

# Aegean Regional Airports - *Cluster B*1<sup>st</sup> Annual Report on Environmental Strategy

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# **Glossary**

Abbreviations		
Term	Definition	
FG	Fraport Greece	
CA	Concession Agreement	
HR	Hellenic Republic	
HRADF	Hellenic Republic Asset Development Fund	
CCD	Concession Commencement Date	
GG	Government Gazette	
EASA	European Aviation Safety Agency	
EC	European Community	
EIB	European Investment Bank	
EBRD	European Bank for Reconstruction and Development	
IFC	International Finance Corporation	
CEMP	Construction Environmental Management Plan	
RFF	Rescue Fire Fighting	
WWTP	Waste Water Treatment Plant	

# **Executive Summary**

The 1<sup>st</sup> Annual Environmental Report is the result of FG's compliance to the Environmental Requirements set in the Concession Agreement, three months after the Concession Commencement Date of the 11<sup>th</sup> of April 2017.

The Environmental Strategy outlines the methods to minimize environmental impacts during the implementation of infrastructure upgrades and growth in operations in response to the 2017 Master Plans. Additionally, the strategy details the ongoing high quality environmental management of the airports.

The specific objectives and targets outlined in this Environment Strategy will provide a framework to ensure social, economic, and environmental goals are reflected in the development and every day running of each airport.

Environmental aspects addressed are: sustainable development, soil management, surface and groundwater, biodiversity, cultural heritage, air quality, noise and waste management. Potential impacts are presented for every environmental aspect, along with preventive actions.

Finally, for each environmental aspect specific targets are presented accompanied with a respective fulfilment timeframe.

## 1 Introduction

### 1.1 About Fraport Greece

**FG** was created in 2015 and is responsible for maintaining, operating, managing, upgrading and developing 14 regional airports in Greece over a period of 40 years.

The operational transfer of the airports to **FG** took place on April 11th, 2017. At the time of the project closing full payment of the €1.234 billion upfront concession fee was made by Fraport Greece in tandem with the transfer of operations at the 14 airports. Along with the upfront concession payment, an annual fixed concession fee of initially €22.9 million and a variable annual concession fee of on average 28.5% of the operational profit will be paid every year.

Two separate, almost identical concessions were granted by the Greek State in an international tender process, each applying to seven of the 14 airports ("Cluster A" and "Cluster B").

FG consists of two concession companies with their corporate seats in Athens, one company for Cluster A named "Fraport Regional Airports of Greece A S.A." ("Fraport Greece A", FGA) and one company for Cluster B named "Fraport Regional Airports of Greece B S.A." ("Fraport Greece B", FGB).

Management Company, a third company with its corporate seat in Athens, is acting as management company and is responsible for central functions on behalf of Fraport Greece A and Fraport Greece B, such as employment of staff and contracting of advisors or suppliers.

The Athens headquarters employ more than 150 people and a total of 390 people are employed at the 14 airports.

The shareholders of **FG** are Fraport AG Frankfurt Airport Services Worldwide and Copelouzos Group.

Fraport B under the Concession Agreement of Aegean Regional Airports, includes the following 7 airports:

- Santorini (JTR),
- Samos (SMI),
- Skiathos (JSI),
- Mykonos (JMK),
- Mitilini (MJT)
- Rodos (RHO) and
- Kos (KGS).

### 1.2 Environmental Strategy Annual Report Concession Agreement Requirements

Fraport Regional Airports of Greece (Fraport-Greece) (FG) has entered into a 40-year Concession Agreement (CA) with the Hellenic Republic (HR), represented by the Hellenic Republic Asset Development Fund (HRADF). The Concession Agreement was ratified by means of the Law 4389/2016 (GG94/27.05.2016).

The Concession Agreement, according to Article 13. Environment Protection - 13.2 Environmental Requirements – 13.2.2. requires the Concessionaire to compile, throughout the Concession Period, an annual report on which shall environmental strategy, submitted to the State within three (3) months of the Concession Commencement Date (CCD) each anniversary thereof. Concessionaire is also obliged to create and maintain an internet site where the aforementioned report shall be published.

# 1.3 Structure of the Environmental Strategy

The Environmental Strategy outlines the airports methods to minimize environmental impacts during the implementation of infrastructure upgrades and growth in operations in response to the 2017 Master Plans and details the ongoing high quality environmental management of the airports. The specific objectives and targets outlined in this Environment Strategy will provide a framework to ensure social, economic, and environmental goals are reflected in the development and every day running of each airport.

Environmental aspects addressed are:

- Sustainable development;
- Soil management;
- Surface and groundwater;
- Biodiversity;
- Cultural heritage;
- Air quality;
- Noise;
- Waste Management.

Potential impacts are presented for every environmental aspect, along with preventive measures.

Finally, for each environmental aspect specific targets are presented accompanied with a respective fulfilment timeframe.



# 2 Environmental Policy

The Management Board of **FG** has adopted an integrated environmental policy for all our business locations (headquarters and airports), having defined environmental and social protection as one of our main company goals. Environmental protection is the responsibility of all employees that need to realize the importance of their duties, take active participation in meeting the common goals and willingly commit to the results of their activities.

### In this context:

- We are managing, operating and developing all our units in an environmentally responsible way in compliance with the applicable laws, regulations and other commitments.
- We are developing, applying and systematically improving our Environmental Management System and seek for continual improvement of our environmental performance.
- We are promoting greater environmental responsibility by training our employees and providing awareness programs for all concerned parties.
- We support a precautionary approach to environmental challenges respecting the principles of cost-effectiveness, economic viability and sustainability.

- We encourage the development and dissemination of environmentally friendly practices and technologies by applying environmental criteria when selecting goods and services.
- We engage in a regular dialogue with our community stakeholder groups and we incorporate their concerns and points of view in our corporate decision-making process.
   We communicate closely with our partners in the air transport value chain and work together to develop joint strategies and concepts directed towards continual improvement of environmental performance.

To meet our goals and targets towards sustainability and environmental protection, we focus on the following key environmental aspects:

- Protection of natural environment, including wildlife management;
- Resource use and waste minimization;
- Waste management (hazardous, nonhazardous);
- Wastewater management;
- Energy management, carbon emissions and climate change;
- 6. Pollution prevention and emergency response;
- 7. Noise management; and
- 8. Traffic management.

# 3 Legal and Stakeholder Requirements

### 3.1 Legal Requirements

Environmental aspects of airport activities are largely governed by national legislation which is in accordance to the European Directives.

National regulations and standards are used as the foundation for environmental programming and performance.

FG, also abides by the E&S Designated Performance Requirement, which means the applicable Alpha Bank Performance Standards as per the 25.7.2016 E&S Policy, the IFC Performance Standards; the EBRD Designated

Performance Requirements and the EIB. The environmental guidelines of each bank are publicly disclosed.

In the interest of responsible and sustainable environmental management, **FG** will endeavour to meet or exceed additional self-imposed standards, including the adoption of applicable international regulations. Tenants at **FG** airports are also required to uphold the same standards.

