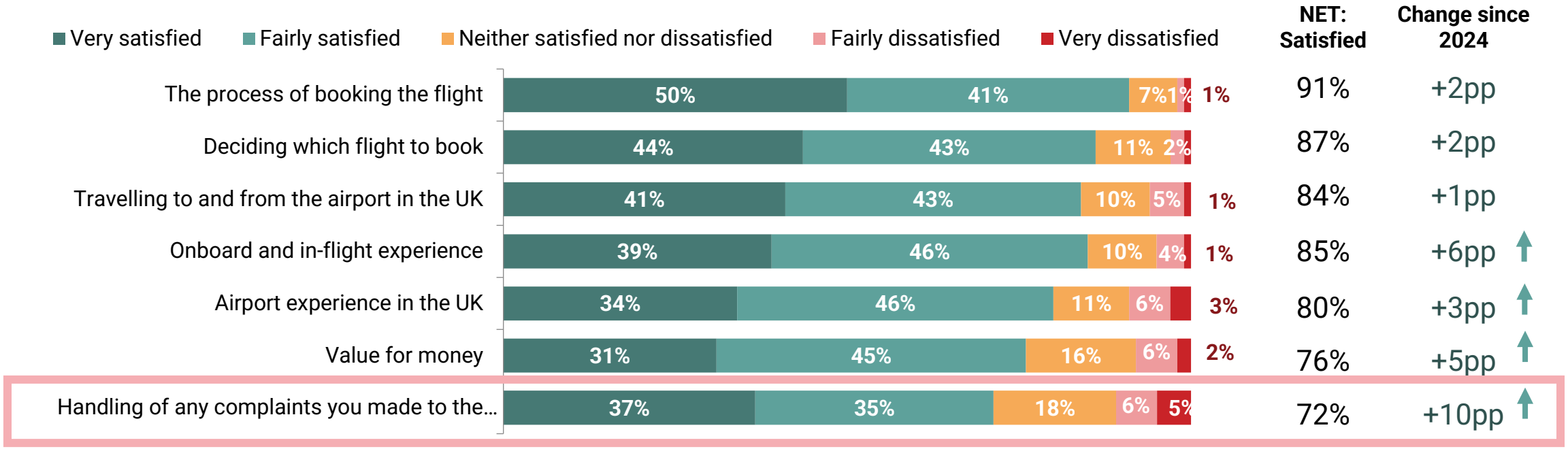
# Passenger satisfaction scores have continued to increase across the board this year, with particularly strong gains in complaints handling. This marks a notable upward trend in an area that had previously seen declines in recent years

## Last flight: Satisfaction with elements of the travel experience

*All those who have flown in the last 12 months, excluding 'Don't know' and 'Not applicable'*




With a year-on-year increase of 10pp, satisfaction with complaints handling continues to rise following a 12pp rise in 2024. While it remains the element of the travel experience with the lowest levels of satisfaction, this reversal in this post-pandemic decline is likely a significant factor in the increase overall. Other areas showing steady improvement in recent years—and an increase of 5pp or more this year—include the onboard and in-flight experience, as well as perceived value for money. The flight booking process continues to be the highest scoring aspect in 2025, with satisfaction increasing by 2pp in both 2024 and 2025.





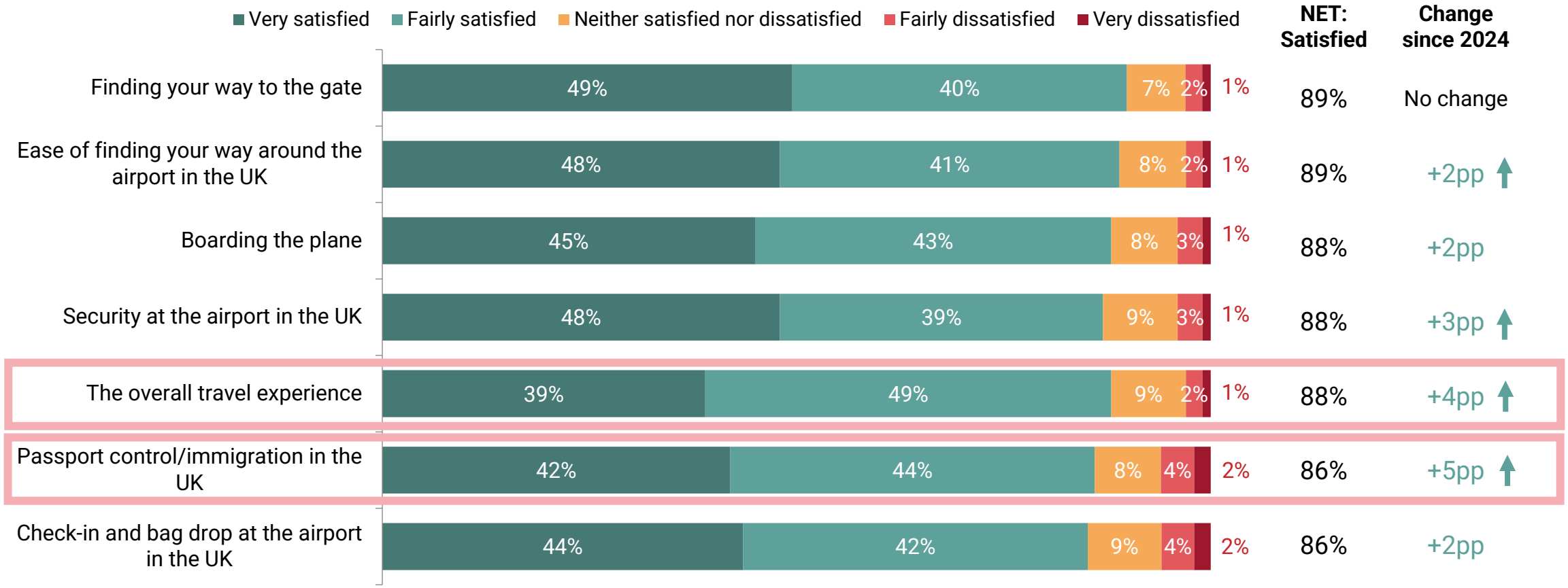


Q23. How satisfied or dissatisfied were you with the following elements? Base: All who have flown in the last 12 months, excluding DK and NA responses (n= 978-2162)

# Looking at the more specific touchpoints in the airport consumer journey, satisfaction has increased since 2024 at every journey point except two, which remained stable. No touchpoints saw a decrease in satisfaction in 2025

## Satisfaction with the airport experience – Page 1 of 2 (highest performing areas)

*Includes only those who have flown in the last 12 months, and excludes those answering 'Don't know' and 'Not applicable'*

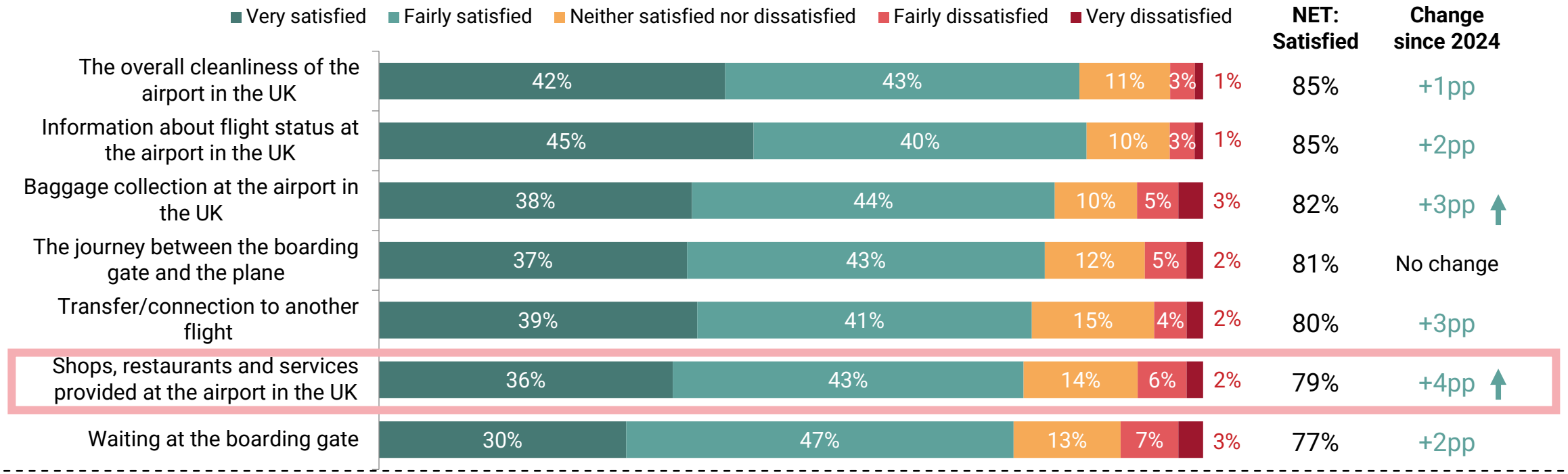



Q24. Thinking now about some more specific aspects of your most recent flight, please tell us how satisfied or dissatisfied you were with the following elements?
Base: All who have flown in the last 12 months, excluding DK and NA responses (n= 1028-2164)

# Every element of the airport experience now records satisfaction of 77% or above, reflecting broad improvements across the overall passenger journey

## Satisfaction with the airport experience – Page 2 of 2 (lowest performing areas)

*Includes only those who have flown in the last 12 months, and excludes those answering 'Don't know' and 'Not applicable'*



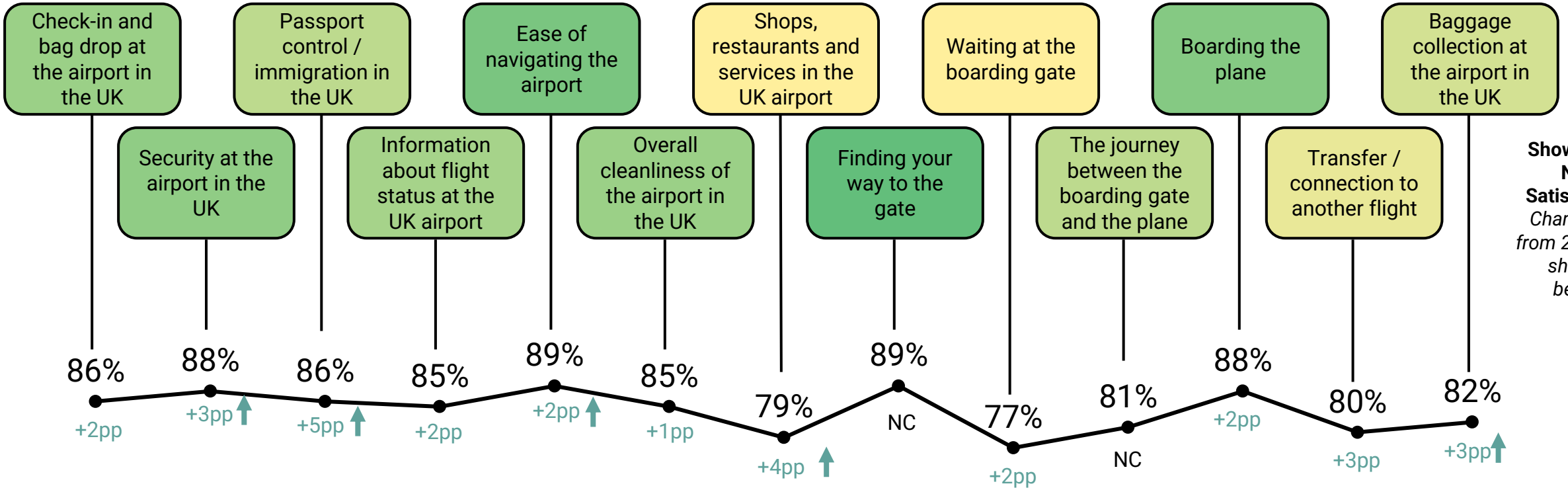

The most significant change from 2024 to 2025 was seen in passport control/immigration (+5pp), shops, restaurants and services provided (+4pp) along with the overall travel experience (+4pp). Encouraging progress was also seen in waiting at the boarding gate – though the lowest score, a rise of 2pp saw scores return to 2023 levels after a dip of 2pp in 2024. Overall, the passenger journey in 2025 presents a positive picture, with satisfaction improving across most areas. The only exceptions are the journey from the boarding gate to the plane and navigating to the gate, which have remained stable rather than increasing. Among passengers dissatisfied with the UK airport experience, most were dissatisfied with shops, restaurants and services provided (37%), waiting at the boarding gate (36%) and the journey between the boarding gate and the plane (29%).

Q24. Thinking now about some more specific aspects of your most recent flight, please tell us how satisfied or dissatisfied you were with the following elements?
Base: All who have flown in the last 12 months, excluding DK and NA responses (n= 1028-2164)

# Consistently positive scores across touchpoints have made the overall travel journey more balanced, likely contributing to the increase in satisfaction with the overall travel experience

## Showing satisfaction with the airport experience, in chronological order

Includes only those who have flown in the last 12 months, and excludes those answering 'Don't know' and 'Not applicable'




According to a behavioural science principle known as the '**peak end rule**', consumers will typically judge an experience based on its most intense points – whether positive or negative – and the end of that experience. This year, both previously low-scoring stages of the consumer journey, airport services and waiting at the boarding gate, have seen notable increases in satisfaction, reducing their negative impact. Satisfaction in these areas continues to grow since 2024.



Q24. Thinking now about some more specific aspects of your most recent flight, please tell us how satisfied or dissatisfied you were with the following elements? Base: All who have flown in the last 12 months, excluding DK and NA responses (n= 1028-2164)



Savanta

# However, for vulnerable passengers who are not digitally confident or have disability/accessibility needs, satisfaction scores for airport wayfinding is markedly lower

Note: Due to a change in vulnerability definitions from 2024 to 2025, direct comparisons to 2024 scores are not possible

**Recent flyers with digital or accessibility vulnerabilities are significantly less likely to be satisfied with…**

| | Digital | Accessibility | Not vulnerable |
|---|---|---|---|
|  **Finding your way to the gate** | 78% | 85% | 91% |
|  **Ease of finding your way around the airport** | 81% | 84% | 90% |
|  **Information about flight status** | 76% | 82% | 88% |



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Q24. Thinking now about some more specific aspects of your most recent flight, please tell us how satisfied or dissatisfied you were with the following elements? Base: All who have flown in the last 12 months, excluding DK and NA responses (n= 1028-2164)

Section 1.4:

# *The experience of passengers with accessibility needs and disabilities*

***Key takeaways from this section:***

- Disabled-passengers and those who require assistance continue to have a markedly different experience from the wider flying public in 2025, echoing the trends seen in 2024. While overall satisfaction with air travel has risen, the gap between disabled and non-disabled passengers has widened further.
- The need for assistance is a key barrier to flying, with those who have not flown in the last 12 months most likely to require assistance in an airport or while flying.
- Consumers with non-visible and physical disabilities continue to be most likely to require a form of assistance while flying.

