

Environmental Bulletin of Mithilini Airport “Odysseas Elytis” (MJT)

Reference year 2023



Issue Year: 2024

Fraport Regional Airports of Greece B S.A.



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1. Introduction

1.1 Location

“Odysseas Elytis” airport of Mytilene is located at a distance of 6km from the capital of Mytilene island, near the east coast of the island of Lesbos. At the south-west the settlements Akrotiri, Taxiarches and Aghia Marina are located, at the north the settlements Neapoli and Vareia are located, whereas at the south the village Agrilia Kratigos is located.

1.2 Administration

The airport administratively belongs to the Municipal Community of Mytilene and the Local Community of Aghia Marina of the Municipal Unit of Mytilene of the Municipality of Lesbos of the homonym Regional Unit that belongs to the Region of South Aegean.

1.3 Environmental licensing

Approved Environmental Terms

E.T. Decision Reference number	JMD 81441/20.12.2002
	Ref. No 23984/11.05.2016
E.T. Amendment Decision Reference Number	Ref. No 1004/16.01.2018
	Ref No. 77785/5110/19.07.2023

1.4 Airport Basic Data

Airport name IATA / ICAO	MJT / LGMT
Airport location – Airport Reference Point (ARP)	Latitude: 39° 03' 28" N Longitude: 26° 35' 55" E
Altitude	18.41 m
Number of runways	1
Operation hours (summer)	00:00 – 23:59
Operation hours (winter)	00:00 – 23:59



Runways	Length/Width	Code
Runway	2,406m x 45m	14/32
Full length of parallel taxiway	N/A	
Number of taxiways	5	
Apron capacity	A B C D E	
	- - 4 1 -	



Terminal	
Total area (m ²)	7.135



Other buildings and service/storage areas	
RFF Station (m ²)	1.180



Employees	High season (31.08.2023)	Low season (30.11.2023)
Fraport Greece (FG) employees	34	32
Employees of other companies	323	263



Parking Areas	
Car parking spaces	141
Bus parking spaces	12
Taxi parking spaces	13

1.5 Airport facilities

1.5.1 Fuel Handlers

Number of fuel handler companies

Number of fuel handler companies operating at the Airport	2
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Installations inside the airport

	EKO	GISSCO	HAFCO
Environmental Management System (EMS)	YES	YES	Not operating at the airport

1.5.2 Ground Handlers

Number of ground handler companies







Number of ground handler companies operating at the Airport	3
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Installations inside the airport

	SKYSEV	SWISSPORT	GOLDAIR
Environmental Management System (EMS)	YES	YES	YES

2. Traffic data statistics

2.1 Annual Traffic Data

Annual Traffic Data for the year 2023		
 Overall Annual Air Traffic Movements ¹ 6.413	Percent of increase or decrease in relation to the previous year	 3,7%
 Annual passenger traffic 497.499		 13,3%
 Annual cargo transferred (tn) 141		 14%

¹ Military and training flights not included.

Aircraft types

Prevailing aircraft types for domestic flights	
Aircraft type	No. of flights
AT76	3.078
A320	947
AT45	464
AT72	452
A20N	188
AT75	188
AT46	32
A321	16
C550	8
ESSP	7
Other	116
Prevailing aircraft types for international flights	
Aircraft type	No. of flights
B738	513
A20N	124
A320	69
A319	48
B752	36
C25M	13
H25B	13
C56X	11
DA42	10
LJ35	9
Other	71

2.2 High season traffic data

High season traffic data (June-September)

Highest traffic month	August
Air traffic movements during the month with highest traffic	715
Air traffic movements daily average number during the month with highest traffic	23

2.3 Low season traffic data

Low season traffic data (October-May)

Lowest traffic month	February
Air traffic movements during the month with lowest traffic	418
Air traffic movements daily average number during the month with lowest traffic	15

3. Aircraft noise)))

3.1 Noise measurements during the reference year

Noise Monitoring Stations



Summary of measurement results

Noise levels are monitored according to the airport’s monitoring program.
No exceedance of noise indicators levels $L_{den}=70$ dB(A) and $L_{night}=60$ dB(A) was observed.