GG	Content	European Legislation	
	General		
A 160	Protection of the environment in Greece		
A 209	New framework for the environmental permitting procedure		
B 407	Building Energy Efficiency Code	Directive 91/2002/EC & 31/2010/EC	
W	/aste management		
A 24	Protection of the environment through criminal law, on waste management	Directive (WFD) 2008/99/EC & 2008/98/EC	
A 64	Management of used mineral oils		
A 75	Management of used vehicle tire		
B 1625	Management of batteries		
B 1184	Management of Waste Electrical and Electronic Equipment (WEEEE)		
B 1312	Management of Construction and Demolition Waste (CDW)		
B 383	Measures conditions and restrictions on hazardous waste management.	Directive 91/156/EC	
Environmental and aircraft noise			
B 1367	Environmental and aircraft noise	Directive (END) 2002/49/EC	
B 384	Environmental Noise	Directive (END) 2002/59/EC	
A 63	Noise management at EU airports	Directive 2002/30/EC	
A 291	Measurements and checks on aircraft noise		
	A 160 A 209 B 407 W A 24 A 64 A 75 B 1625 B 1184 B 1312 B 383 Environ B 1367 B 384 A 63	General A 160 Protection of the environment in Greece A 209 New framework for the environmental permitting procedure B 407 Building Energy Efficiency Code  Waste management  A 24 Protection of the environment through criminal law, on waste management  A 64 Management of used mineral oils A 75 Management of used vehicle tire  B 1625 Management of batteries  B 1184 Management of Waste Electrical and Electronic Equipment (WEEEE)  B 1312 Management of Construction and Demolition Waste (CDW)  B 383 Measures conditions and restrictions on hazardous waste management.  Environmental and aircraft noise  B 1367 Environmental and aircraft noise  B 384 Environmental Noise  A 63 Noise management at EU airports  Measurements and checks on aircraft	

Greek Legislation No	GG	Content	European Legislation
	Env	vironmental Liability	
PD 148/2009	A 190	Environmental liability for the prevention and remedy of environmental damage.	Directive (ELD) 2004/35/EC
		Air pollutants	
JMD 14122/549/E.103/2011	B 488	Ambient air quality	Directive 2008/50/EC
JMD 22306/1075/Δ103/2007	B 920	Target values and limits for assessment of concentrations of arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in atmospheric gases	Directive 2004/107/EC
	Na	ature Conservation	
PD 67/81	A 23	Protection of wild flora and fauna	
Law 3937/2011		Conservation of Biodiversity	
	chaeology	and sites of cultural interest	
Law 3028/2002	A 153	Cultural heritage protection	
		Wastewater	
JMD 145116/2001	B 354	Establishment of Measures, Conditions and Procedures for the Re-use of Wastewater and other provisions	
JMD 191002/2013	B 428	Amendment of JMD 145116/2011 which abolishes the relevant permit.	
MD E1b/221/65	B 138	Emissions standards and limits of wastewater discharged into water intended for bathing and any other use except from water consumption. As modified by MD Γ4/1305/1974, Γ1/17831/1971, ΓΥΓ2/133551/2008	
	Ele	ectromagnetic fields	
Decision 661/2012	B 2529	Procedures on licenses of land based antennas	

Table 1: Core Environmental Legislation

### 3.2 Approved Environmental Terms

Each airport operates under Approved Environmental Terms which ensure the optimal operation of the airport regarding the protection of the environment.

The terms set limits, guidelines and monitoring patterns adjusted to each airport individually, defending each environmental aspect.

A/A	Airport	Approved Environmental Terms Decision
		• 32649/04.11.1994 as it has been modified and extended by the
1	KGS	following:
•	NGS	o 106589/08.08.2006
		o 197968/03.05.2012
		32650/04.11.1994 as it has been modified and extended by the
2	JMK	following
		o 103324/18.04.2006
		o 175511/15.10.2014

A/A	Airport	Approved Environmental Terms Decision
3	MJT	<ul> <li>81441/20.12.2002 as it has been extended and modified by the following:</li> <li>23984/11.05.2016</li> </ul>
4	RHO	<ul> <li>32648/04.11.1994 as it has been extended and modified by the following:</li> <li>100425/17.01.2006</li> <li>23983/11.05.2016</li> </ul>
5	SMI	<ul> <li>106454/14.03.2000 as it has been modified by the following:</li> <li>131852/27.10.2010</li> </ul>
6	JTR	• 51227/25.10.2016
7	JSI	<ul> <li>68597/24.06.1999 as it has been extended and modified by the following:</li> <li>106193/11.07.2008</li> <li>120306/11.01.2010</li> </ul>

Table 2 Approved Environmental Terms Decisions for all 7 airports of Cluster B.

### 3.3 Stakeholder Requirements

As a community-based organization, we value the relationships we build with our business partners and surrounding communities.

Stakeholder engagement is being currently carried out and is also planned for the upcoming stages of project implementation. Prior to the start of construction activities, a site specific plan Stakeholder Engagement Plan (SEP) will be developed for each airport.

The SEP outlines a systematic approach to stakeholder engagement that will help **FG** develop and maintain over time a constructive

relationship with their stakeholders throughout the duration of the Concession period.

Each plan will contain information on the following:

- specific works that will take place at each airport
- stakeholders who may be affected or interested in the works
- timeline for any consultation activities;
- · communication tools and
- details of grievance process and contacts and local contact information.

### **Roles and Responsibilities**

Role	Responsibility
Fraport Greece	<ul> <li>Overall responsibility for implementing the environmental requirements specified by the legislation and the Environmental and Social Management Plan</li> <li>Auditing contractors, tenant and other airport operators' compliance with relevant environmental obligations.</li> <li>Reviewing and/or approving tenant and operators' environmental management plans.</li> <li>Promoting best practice environmental management to tenants, operators and contractors.</li> </ul>
Tenants & Operators	<ul> <li>Responsible for preventing environmental harm.</li> <li>Meeting statutory environmental requirements</li> <li>Ensuring appropriate plans and/or systems are in place to manage environmental risks posed by activities.</li> </ul>

Table 3 Roles and responsibilities

The relevant stakeholders identified per category are:

- Local population
- Airport Employees
- Grantor, Government and Public bodies
- Non Governmental Organizations
- Professional associations
- Scientific Organizations
- Media
- Vulnerable groups (which may include people with disabilities, refugees, cultural or religious minorities groups, etc.)
- Customers and economic partners
- Financial partners

Graphic 1 Stakeholder categories



# 4 Cluster B Airports

### 4.1 Location and Airport Environment

### Santorini (JTR)



Figure 1 JTR Airport

Santorini International Airport is located on the East side of the Santorini island, close to Kamari village. It is 6 km from the island capital, Thira, and 2.5 km East of Mesaria.

The island of Santorini is one of the most popular tourist destinations in Europe.

The airport is located in a distance of approximately 1km from Natura 2000 GR4220003 (SCI) "Nea kai Palia Kameni-Profitis Ilias" area

### Samos (SMI)



Figure 2 SMI Airport

Samos International Airport "Aristarchos of Samos" is located on the South-East side of the Island of Samos in the Eastern Aegean Sea. The airport is around 3 km from the town of Pythagoreio and 14 km from the capital of the island, the town of Samos, formerly known as Vathi.