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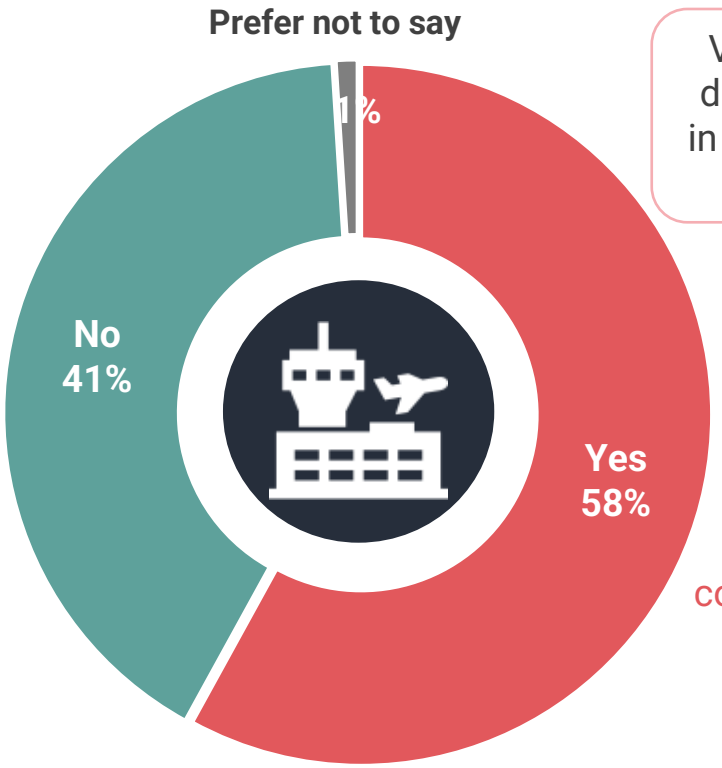
# The proportion of disabled consumers facing difficulties in accessing or using airports and flying has remained largely unchanged since 2024. New data in 2025 suggests that among all passengers, 15% would need assistance were they to travel

## Difficulty in accessing/using airports or flying

*All who have a disability*



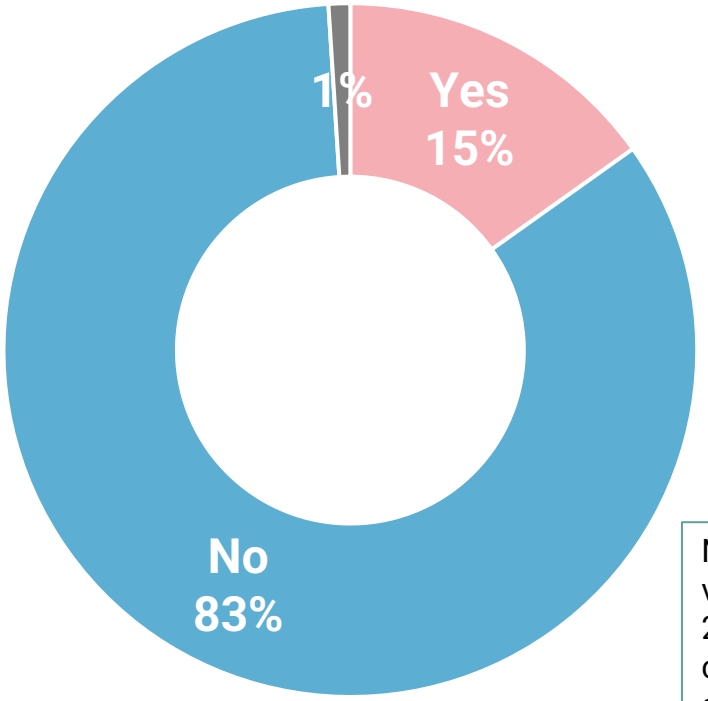

+2pp compared to 2024

-1pp compared to 2024

Very minimal/no differences noted in sub-groups from 2024-2025

## Would you need specific assistance from the airport or airline if you were to fly in the future?

*All respondents*




Those who have not flown in the last 12 months are more likely to require assistance, indicating the need for assistance may be a barrier to travel

Note: Due to a change in vulnerability definitions from 2024 to 2025, direct comparisons to 2024 scores are not possible for Q15b

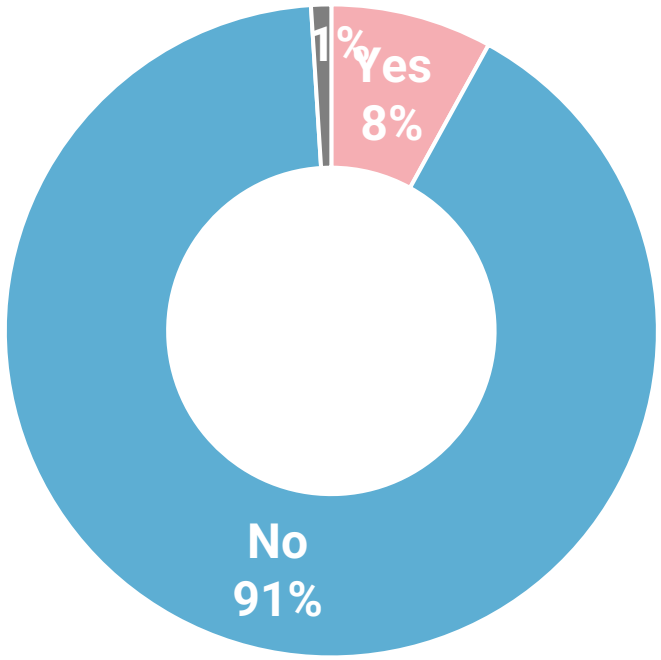


Q12. Does/would your disability or health condition make accessing and/or using airports or flying difficult? Base: All who have a disability or health condition (n=686) Q15b. If you were to fly in future, would you need or think you would need specific assistance from the airport or airline? Base: All respondents (n=3500)

# About one in ten needed airport or airline assistance on their last flight. Passengers with a non-visible disability and physical disabilities or health conditions were more likely to require assistance on their most recent flight

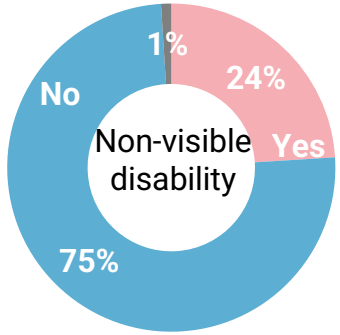
**Did you need specific assistance from the airport or airline on your most recent flight?**

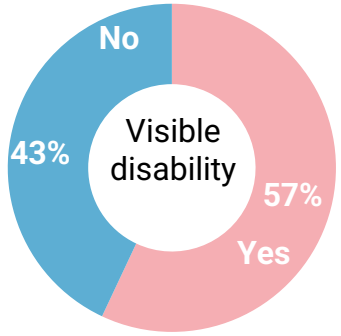
*All who have flown in the last 12 months*

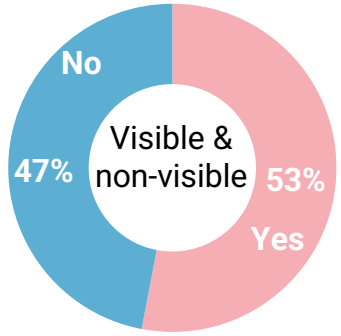



Note: Due to a change in vulnerability definitions from 2024 to 2025, direct comparisons to 2024 scores are not possible for Q15a

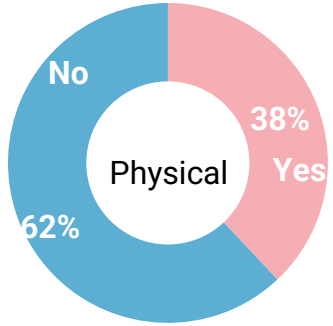
Assistance is required more amongst passengers with visible disabilities, and those with both visible *and* non-visible disabilities:

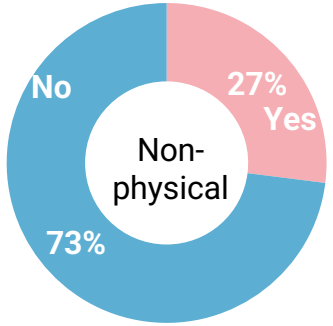


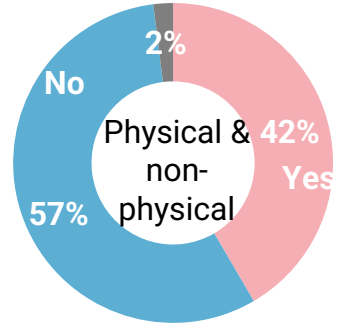




And assistance is required more amongst passengers with physical disabilities, and those with both physical *and* non-physical disabilities:



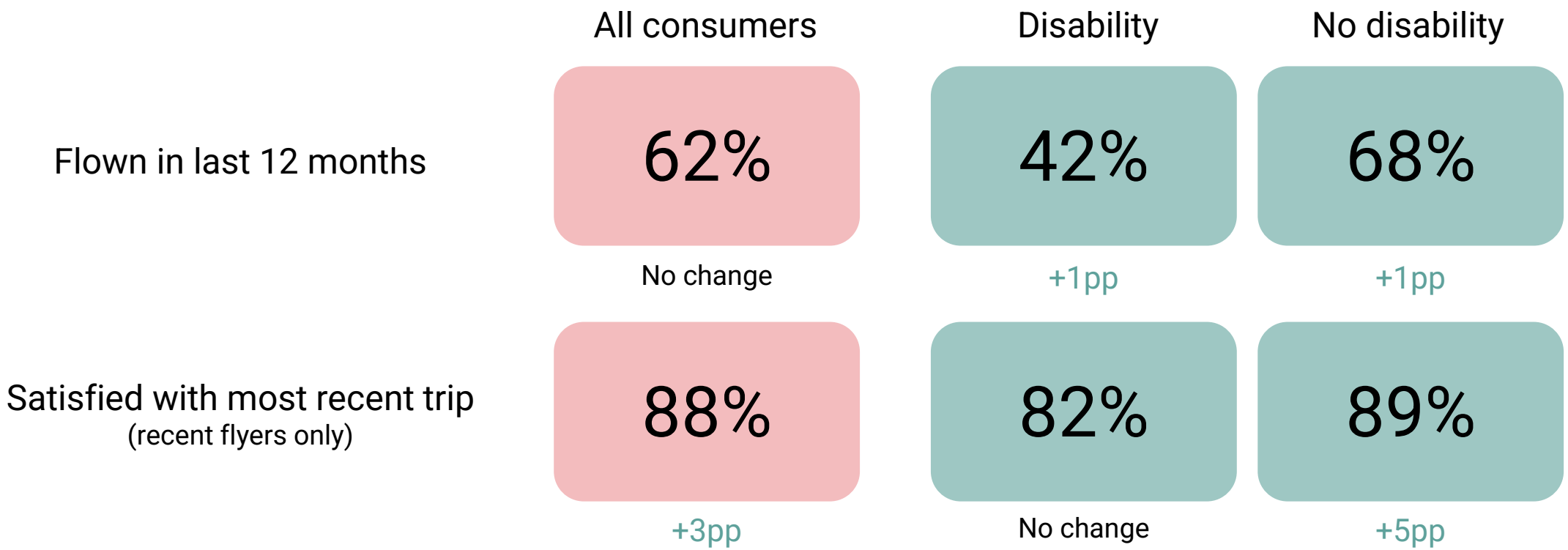




Q15a. Thinking about your most recent flight, did you need specific assistance from the airport or airline? Base: All who have flown in the last 12 months (n=2173)

# Disabled passengers remain less likely to have flown in the past 12 months. While their overall satisfaction with their most recent flight has remained unchanged, the gap in satisfaction between disabled and non-disabled passengers has widened

**Showing flying behaviour and satisfaction with the overall travel experience on the most recent flight amongst recent flyers, by disability status**

*Percentage-point changes since 2024 shown*










Q1. When was the last time you flew from a UK airport, either to travel within the UK or to go abroad? Base: All respondents, 2025 (n=3,500) including those with (n=686) and without (n=2763) a disability or health condition. Q24.14. Please tell us how satisfied or dissatisfied you were with the overall travel experience? Base: All who have flown in the last 12 months, excluding DK and NA responses (n=2,164), including those with (n=286) and without (n=1863) a disability or health condition

# Disabled passengers still report lower scores by comparison at a few touchpoints in their journey

*Disabled recent flyers are significantly less likely than non-disabled passengers to be satisfied with…*

| | Disability | No disability |
|---|---|---|
|  **Onboard and in-flight experience** | 81% | 86% |
| | +6pp | +6pp |
|  **Airport experience in the UK** | 75% | 81% |
| | +6pp | +3pp |
|  **Handling of complaints** | 66% | 74% |
| | +7pp | +12pp |

*Changes from 2024 shown below*

There are three satisfaction metrics which continue to see significantly lower scores amongst disabled passengers, despite these scores seeing improvements since 2024– two concerning the travel experience, and one complaints handling.

The largest gap is in satisfaction with the handling of any complaints made to the airport or airline, with only 66% of disabled passengers satisfied compared to 74% of non-disabled passengers. This was most pronounced among financially vulnerable passengers at 64% (vs 70% for those without vulnerabilities).







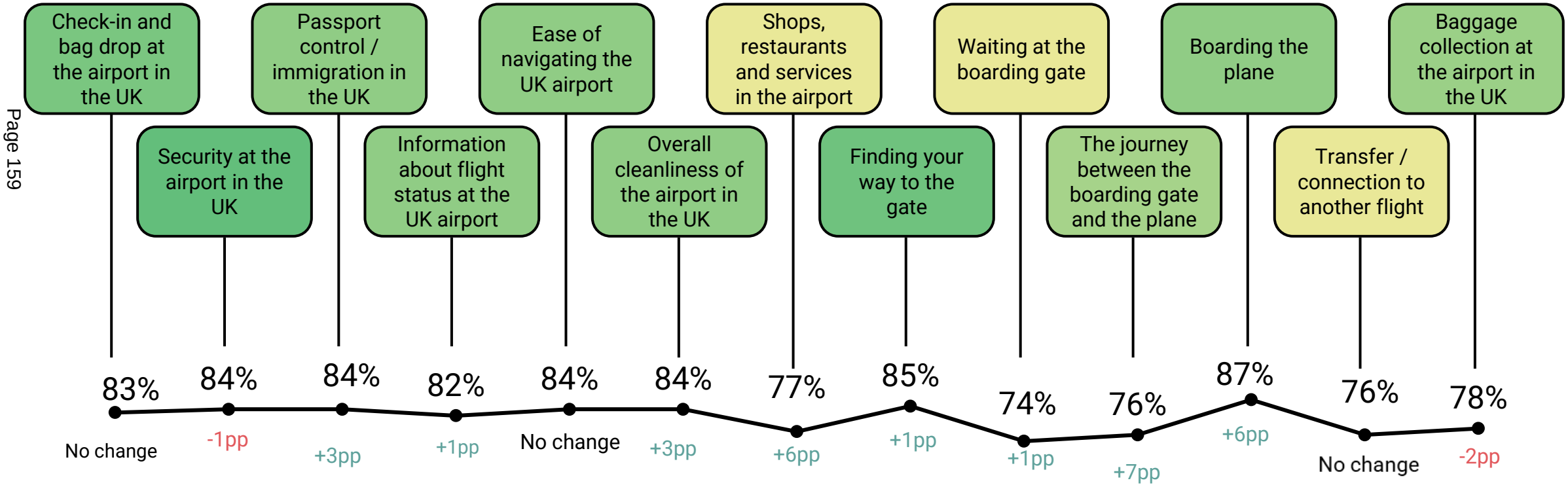
Q23. How satisfied or dissatisfied were you with the following elements? Base: All who have flown in the last 12 months, excluding DK and NA responses, including those with (n=233,218,94) and without (n=1594,1498,612) a disability or health condition.

# At certain stages of the airport experience, disabled passengers report the lowest levels of satisfaction—specifically when waiting at the boarding gate, travelling between the boarding gate and the plane, and transferring to another flight

**Showing**
**NET: Satisfied**
*Changes from 2024 shown below*

***Showing satisfaction with the airport experience, in chronological order (Disabled consumers only)***

*Includes only those who have flown in the last 12 months, and excludes those answering 'Don't know' and 'Not applicable'*





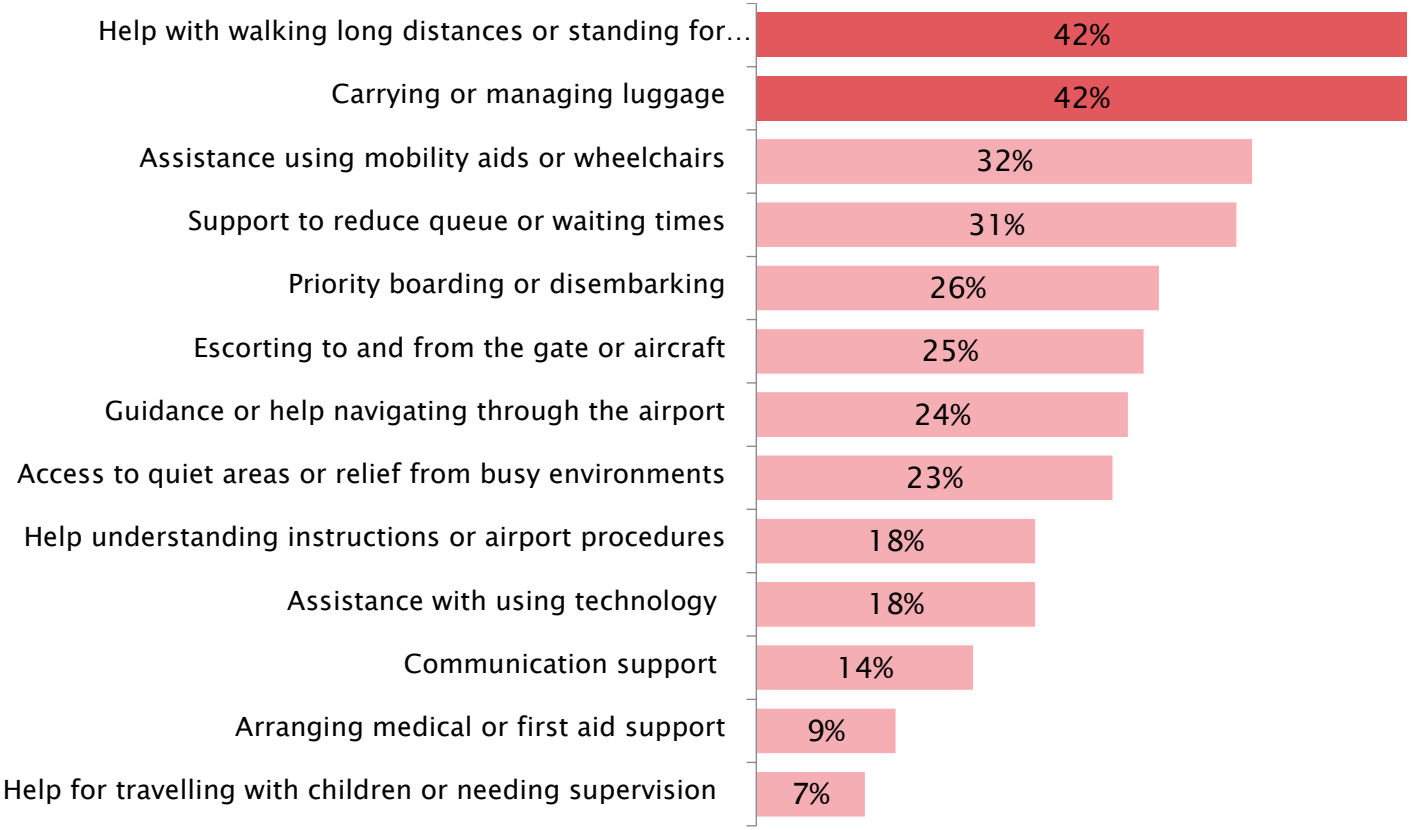



Q24. Thinking now about some more specific aspects of your most recent flight, please tell us how satisfied or dissatisfied you were with the following elements? Base: All consumers with a disability or health condition who have flown in the last 12 months, excluding DK and NA responses (n=142-289)

# The most common forms of assistance passengers have needed, or would need, are help with walking or standing for long periods and carrying or managing luggage

***Reasons passengers have needed, or would need, assistance***

*Showing percentage who say the following*




Among those who expect to need assistance, older passengers are most likely to need help with walking long distances or standing (64%).

