

Reference year 2024

ENVIRONMENTAL BULLETIN OF SAMOS “ARISTARCHOS OF SAMOS” AIRPORT (SMI)



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1. INTRODUCTION

1.1 Location

"Aristarchos of Samos" airport of Samos has been operating since 1963 and is located at 14 km from the town of Samos (Vathy) and at approximately 3km from the town of Pythagoreio. The airport is located to the south side of the island, near the settlement Potokaki.

1.2 Administration

The airport administratively belongs to the Municipal Communities Chora and Pythagoreio of the Municipal Unit Pythagoreio of the Municipality of Samos of the homonym Regional Unit, of the Region of North Aegean.

1.3 Environmental licensing

Approved Environmental Terms

<i>E.T. Decision Reference number</i>	106454/14.03.2000
	131852/27.10.2010
	3704/12.02.2018
<i>E.T. Amendment Decision Reference Number</i>	24437/1573/14.03.2022
	74752/5077/18.07.2022

1.4 Airport Basic Data

<i>Airport name IATA / ICAO</i>	SMI / LGSM
<i>Airport location – Airport Reference Point (ARP)</i>	Latitude: 37° 41' 21" N Longitude: 26° 54' 44" E
<i>Altitude</i>	5.74m
<i>Number of runways</i>	1
<i>Operation hours (summer)</i>	05:15 – 21:15
<i>Operation hours (winter)</i>	06:30 – 18:00



<i>Runways</i>	<i>Length/Width</i>	<i>Code</i>			
Runway	2,044m x 45m	09/27			
Full length of parallel taxiway	N/A				
Number of taxiways	3				
Apron capacity	A	B	C	D	E
	-	-	4	4	-



<i>Terminal</i>	
Total area (m ²)	9,473



<i>Other buildings and service/storage areas</i>	
RFF Station (m ²)	1,144



<i>Employees</i>	<i>High season (31.08.2024)</i>	<i>Low season (30.11.2024)</i>
Fraport Greece (FG) employees	30	25
Employees of other companies	343	248



<i>Parking Areas</i>	
Car parking spaces	192
Bus parking spaces	14
Taxi parking spaces	36

1.5 Airport facilities

1.5.1 Fuel Handlers

<i>Number of fuel handler companies</i>			
<i>Number of fuel handler companies operating at the Airport</i>			
			2
<i>Installations inside the airport</i>	<i>EKO</i>	<i>GISSCO</i>	<i>HAFCO</i>
<i>Environmental Management System (EMS)</i>	YES	YES	Not operating at the airport

1.5.2 Ground Handlers

<i>Number of ground handler companies</i>			
<i>Number of ground handler companies operating at the Airport</i>			
			3
<i>Installations inside the airport</i>	<i>SKYSERV</i>	<i>SWISSPORT</i>	<i>GOLDAIR</i>
<i>Environmental Management System (EMS)</i>	YES	YES	YES

2. TRAFFIC DATA STATISTICS

2.1 Annual Traffic Data

Annual Traffic Data for the year 2024



Overall Annual Air Traffic Movements¹
5.630



Annual passenger traffic
488.194



Annual cargo transferred (tn)
145

Percent of increase or decrease in relation to the previous year



-1,0%



2,3%



-10%

¹ Military and training flights not included.

Aircraft types

Prevailing aircraft types for domestic flights

Aircraft type	No. of flights
AT76	2.598
AT45	478
A320	188
EC35	93
AT75	24
PAY2	23
C56X	12
A109	12
AT46	12
CL60	10
Other	146

Prevailing aircraft types for international flights

Aircraft type	No. of flights
B738	993
A320	396
A20N	272
B739	97
A319	74
A321	28
E190	24
GLEX	10
E55P	8
F900	8
Other	124

2.2 High season traffic data

High season traffic data (June-September)

Highest traffic month	July
Air traffic movements during the month with highest traffic	872
Air traffic movements daily average number during the month with highest traffic	28

2.3 Low season traffic data

Low season traffic data (October-May)

Lowest traffic month	November
Air traffic movements during the month with lowest traffic	76
Air traffic movements daily average number during the month with lowest traffic	8

3. AIRCRAFT NOISE

3.1 Noise measurements during the reference year

Have noise measurements at the airport's surrounding area been performed during the reference year? **NO**

Summary of measurement results

Noise levels are monitored according to the airport's monitoring program and new approved environmental terms.