The airport includes both civilian and military areas.

In the vicinity of the airport there are no protected areas. However, in the Island of Samos the habitat species of Golden Jackals (canis aureus) are protected under EU provisions. In addition, a small area in the SW

airport boundary is within "Heraion" archaeological sitec (GG 209/AAP/2012) and the east boundary of the concession site is within "Pythagoreio" boundary (GG 598/B/1984).

### Skiathos (JSI)



Figure 3 JSI Airport

Skiathos International Airport "Alexandros Papadiamantis" is located on the East side of the Island of Skiathos in the Western Aegean Sea. The airport is around 2 km from the capital of the island, the town of Skiathos.

The airport has no military use.

In the vicinity of the airport there are no Natura 2000 protected areas. The archaeological site of "Kefala" is sited adjacent to the northern boundary site of the airport.

### Mykonos (JMK)



Figure 4 JMK Airport

Mykonos International Airport is located on Mykonos Island, part of the Cyclades islands, approx. 4 km south east of the town of Mykonos (Chora), a journey of about 10 minutes. Mykonos is one of the most touristic island of Greece.

The airport is used by the commercial traffic, with no permanent military presence.

In the vicinity of the airport there are no protected areas. However, the whole island has been designed as a Site of Exceptional Natural Beauty (MD C/848/40, GG 329/B/31-3-1980). The MD does not impose any restrictions to airport's operation.

Within the airport boundaries there is a Church.

### Mitilini (MJT)



Figure 5 MJT Airport

Mitilini International Airport "Odysseas Elytis" is located on the South-East side of the Island of Lesbos, the third largest island in Greece situated in the Eastern Aegean Sea.

The airport is around 7 km from the town of Mitilini and is sited parallel to the coast. The terminal building and both aprons are located between the coast and the runway.

In the vicinity of the airport there are no Natura 2000 protected areas. The whole area of the airport falls within the limits of the proclaimed archaeological site of "Mitilini airport" (GG 978/B/1991).

### Rodos (RHO)



Figure 6 RHO Airport

Rodos International Airport "Diagoras" is situated on the island of Rodos within the Dodecanese islands. The airport is approximately 14km south-west of the capital city of Rhodos.

The airport incorporates both civilian and Military use.

In the vicinity of the airport there are no Natura 2000 protected areas. The airport is located within the boundaries of the proclaimed archaeological site "Archaeological site of Asomatos Kremasti, Paradisi Mountain and Rodos Airport" (GG 1979/B`/8-11-1999).

### Kos (KGS)



Figure 7 KGS Airport

Kos International Airport "Ippokratis" is located near the village of Antimacheia in the Irakleides region of Kos Island, approx. 27km south-west of Kos Town.

The island population is over 30,000, and the vast majority of the airport's 2.1 million passengers (2015) are tourists, mostly from Germany and the UK. The airport has no military presence.

A significant part of the NW part of the airport is within the limit of proclaimed archaeological site (GG 1387/B/22-10-2001) of "Antimachia". Additionally, church of Saint Charalabos is sited within airport boundaries. Near the airport of Kos there are no protected areas of environmental significance.

# 5 Planning for the future

FG will invest a total of at least €330 million in airport infrastructure until 2021, followed by maintenance and traffic-driven capacity investments during subsequent years of the project.

The proposed works in Cluster B include:

- 4 Runways will be refurbished namely those of Mykonos (JMK), Mitilini (MJT), Rodos (RHO), Skiathos (JSI)
- New terminal will be built in Lesvos (MJT)
- Terminal will be refurbished and expanded at 5 airports: Kos (KGS), Santorini (JTR), Samos (SMI), Mykonos (JMK) and Skiathos (JSI).
- Terminal remodeling will take place at the airport of Rodos (RHO).

### 5.1 Future works

### Santorini (JTR)

Imminent Works	Description
Terminal	Expansion and refurbishment of the existing
RFF	New RFF station in the same location
Road & Parking	New parking area
Utilities	Installation of new Pumping Station and sewerage connection pipe with the municipality WWTP
Other	New solid waste collection area New GSE parking area



Figure 8 Future JTR Airport view

### Samos (SMI)

Imminent Works	Description
Terminal	Terminal expansion
RFF	RFF station in a new location
Utilities	New sewerage Pumping Station New blew water collection tank and connection with municipality's network
Road & Parking	Remodelling of the existing parking areas and traffic reconfiguration
Other	New solid waste collection area  New GSE parking area



Figure 9 Future SMI Airport view

### Skiathos (JSI)

Imminent Works	Description
Terminal	Expansion and refurbishment of the existing
RFF	New RFF station almost in the same location
Road & Parking	Remodelling of the existing parking areas and traffic reconfiguration
Other	Relocation of fuel handler's offices and storage areas
	New solid waste collection area
	New GSE parking area



Figure 10 Future JSI Airport view

### Mykonos (JMK)

Imminent Works	Description		
Terminal	Expansion and refurbishment of the existing		
RFF	RFF station in a new location		
Road & Parking	Remodelling of the existing parking areas and traffic reconfiguration  New entrance roundabout		
Other	Expansion of the GSE parking area		
	Relocation of fuel handlers offices		



Figure 11 Future JMK Airport view

### Mitilini (MJT)

Imminent Works	Description
Terminal	New Terminal in a new location
RFF	RFF station in a new location
Apron	Apron expansion for lightweight aircrafts
Road & Parking	New Parking areas and traffic reconfiguration
Utilities	New WWTP
Other	New solid waste collection area
	New GSE parking area
	Relocation of Air club



Figure 12 Future MJT Airport view

### Rodos (RHO)

Imminent Works	Description
Terminal	Refurbishment of the existing terminal
RFF	New RFF building
Road & Parking	Remodelling of the existing parking areas and traffic reconfiguration
Other	New solid waste collection area New GSE parking area



Figure 13 Future RHO Airport view

### Kos (KGS)

Description
Expansion and refurbishment of the existing terminal
New RFF building in a new location
Apron expansion
Remodelling of the existing parking areas, new parking areas and traffic reconfiguration
New WWTP
New solid waste collection area  New GSE parking area



Figure 14 Future KGS Airport view

# 5.2 What has already been achieved

Up until now Master Plans for all 7 airports have been submitted. Each Master Plan determines an ultimate overall layout that will best utilise the potential of the airport campus and optimise the use of existing infrastructure that best fits the expected traffic volume and characteristics over the next 20 years.

Modification Dossiers of the Approved Environmental Terms for every airport have been submitted to the Ministry of Environment and Energy. The dossiers contained Environmental Impact Assessment Studies that describe the Imminent Works, evaluate the potential environmental impact and propose protective actions.

For the assessment of the current status of the environment and the existing contamination an **Environmental Baseline Survey** was conducted in every airport. The survey recorded

- Soil contamination
- Surface and underground water contamination
- Waste disposal

Environmental Baseline Survey for Sewage Treatment Plants for the evaluation and monitoring of the effectiveness of the existing Waste Water Treatment Plants (WWTP) which are located in Kos (KGS), Mitilini (MJT) and Rodos (RHO). Improvements were proposed for the existing facilities in order to upgrade them. Maintenance and upgrade works of the WWTPs are of high priority for FG.

