

# SLIGHTLY STEEPER APPROACHES

## QUICK VIEW CONSULTATION

### Background

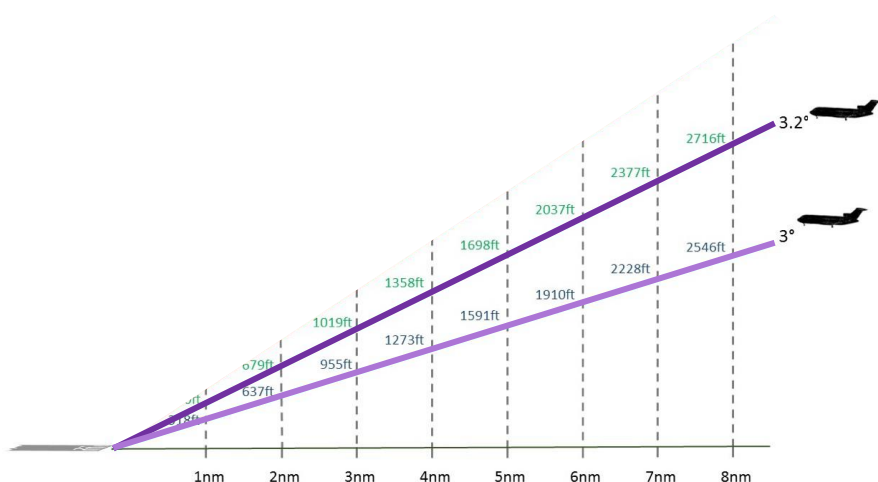
Heathrow is consulting on the permanent adoption of Slightly Steeper Approaches (SSA) for some of the aircraft arriving at the airport. These approaches have been in operation at Heathrow on a temporary basis following trials held between [2015](#) and [2017](#). Since then, the CAA has permitted their continued use whilst this Airspace Change Process for their permanent adoption was followed.

Following the creation of design principles, and the development and initial appraisal of options for SSA, we are now at Stage 3 of the Airspace Change Process. This is the stage where we undertake detailed analysis of SSA and then consult with our stakeholders. As part of the consultation for this Airspace Change, we are asking the question:

**Do you support the permanent adoption of slightly steeper approaches at Heathrow airport?**

### What are Slightly Steeper Approaches?

Most aircraft arriving into Heathrow fly a standard 3° approach angle which is similar to most airports around the world. However, a small percentage (0.6% in 2019) fly the available SSA. When aircraft fly SSA, they fly higher for longer. The trials in 2015-2017 demonstrated that this helps to reduce the noise footprint on the ground.



In 2019 0.6% of aircraft arrived using 3.2° Slightly Steeper Approaches.

The majority of aircraft arrived flying the standard 3.0° approach angle.

During the first SSA trial in 2015, it was identified that the number of aircraft able to operate SSA is limited due to Air Traffic Control (ATC) workload. This is because of the type of satellite-based procedure that SSA use, not because the angle of approach itself is steeper. More information regarding this can be found within our [Consultation Document](#).

SSA do not change the number of aircraft arriving at Heathrow

SSA apply to easterly and westerly operations

SSA do not change the lateral flight paths of arriving aircraft

SSA allow aircraft to stay higher for longer, creating a small noise benefit



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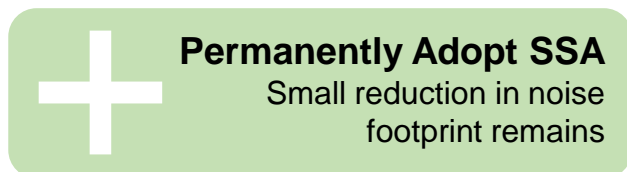
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### What is the alternative?

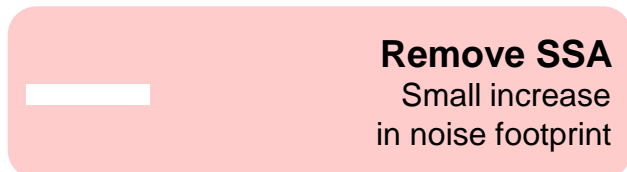
If SSA are not permanently adopted, the small percentage of flights currently operating SSA would revert back to operating standard approaches. This would mean that all aircraft arriving at Heathrow will operate standard 3.0° approach angles.

### What are the benefits and impacts of Slightly Steeper Approaches?

During the trials held in 2015-17, Heathrow analysed the benefits and impacts of SSA. The trials found that when aircraft fly SSA, they were higher for longer, and therefore there was a small average noise reduction of 0.5dBA recorded at the monitoring sites.



**Permanently Adopt SSA**  
Small reduction in noise  
footprint remains



**Remove SSA**  
Small increase  
in noise footprint

Whilst the change in noise is very small, a reduction of 0.5dBA for around 0.6% of arrivals, is an incremental step to reducing the impact of Heathrow's noise footprint on health and quality of life.

As SSA are currently in operation at Heathrow, reverting back to all aircraft operating standard 3.0° approaches would result in a very small increase to the noise environment at Heathrow.

During the trial, and as part of the airspace change process, we have also reviewed other impacts of permanently adopting SSA or reverting back to all aircraft operating standard approach angles:

Impact	Permanently adopt SSA	Remove SSA
Noise impact on health and quality of life,	Positive impact	Negative impact
Air quality, Greenhouse gas impact (CO <sub>2</sub> ), Fuel burn.	Positive impact (marginal)	Negative impact (marginal)
Capacity / resilience, Social Impact, Distributional Impact, Tranquillity, Biodiversity, Historic Environment, Landscape / Townscape, Safety, Water Environment.	Neutral impact	Neutral impact
Access, Economic impact from increased effective capacity.		
Training costs, Other costs.		
Infrastructure costs, Deployment costs.		

For full details, please see the consultation document and full options appraisal available via the link below

Our analysis shows small improvements mainly to noise impacts and no negative impacts for other stakeholders. Therefore, Heathrow is promoting the permanent adoption of SSA.

### Find out more & respond to the consultation

The consultation on SSA runs for 4 weeks from 5 March 2021 – 2 April 2021. To find out more about the proposals and respond to the consultation, please use the following link:

### Slightly Steeper Approaches Consultation Site

If you have any questions about our consultation, or would like to request a hard copy of our consultation material, please contact the Heathrow Community Helpdesk (0800 344 844) or emailing [airspace@heathrow.com](mailto:airspace@heathrow.com)