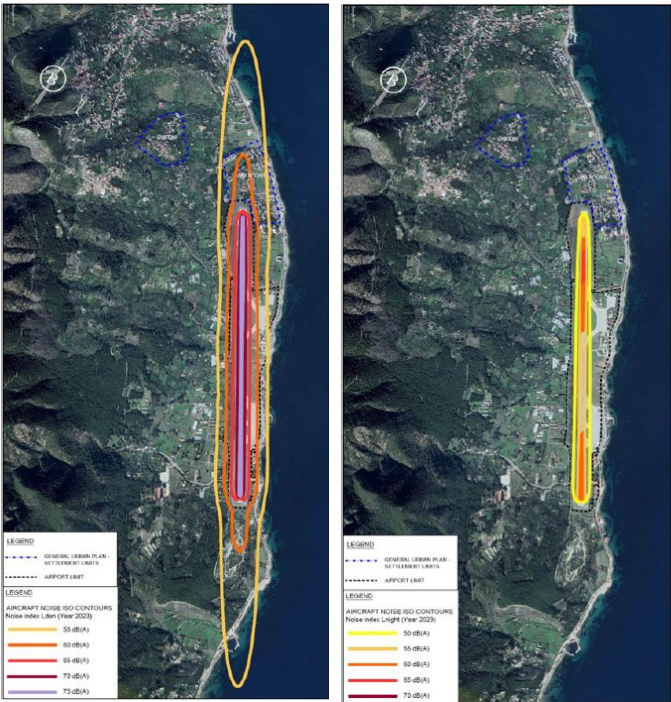
Have noise measurements at the airport's surrounding area been performed during the reference year? YES

Measurement points coordinates	Measurement points description
Position 1: 39° 04' 10" N 26° 35' 19" E	Neapoli area, north of the runway in a hotel yard. Affected by arrivals RWY 14 and departures RWY 42
Position 2: 39° 03' 56" N 26° 35' 47" E	East of the runway on a hotel roof. Affected by all flights to and from both directions
Position 3: 39° 02' 06" N 26° 36' 44" E	To the south of the runway, in the yard of a house. Affected by arrivals RWY 32 and departures RWY 14
Measurement period	30.08.2023 – 31.08.2023
Noise indicators	L_{den} , L_{night}

Noise complaints: 0

3.2 Noise levels calculation based on noise simulation software

Noise contours



Aircraft noise levels calculation based on noise simulation software YES

Software used IMMI Premium 2021

Noise indicators and respective contours calculation L_{den} & L_{night}

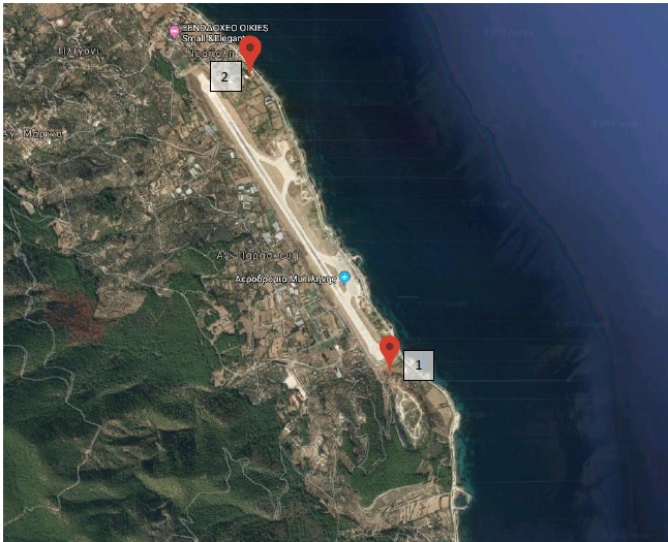
Summary of results

For the year 2023 no buildings inside official settlement boundaries were found to be exposed to noise levels higher than the limits L_{den}=70 dB(A) και L_{night}=60 dB(A).