Noise Baseline Survey for the peak period of 2016 at each airport, which included on site measurements and raw data collection. The data were evaluated, noise contours were calculated, and the subsequent noise trends were presented.

In cooperation with the National and Technical University of Athens an Interim Air and Noise and Monitoring Plan was implemented for each airport and was included as an Annex in the EIA Studies. The interim plan proposed a comprehensive air pollution and noise monitoring system that can replace the existing requirements of the existing Environmental Terms.

Climate Change Resilience Study in order to identify and ensure that climate-related risks and opportunities are identified early on and managed effectively, by integrating the findings of this study in the airport's Master Plans.

Asbestos Baseline Evaluation in order to identify the current conditions regarding the presence of asbestos materials in the existing infrastructure of the airport's buildings. In each airport all asbestos materials were identified and characterized as low, medium or high risk. For the management of these materials recovery actions were proposed and removal will take place as part of Imminent Works.

# 5.3 What could happen to the environment

- a. <u>Physical Environment</u> All the proposed works are located within each airport's existing boundary. During construction of the proposed works no major issue from dust is anticipated.
- b. Subsurface and Soil Soil compaction will generally occur during most of the construction activities involving heavy machinery, especially when the soil is wet.
  - The main impact during construction will occur from the excavation due to the construction of the expansion works. It is expected that the morphology and the surface characteristics of the surrounding area will not have major impacts during the construction of the proposed works.
- c. Water Resources Possible water pollution sources are the storm water runoff of the construction site, or other runoff and possible accidental oil or fuel leakage. Water consumption for construction purposes is considered not significant. Regarding the urban wastewater, the estimated loads from the construction site is not expected to significant bear down each airport's area.
- d. Landscape & Visual Amenity During construction there will be impacts on landscape and visual amenity but these are not considered significant and will be short – term and totally reversible. It should be noted that the proposed works are designed to be consistent and enhance the area's aesthetics.
- e. <u>Acoustic Environment</u> The proposed works are likely to result in local noise

disturbance from construction activities and machinery. No significant impact (noise or vibration) is expected on residential properties from blasting and hammering as the majority of these activities will take place within the terminals.

- f. Solid Wastes / Toxic and Dangerous Wastes For the waste produced during construction, the estimated quantities will not affect the existing management methods.
- g. <u>Socioeconomic Environment</u> For the socioeconomic environment opportunities and benefits are expected from the construction of the proposed works. It is estimated that significant employment positions will occur during construction.
- Cultural Heritage Potential sites within the Project footprint will be investigated further prior to construction. Any findings will be addressed in cooperation with the Local Archaeological Authorities.

### 5.4 Imminent Actions

Actions regarding environmental protection and

### 1. Monitoring plans

Monitoring plans will be implemented for each of the following environmental attribute:

- air (including CO<sub>2</sub> emissions),
- noise,
- water,
- soil.

The frequency of the monitoring will be set according to the respective Environmental Terms.

### 2. Waste Management Plan

**FG** is already in the process of creating a Pilot Waste Management Plan for Thessaloniki airport that will later on be used as a guide for the implementation of WMPs for the remaining airports.

### 3. Recycling of Hazardous Waste

In compliance with the relative legislation regarding waste management and recycling **FG** is signing contracts with Alternative Management Systems in order to manage the recycling of hazardous waste such as:

- Used Mineral Oils,
- Old Tires,
- Electrical and electronic Equipment,
- Batteries and Accumulators.
- 4. Wildlife Management Plan
- 5. Monitoring of Greenhouse Gases (GHG)

# 6 Sustainable Development

# 6.1 Overview and Objectives – Environmental and Social Management Plan

### **Company Objectives:**

The objective of **FG** is the safe, secure, and efficient management of the 7 Greek Regional Civil Airports of Rodos (RHO), Kos (KGS), Santorini (JTR), Mykonos (JMK), Mytilene (MJT), Samos (SMI) and Skiathos (JSI).

**FG** provides the infrastructure and the necessary services for meeting, sending off and serving of airplanes, passengers, baggage, cargo and mail according to the best practices and the applicable legislation.

FG aims to create a pleasant passenger experience for its customers, thus creating new business opportunities for concessionaires and service providers; as well as to make our airports attractive and environmentally friendly destinations for passengers, tour operators and airlines in the region.

We will constantly improve the quality of our services, productivity and environmental performance in order to keep our market place in the long term.

### FG ensures that:

- We communicate our environmental policy to all employees and persons working on our behalf
- We communicate this policy and the results of our activities to our Shareholders and to Second and Third parties as appropriate and to the Public.
- We maintain and continuously improve our environmental policy and Management System.
- We will establish and review objectives and targets for the Environment (along with the Quality, and Health & Safety ones).
- This environmental policy will be reviewed on an annual basis.

### Requirements

**FG** incorporates, as applicable, Fraport AG policies, established procedures and management systems in the development of its own respective documents.

FG is implementing an Environmental Management plan sufficient to address the environmental and social impacts and issues associated with each airport project.

Through the development of the airport masterplans, **FG** minimized the need for land acquisition and mitigated or eliminated any degradation or disturbance of landscape features, disturbance of wildlife habitats or altering of heritage buildings and monuments.

**FG**, through promotion of sustainable growth of air-travel, will benefit local communities by boosting regional financial activity and job creation. The project will influence sustainable local working conditions and hiring, both by **FG** and business partners.

The Environmental Management System is in compliance with all ordinances, statutes and regulations of Greek State Agencies and European Union legislation related to the protection of the Environment, as required of enterprises such as ours.

The approved EPC contractor as well as the fuel handlers in the airports hold ISO14001 certification or equivalent.

The EPC agreement requirements specify that the contractor shall elaborate and enforce a project specific Construction Environmental Management Plan (CEMP).

# 6.2 Environmental dimension as incorporated in planning and designs

Airport tenants, contractors and operators are required to ensure appropriate systems and procedures are in place to manage specific environmental risks associated with their activities from resources consumption. Tenants are encouraged to conserve energy through KENAK, the Greek state "Regulation on the Energy Performance of Buildings" and the technical guidelines issued by the Technical Chamber of Greece to be applied to all new and extensively renovated airports buildings. Recommendations are made to tenants during audits on methods to reduce their energy and resource consumption and waste generation.

FG inspects each airport, tenant, contractor and operator activities. Where excessive resource

consumption is observed, airport operators are required to monitor and reduce this consumption.

### **Energy**

Energy conservation as already incorporated in the design will be achieved through:

- Terminal use minimization during winter period by isolating unnecessary parts of the buildings with minimal use.
- Protection of the building against outdoor adverse conditions by enhancing shell insulation specification, solar protection glazing and / or external shading.
- Use of natural light preferred where possible.
- High efficiency chilled and hot water production equipment.
- Adjustable energy consumption to variable load demand (variable flow systems).
- Energy recovery systems in the airhandling units' design and free cooling and night cooling mode concepts.
- Installation of active power harmonic filters.
- Upgrade to low energy consuming lighting fixtures and automated lighting controls.
- Energy Management System in connection for monitoring energy consumption, providing trends and correlation data and introducing effective related controls.