Within vulnerable groups, 80% of those experiencing digital vulnerability anticipate requiring support with technology, such as check-in kiosks, while 70% of those facing language or communication challenges are likely to need help understanding instructions or airport procedures.

Q16a. What are the reasons you needed or would need specific assistance? Base: All who require assistance when making a flight or would need it in future (n=551)

Section 2.1:

# Consumer priorities, value for money and hidden charges

Page 161

***Key takeaways from this section:***

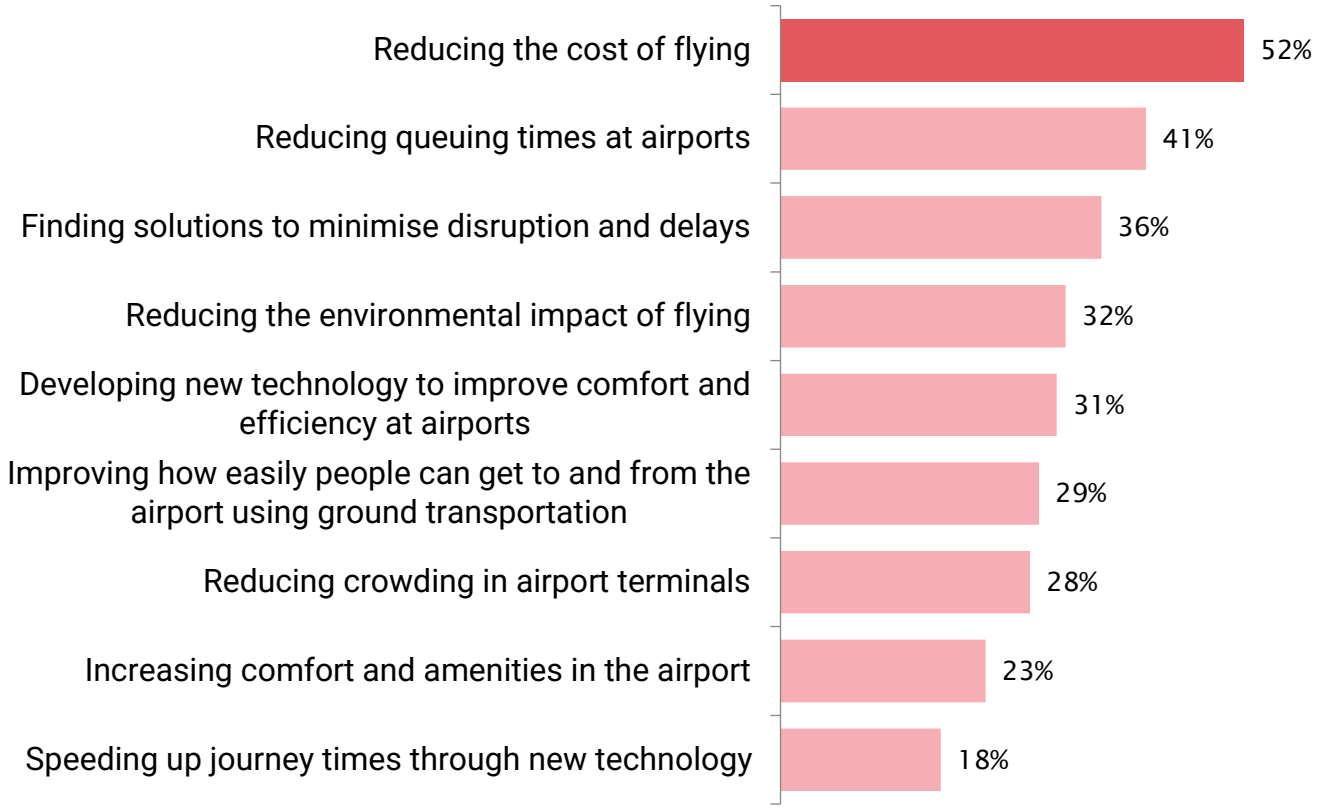
- The cost of flying remains the leading priority (52%) among consumers for the aviation industry to invest on in the next 12 months. Overall, more than half (54%) report taking actions to cut costs on their most recent flight—such as choosing less convenient travel times or bringing only hand luggage.
- Despite widespread concerns over cost, satisfaction with value for money has increased to 76%, returning to pre-pandemic levels.
- While many passengers are aware of what's included in their airfare, overall awareness remains inconsistent. Notably, about one in four passengers are unaware of specific extra charges—such as fees for printing boarding passes at the airport (24%) or making the booking (27%).

Agenda Annex

# Lowering airfares is still the top priority for consumers when it comes to the aviation industry

***How the UK public would prioritise areas for investment in the aviation industry over the next 12 months***

*Showing % who placed the following priority areas in their top 3*




Reducing the cost of travel is the main priority for younger age groups, while for those aged 55+, their main priority is reducing queueing times at airports.

| | 18-34 | 35-54 | 55+ |
|---|---|---|---|
| Reducing the cost of flying | **53%** | **57%** | 46% |
| Reducing queueing times at airports | 32% | 39% | **48%** |

*A direct comparison to last year is not recommended for this question since four new options have been added this year - differences may reflect the altered choices rather than real shifts in respondent views or behaviours.

Q7. Consider this list of possible areas of investment for the aviation industry over the next 12 months. How would you prioritise these areas?
Base: All respondents (n=3,500).

# While specific vulnerabilities have an influence over consumer priorities, reducing the cost of flying is universally important for all groups

## Showing % who placed the following priority areas in their top 3 by vulnerability status

| | Not vulnerable | Personal circumstances *(22% of sample)* | Language / Communication *(4% of sample)* | Digital *(8% of sample)* | Accessibility and disability *(21% of sample)* | Financial *(29% of sample)* |
|---|---|---|---|---|---|---|
| **#1** | Reducing the of flying 49% | Reducing the cost of flying 51% | Developing new technology 51% | Reducing the cost of flying 45% | Reducing the cost of flying 47% | Reducing the cost of flying 61% |
| **#2** | Reducing queuing times 42% | Developing new technology 43% | Reducing the cost of flying 47% | Reducing queuing times 42% | Reducing queuing times 39% | Reducing queuing times 38% |
| **#3** | Minimising disruption and delays 40% | Reducing queuing times 39% | Minimising disruption and delays 33% | Reducing crowding in airport terminals 36% | Reducing environmental impact / Reducing crowding 33% | Minimising disruption and delays 33% |

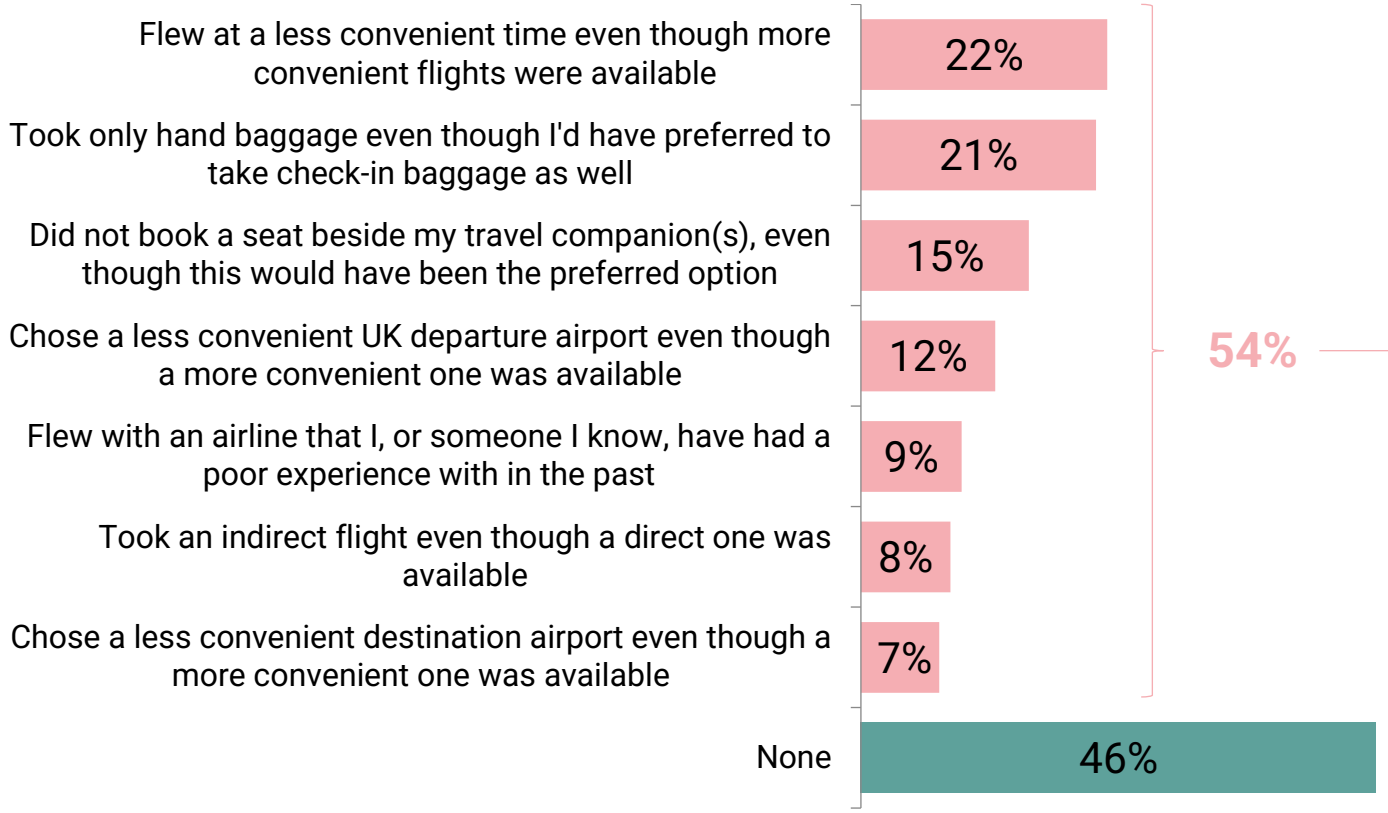
*All figures in this report have been rounded to the nearest whole number. Further details can be found in the 'How to read this report' at the beginning of the report.

Q7. Consider this list of possible areas of investment for the aviation industry over the next 12 months. How would you prioritise these areas? Base: All respondents (n=3,500).

# Reflecting cost concerns, over half of passengers claim they took actions for their last flight to save money, with flying at a less convenient time and taking only hand luggage being the most common among them

## Actions passengers have taken to save money on their last trip

*Among those who have flown in the last 12 years*




Taking any of the actions listed is more common among younger age groups as well as those considered vulnerable.

18-34: 71%, 35-54: 55%, 55+:39%
Not vulnerable: 46%, Vulnerable: 66%



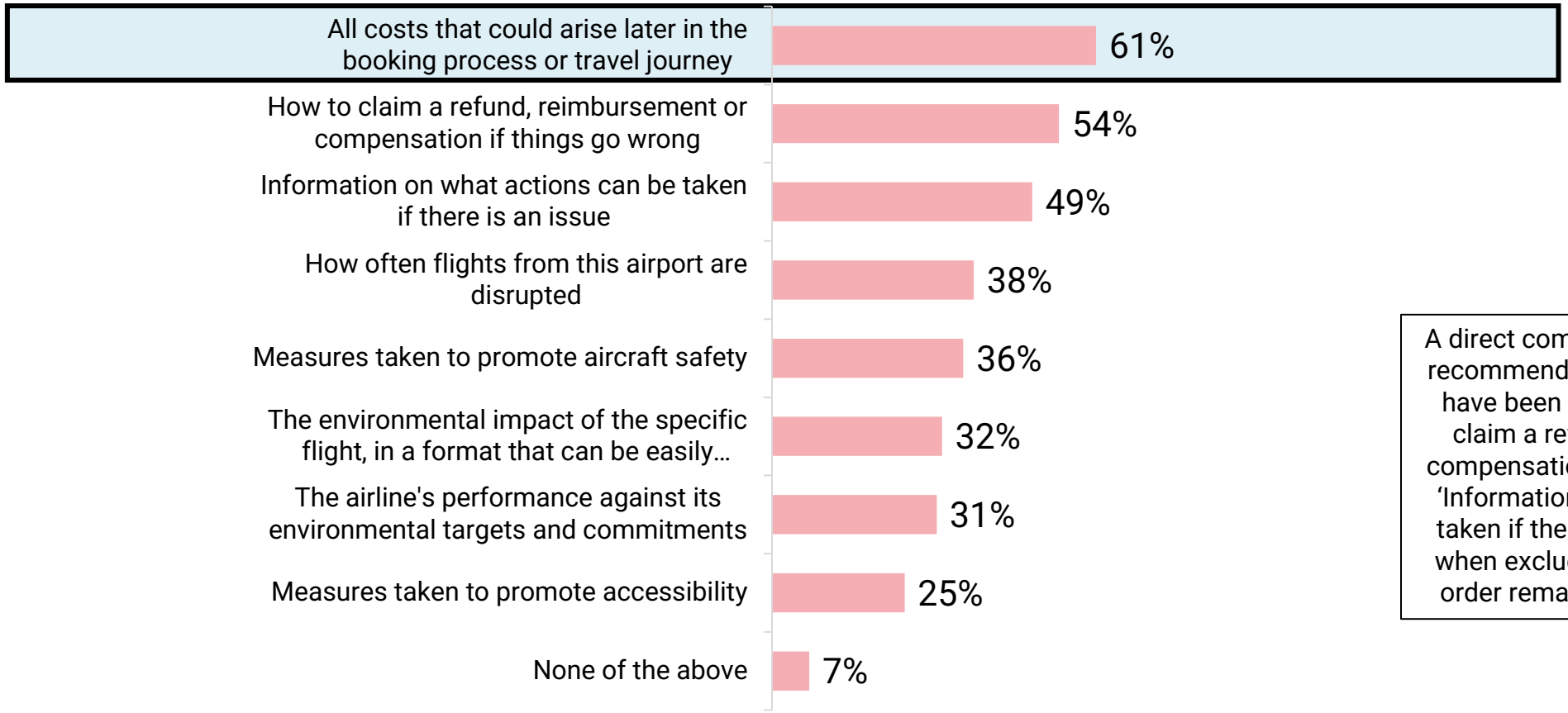




Q21. Still thinking about this most recent flight, did you do any of the following to save money on your trip? Base: All who have flown in the last 12 months (n=2173).