4. Air quality ⇨

4.1 Air quality measurements during the reference year

Air Quality Monitoring Network



Have air quality measurements at the airport’s surrounding area been performed during the reference year? YES

Measurement points	Measurement points description
Position 1	Area inside the airport, south of the runway
Position 2	Hotel parking lot 850 meters from the airport
Measurement period	23.05.2023 – 07.06.2023 09.11.2023 – 26.11.2023
Pollutants measured	PM ₁₀ , PM _{2,5} , NO ₂ , SO ₂ , C ₆ H ₆ , O ₃ , CO

Summary of measurement results

Air quality is monitored according to the airport’s monitoring program. No exceedance of the air quality limits was observed.

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

According to environmental terms, there is no obligation for air pollutants emission this year.

5. Waste management

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

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 2023, Fraport Greece B managed a total of 6.42 tons of Hazardous waste (FG A 5.59 tn, third parties 0.83 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: Mitilini Airport "Odysseas Elytis" is near to the Natura 2000 sites: <ul style="list-style-type: none">• GR4110005 Lesvos: Kolpos Geras, Elos Ntipi Kai Oros Olympos (Area:11,918.14ha)• GR4110013 Lesvos: Kolpos Geras, Eli Ntipi Kai Charamida (Area:5,172.26ha)	



Fauna

Are there protected species of fauna/birds in the broader airport area?	YES
(if YES) Short description: The protected bird species that have been observed at Mitilini airport since April 2017 are presented below: Mitilini Airport "Odysseas Elytis" is near to the Important Bird Area GR138: Gera gulf, Ntipi and Charamida marshes, Lesvos (Area: 5661.95ha).	
Black stork (<i>Ciconia nigra</i>), Booted eagle (<i>Hieraaetus pennatus</i>), Eurasian skylark (<i>Alauda arvensis</i>), Lapwing (<i>Vanellus vanellus</i>), Mediterranean gull (<i>Larus melanocephalus</i>), Red-footed falcon (<i>Falco vespertinus</i>), Sandwich tern (<i>Sterna sandvicensis</i>), Short-toed snake eagle (<i>Circaetus gallicus</i>)	

7. Wildlife hazard management

Wildlife strikes and wildlife hazard management measures

Wildlife species that suffered a strike	Strikes (%)
Small passerines	57%
Seagulls	43%

Wildlife strike risk mitigation measures

The presence and behavior of wildlife species at Kos airport is monitored in regular intervals, daily, from dawn to dusk. Some of the wildlife control methods applied at Kos 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, water body management) are also taken to further reduce the presence of 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
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9. Resources consumption

9.1 Energy consumption

Energy consumption (monthly electric energy consumption, in Kwh)

Total annual electric energy consumption (in Kwh)	1.410.688,82*
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*Third parties' consumption is excluded

9.2 Fuel consumption

Fuel consumption

Number of FG vehicles at the airport	11
	Diesel (lt) 7.602,67
Total annual fuel consumption	Unleaded gasoline (lt) 3.419,28

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 (m³)	N/A

*Heating and air conditioning is performed via heat pumps

9.4 Fuel consumption for generator

Fuel consumption

Total annual consumption (lt)	2.569,03
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9.5 Water consumption

Water consumption

Total annual consumption (m³)	8.526,80
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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 (t) Emissions (t)
	2023
Direct emissions form heating fuel (scope 1)	0,0
Direct emissions from fuel used for fleet vehicles (scope 1)	28,3
Direct emissions from fuel used for generators (scope 1)	6,8
Indirect emissions from electricity consumption (scope 2)	753,4
Total (t)	788,5
Kg CO ₂ e /passenger	1,58

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. Electromagnetic radiation

The measurements were carried out at 21 different points around the antenna array located at the airport on 29.11.2023.