- Energy Balance report as design deliverable that will constitute the base line for the elaboration of the Energy Management System.
- Identify high level renewable energy opportunities (e.g. geothermal HVAC applications).

### **Water Conservation and Quality**

- Site-wide drainage and wastewater monitoring schemes as appropriate.
- Landscaping that features xeriscape and drought-tolerant species.
- Monitoring to track water consumption.
- Storm water pollution prevention plan for all new construction.
- Spill traps/management, oil separators and closed fuel delivery systems as foreseen in the environmental terms.
- Refurbishment of existing Waste Water Treatment Plants

# Resources (materials and waste management)

Selection of materials that reflect our sustainability approach will consider, when possible, the following criteria:

- Reuse of building & appropriate excavation materials onsite.
- Future use of lower biochemical oxygen demand (BOD) de-icing materials.
- Use of nontoxic pest-control products.
- Use of construction materials & interior finishes with high recycled content and low VOC paints is encouraged.

Target	Timeframe	
Develop a carbon management strategy and associated management plans to reduce each airports carbon footprint.	Ongoing - within 1 <sup>st</sup> year of operations	
Undertake waste management review and audit to identify opportunities for waste reduction and diversion from landfill.	Ongoing - within 1 <sup>st</sup> year of operations	
Incorporate resource use efficiency measures for new developments. Implementation of an Energy Management System	Ongoing – Upon completion of Imminent Works	
Ensure CEMPs incorporate measures to minimize draw on natural resources and maximize diversion of waste from landfill during the construction phase of developments.	Ongoing – Prior to Imminent Works commencement	

Table 4 Targets for sustainable development

# 7 Soil Management

### 7.1 Overview

FG's objective is to protect soil from airport activities and appropriately manage and/or rehabilitate any contaminated sites.

The majority of contaminated sites are associated with historic activities on and off each airport including hydrocarbon spills, and constituents landfill activities firefighting foams.

Some activities that could affect soil are:

- Construction and earthworks.
- Grounds maintenance including vegetation removal and weed control.
- Storage, handling, use and disposal of hazardous materials.
- Aircraft refuelling, vehicle and aircraft wash down.
- Aircraft, vehicle, mechanical plant and electrical equipment maintenance.
- Car parking.
- Waste management infrastructure, storage and disposal.
- Demolishing buildings containing hazardous materials.
- Surrounding land use.

These activities could cause:

- Contamination from spillage, leakage, seepage, or residual runoff from hardstand areas.
- Migration of existing contamination from the original source through natural pathways or disturbance during construction.

### 7.2 **Soil Management Action Plan**

FG will regularly inspect the airport, tenant, contractor and operator activities. Where there is soil or groundwater contamination caused by their operations, airport operators will be required to undertake relevant measures to monitor. manage or remediate the contamination (obligation imposed by the Approved Environmental Terms).

According to article 13.4. of the Concession Agreement FG will aim to remediate any identified pre-existing contamination within the concession sites.

Actions to manage potential impacts to soils include:

- Periodic measurement campaigns to evaluate soil pollution and surveys of contaminated sites.
- Decontamination of polluted zones and soil remediation.
- Activities with the potential contaminate soil or groundwater will undergo a risk assessment to inform appropriate management procedures.

CEMP's prepared for relevant construction projects addressing potential soil impacts including contaminated land management measures.

Airport tenants, contractors and operators are required to ensure appropriate systems and procedures are in place to manage specific environmental risks associated with their activities.

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Target	Timeframe
Remediation of contaminated areas	Up to 2021 (Imminent Works completion)
Re-use of excavation and demolition products	In imminent and future works
Ensure CEMPs incorporate measures to minimise potential adverse impacts to soil associated with contraction activities.	Ongoing – Prior to Imminent Works commencement

Table 5 Targets for soil management

# 7.3 Achievements (with respect to soil conservation)

Already since 2016, an **Environmental Baseline Survey** took place in order to identify pre-existing contaminated areas.

In all FG airports specialized personnel conducted on site visits in order to record the existing contamination. In each airport a number of ditches were performed in order to examine both surface and underground soil contamination.

The works were split in two phases where the following were achieved:

### Phase I

- Collection and analysis of all available baseline data
- Site visit and inspection of the operating companies
- Detection of areas of environmental concern

Evaluation of the collected desktop and site visit data a specific soil / subsoil sampling and analysis program was finalized for the next investigation phase (Environmental Phase II investigation).

### Phase II

- Definition of the soil and groundwater conditions at the selected areas of environmental concern at the airport site.
- Assessment of the environmental risk stemming on potential subsoil contamination for the specific site.
- Proposal of necessary actions for the protection of soil.

## 8 Surface Water and Groundwater

### 8.1 Overview

FG's objective is to protect surface water and groundwater from airport activities and appropriately manage or rehabilitate any contaminated sites.

All the airports of Cluster B are near coastal areas and are typical of coastal environments. Being close to the sea, surface and groundwater levels and quality can be susceptible to quality and quantity alterations affected by sea level rise, tidal influences and flooding.

In addition, some activities that could affect water quality may be:

- Changes to the drainage network, leading to increased flow velocities or reduced flood storage capacity.
- Development that creates increased impermeable areas and increased runoff.
- Construction, earthworks and vegetation removal.
- Weed and pest control.
- Aircraft refuelling.
- · Equipment refuelling.
- Vehicle and aircraft cleaning.
- Aircraft, vehicle and equipment maintenance.
- Collection, storage, handling, use and disposal of hazardous materials.
- Waste management infrastructure and storage.
- Upstream land uses.
- Known and potentially contaminated sites.
- Potential malfunction of sewerage collection and wastewater treatment.

These activities may cause:

- Contamination from spillage, leakage or seepage into storm water infrastructure.
- Disturbance of known and potentially contaminated sites.

- Changes to the upstream or downstream flooding regime and possible disturbance of local water drills.
- Increased flow velocities, leading to erosion.
- Creation of mosquito-breeding habitat leading to public health risks.
- Attraction or spread of pest animals and weeds.
- Possible disturbance of local fauna and flora.

### 8.2 Water Management Plan

**FG** will develop an effective water management procedures aiming to eliminate any potential surface and groundwater environment disturbance.

Surface and groundwater quality will be monitored at various sites regarding physicochemical parameters by using:

- monitoring boreholes and
- surface water samples across the airports.

All chemical analysis will be conducted in licensed and certified laboratories.

Greek legislation does not specify certain monitoring parameters for storm water quality. However, the Approved Environmental Terms refer to storm water quality and impose preventive measures. Such measures are:

- drainage systems (channels, ditches and pipelines networks),
- oil-separators and
- sand traps,

in order to ensure that all storm waters are free off oils or other pollutants.

Measures to manage potential impacts to surface water and groundwater quality include:

- Implementation of relative Environmental Terms for each airport.
- Spill response and reporting procedures.