# To enable these savings, there is a strong desire from consumers for more transparency on cost information at the point of booking a flight

***Showing percentage of consumers who would like to see more information in the following areas at the point of booking a flight***

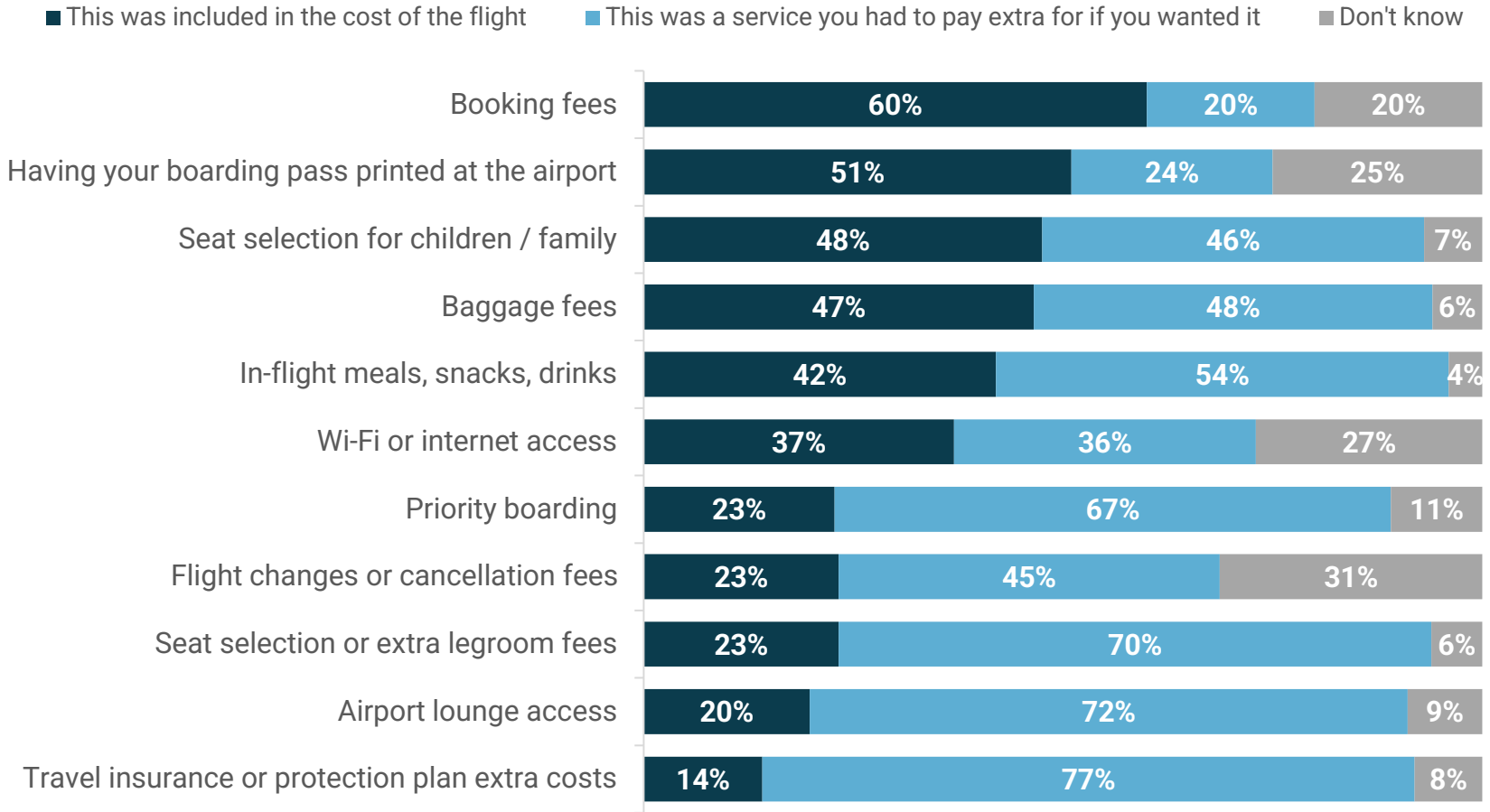



A direct comparison to last year is not recommended since two new options have been added this year ('How to claim a refund, reimbursement or compensation if things go wrong' and 'Information on what actions can be taken if there is an issue'). However, when excluding the new options, the order remains the same as in 2024.

Q10. In which of the following areas, if any, would you like to see more information at the point of booking? Base: All respondents (n= 3500).

# Awareness of what passengers thought was included in their airfare is uneven, reflecting inconsistencies in how airlines apply extras such as seat selection, baggage, and booking fees across flight classes, fare types, and policies

**Showing % of recent flyers that thought the following was included in the cost of their flight or whether they had to pay extra for it**




For example, while six in ten flyers believe booking fees were included in their last flight, and only two in ten recall paying extra. This discrepancy is likely due to:

- Varying airline practices: Some airlines absorb or bundle these fees into the total fare, while others list them as separate charges at checkout.
- Differences in how costs are presented: Full-service carriers may hide or waive fees as part of consumer service, while low-cost or budget airlines tend to itemise and charge these fees separately.

Similarly, the near-even split in awareness over whether child or family seat selection was included (48% say yes, 46% no) likely reflects differences in both ticket class and airline policy. Premium cabins often bundle in more perk including seat selection for families, whereas basic economy fares are more restrictive and may add fees for these services.

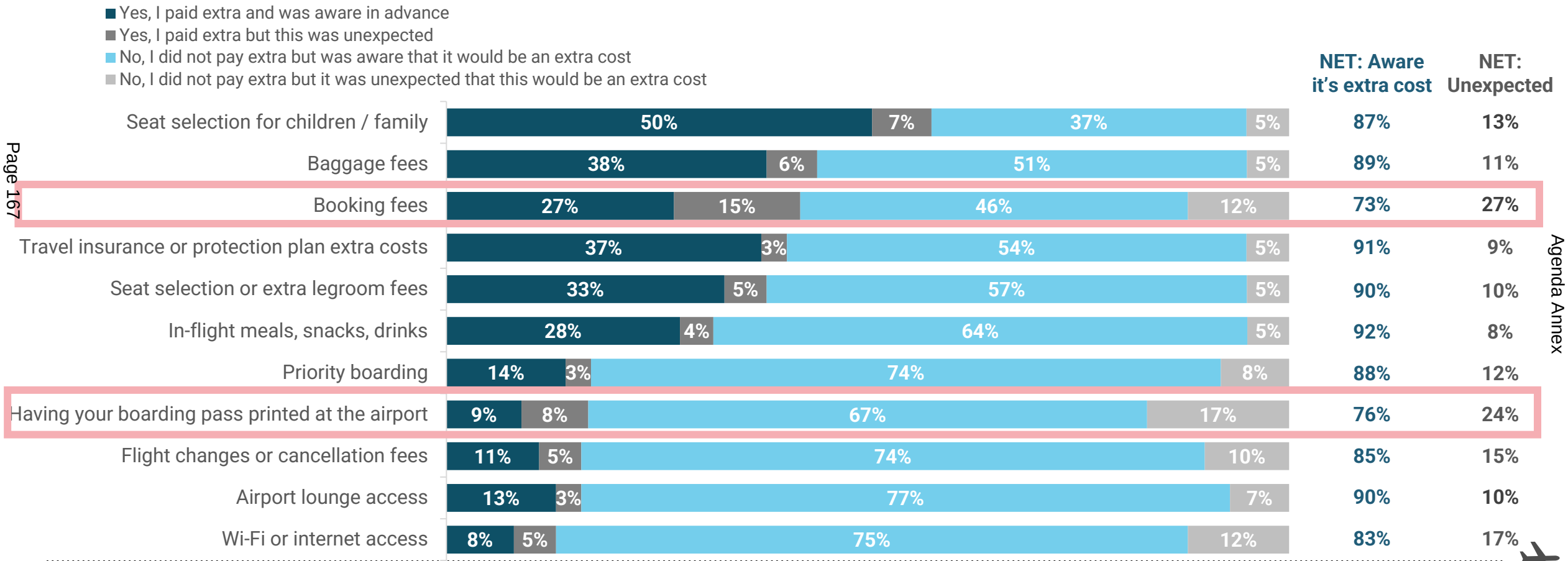
It is also worth noting passengers' recall biases - many may not notice or remember subtle processing charges, especially if they're embedded in the final price.

Q22a. On your most recent flight, were each of the following services included in the cost of your flight or were they extra services that you had to pay for? Base: All who have flown in the last 12 months (n=2173).

# The gap in knowledge can result in unexpected extra costs, with booking fees, as well as charges for printing boarding passes at the airport, most frequently identified as unexpected by recent flyers

**Showing % of recent flyers and whether they did or did not pay extra for each of the following services that were an additional cost on their flight**

*% of those who would have had to pay extra for each service*

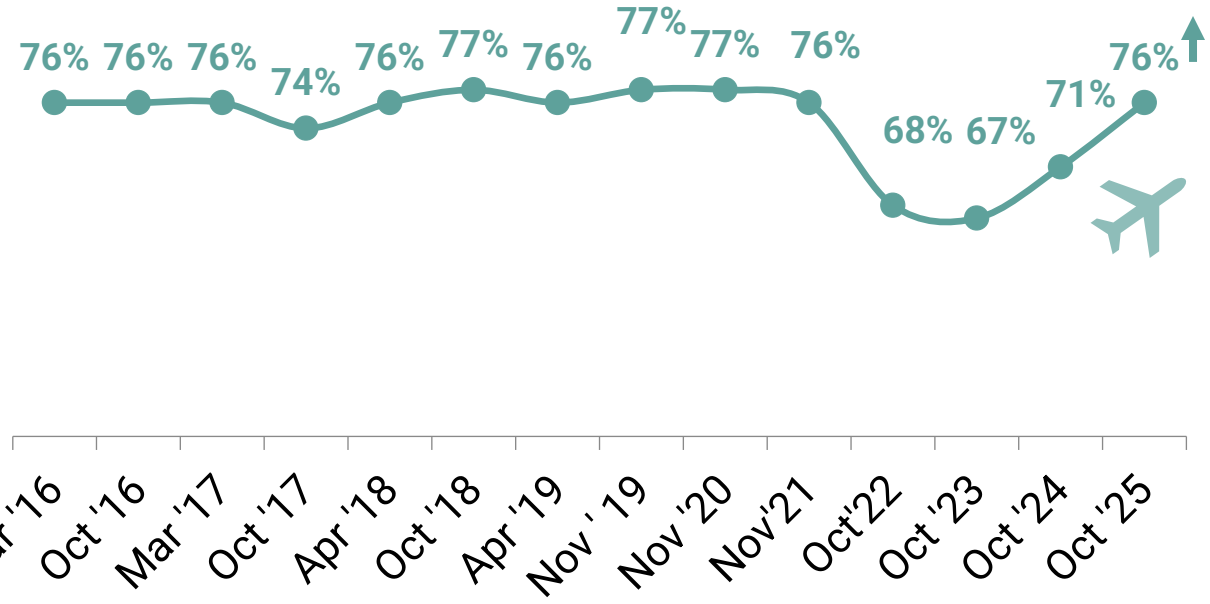



Q22c. For each of the following services that were paid extras, did you pay for this extra service on your most recent flight, and did you know beforehand that there would be an extra cost? Base: All who had extra services that could be paid for on their most recent flight (n=223-1683).

# Despite taking measures to minimise costs and avoid unexpected costs, overall satisfaction with value for money is high and shows similar levels to before 2022

## Satisfaction with value for money of their last flight

*NET: Satisfied (very satisfied + fairly satisfied) figures only*




**Context**

The dip between 2022 and 2024 may be due to a mismatch between rising prices and impaired service quality during the turbulent post-pandemic recovery. In 2025, operations and pricing seem to have stabilised, which has resulted in better perceptions on value for money.

### Satisfied with the value for money of last flight

| | Disability | No disability | Gap |
|---|---|---|---|
| October 2024 | 64% | 72% | -8pp |
| October 2025 | 75% | 76% | -1pp |

In previous years we have observed a gap in satisfaction with value for money among disabled and none disabled consumers. This year the gap is negligible.
This trend also applies to individuals identified as vulnerable according to the approach set out in slide 9.







Q23. Value for money: How satisfied or dissatisfied were you with the following elements? Base: All who have flown in the last 12 months, excluding DK and NA responses (n= 2150)



Savanta

Section 2.2:

# *Travel disruption and complaint handling*



***Key takeaways from this section:***

- Travel disruption was experienced by fewer passengers than last year, with reports of flight delays also declining marginally.
- Over half of passengers who experienced a travel problem reported not being informed of their rights at the time, with this issue especially evident among those whose flights were delayed.
- Understanding of entitlement terms among consumers is inconsistent, suggesting uncertainty about the distinctions between "refund," "compensation," and "reimbursement," and their correct application during air travel and disruption.
- When asked, one in five consumers expressed dissatisfaction with the clarity and speed of information they received during disruption.
- Despite ongoing communication challenges, it's encouraging to see that satisfaction with complaint handling has improved markedly—even as the number of complaints remained steady compared to last year. Passengers cited notable progress in the ease of reaching support, faster response times, and a smoother complaint process, leading to more positive outcomes overall.

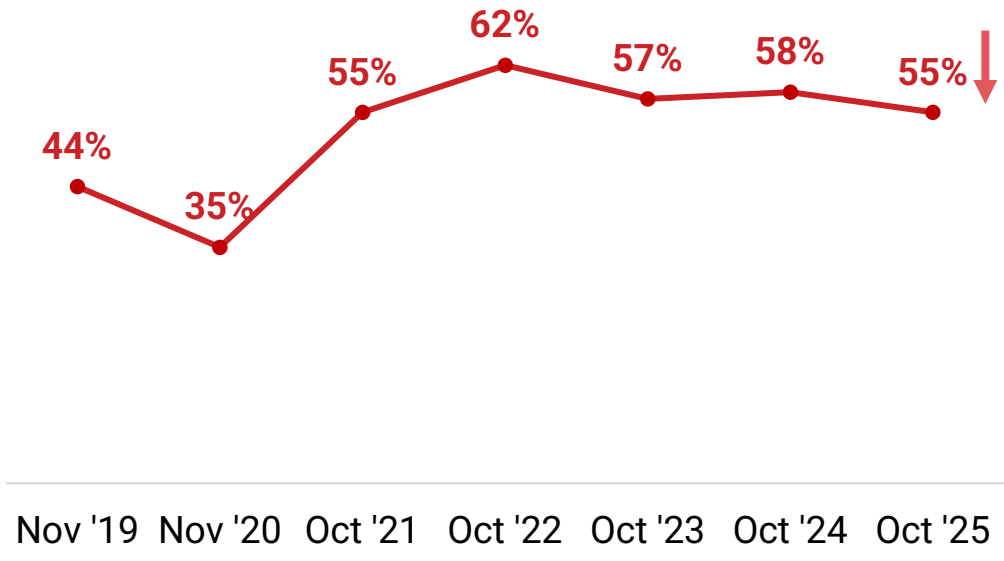


Agenda Annex

# Travel disruption has decreased this year, but passengers are experiencing more airport crowding and queuing

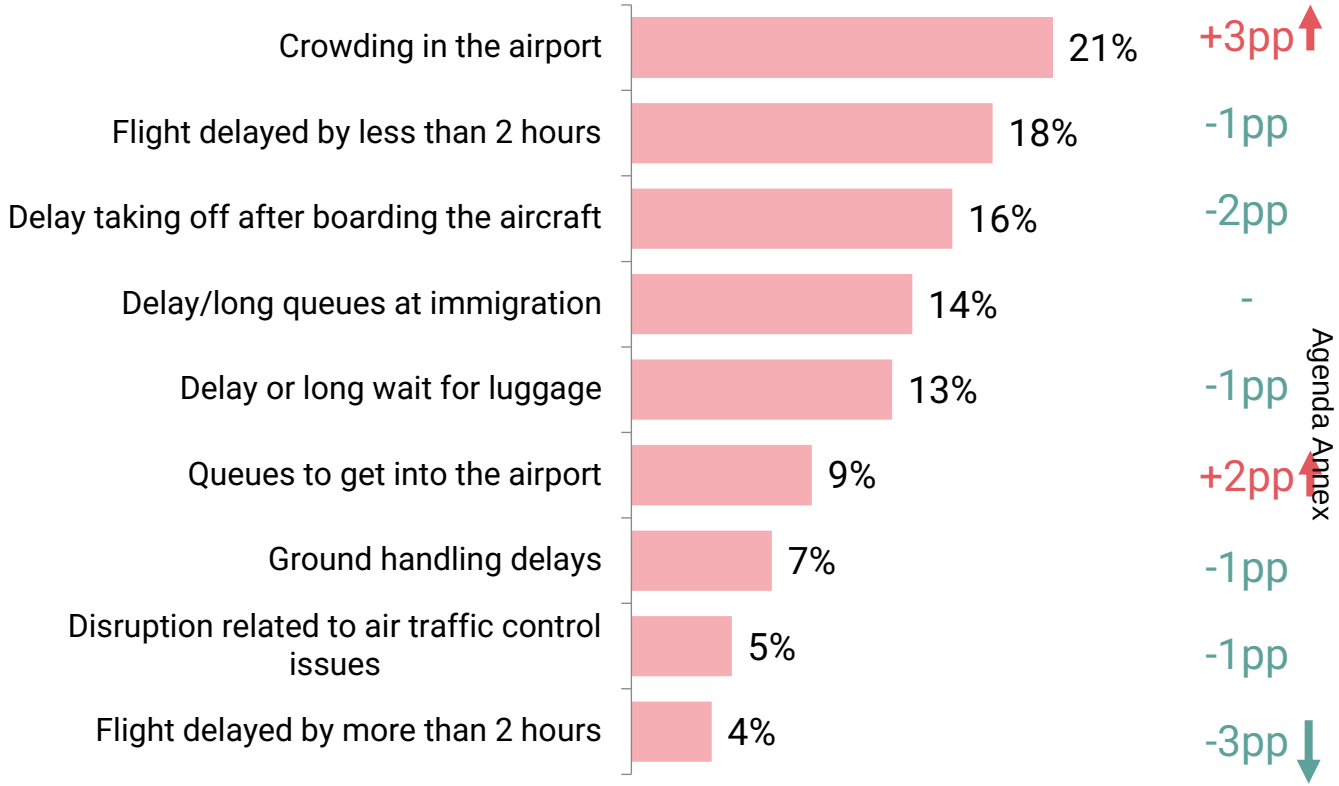
## Proportion of recent flyers facing any travel problem