For year 2024, no noise measurements are foreseen.

Noise complaints: 0

3.2 Noise levels calculation based on noise simulation software

Aircraft noise levels calculation based on noise simulation software **NO**

Summary of results

According to environmental terms, there is no obligation for noise simulation software this year.

4. AIR QUALITY

4.1 Air quality measurements during the reference year

Have air quality measurements at the airport's surrounding area been performed during the reference year? **NO**

Summary of measurement results

Air quality is monitored according to the airport's monitoring program and new environmental terms.

There is no obligation for air quality measurements for 2024.

4.2 Air pollutants emission and dispersion modelling

Calculation of air pollutants concentrations based on an emission and dispersion modelling software **NO**

Summary of results

Air quality is monitored according to the airport's monitoring program and new environmental terms.

According to environmental terms, there is no obligation for air modeling for 2024.

5. WASTE MANAGEMENT

<i>Waste</i>	<i>Collection</i>	<i>Management/Disposal</i>
<i>Recyclables (paper, plastic, metals, glass)</i>	<i>Separate collection by the Municipality of Samos</i>	<i>Disposal at material recovery facility (OEDA Samos) and transshipment for recycling</i>
<i>Residues (Mixed Waste) and Bulky Waste</i>	<i>Collection by the Municipality of Samos</i>	<i>Disposal in landfill (OEDA Samos)</i>

Notes:

1. Regarding the different categories of the MSW (recyclables, mixed waste, bulky waste), the Airport Users handle their waste together with Fraport Greece B (central management).
2. Regarding the "alternative management" waste categories (Waste lubricant oil WLO, WEEE, etc.):
 - i. Waste Lubricant Oil (WLO): Collection and management by authorized collector "CYTOP S.A."
 - ii. Waste Electrical & Electronic Equipment (WEEE): Collection and management by alternative management system "Appliances Recycling S.A."
 - iii. Accumulators: Collection and management by alternative management system "Re-Battery S.A."
 - iv. Small batteries: Collection and management by alternative management system "AFIS S.A."
 - v. Used tires: Collection and management by alternative management system "ECOELASTIKA S.A."
3. The total quantities of the hazardous waste further to the above-mentioned and produced at the airport, are managed by licensed private companies which have a contract with Fraport Greece B, after a Tender process according to the provisions of the legislation in force.
4. In the year 2024, Fraport Greece B in SMI managed a total of 102,04 tons of Hazardous waste (SMI FG B 87,24 tn, third parties 14,8 tn).
5. The total quantities of the produced waste by category resulting from all activities of the airport, the collectors and final recipients, are recorded by Fraport Greece B and submitted in the Electronic Waste Registry of the Ministry for Environment and Energy via the Annual Waste Producer Report according to the provisions of the legislation in force.

6. ECOSYSTEM AROUND THE AIRPORT

6.1 Flora – Fauna



Flora

Are there protected zones of vegetation/habitats in the broader airport area?

YES

(if YES) Short description: Samos Airport "Aristarchos of Samos" is near to the Natura 2000 site:

- GR4120001 Samos Paralia Alyki (Area: 307.07ha)



Fauna

Are there protected species of fauna/birds in the broader airport area?

YES

(if YES) Short description: Samos Airport "Aristarchos of Samos" is close to the

- Important Bird Area GR146 Psili Ammos lagoon (Area:182,93 ha)

- Important Marine Mammal Area Central Aegean (Area: 5.826,500 ha) where the species *Monachus monachus* is recorded

The protected bird species (listed under Annex I of Directive 2009/147/EC) that have been observed at Samos broader airport area since April 2017 are presented below:

Black crowned night heron (*Nycticorax nycticorax*), Black stork (*Ciconia nigra*), Black-winged stilt (*Himantopus himantopus*), Bonelli's eagle (*Aquila fasciata*), Collared pratincole (*Glareola pratincola*), Common crane (*Grus grus*), Cretzschmar's bunting (*Emberiza caesia*), Eleonora's falcon (*Falco eleonora*), Eurasian bittern (*Botaurus stellaris*), Eurasian eagle owl (*Bubo bubo*), Eurasian honey buzzard (*Pernis apivorus*), Eurasian sparrowhawk (*Accipiter nisus*), Eurasian stone-curlew (*Burhinus oedicnemus*), European kingfisher (*Alcedo atthis*), European nightjar (*Caprimulgus europaeus*), European roller (*Coracias garrulus*), European shag (*Phalacrocorax aristotelis*), Flamingo (*Phoenicopterus roseus*), Glossy ibis (*Plegadis falcinellus*), Golden plover (*Pluvialis apricaria*), Great egret (*Casmerodius albus*), Hen harrier (*Circus cyaneus*), Lesser grey shrike (*Lanius minor*), Little egret (*Egretta garzetta*), Long-legged buzzard (*Buteo rufinus*), Marsh harrier (*Circus aeruginosus*), Montagu's harrier (*Circus pygargus*), Pallid harrier (*Circus macrourus*), Peregrine falcon (*Falco peregrinus*), Purple heron (*Ardea purpurea*), Pygmy cormorant (*Phalacrocorax pygmeus*), Red-backed shrike (*Lanius collurio*), Red-footed falcon (*Falco vespertinus*), Ruff (*Philomachus pugnax*), Ruddy shelduck (*Tadorna ferruginea*), Sandwich tern (*Sterna sandvicensis*), Short-toed snake eagle (*Circaetus gallicus*), Spur winged lapwing (*Vanellus spinosus*), Squacco heron (*Ardeola ralloides*), Tawny pipit (*Anthus campestris*), White stork (*Ciconia ciconia*), Wood sandpiper (*Tringa glareola*), Woodlark (*Lullula arborea*).

The Golden Jackal (*Canis aureus*) is listed as Endangered (EN) in the Red Data Book of Threatened Animals of Greece.

7. WILDLIFE HAZARD MANAGEMENT

Wildlife strikes and wildlife hazard management measures

Wildlife species that suffered a strike	Strikes (%)
Small passerines	100%

Wildlife strike risk mitigation measures

The presence and behavior of wildlife species at Samos airport is monitored in regular intervals, daily, from dawn to dusk. Some of the wildlife control methods applied at Samos airport are: distress calls (bioacoustics), digital sounds, anti-bird laser, etc. Preventive long-term actions that are mainly related to habitat management measures (e.g. grass cutting, drainage clearance, water body management) are also taken to further reduce the presence of hazardous wildlife species constituting a risk to flight safety. In addition, a NOTAM is published and regularly updated.

8. CULTURAL HERITAGE

Have new cultural heritage properties been discovered during the reporting period?

NO

9. RESOURCES CONSUMPTION



9.1 Energy consumption

Energy consumption (monthly electric energy consumption, in Kwh)

Total annual electric energy consumption (in Kwh)	1.457.997,63*
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*Third parties' consumption is excluded.



9.4 Fuel consumption for generator

Fuel consumption

Total annual consumption (lt)	875,29
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9.5 Water consumption

Water consumption

Total annual consumption (m ³)	6.130,00
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9.2 Fuel consumption

Fuel consumption

Number of FG vehicles at the airport	12	
Total annual fuel consumption	Diesel (lt)	6.522,12
	Unleaded gasoline (lt)	5.152,10



9.3 Heating oil or natural gas consumption

Heating oil or natural gas consumption

Total annual heating oil consumption (lt)	-*
Total annual heating natural gas consumption (m ³)	N/A

*Heating and air conditioning is performed via heat pumps.

10. GREENHOUSE GAS EMISSIONS & CARBON FOOTPRINT

Greenhouse gas emissions that were included in the carbon footprint calculation are the CO₂, CH₄ & N₂O emissions included in scope 1 & 2 of the GHG protocol:

- Scope 1: Direct GHG emissions that occur from sources that are owned and/or controlled by the airport,
- Scope 2: Indirect GHG emissions from the generation of purchased electricity, steam, heat or cooling consumed by the airport.

Source Flows	Total CO ₂ e Emissions (t) 2024	
	Location based	Market based
Direct emissions from heating fuel (scope 1)	0,0	0,0
Direct emissions from fuel used for fleet vehicles (scope 1)	29,6	29,6
Direct emissions from fuel used for generators (scope 1)	2,3	2,3
Indirect emissions from electricity consumption (scope 2)	729,9	533,2
Total (t)	761,8	565,1
Kg CO₂e /passenger	1,56	1,16

Notes

Fraport Greece B is committed to the monitoring, management and reduction of its airports carbon footprint.