- · Waste handling procedures.
- Vegetation removal and weed and pest control procedures.
- Installation and maintenance of storm water treatment devices (oil-separators and sand traps).
- Tenant and construction audits with routine inspections.
- Incorporation of existing surface water and groundwater information during planning the new developments (imminent works).

- Drainage infrastructure designed and modelled to prevent potential flood impacts.
- CEMP's will be prepared for relevant construction projects addressing potential surface water and groundwater impacts.

FG will regularly inspect the airport, tenant, contractor and operator activities. Where there is water contamination or impacts to the drainage network caused by their operations, airport operators will be required to undertake relevant measures to monitor, manage or remediate the impacts

Target	Timeframe
Install storm water quality protection infrastructure (oil-separators, sand traps) as necessary	Up to 2021 (Imminent Works completion)
Water management procedures.	Ongoing - within 1 <sup>st</sup> year of operations
Ensure CEMPs incorporate measures to reduce potential adverse impacts to surface water and groundwater associated with construction activities.	Ongoing – Prior to Imminent Works commencement

Table 6 Targets for water management.

### 8.3 Achievements

Already since 2016, an **Environmental Baseline Survey** located all contaminated areas.

In all 14 airports specialized personnel conducted on site visits in order to record the existing contamination. In each airport a number of boreholes were performed in order to examine both surface and underground water contamination.

The works were split in two phases where the following were achieved:

### Phase I

- Collection and analysis of all available baseline data (surface and groundwater samples).
- Site visit and inspection of the operating companies.
- Detection of areas of environmental concern.
- Inventories of water bodies and groundwater.

Evaluation of the collected desktop and site visit data a specific groundwater sampling and

analysis program was finalized for the next investigation phase (Environmental Phase II investigation).

### Phase II

- Definition of the groundwater conditions at the selected areas of environmental concern at the airport site.
- Assessment of the environmental risk stemming on potential groundwater contamination for the specific site.
- Proposal of necessary actions for the protection of groundwater.

Each survey concluded in proposing remedial actions, for groundwater contamination especially for reducing the concentrations of petroleum hydrocarbons and chlorinated hydrocarbons such as:

- Pump and treat technique. Granular activated carbon (GAC) and aeration technique for the removal of organic contaminant in waters.
- Groundwater monitoring system. This includes the groundwater sampling and analyses twice a year, once within the period September- October and again within the period March-April.

# 9 Biodiversity

### 9.1 Overview

**FG** values greatly the protection of the ecosystems and plans to:

- appropriately manage biodiversity values across the network of its 14 airports.
- reduce adverse impacts to surface water (lakes, lagoons and sea) and groundwater from airport activities.
- protect and enhance the ecological values of conservation areas.

As mentioned previously the majority of the airports, especially in SMI, are within or in close proximity of protected areas with great ecological value.

### Wildlife Hazard Management

The presence of certain wildlife (large birds, foxes, wolves etc.) at airports can pose a significant risk to aircraft safety.

**FG** is establishing a Bird and Wildlife Management Program to proactively manage bird and wildlife strike risk.

Under the program, habitat is managed to limit attracting wildlife species. Active dispersal of bird and wildlife hazards occurs.

The wildlife management takes into consideration the following principles:

- Nonlethal Bird Techniques by use of the bioacoustics method for bird dispersal to scare birds (with portable and vehicle installed systems).
- Habitat management and landscaping techniques that reduce the attractiveness to birds.
- Monitoring and movement of birds away from aircraft, and their flight paths.
- Cooperation with Non-Government Organizations (NGO's) such as the Archipelagos, Archelon, National Marine Park of Zakynthos etc.

**FG** manages biodiversity at the airports and works to reduce the potential impact of its operations on the biodiversity of the surrounding area.

Some activities likely to affect biodiversity at each airport may be:

- Grounds maintenance activities including vegetation clearing and slashing.
- Weed and animal pest control.
- Hazardous wildlife control procedures.
- Vehicle or aircraft movements.
- Construction and demolition works.

These activities could cause:

- · Reduced native biodiversity.
- Introduction and spread of weed and animal pest species.
- Fragmentation of habitat from clearing associated with new developments.
- Degradation of foraging or breeding habitat.
- Direct injury to fauna through vehicle or aircraft collision or wildlife hazard procedures.
- Loss of native species from weed, pest and fire management activities.

# 9.2 Biodiversity Management Action Plan

Actions that can be protective of biodiversity values are:

- Wildlife hazard management procedures and training.
- Grass-cutting and tree-cutting in certain time periods according to relevant Environmental Terms.
- Monitoring significant species. Especially in Samos (SMI airport) for the protection of the habitat species of the Golden Jackal, which is protected by EU provisions.
- Landscaping procedures and guidelines with an emphasis on using locally sourced, endemic species
- Controlled spraying using biological pesticides (especially for overpopulation of species such as mosquitos).

 CEMP's prepared for relevant construction projects addressing potential biodiversity impacts

Airport tenants, contractors and operators are required to ensure appropriate systems and

procedures are in place to manage specific environmental risks associated with their activities.

Target	Timeframe

Wildlife management Plan which will include consideration of biodiversity conservation (impact of birdstrike in areas with high potential for sensitive bird species).

Ensure CEMPs incorporate measures to reduce potential adverse impacts to biodiversity associated with construction activities and eliminate risks associated with invasive species

Ongoing – Prior to Imminent Works

commencement

Ongoing - within 1st year of operations

Table 7 Targets for biodiversity

### 9.3 Achievements

FG has already submitted to the European Aviation Safety Agency (EASA), a general Wildlife Hazard Management Plan which will apply to all airports. The plan incorporates all the aforementioned objectives and actions.

FG in <u>cooperation</u> with Archipelagos, an NGO presently active for the protection of the habitat species of the Golden Jackal *(canis aureus)* and its habitat, examines the parameters of safely relocating the jackals that were found within airport boundaries.

Archipelagos conducted a preliminary survey in order to assess the possible entry points of Golden Jackals (Canis aureus) into airport area, as well the overall population within the airport, in order to support remedial action for their exclusion.

Specifically, four (4) InfraRed camera traps were placed in two (2) sites within the airport area. Jackals were spotted during night time and their point of entrance was located. Archipelagos will continue to observe the area in order to gather more data and will then proceed to propose measures and action for its relocation.



Figure 15 Golden Jackal (Source: www.archipelagos.gr)



Figure 16 Golden Jackal within SMI airport boundary (May 2017, Archipelagos and FG).

# 10Cultural Heritage

### 10.1 Overview

The sustainable and respectful management of the heritage values will be achieved by:

- Developing and maintaining a detailed knowledge of the heritage values that exists within and in the proximity of FG's concession areas;
- Identifying heritage values early on in the development process so that those heritage values can be considered, avoided and protected;
- Developing and submitting applications under relevant legislation, in consultation with relevant stakeholders, to impact those heritage values when that cannot be avoided;
- Developing and implementing procedures for appropriately managing heritage values using the guiding principles of avoid, protect and mitigate;
- Ensuring compliance will heritage legislation, associated statutory approvals and the provisions of the concession agreement; and
- Educating FG staff of the heritage values that exist within and in the proximity of FG's concession areas and the appropriate actions when interacting with these values.