*Among those who have flown in the last 12 months*




## Most experienced travel problems in last trip*

*Showing % who experienced the following (showing top 9 answers only)*
**Outward and return flights and any transfers as one journey*

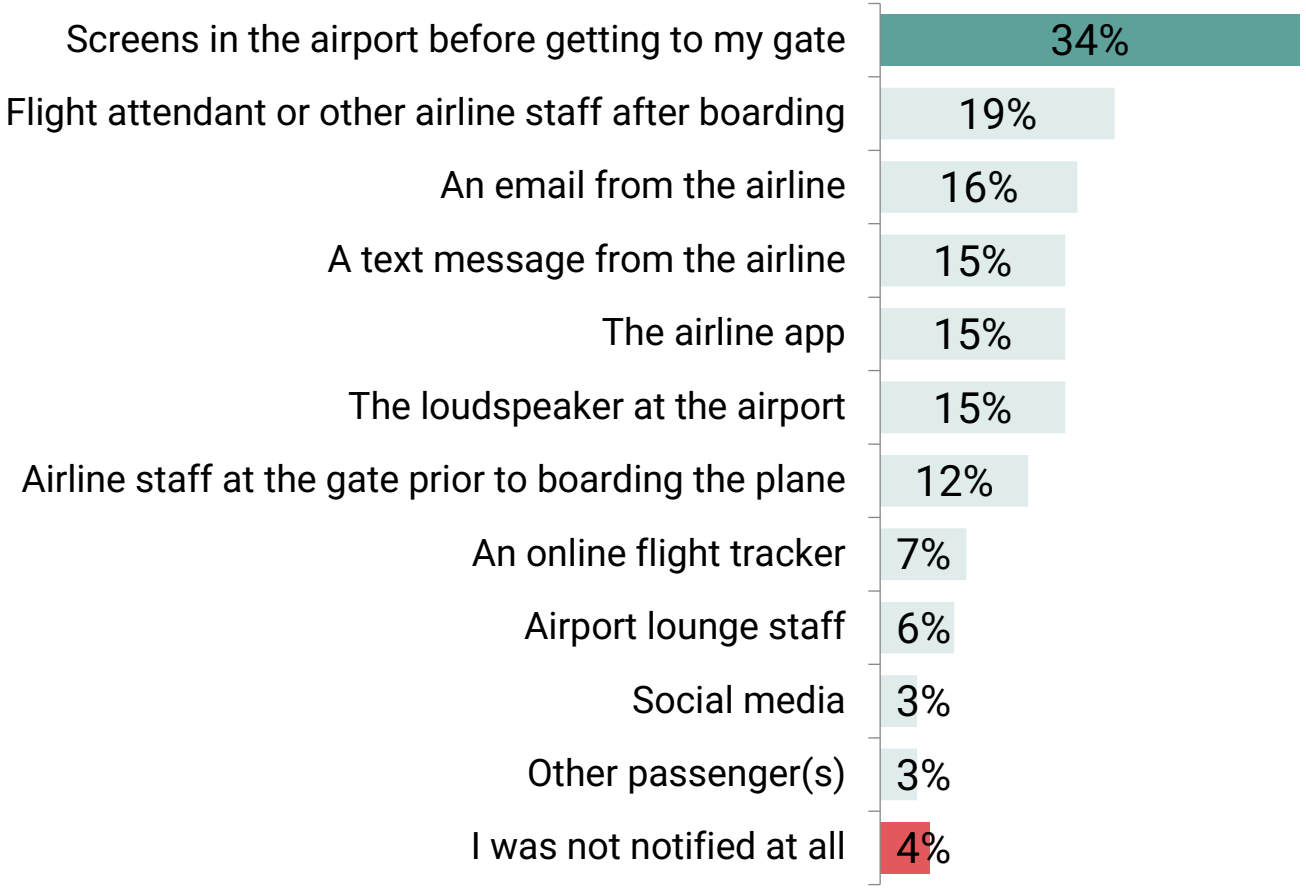



Q27. During your most recent journey, did you experience any of the following issues? Base: All who have flown in the last 12 months (n=2173).

# For those affected by flight delays or cancellations, screens near boarding gates were the main notification channel, with only a small number saying they were not notified at all

## Notification channels for any flight delay / cancellations

*Among those who have experienced a flight delay or cancellation in the last 12 months*




In 2025, the CAA commissioned carried out research to better understand airline communication with passengers during disruption *. Savanta repeated this question from the research to provide another point of comparison.

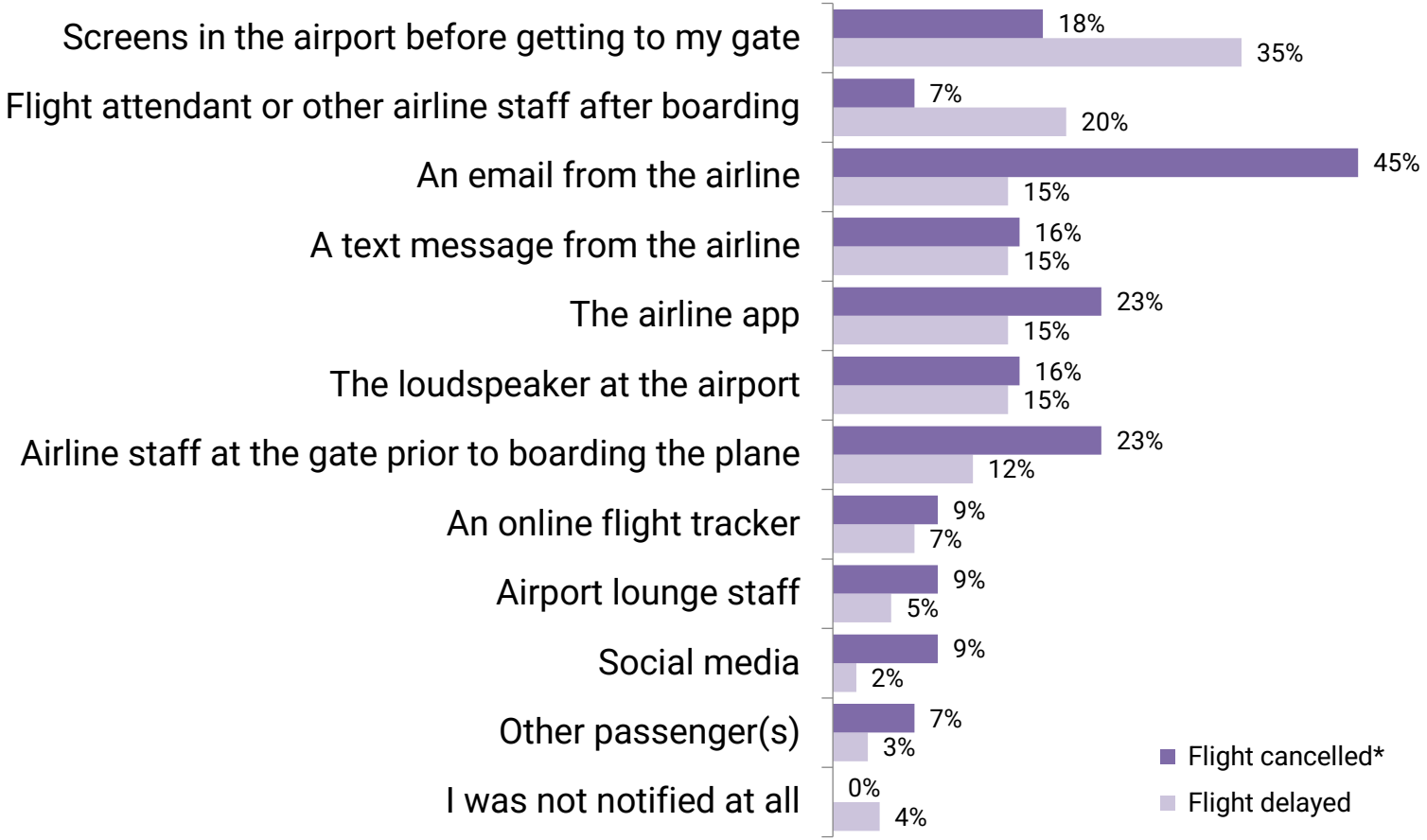
The results captured by Savanta align with those of the previous CAA research: screens are the most common channel for notifying passengers about delays or cancellations (31% in the disruption research). Overall, passive notification channels—where passengers are informed by the airline or others—are more prevalent than active channels, where passengers themselves seek out information.

Q29NEW. How were you first notified about your flight delay / cancellation? Base: All who experienced a flight delay or cancellation (n=505). *Research mentioned in this slide: https://www.caa.co.uk/publication/download/25553

# However, when looking at them separately, the primary channel for flight cancellations was email communication from the airline

## Notification channels for any flight delay / cancellations

*Among those who have experienced a flight delay or cancellation in the last 12 months*



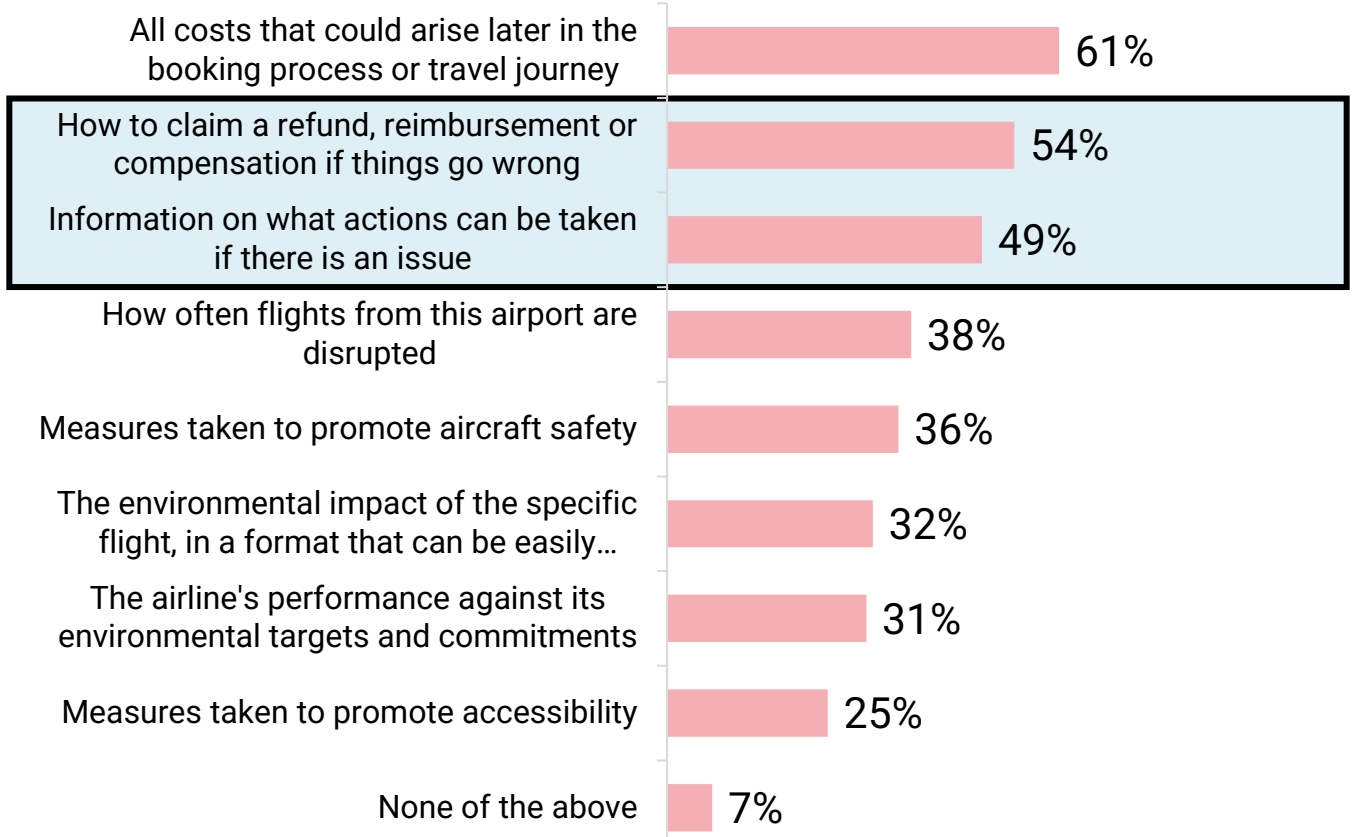

The previous slide presented the most common channels used to notify passengers of delays and cancellations together. However, earlier CAA research indicates that notification channels often differ depending on the nature of the disruption.

Examining the 2025 results separately, the trend continues: airport screens are the most common method for communicating delays, while cancellations are most frequently notified via email from the airport.

Q29NEW. How were you first notified about your flight delay / cancellation? Base: All who experienced a flight delay or cancellation (n=505), flight delays n=474, flight cancellation n=56* Small sample size, please treat with caution. Research mentioned in this slide: https://www.caa.co.uk/publication/download/25553

# Consumers would like more information on actions to take in case of an issue and how to claim a refund, reimbursement, or compensation

***Showing percentage of consumers who would like to see more information in the following areas at the point of booking a flight***




After cost information (61%), consumers would like more information in two new options areas included this wave: how to claim a refund, reimbursement, or compensation if things go wrong (54%), and what actions can be taken if there is an issue (49%). This is similar to the proportion of flyers who report experiencing an issue in the last year (55%), as seen before.

Consumers aged 55+ are significantly more likely to want information on refunds and compensation (58%) as well as actions to be taken when there is an issue (54%).

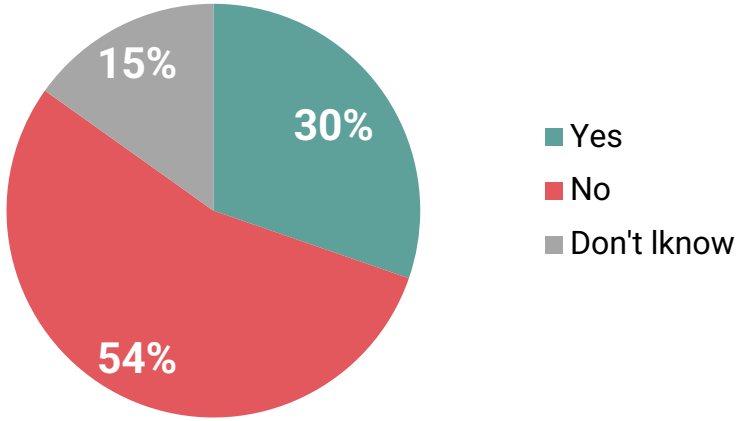
*Looking at the options tracked over time, a direct comparison to last year is not recommended since these two new options have been added this year. However, when excluding the new options, the order remains the same as in 2024.

Q10. In which of the following areas, if any, would you like to see more information at the point of booking? Note: respondents were able to choose multiple options here, so percentages add up to over 100%. Base: All who complained about a travel problem (n=174). Base: All respondents (n= 3500).

# Over half of passengers who experienced a travel problem report they were not informed of their rights; this is especially pronounced among those with delayed flights. However, it cannot be determined whether all affected passengers had statutory rights, or if delays were sufficient for those rights to apply

## Informed of their rights by airport or airline

*Among those who experienced a travel problem*




Three in ten (30%) of passengers say that they were informed of their rights when experiencing a travel problem (2024: 26%). This issue disproportionately affects older consumers, with only 11% saying they were informed, compared to 49% of 18-34 year-olds. No significant differences have been noted for other groups.