Measurement point	Amperage E (V/m)	Power Density (W/m ²)
1	5,13E-01	6,98E-04
2	5,12E-01	6,95E-04
3	7,60E-01	1,53E-03
4	1,05E+00	2,94E-03
5	1,72E+00	7,83E-03
6	2,02E+00	1,08E-02
7	1,81E-01	8,72E-05
8	2,53E-01	1,69E-04
9	4,23E-01	4,75E-04
10	4,67E-01	5,79E-04
11	3,51E-01	3,27E-04
12	7,04E-01	1,31E-03
13	3,49E-01	3,24E-04
14	4,17E-01	4,61E-04
15	7,30E-01	1,41E-03
16	1,02E+00	2,74E-03
17	2,92E-01	2,27E-04
18	1,60E-01	6,82E-05
19	1,87E-01	9,26E-05
20	2,42E-01	1,55E-04
21	1,41E-01	5,30E-05
22	1,47E-01	5,69E-05
23	1,89E-01	9,46E-05
24	3,39E-01	3,04E-04
25	1,68E-01	7,50E-05
26	1,41E-01	5,24E-05
27	2,47E-01	1,62E-04

Notes

At this measurement campaign, no exceedances were found. The defined limits of exposure to electromagnetic radiation, are respected, as they are determined by the relevant legislation.

12. Human consumption water monitoring program



Human consumption water quality

Water supply (public water network or airport's boreholes)	Municipal Water & Sewage Company (DEYA) of Lesvos
Is sampling of the airport's water network performed?	YES
(if YES) Sampling frequency:	Quarterly

Summary of results

The results of the microbiological and chemical analyses show that the parameters analyzed as regards the airport's water network are 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.

13. 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:	Annual
Parameters analyzed: pH, conductivity, TSS, DO, NO ₃ , NO ₂ , Oil & grease, BOD, COD, Total Petroleum Hydrocarbons (TPH), PAHs, BTEX, Heavy metals, Detergents	

Summary of results

Surface rainwater quality is monitored according to the airport's monitoring program. The quality parameters are those set in the Standard Environmental Commitments as set in the MD 51354/2641/E103 (GG 1909/B'/08.12.2010). Surface rainwater monitoring for 2023, was performed and the quality of the water is in accordance with the standard. However, presence of hydrocarbons (C₁₀-C₄₀) (µg/l) and pathogens is recorded, which will be further investigated.

14. 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:	Annual
Parameters analyzed: Groundwater: TPH, BTEX, benzene, MTBE, PAH (16 priority compounds according to USEPA, except Naphthalene) PAH & Soil gas: (MTBE (PCE), Toluene, 1,1,1-Trichloroethane, Trichloroethylene (TCE), Vinyl chloride (VC), Xylene (total))	

Summary of results

Groundwater monitoring within airport boundary - Fraport Greece

Groundwater quality is monitored according to the airport's monitoring program. Groundwater monitoring for 2023 was performed. The results show no exceedances.

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

According to the approved environmental terms, monitoring of groundwater, underground air (soil gas) from the Fuel Handlers for reference year 2023 was performed by EKO and GISSCO. No exceedances were recorded.

15. Sewage treatment and disposal



Sewage

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

*For the year 2022, the sewage were transferred to the local WWTP, for operational reasons. The WWTP restart is scheduled for 2023.
During year 2023, until the receipt of the new irrigation field, the wastewater was removed by trucks to the local WWTP. WWTP start-up started in September 2023 and normal operation began normal in December 2023. During December there was 1 exceedance in in Total Phosphorus (Total P). FG monitor effluent quality and take corrective actions when necessary.

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	Secondary treatment & chlorination
Treatment method	Prolonged ventilation
Disposal of treated wastewater	Limited irrigation during March-October according to the Environmental Terms**
Sludge disposal	Landfill
Sampling frequency of WWTP effluent	Monthly
Parameters analyzed	BOD, SS, TN,TP, T. Coliforms, E.coli, pH, residual Cl ₂
Summary of quality of WWTP effluent	Limits as set in Table 1 of the Annex of JMD 145116/2001

