Draft Flight Path Design Principles

airservices

As part of our commitment to improve our dialogue with industry and community stakeholders, Airservices Australia has developed a set of principles to help us to design, develop and make decisions about flight paths that we implement and operate.

The Draft Flight Path Design Principles have been internationally benchmarked against other aviation service providers.

Flight path design is a complex end-to-end process that must ensure safety as the first priority, and then seek to balance the efficiency and operational needs of the range of stakeholders, minimise the environmental impacts of aircraft operations, and provide equity of access to airspace. Consideration is also given to the effect of the flight path change on the broader air traffic management network performance.

It is not possible to guarantee any suburb, group or individual exemption from the effects of aircraft operations, including noise and visual impacts.

Once finalised, following national consultation, the Flight Path Design Principles will be used in the design and development of flight paths in the future, as part of the conduct of environmental assessments of proposals for new air routes and for changes to existing arrangements, and as the basis for determining the designs that will progress to implementation.

Airservices Australia commits to being transparent throughout the flight path design, development and implementation process, and to describing how each of the principles have been considered in the flight path change process.

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Safety principles

- Principle 1 - The safety of air navigation must be the most important consideration.
- Principle 2 - Flight paths must be designed in accordance with Australian and International design standards established in International Civil Aviation Organisation (ICAO) PANS-OPS[1] and Australian Civil Aviation Safety Regulations Part 173.

Environmental principles

- Principle 3 - Minimise the effect on the environment through designs that effectively manage emissions, fuel consumption and greenhouse gases, limiting these wherever practicable.
- Principle 4 - To the extent practicable, protect areas of Matters of National Environmental Significance (MNES), local cultural heritage and areas of natural beauty, considering both the noise, emissions and visual impacts of the change.
- Principle 5 - Design flight path changes that deliver efficiency while minimising the noise effects of aircraft operations through continuous descent operations(CDO), continuous climb operations (CCO) and unrestricted flight paths.

Noise and community impact principles

- Principle 6 - Noise should be concentrated as much as possible over non-residential and other non-noise sensitive areas and establishments.
- Principle 7 – Where residential areas are exposed to noise, it should be fairly shared whenever feasible and practicable.
- Principle 8 - Noise Abatement Procedures and Fly Neighbourly Procedures should be optimised to achieve the lowest possible overall impact on the community.
- Principle 9 - Aircraft operations that are conducted at night or on weekends should be treated as being more sensitive than those which occur during the daytime or on weekdays.
- Principle 10 - Both current and expected future noise exposure shall be taken into account when considering flight path design changes.
- Principle 11 - To the extent practicable, distribute flight paths so that residential areas overflown by aircraft arriving on a particular runway do not also experience overflight by aircraft departing from the runway in the reciprocal direction.

Operational principles

- Principle 12 - Consider the impact of flight path options on airport capacity and overall network operations.
- Principle 13 - Flight paths will accommodate differing aircraft performance as specified in ICAO PANS-OPS.
- Principle 14 – Design flight paths to facilitate access to all eligible airspace users.

1 International Civil Aviation Publication Doc 8168-OPS/611 Volumes I and II