Consumers whose flights were cancelled are more likely to say that they were informed of their rights by the airport than those whose flight was delayed only.

| *Informed of their rights?* *(Among those who experienced a travel problem)* | **Flight delayed** | **Flight cancelled*** |
|---|---|---|
| Yes | 28% | **50%** |
| No | **59%** | 36% |

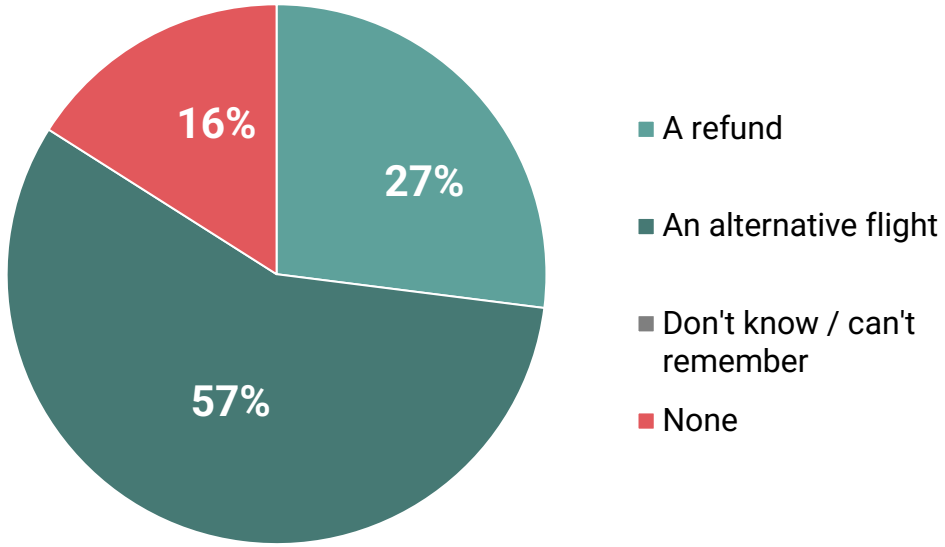
*Note: Under UK law, eligibility for compensation or support when flights are disrupted depends on specific criteria such as the type of disruption, flight route, airline, length of delay, and reason for the disruption—so not all reported experiences qualify for statutory entitlements.*

Q30. And were you informed of your rights by the airport or airline? BASE: All who experienced a travel problem (n=1186). ), flight delays n=474, flight cancellation n=56*
Low base size, please treat with caution

# Many affected passengers report missing out on support during travel disruptions, especially in cases of lengthy delays. However, these perceptions may reflect individual circumstances and may not always indicate eligibility for statutory support

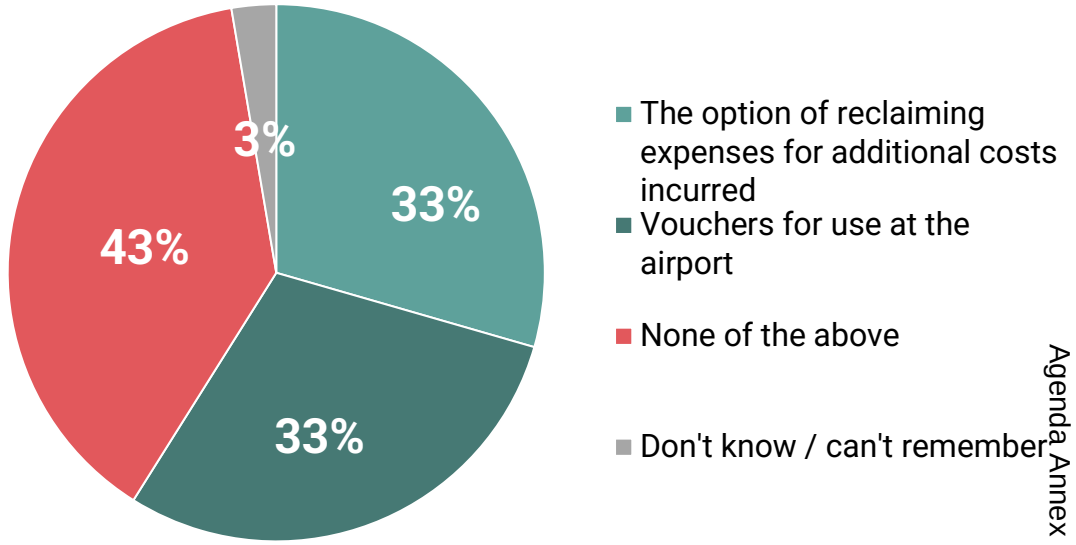
## Refund or alternative flight offered following cancellations

*All respondents who had to cancel their flight**




## Care and assistance offered following delays

*All respondents who had a flight delay of more than 2 hours**




*Note: Under UK law, eligibility for compensation or support when flights are disrupted depends on specific criteria such as the type of disruption, flight route, airline, length of delay, and reason for the disruption – so not all reported experiences qualify for statutory entitlements.*

While an alternative flight is commonly reported to be offered across age groups**, older passengers (55+) are much less likely to report that they were offered a refund (17%) compared to those 18-34 (33%)*** Passengers in this age group are also less likely to report that they were informed of their rights, highlighting the need for more accessible information on when and what passengers are entitled to when experiencing travel issues and able to access their entitlements.

Q32. And when your flight was cancelled on your most recent journey, were you offered the choice of a refund or an alternative flight (either on the same or a different airline)? Base: All who experienced a flight cancellation (n=56*) Q33. When your flight was delayed on your most recent journey, were you provided with welfare, such as vouchers for use at the airport, or the option of reclaiming expenses for additional costs incurred? Base: All who experienced a flight delay of two hours or more (n=94*) *Low base size, please treat with caution

# Understanding of key entitlement terminology is inconsistent, suggesting some confusion between the meanings of "refund", "compensation" and "reimbursement“, and when each applies in the context of air travel and disruption

| | A refund | Compensation | Reimbursement | Don’t know |
|---|---|---|---|---|
| If my flight is delayed by **more than 5 hours** or cancelled and I decide not to fly, I can claim... | 41% | 28% | 10% | 21% |
| If my flight is delayed by **more than 3 hours** (and the airline is responsible) but I still decide to travel on that flight, I can claim... | 14% | 58% | 11% | 17% |
| If my flight is delayed and I have to pay for meals, accommodation, or transport, I can claim... | 14% | 33% | 37% | 16% |

When presented with statements about ‘reimbursement’ for meals, accommodation, or transport due to delayed flights, 37% responded correctly.

However, a similar proportion (33%) incorrectly associated ‘compensation’ with the scenario, highlighting passenger uncertainty over the terminology that defines passenger rights.



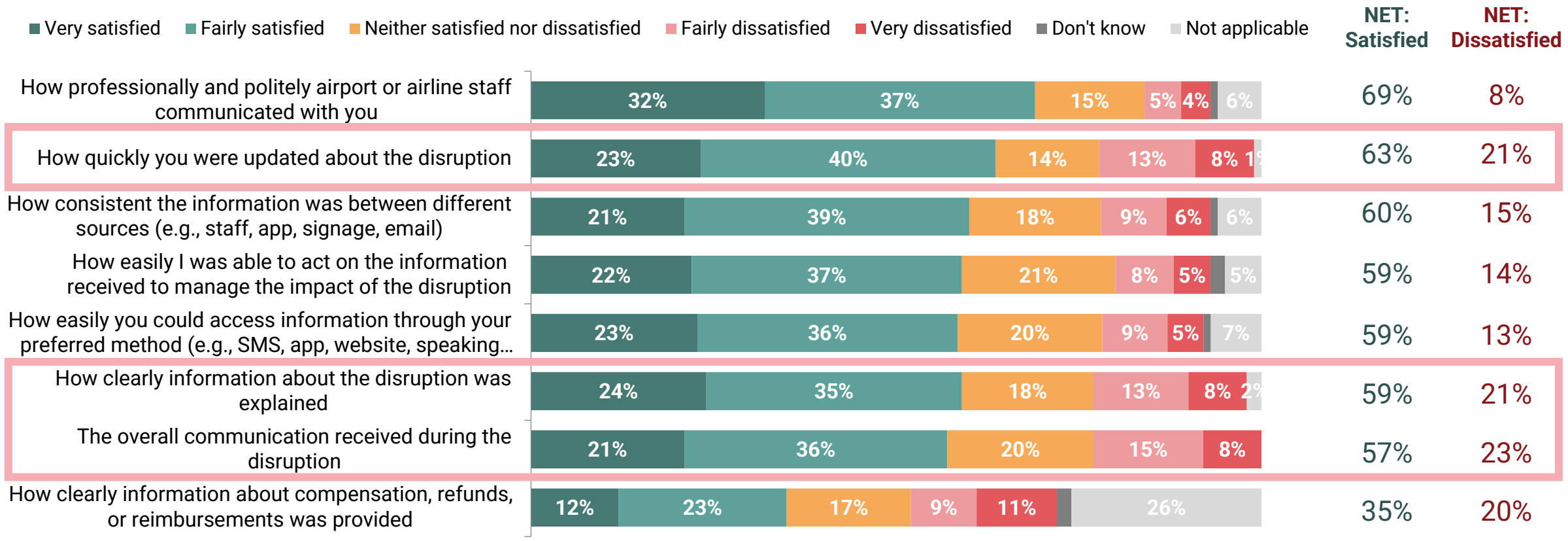


Q33b. In the context of air travel, passengers who have experienced delays often refer to: compensation, reimbursements and refunds. Please read each statement and choose the ONE term that best applies to your knowledge by ticking only one option for each Base: All who experienced a flight cancellation or delay (n=132)

# When considering aspects of communication during travel disruption other than compensation, reimbursements, and refunds, passenger dissatisfaction is highest with the clarity and speed of information provided by airports and airlines

## Satisfaction with different aspect of the communications received during travel disruption*

*All who received communication about their delay / cancellation*

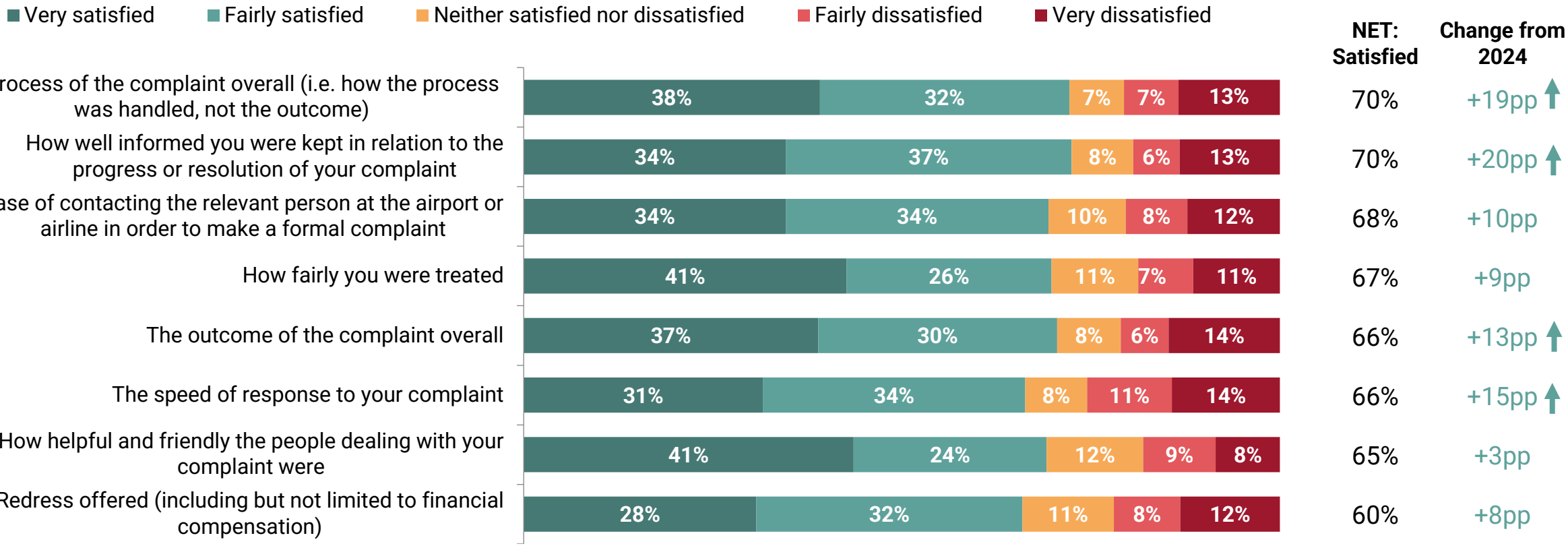



Q29b. For each of the following aspects of communication you received during your travel disruption, please indicate how satisfied you were. Base: All who received communication about their delay / cancellation (n=466). *New question for 2025

# Although consumers reported shortcomings with communication during disruption, satisfaction with complaints handling after problems occur has risen

## Satisfaction with specific aspects of complaints handling

*All who have flown in the last 12 months, experienced a travel issue and complained, excluding 'Don't know' responses*







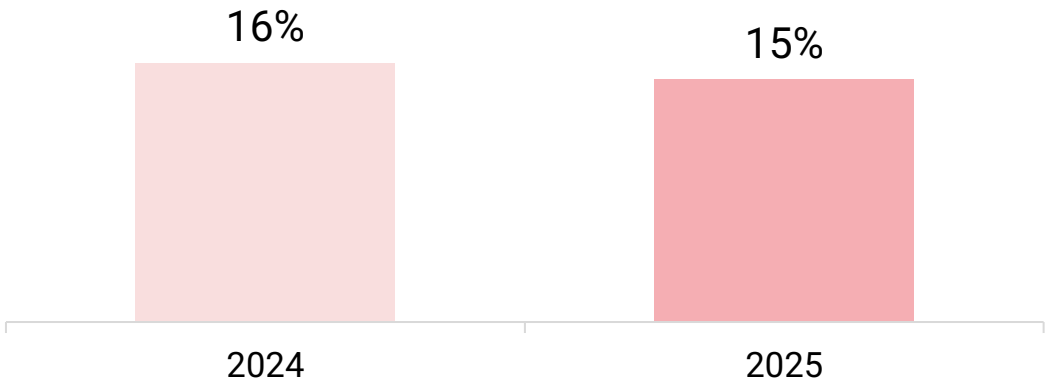



Q36. Thinking more specifically about any complaints you made about the travel issue, how satisfied or dissatisfied were you with each of the following aspects? Base: All who formally complained about a travel problem (n=166).

# The prevalence of disruption related complaints is similar to last year, but satisfaction with how they are handled is considerably higher

## Percentage of passengers who made a complaint following disruption

Among those who faced disruption on their most recent flight

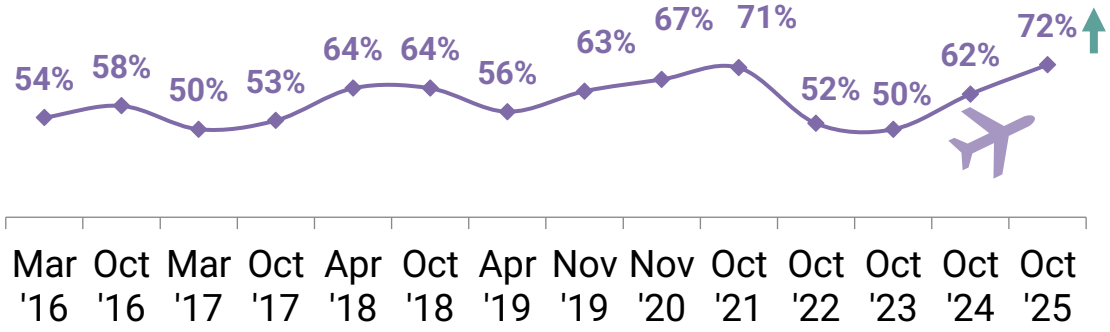



The proportion of passengers making a complaint after facing a travel issue on their most recent flight is similar to the previous year.

In line with last year, complaints were more common among those who experienced a cancellation or diversion (29%) than among those who experienced a delay (14%).

## Showing percentage of passengers satisfied with complaints handling on their most recent trip

*Among those who have flown in the last 12 months*




Although complaints are still being submitted in similar numbers, satisfaction with how they are handled has notably improved in the last few years, with three quarters of consumers saying that they were satisfied with the process.

Those who experienced a cancellation or diversion (80%) are more likely to say they were satisfied with the complaint handling process than those who experienced a delay (63%).



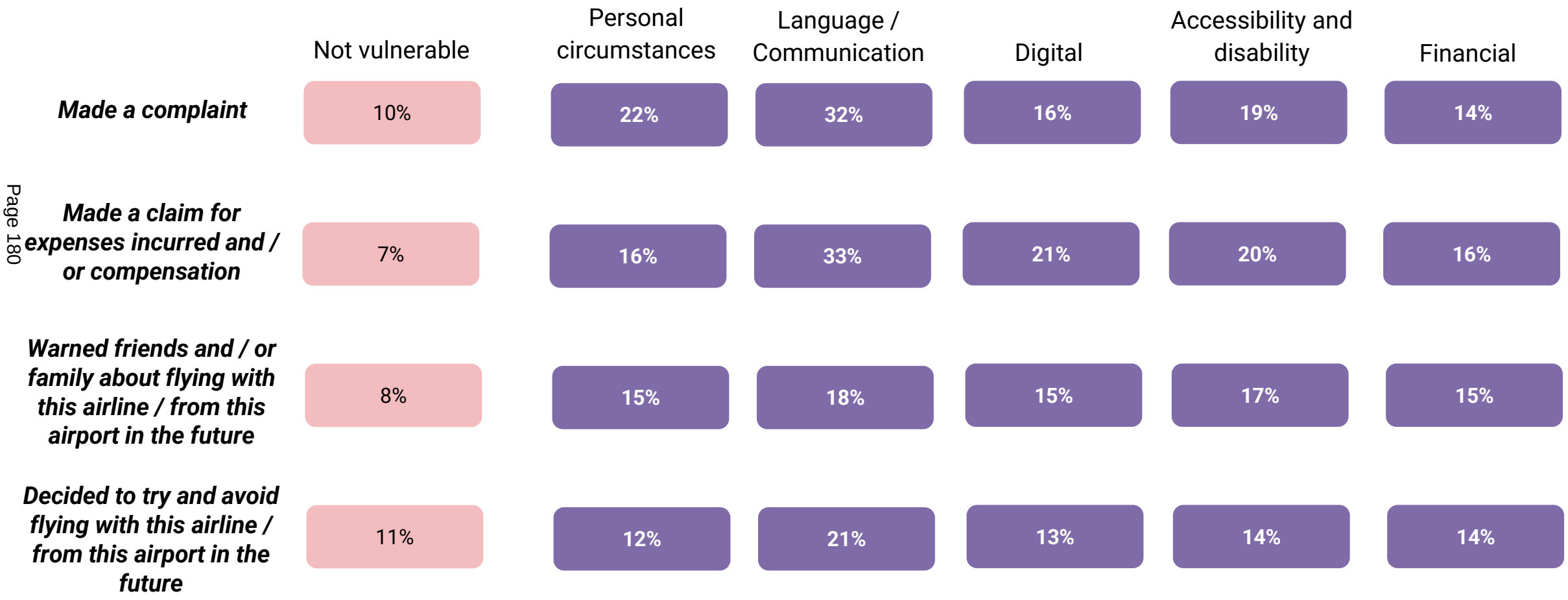
Agenda Annex



Q34. Which, if any, of the following did you do during or after experiencing your flight issue? Base: All who faced a travel problem (n=1186).
Q23. How satisfied or dissatisfied were you with the handling of complaints? Base: All who have flown in the last 12 months, excluding DK and NA responses (n=977).