**FG's** management of cultural heritage will follow procedures laid out in the Concession Agreement, consistent with the following practices:

- Test excavations to determine the existence of Antiquities.
- Vibration monitoring where necessary.
- Maintain the existing building structure, envelope, and interior non-structural elements of a historic building or contributing building in a historic district.

Almost all of the airports of Cluster B are in proximity of cultural heritage important values (e.g. proclaimed archaeological sites, churches, monasteries, sites of important aesthetic value etc.), as described in Chapter 4.1.

Activities with the potential to affect cultural heritage at the airports include any ground disturbing activities that could damage known or unknown heritage value. This would include:

- Grounds maintenance activities including vegetation clearing and slashing.
- · Construction and demolition works.

# 10.2 Cultural Heritage Management Plan

A key measure to manage the cultural heritage values at the Airport will be the ongoing implementation of the whole of the airports Cultural Heritage Management Plan CHMP, which includes:

- Cultural heritage awareness training for staff and contractors.
- Preparation and implementation of project-specific CEMPs for relevant projects that affect cultural heritage values.
- Regular inspections of cultural heritage sites
- Ongoing liaison with Indigenous stakeholders.
- During construction works when needed perform archaeological cross sections in collaboration with Archaeological Authorities.
- CEMP's prepared for relevant construction projects addressing potential cultural heritage impacts and Chance Finds procedure.

Target	Timeframe
Early identification and detailed understanding of heritage values within proposed development areas so that these may be appropriately considered	Ongoing – Prior to Imminent Works commencement
Coordinate with Hellenic Ministry of Culture and Sports to develop corporate level cultural heritage procedure including chance finds procedure (in accordance with the requirements of Article 15 of the CA).	During Imminent Works
Develop site specific cultural management plans in cooperation with Greek authorities and ensure implementation by contractors.	Ongoing – Prior to Imminent Works commencement
Develop a Chance Finds procedure	Ongoing – Prior to Imminent Works commencement
Develop and maintain a heritage database within and in the proximity of FG's concession areas	Ongoing - within 1 <sup>st</sup> year of operations
Increasing awareness by FG staff and airport tenants of the diverse heritage values within FG's concession areas, the importance of these values and the process to protect these values	Ongoing - within 1 <sup>st</sup> year of operations
Ensure CEMPs incorporate measures to reduce potential adverse impacts to cultural heritage associated with construction activities.	Ongoing – Prior to Imminent Works commencement

Table 8 Targets for cultural heritage

### 10.3 Achievements

Already for each airport **FG** has created a **Catalogue with relevant heritage sites**.

The catalogue was part of the Heritage Action Plan that was implemented by FG and includes the following (where applicable) per airport:

- Archaeological places and their relevant protection zones.
- Places of significance to the cultural and spiritual beliefs.
- Artefacts and the remains of important structures.
- Sites of exceptional beauty and traditional settlements.

Architectural landmarks & building of beauty and/or importance.

# 11 Air Quality

### 11.1 Overview

**FG** manages airport operations in a way that prevents air emissions causing a nuisance or harm to neighbouring receptors.

Some activities that generate air emissions include:

- Aircraft ground operations including refuelling.
- Vehicle and equipment operations.
- Use of air-conditioners, pumps and generators.
- General Aviation maintenance, including spray painting and paint stripping activities, workshop activities and cleaning operations using organic solvents.
- Use of ground power units and auxiliary power units.
- Grounds maintenance, including vegetation removal and weed control.
- Construction and demolition works.

These activities could cause:

- Air emissions, including greenhouse gases and potentially ozone depleting substances.
- Reduced visibility (mainly from dust or smoke).
- Public nuisance or health issues.
- Offensive or concerning odours (e.g. fuel odours).

### 11.2 Protective actions

Measures to manage potential impacts to air quality include:

- Environmental awareness and inductions.
- Monitoring plan and implementation of the measures imposed by the Environmental Terms. The plan will include type and frequency of monitoring parameters and monitoring equipment. The gathered data will be evaluated, air pollutant contours will be calculated, and the subsequent trends will be presented. Relevant measures will be adopted in case of limits exceedance.
- Appropriate collection and disposal of ozone- depleting substances from airconditioning units.
- Maintenance of vehicles and equipment to prescribed standards.
- CEMP's for relevant construction projects addressing potential local air quality impacts including dust control measures.

**FG** is also planning the phased replacement of terminal package air-conditioners that use ozone depleting substances.

Airport tenants, contractors and operators are required to ensure appropriate systems and procedures are in place to manage specific air quality environmental risks associated with their activities.

FG will regularly inspect the airport, tenant, contractor activities. Where there are unacceptable air emissions caused by their operations, airport operators will be required to undertake relevant measures to monitor, manage or remediate the impacts.

Target	Timeframe
Ensure appropriate servicing and maintenance of	Ongoing – Throughout the concession
equipment.	period
Air monitoring plan for all airports	Interim monitoring plan ongoing - 2018
Ensure CEMPs incorporate measures to reduce	Ongoing – Prior to Imminent Works
potential adverse impacts to local and regional air	commencement
quality associated with construction activities.	

Table 9 Targets for air quality

### 11.3 Achievements

FG has already implemented an Interim Monitoring Plan for Air Quality in cooperation with the National and Technical University of Athens. The Plan was submitted to the Ministry of Environment and Energy as an Annex to the Modification EIA studies.

Additionally, in the aforementioned studies Air Quality Modelling was presented depicting the expected air quality in relation to the passenger forecast for upcoming years.

## 12 Noise

### 12.1 Overview

Noise requirements apply to noise associated with ground-based airport activities and aircraft landing and take-off procedures as well as ground running and idling on aprons.

Noise receptors surrounding the airport that could be affected are predominantly the surrounding or adjacent in some cases, urban areas and local fauna.

During maintenance and imminent works noise will be carefully managed to reduce off-site impacts.

**FG** will manage noise in such a manner so as to ensure it does not cause nuisance to, or adversely affect, neighbouring receptors. Activities could generate noise may be:

- Aircraft landing and take-off procedures
- Aircraft ground running and idling on aprons
- Aircraft maintenance and testing activities
- Fixed and mobile equipment
- General airport and infrastructure maintenance activities
- Internal road network traffic
- Tenant and operator activities.
- Construction and demolition works (temporary only for the duration of imminent works implementation).

These activities could cause:

- Nuisance to airport operators and the community
- Disruption in roosting and breeding behaviour of local fauna.

### 12.2 Noise Management Plan

**FG** plans to produce a noise management plan during the operational period, for each airport.

Monitoring plan and implementation of the measures imposed by the Environmental Terms. The plan will include type and frequency of monitoring parameters and monitoring equipment. The gathered data will be evaluated, noise contours will be calculated, and the subsequent noise trends will be presented. Corrective actions are implemented in case of limit exceedance.

