Appendix C: Environmental management and performance

The following report meets the requirements of section 516A of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act). It describes our:

- environmental management approach (including key potential impacts)
- management activities which accord with the principles of Ecologically Sustainable Development.

Environmental management approach

Environmental oversight and accountability

We continue to define and document specific role based accountabilities for senior managers, who hold key environmental obligations under legislation and/or the Airservices Environmental Management System (EMS). These roles include the CEO and Executive Committee.

Environmental policy

Our Environmental Policy describes our highest level of commitment to reducing environmental impacts, improving environmental performance and embedding sustainability principles. The policy describes specific commitments for the protection and management of key environmental values and issues, including energy, water, waste and biodiversity. It focuses the organisation on achieving positive environmental outcomes for our customers, stakeholders and the community.

Environmental Management System

We maintain and continually improve our environmental management system (EMS), in line with ISO 14001:2015 *Environmental Management*. Two sites at Gold Coast Airport and Canberra Airport are ISO 14001 certificated.

Our EMS, with the environmental policy, embeds a framework of hierarchical standards, procedures and controls that set the way we:

- manage our environmental impacts
- comply with regulatory obligations
- achieve positive environmental outcomes.

Key potential environmental impacts arising from our activities—and the way these are managed under the EMS—are outlined in Table 2.

Table 2: Key environmental impacts and associated EMS control measures and assurances

Potential impact	EMS control measures	Assurance mechanism

Aircraft noise and emissions impacts from flight path changes
 	
(includes community, wildlife, and social amenity impacts)
	• Application of mandatory management standard 'Environmental Management of Changes to Aircraft Operations', which requires:
	  – targeted environmental impact and risk assessment of proposed changes
	  – seeking advice under the EPBC Act for changes deemed to trigger potential 'significant impact'
	  – iterative environmental design to minimise impacts
	  – social impact analysis and community consultation for proposed changes.
	• Provision of a Noise Complaint Information Service, which:
	  – receives and responds to complaints through a dedicated call centre
	  – investigates and actions complaints
	  – reports complaints statistics to senior management.
		• Internal assurance reviews and audits undertaken by:
		  – Safety and Assurance Group
		  – Airservices audit function.
		• External reviews/audits undertaken by:
		  – ISO 14001 auditors
		  – external stakeholders as required (including the Aircraft Noise Ombudsman and CASA).

Impacts from on-ground changes—including construction projects
 	
(includes soil, water and biodiversity impacts)
	• Application of mandatory standard 'Environmental Management of Changes to On-Ground Activities', which requires:
	  – targeted environmental impact and risk assessment of proposed changes
	  – investigation and acquittal of all approval and permitting requirements
	  – documentation and implementation of specific project controls (including Construction Environmental Management Plans).
	• Application of other subsidiary EMS standards and procedures (including Infrastructure Management Standard, Incident Management Standards, and Chemical Management Procedures).
		• Internal assurance reviews and audits undertaken by:
		  – Safety and Assurance Group
		  – Airservices audit function
		  – project support staff from within relevant business groups.
		• External audits undertaken by:
		  – ISO 14001 auditors
		  – Stakeholders as required (e.g. Airport Environment Officers).

Potential impact	EMS control measures	Assurance mechanism

Legacy contamination from the historic use of firefighting foams containing PFAS	• Implementation of the Per-and polyfluoroalkyl substances (PFAS) Program Management Plan, including:
	  – site assessments to better understand the extent and level of historic PFAS residues
	  – undertaking research and development activities to better understand PFAS and associated issues
	  – trialling new technologies in the field aimed at containing PFAS migration
	  – working with relevant government authorities to develop regulatory guidance required to better address these issues.
	• Application of ARFFS and ANS Environmental Management Instructions.
	• Application of other subsidiary EMS standards and procedures (including Incident Management Standards, and Chemical Management Procedures).
		• Internal assurance reviews and audits undertaken by:
		  – Safety and Assurance Group
		  – Airservices audit function.
		• External audits undertaken by:
		  – ISO 14001 auditors
		  – Stakeholders as required (e.g. Airport Environment Officers; State Environmental Protection Authority).