# However, some vulnerable groups are more likely to make complaints, share negative experiences with friends and family, or avoid using the same airline or airport in the future

## Actions taken during or after experiencing travel problem by different lenses of passenger vulnerability







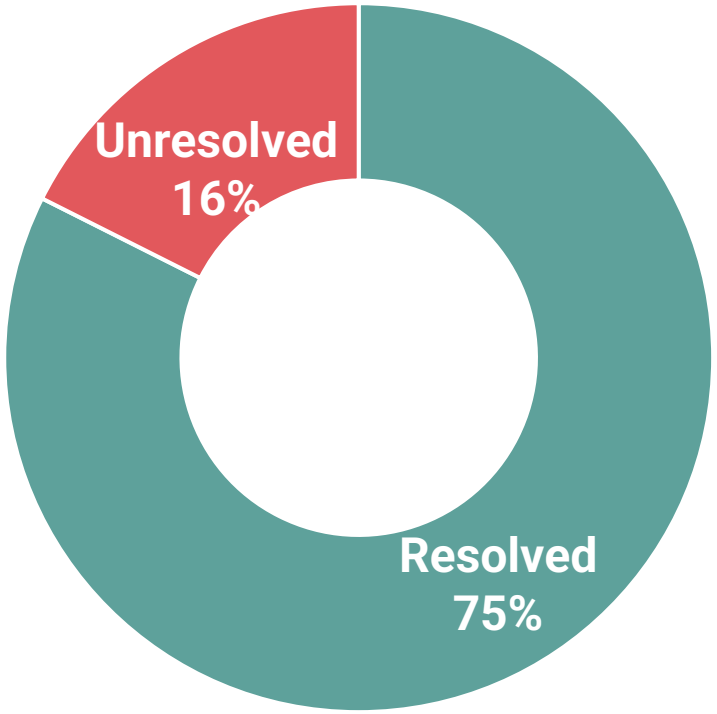



Q34. Which, if any, of the following did you do during or after experiencing your flight issue? Base: All who faced a travel problem (n=1186).

# Three quarters of those who complained had their issue resolved, and six in ten consumers who raised a complaint say that it was resolved to their satisfaction

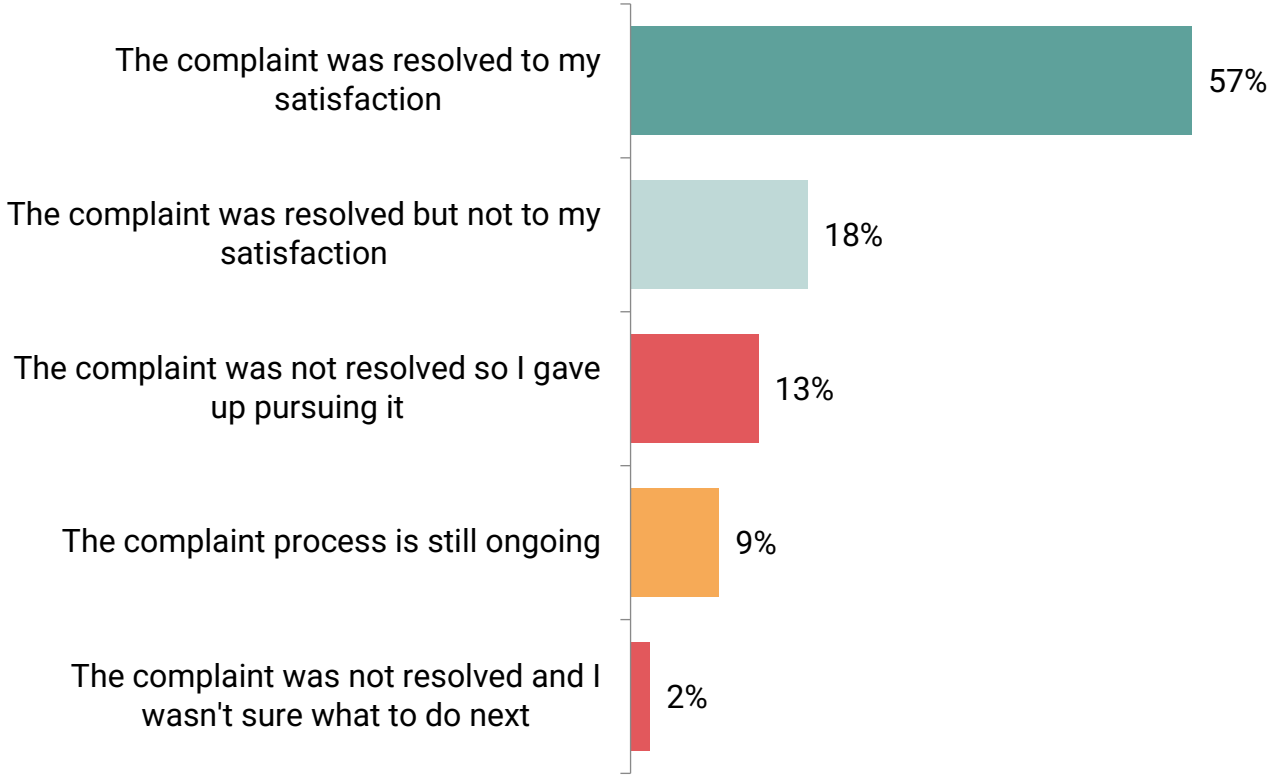
## Outcome of complaint

*All who complained about a travel problem*




## Outcome of complaint

*All who complained about a travel problem*





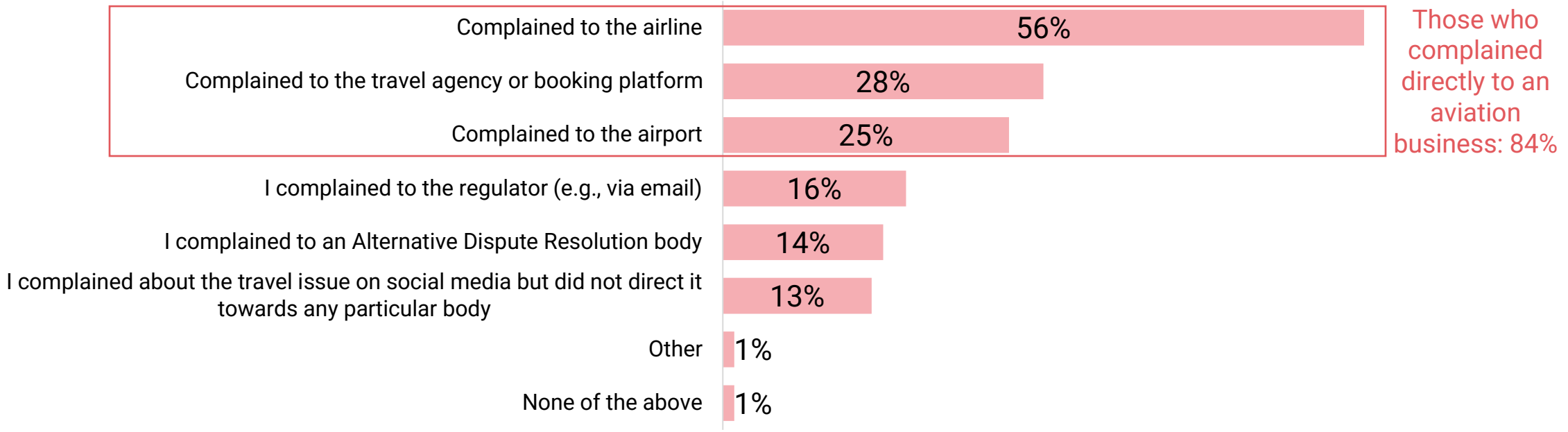



Q35b. What was the outcome of your complaint? Base: All who complained about a travel problem (n=174)

# Over half of those that complained after a recent flight issue did so to the airline, suggesting they see their travel issue as the responsibility of the airline to handle

## Complaints made after recent flight issue(s)

*Showing % who took the following actions after their travel disruption*

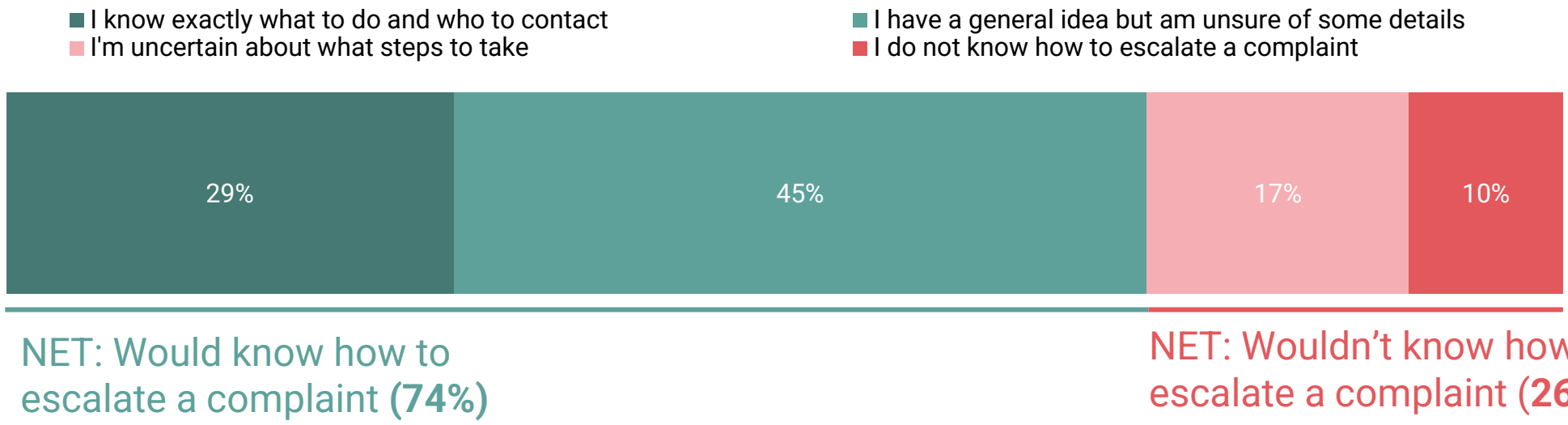



Only a small proportion of passengers direct their dissatisfaction with how their travel issue was handled by making a complaint. But of those that do complain, **most complain to the airline.**

Q35. Who did you make a complaint to? Note: respondents were able to choose multiple options here, so percentages add up to over 100%.
Base: All who complained about a travel problem (n=174)

# Three quarters of passengers say they would know how to escalate a complaint, but this decreases to two thirds among those who have experienced delays in their last flight

**All those who would say the following under a hypothetical scenario where passengers experience a travel disruption on their flight**




*All figures in this report have been rounded to the nearest whole number. Further details can be found in the 'Methodology' section at the end of the report.

However, those who have experienced a flight delay (66%) are less likely to say this compared to those who have experienced a cancellation or diversion (83%), or no disruptions at all (81%). Similarly, older passengers are also less likely to say they know exactly what to do and who to contact to escalate a complaint (23%) compared to younger age groups (18-24: 36%)

Q34b. Suppose you experienced a travel disruption on your flight, made a complaint and were not satisfied with the response. How confident, if at all, are you in knowing how to escalate your complaint? Base: All who have flown in the last 12 months (n=2178)

Section 2.3:

# Aviation and the environment

Page 184

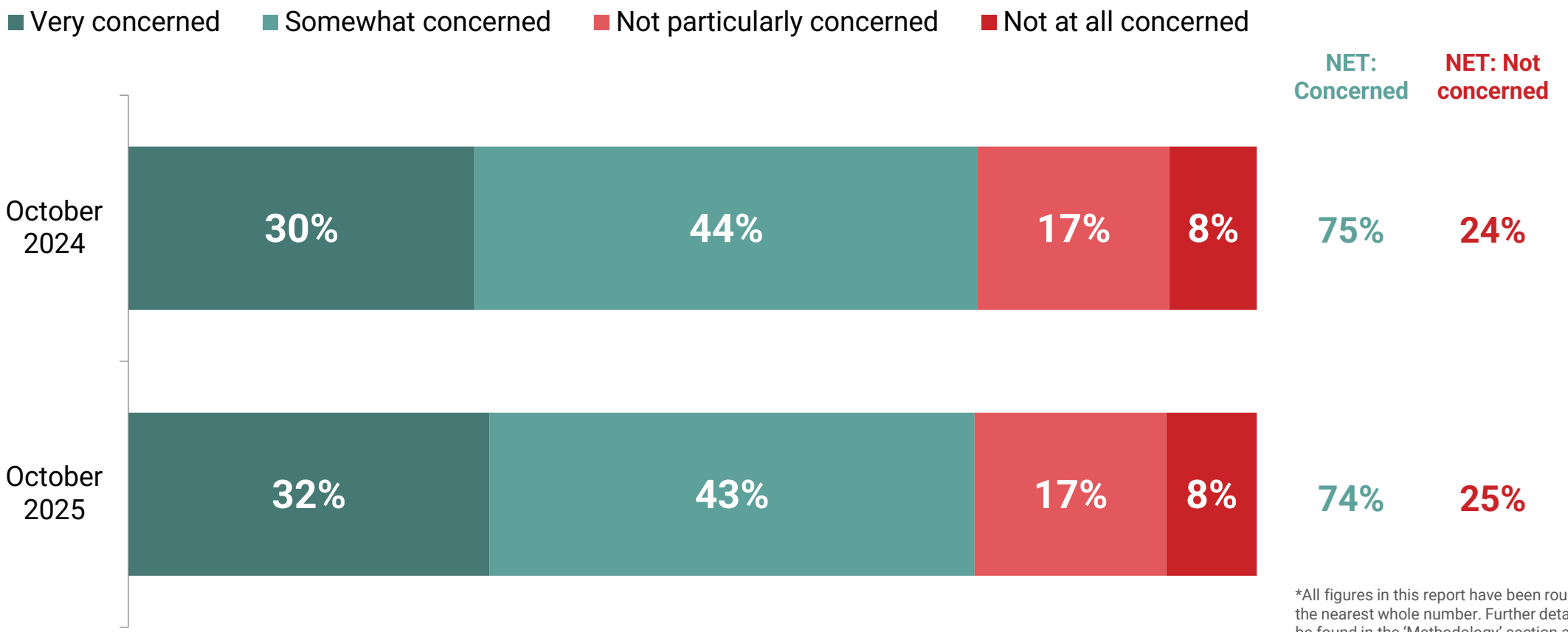
***Key takeaways from this section:***

- Attitudes towards the environment are similar to those seen last year, with widespread concern about the environment, but relatively few consumers paying to offset the environmental impact of their flight.
- Around one third of consumers believe it is the airline's responsibility to cover the environmental impact of aviation; however, a quarter feel this cost should be built into the price of the ticket.
- As seen earlier, younger consumers are significantly more likely to fly than older age groups, and they are also more likely to claim they have paid to reduce the environmental impact of aviation on their last flight. However, the results indicate that the affordability of flying may be an even greater priority to them.

Agenda Annex

# Similar to last year, three quarters of consumers say that they are concerned about the environment and climate change at present

***Showing level of concern with the environment and climate at present***




*All figures in this report have been rounded to the nearest whole number. Further details can be found in the 'Methodology' section at the end of the report.