In order for this target to be achieved:

- Direct and indirect carbon emissions from all the emission sources in the airports' boundaries are calculated and reported, based on the GHG Protocol (scope 1 & 2)
- The airport is certified according to ACA (Airport Carbon Accreditation), Level-1.

11. HUMAN CONSUMPTION WATER MONITORING PROGRAM

Human consumption water quality

<i>Water supply (public water network or airport's boreholes)</i>	<i>Municipality of Samos network</i>
<i>Is sampling of the airport's water network performed?</i>	<i>YES</i>
<i>(if YES) Sampling frequency</i>	<i>Quarterly</i>

Summary of results

The results of the microbiological and chemical analyses show that the parameters analyzed as regards the airport's water network are not within the legislative limits defined by the Ministerial Decision Δ1 (δ)/ΓΠ οικ. 27829/2023 (ΦΕΚ 3525/Β` 25.5.2023) regarding the quality of human consumption water, as there are occasional elevated concentrations of Arsenic (As).

12. RAINWATER

RAINWATER (collection, treatment disposal and recipient)

Area	Collection/treatment/disposal	[YES/ NO]
Apron and manoeuvring area	Collected in drainage ditches leading to the sea	YES
Other runoffs (runway etc.)	Collected in drainage ditches leading to the sea	YES
Treatment of rainwater by oil-separator		NO

Rainwater quality

Is sampling of the airport's rainwater performed?	YES
(if YES) Sampling frequency	Twice a year
Parameters analyzed: pH, conductivity, TSS, DO, NO ₃ , NO ₂ , Oil & grease, BOD, COD, Total Petroleum Hydrocarbons (TPH), PAHs, BTEX, Heavy metals, PCBs, Detergents	

Summary of results

Surface rainwater quality is monitored according to the airport's monitoring program. Due to the absence of designated recipients and relevant national quality limits for surface rainwater, the Environmental Health & Safety Guidelines of the International Finance Corporation (IFC) are adopted. For the year 2024, the monitoring program was performed with one set of sampling. The presence of hydrocarbons (C₁₀-C₄₀) (mg/lt) and pathogenic microorganisms is recorded, and the monitoring of the phenomenon will continue.

13. GROUNDWATER AND/OR SOIL AND/OR SOIL GAS MONITORING

Groundwater and/or soil and/or soil gas quality

Is sampling of the airport's groundwater and/or soil and/or soil gas performed?

YES

(if YES) Sampling frequency

Yearly

Parameters analyzed: Groundwater: TPH, BTEX, MTBE (groundwater) and Volatile hydrocarbons, aliphatic, aromatic and chlorinated (soil gas), pH, conductivity, TSS, DO, BOD, COD, NO₃, NO₂, oils and grease, TPHs, heavy metals, (As, Pb, Cd, Cr, Cu, Ni, Hg, Zn), chlorine ions, sulphate ions.

Summary of results

Groundwater monitoring within airport boundary - Fraport Greece

Groundwater quality is monitored according to the airport's monitoring program. The results show no exceedances. The results do not record exceedances in petroleum products, but they do record high values in some heavy metals, resulting in the need for a Special Substratum Study.

Groundwater and/or soil and/or soil gas monitoring at fuel farms – Fuel Handlers

According to the approved environmental terms, monitoring of groundwater from the Fuel Handlers for reference year 2024 was performed by EKO and GISSCO. The results show no exceedances.

14. SEWAGE TREATMENT AND DISPOSAL



Sewage

Sewage network to the municipal wastewater treatment plant (WWTP)	YES
Autonomous airport's wastewater treatment plant (WWTP)	NO

Blue water

Collection and disposal:
Collection in watertight tank and disposal to the municipal sewage network.

Waste water treatment plant description (where applicable)

Description of characteristics and condition of the airport's WWTP including possible problems. Type and frequency of the effluent quality measurements

Degree of treatment of airport's WWTP	N/A
Treatment method	N/A
Disposal of treated wastewater	N/A
Sludge disposal	N/A
Sampling frequency of WWTP effluent	N/A
Parameters analyzed	N/A
Summary of quality of WWTP effluent	N/A

Contact

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