Measures to manage potential impacts from noise emissions include:

- Environmental awareness and inductions
- Recording, investigation and followup of noise enquiries
- Implementing operational procedures for noise- generating activities
- Implementing noise control measures through CEMPs as standard
- Tenant and construction audits
- Aircraft ground running policy and review of the policy in response to airport operational matters and tenant feedback
- Regular servicing and maintenance of vehicles and equipment.

FG will regularly inspect the airport, tenants, contractor and operator activities. Airport tenants, contractors and operators will be required to ensure appropriate systems and procedures are in place to manage specific noise-related environmental risks associated with their activities.

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Target	Timeframe
Noise Monitoring Plan and implementation of it.	Interim monitoring plan ongoing - 2018
Timely investigation of any reported inappropriate noise generation	When required
Ensure all CEMP(s) incorporate measures to minimize potential adverse noise impacts associated with construction activities.	Ongoing – Prior to Imminent Works commencement

Table 10 Targets for noise

### 12.3 Achievements

FG has already implemented a Noise Baseline Survey for the peak period of 2016 at each airport, which included on site measurements and raw data collection. The data were evaluated, noise contours were calculated, and the subsequent noise trends were presented.

Additionally, FG has implemented an <a href="Interim">Interim</a> <a href="Monitoring Plan for Noise">Monitoring Plan for Noise</a> in cooperation with the National and Technical University of Athens. The Plan was submitted to the Ministry of Environment and Energy as an Annex to the Modification Dossiers of the EIA studies.

Additionally, in the aforementioned studies Noise Modelling was presented depicting the expected noise levels in relation to the passenger forecast for upcoming years.

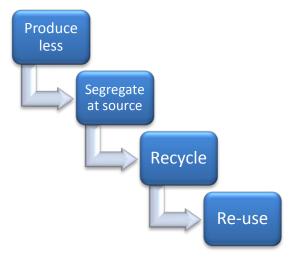
# 13 Waste Management

### 13.1 Overview

FG will ensure the storage, handling and use of waste materials (hazardous and non-hazardous) is carried out in accordance with applicable legislation, standards and state planning for waste management.

The main objective is to produce less waste where possible. Waste segregation at the source will be promoted for all personnel and tenants.

Recycling and re-use are both of great importance for **FG** and will be implemented throughout the operational period including construction works.



Graphic 2: FG's main objectives regarding waste management

Airport operations inevitably produce solid waste on a daily basis from a variety of sources involving personnel, passengers, tenants and handlers. Also, a variety of hazardous materials are used such as lubricant and mineral oils, batteries and accumulators, tires, electronic and electrical equipment etc. Hazardous materials have the potential to cause harm to persons, property or the environment. As a result, they should be handled and used in an appropriate manner. Where feasible, **FG** will substitute, reduce or eliminate the use of hazardous materials and those used will be appropriately recycled according to relative legislation.

Airport tenants retain responsibility for solid waste as well as hazardous materials held in individual premises.

Some activities related to hazardous materials may be:

- Bulk fuel storage and handling including aviation, unleaded and diesel fuels.
- Aircraft refuelling, vehicle and aircraft wash down.
- Vehicle refuelling at the service station.
- Aircraft, vehicle and mechanical plant and electrical equipment maintenance.
- Construction, earthworks and demolition.
- Quarantine operations.
- General airport operation, construction, maintenance and landscaping including weed and animal pest control.

These activities could cause:

- Release of hazardous materials, leading to water, land and air contamination.
- Human and ecosystem health impacts.

### 13.2 Waste Management Plan

Waste Management Plan procedures will be developed so that waste streams are properly identified, segregated and treated, along the following lines:

- Separation of solid waste types at the point of generation. Use of specially designed waste bins for separation of paper, metal-plastic, glass and organic.
- Dedicated areas for the collection and storage of recyclable materials
- Hazardous waste disposed and recycled properly by certified handlers.
- Waste containers around the airport for passengers and tenants - transferred to onsite dumpsters and compactors, then transported to an offsite processing facility.
- Airport offices recycle paper, batteries, tonners, electrical devices.

**FG's** Health and Safety procedures – details procedures in relation to storage, handling and disposal asbestos and other hazardous

materials, maintenance of asbestos register, Health and Safety incident reporting, etc.

Airport tenants, contractors and other airport operators are also required to ensure appropriate systems and/or procedures are in place to manage specific environmental risks associated with their activities and abide by the relevant legislative requirements for waste management.

FG will regularly inspect the airport, tenant, contractor and operator activities to check environmental risks associated with their activities in relation to hazardous materials are being managed appropriately.

Management of hazardous materials is also addressed through CEMPs for relevant construction projects.

Hazardous materials in relation to FG's activities will be managed under different mechanisms depending on the nature of the activity.

These mechanisms include:

 Environmental Management Plan – includes procedures for spill response, interceptor trap maintenance, environment incident reporting, tenant audits etc.  Airport Emergency Plan – details procedures for dealing with major incidents in relation to hazardous materials, fuel and oil spills.

In regard to the asbestos materials an Asbestos Management Plan will be implemented were the following actions will be included:

- a. Labelling of the materials as asbestos containing materials.
- b. Notification of the personnel working in the vicinity of these materials.
- c. No disturbance of the asbestos materials.
- d. Proactive painting of the external surfaces with plastic painting (optional).
- e. Optimal solution: Programmed removal of the asbestos materials by a specialized and licensed company.
- f. Following asbestos removal the premises must be assessed conducting visual inspection and air monitoring in accordance with relevant Greek legislation for issuing Clearance Certificates Certificates of Reoccupation. The assessment should be carried out by independent laboratory accredited by Hellenic Accreditation System (ESYD) for asbestos air sampling and analysis.

Target	Timeframe
Pilot Waste Management Plan with transferability for other airports	Fall 2017
Monitor chemical storage and handling practices during internal and tenant audits	As per internal and tenant audit schedule
Monitor availability of up-to-date Materials Safety Data Sheets at points of use during internal and tenant audits.	As per internal and tenant audit schedule
Ensure CEMPs incorporate measures to reduce potential adverse impacts associated with the storage, handling and use of hazardous materials associated with construction activities	Ongoing – Prior to Imminent Works commencement

Table 11 Targets for hazardous waste

### 13.3 Achievements

Actions already achieved:

<u>Contracts</u> with <u>Alternative Management</u> <u>Systems</u> for the recycling of hazardous waste such as oils, batteries, tires, electronic and electrical equipment.

Asbestos Baseline Evaluation in order to identify the current conditions regarding the

presence of asbestos materials in the existing infrastructure of the airport's buildings. In each airport all asbestos materials were identified and characterized as low, medium or high risk. For the management of these materials recovery actions were proposed and removal will take place as part of Imminent Works

# 14 Conclusion

The 2017 Environmental Strategy Report is not a business as usual strategy. The commitments, goals and initiatives will be challenging to plan, launch and deliver.

The targets are difficult but we believe they are realistic. This plan is visionary and will take concerted investment, coordination and changes in culture to achieve but it supports and is supported by **FG's** Mission, Vision, Values and Strategic Plan.

FG will monitor and report annually on progress against our goals and the lessons learned and will seek regular feedback and input on how to do better