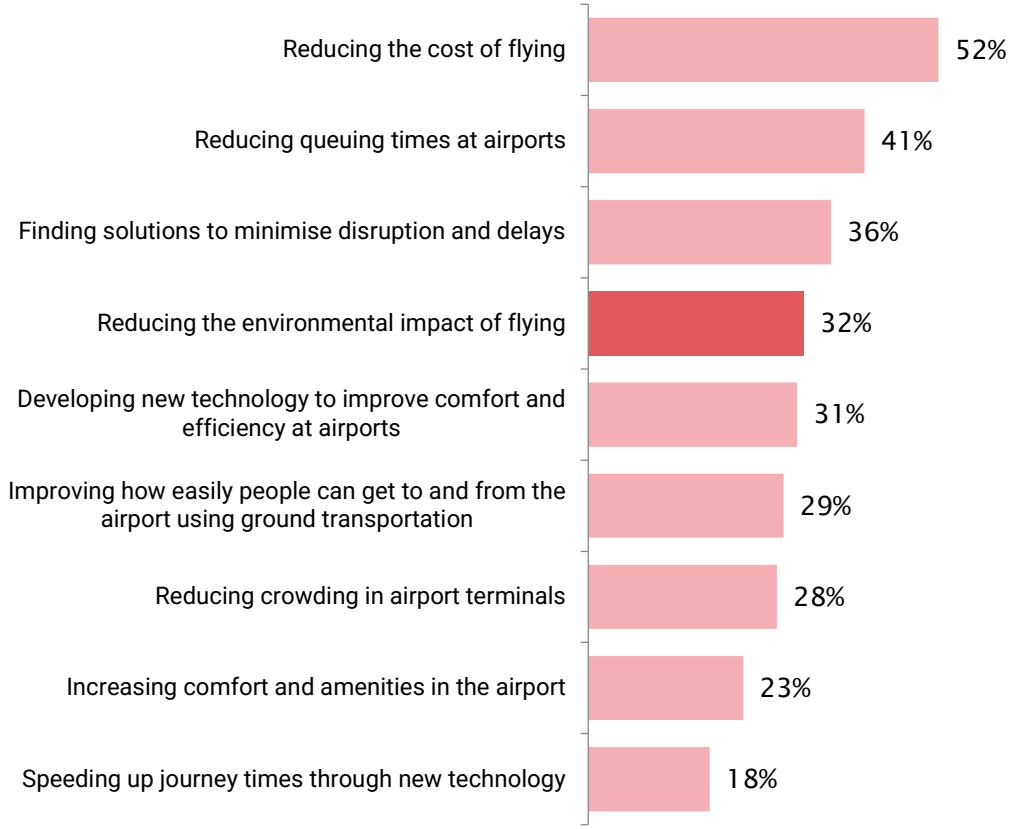


Q38. To what extent, are you concerned about the environment and climate change at present?
Base: All respondents (n=3500).

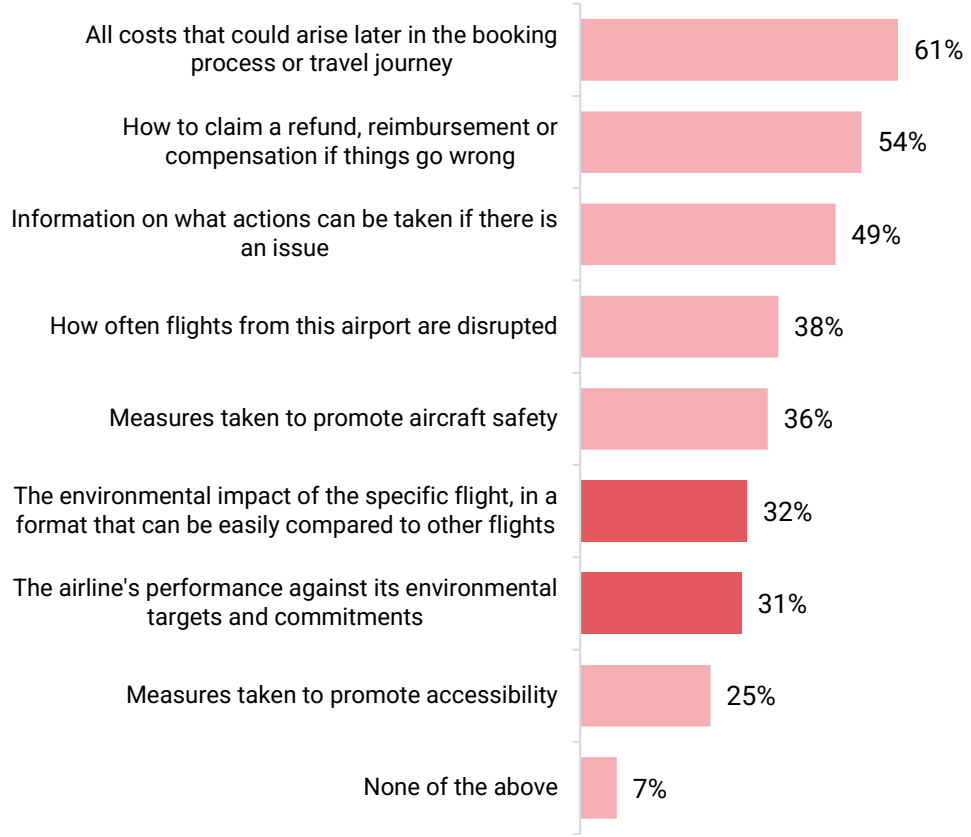
# However, reducing the environmental impact of flying is assigned lower priority compared to reducing the cost of flying by consumers. The provision of environmental impact information at the point of booking is also regarded as a lower priority when compared to other information, such as costs or actions to take when issues arise

***How UK consumers would prioritise areas for investment in the aviation industry over the next 12 months***

*Showing % who placed the following priority areas in their top 3*




***Showing percentage of consumers who would like to see more information in the following areas at the point of booking a flight***










Q7. Consider this list of possible areas of investment for the aviation industry over the next 12 months. How would you prioritise these areas?
Base: All respondents (n=3,500); Q10. In which of the following areas, if any, would you like to see more information at the point of booking? Base: All respondents (n= 3500).



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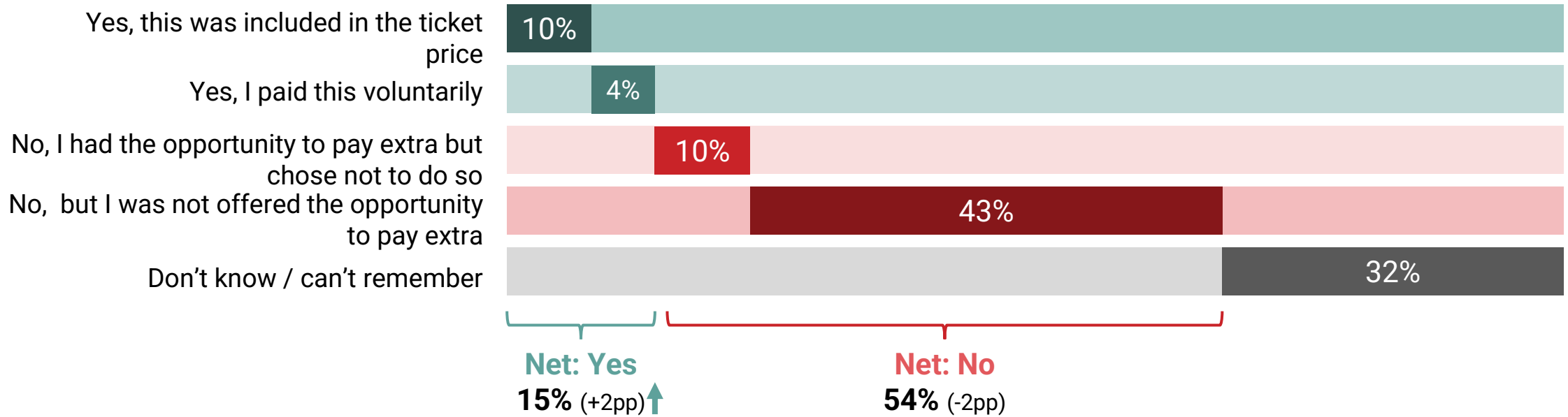
# A significant proportion of passengers claim they either weren't offered the option to offset the environmental impact of their most recent flight or do not remember

*Showing the percentage of recent flyers who paid to reduce or offset the environmental impact of their most recent flight*




Just 15% of consumers who have flown previously say that they have paid to reduce or offset the environmental impact of their most recent flight, a similar proportion as in 2024. It also continues to be the case that younger recent flyers (aged 18-34) are significantly more likely to pay to reduce or offset the environmental impact of their last flight (27%).
It is worth noting that older and digitally vulnerable consumers are significantly more likely to say that they are unsure whether they did this or not.

*All figures in this report have been rounded to the nearest whole number. Further details can be found in the 'Methodology' section at the end of the report.



Q40. On your most recent flight, did you pay for reducing or offsetting the environmental impact of your flight?
Base: All who have flown previously (n=3370).



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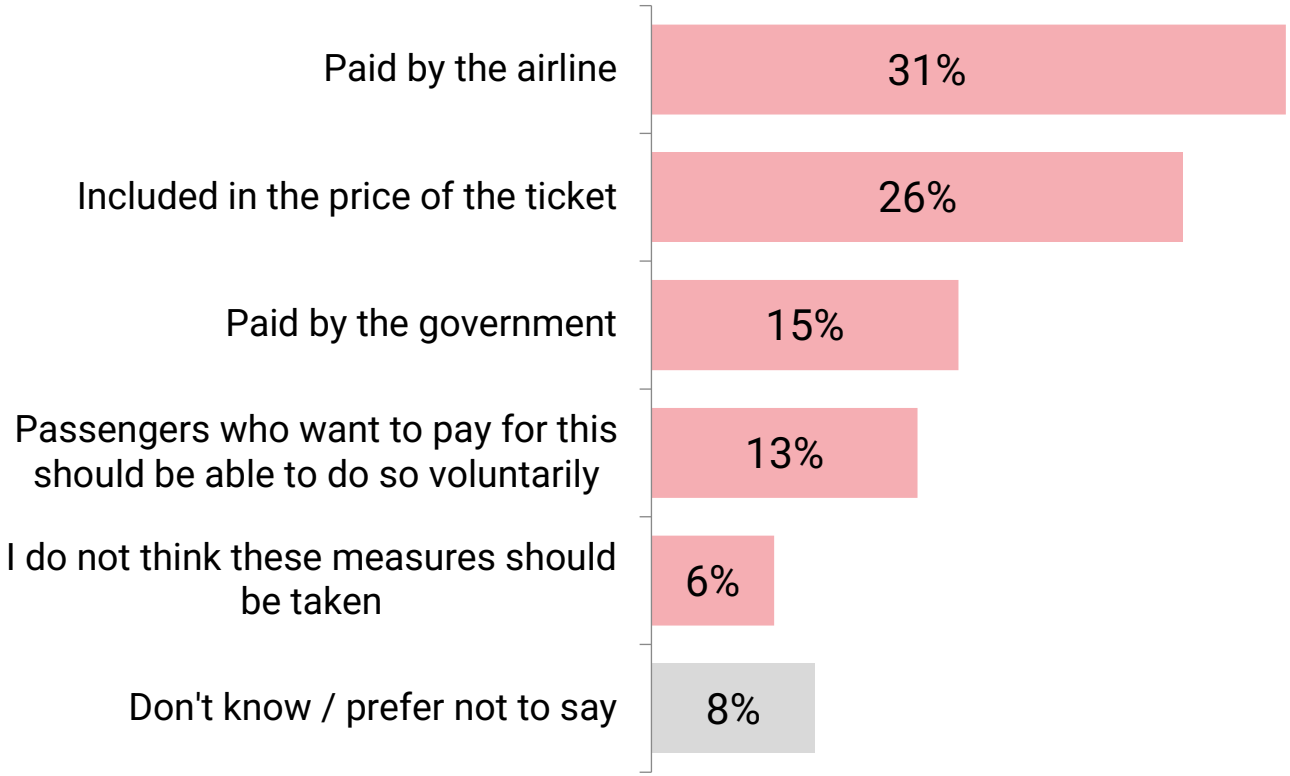
# Consumers believe it should mainly be the airlines' responsibility to alleviate the impact of aviation on the environment

## Covering the costs of environmental measures

*Showing % who say the following should cover the cost of environmental measures to reduce the impact of flying*




Consumers aged 55 and over are significantly more likely to think that environmental cost should be included in the ticket price (35%) compared to those aged 18-34 (19%) and those aged 35-54 (23%).

Younger passengers, on the other hand, are significantly more likely to think that the government should cover the costs of measures to reduce the environmental impact of flying. Consumers aged 18–34 are four times as likely as those aged 55+ to hold this view (28% vs. 7%).



Agenda Annex



Q39. Airlines can take various measures to reduce the environmental impact of flying. How do you think the cost of these measures should be covered?
Base: All respondents (n=3500).

# Methodology

The Aviation Consumer Tracker is a quantitative survey of a nationally representative sample of 3,500 UK adults (18+). The full sample profile is detailed on the next page.

Fieldwork is predominantly conducted online, but an additional 500 consumers complete the survey via telephone interview (CATI), to ensure that consumers with limited digital access or capability are able to participate.

| 3,500 completes | 3,000 online completes<br>500 phone completes | Fieldwork dates:<br>17th September to 20th October 2025 |
|---|---|---|

The research design, analysis and reporting is conducted by Savanta, an independent market research organisation.

As a member of the Market Research Society, Savanta conducts this research programme in strict accordance with the requirements of the international quality standard for market research.

# Previous instalments of this research

From 2016 to 2019, the ACS was conducted twice per year. From the ninth instalment or 'wave' of the survey onwards (2020), the survey has been conducted once per year.

Most questions asked in the survey are repeated every wave, or every other wave. This provides a picture of how and why consumers attitudes are changing over time. The remaining, variable component of the survey enables the CAA to investigate emerging trends and explore specific questions in detail.

**Previous ACS reports can be accessed here**
(Clicking this button will take you to the CAA website)

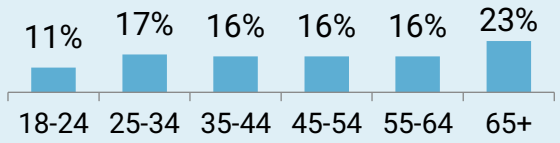
# Weighted sample profile

The core sample is recruited according to figures from the Office for National Statistics, in order to ensure that it is demographically representative of the UK by gender, age, region and working status. The entire sample (including phone boost) is then weighted by the same factors to correct any minor variations from the ONS figures. The weighted sample profile is as follows:

## Gender

| | |
|---|---|
| Male | 48% |
| Female | 51% |

## Age




## Working status

| | |
|---|---|
| Working full time | 45% |
| Working part time | 15% |
| Not working (including, e.g., students and the retired) | 38% |

## Region

| | | | |
|---|---|---|---|
| East Midlands | 7% | South West | 9% |
| East of England | 9% | West Midlands | 9% |
| London | 13% | Yorkshire and the Humber | 8% |
| North East | 4% | Northern Ireland | 3% |
| North West | 11% | Scotland | 8% |
| South East | 14% | Wales | 5% |

*Note: All figures in this report have been rounded to the nearest whole number.*

*When the data is weighted, each respondent is assigned a weighting factor to adjust the contribution of different groups in a sample, ensuring that the final results are representative of the target population. This means that each individual respondent might count as, for example, 0.7 people or 1.5 people, depending on whether they have been weighted up or down.*

*This in turn means that the number of people selecting a particular answer can also not be a whole number, but for simplicity they are displayed as whole numbers in the charts and tables. Consequently, when adding up the number of responses displayed for each individual answer code, the total might differ by 1-2 from the total sample size. However, the figures are correct.*

# Contact details

If you have any questions about the presentation or the research more widely, please feel free to reach out directly to the Savanta team: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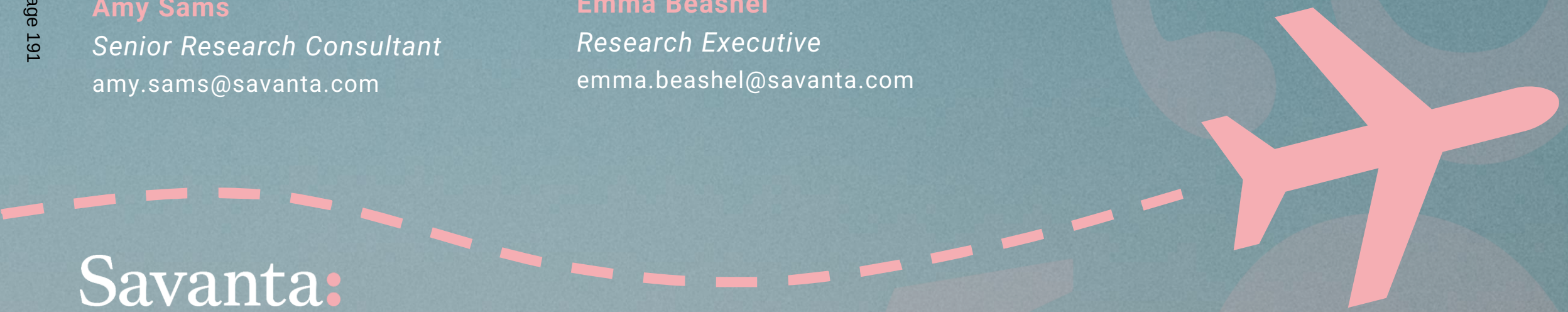

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