Impacts from on-ground operational activities (includes soil, water and biodiversity impacts)	• Application of mandatory standard 'Environmental Performance Requirements and Controls for Airservices Infrastructure', which prescribes: – objectives and key controls for managing each lifecycle stage of infrastructure development (including the operational phase). • Application of ARFFS and ANS Environmental Management Instructions. • Application of other subsidiary EMS standards and procedures (including Incident Management Standards, Chemical Management Procedures and Weed and Pest Control Guidelines).	
Resource usage (including energy waste, water)	• Application of mandatory standard 'Environmental performance requirements and controls for Airservices Infrastructure', which requires: – incorporation of resource efficient and sustainable technologies in the development and refurbishment of infrastructure. • Monitoring and metering of emissions, energy and fuel usage through the ENVIZI energy management service (to enable reporting in accordance with *National Greenhouse and Energy Reporting Act 2007*).	

Accordance with Ecologically Sustainable Development Principles

We are committed to the principles of ecologically sustainable development (ESD) which are enshrined within our corporate plan, environmental policy and EMS.

Key improvements and management initiatives for 2018–19, which accord with ESD principles under the EPBC Act, are described in Table 3.

Table 3: Key ESD aligned activities in 2018–19

Ecologically Sustainable Development Principles	Activities
Integration principle: decision making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations	A redesign of the flight path change management process has focused on enhancing and integrating social and environmental impact assessment methodologies. Informing the delivery of effective community engagement activities and environmentally responsible flight path design. Key improvements enacted under the program included: - peer review and revision of our quantitative assessment criteria, and associated methodologies, for determining potential 'significant' impacts under the EPBC Act - development of a Social Impact Analysis process and procedure to identify social factors which could influence community acceptance of a flight path change - improved community engagement procedures to ensure effective communication and consideration of potential environmental and social impacts from proposed changes - revision of change management standards and associated procedures to enact and integrate the above improvements. The Department of the Environment and Energy, and Department of Infrastructure, Transport, Cities and Regional Development, were consulted throughout development of the improvement program, with the Aircraft Noise Ombudsman briefed on the key outcomes. To support the environmental efficiency of our customers' operations (both short and long term), we continued to: - provide efficient aircraft routing options - implement Required Navigation Performance procedures. We are implementing the Airport Collaborative Decision Making (A-CDM), and Long Range Air Traffic Flow Management (LR-ATFM) platforms. A-CDM is a form of smart airport technology that allows Airservices, airports and airlines to share data and synchronises operations. LR-ATFM allows greater scheduling and control of aircraft airport arrivals, which avoids holding patterns and associated landing delays. These platforms will improve environmental outcomes by reducing fossil fuel use and emissions.

Ecologically Sustainable Development Principles	Activities
Precautionary principle: if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation	In 2018–19 we implemented a new enterprise risk classification matrix that better aligns with our defined organisational appetite for environmental risk management—a level considered As Low as Reasonably Practicable (ALARP). To support implementation of the new matrix, we revised our environmental risk management procedures defining key approaches for processes with a heightened environmental risk (including on ground change management and operational site management activities).

We continued to progress implementation of the Per-and polyfluoroalkyl substances (PFAS) Program Management Plan. This includes:

- continuing site assessments to better understand the extent and level of PFAS residues
- undertaking research and development activities to better understand the issues
- trialling new technologies in the field aimed at containing PFAS migration
- working with relevant government authorities to develop the regulatory guidance required to better address these issues.

A key milestone of the plan—delivered this reporting period—was an agreement with the Department of Defence (Defence) to transition from the use of PFAS containing aqueous film forming foam (AFFF) at Darwin and Townsville airports, to PFAS-free Solberg RF6 foam. Although we ceased operational use of AFFF nationally in 2010, its use has continued at Darwin and Townsville under contractual obligations with Defence. This agreement marks a positive precautionary step for our efforts to minimise further national impacts from the use of PFAS containing firefighting foams.

We have completed the Darwin transition to PFAS-free foam. In partnership with Defence we anticipate that the transition at Townsville will be completed during 2019–20.

Ecologically Sustainable Development Principles	Activities
Intergenerational principle: the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.	We continue to evolve and develop the EMS to ensure the application of programs and controls that protect the environment from our activities for current and future generations.

Key EMS improvements made in 2018–19 include:

- revised change and infrastructure management standards to better reflect lifecycle approaches to environmental management and improved risk assessment in decision making
- revised risk management methodologies and processes for operational processes
- improved organisational incident management processes and procedures.

To ensure our EMS is fit for purpose and continually improving, we maintain our certification under ISO 14001:2015, for our two key representative sites—Gold Coast Airport and Canberra Airport. In 2018–19, we were independently verified as having successfully transitioned from the 2004 version to the 2015 version of ISO 14001, implementing all necessary system improvements.

We continue to promote environmental awareness and train key staff on environmental issues, while undertaking a targeted audit and assurance program to check on, and improve, our performance.

We worked with the Civil Aviation Historical Society and other stakeholders to preserve Australia's aviation history. We continued our support for the 'Connecting the Nation' portal, sponsorship of the Airways Museum based at Essendon Airport, and industry partnership with the Australian Research Council for the Heritage of the Air Project (a research project investigating how aviation has transformed Australian society over the last 100 years).

We reviewed and released our new Heritage Strategy for 2018—2020, in accordance with Section 341ZA of the EPBC Act. During the previous financial year (and in accordance with the strategy), we completed Heritage Management Plans for six air traffic control towers listed on the Commonwealth Heritage List, and commenced digital recording work for four navigational aids with known heritage values, that will soon be divested by Airservices.

We continue to work towards improving the monitoring of greenhouse gas emissions, energy consumption and production. We reported in accordance with *National Greenhouse and Energy Reporting Act 2007* requirements for 2018–19.

Ecologically Sustainable Development Principles	Activities
Biodiversity principle: the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision making	The protection of biodiversity values is a key requirement of the EMS with associated controls are built in to the management of all our activities (from flight path changes to on-ground operations). Our revised requirements for flight path change management include additional quantitative and qualitative measures for assessing biodiversity impacts. Our internal standards for infrastructure development, includes targeted controls to protect flora and fauna values throughout projects and operational activities.
Valuation principle: improved valuation, pricing and incentive mechanisms should be promoted	We continue to build and manage our asset base through implementing our Portfolio, Program and Project (P3M) framework. Under P3M, investment projects are strategically prioritised to deliver value and innovation to our customers and ensure sustainment of our ageing asset base. In 2018–19, we completed an assurance review of business performance in meeting environmental requirements (including ESD considerations) at key project gate stages. This resulted in a range of improvements made to both project processes and internal EMS requirements requiring the incorporation of ESD technologies through a cost benefit assessment, and enshrining requirements for sustainable procurement in product sourcing.

Noise Complaints and Information Service data

The number of residents contacting the Noise Complaints and Information Service (NCIS) increased by 464 to a total of 3824 in 2018–19. This compares to 3360 in 2017–18.

The number of residents concerned about activities at the 10 major airports rose by 25 per cent, however levels remained under those seen in 2016–17 and previous years. The most-raised issue at major airports continued to be about standard flight path corridors. Concerns included the frequency of movements, a perception that something had changed, the location of the flight path and the altitudes of aircraft on arrival and/or departure. While concerns about standard flight paths are investigated, few opportunities to mitigate noise for residential areas in close proximity to the major airports.

Table 4 shows during 2018–19 there was an 85 per cent increase in complaints from residents about Perth Airport. This is due to prolonged use of the crossing runway during periods when the north-south runway was closed. While some of these closures were due to required maintenance and upgrades, tunnelling for the Forrestfield Airport Link rail project also disrupted the runway's use for significant periods.

A 51 per cent increase in complaints for Gold Coast Airport was a result of implementing an instrument landing system and associated new flight path in the first half of 2019. Noise Abatement Procedures have been implemented to ensure that use of the system by jet aircraft is restricted to periods of low cloud and poor visibility, or when operationally required by the pilot.

Brisbane Airport experienced a 28 per cent rise which in part represents a growing awareness of noise as the new runway nears completion. Numbers declined for Adelaide and Melbourne Airports and remained steady for Sydney and Cairns Airports.

In May 2019, we released our review of the Hobart flight paths introduced in 2017. 2018–19 saw a large decrease in residents from Hobart reporting concerns, with a total of 38 people compared to 152 the previous year. The figures shown in Table 4 show all complainants in the Hobart basin. Consultations with Sunshine Coast residents on the proposed flight paths for the area's new runway revealed concerns about existing aircraft noise, which had increased to 70 in 2018–19, compared to 51 in 2017–18.

Table 4: Number of residents who contacted the NCIS for the 10 major airports

Airport	2016–17	2017–18	2018–19
Adelaide	111	102	**89**
Brisbane	247	197	**252**
Cairns	38	30	**30**
Canberra	43	21	**30**
Darwin	13	4	**5**
Gold Coast	210	153	**231**
Hobart	3	384	**293**
Melbourne	155	177	**160**
Perth	791	388	**716**
Sydney	773	714	**713**
Total	**2,384**	**2,170**	**2,519**