

ENVIRONMENTAL BULLETIN OF MITILINI “ODYSSEAS ELYTIS” AIRPORT (MJT)

Reference year 2022

Fraport Regional Airports of Greece B S.A.

Issue Year: 2023

**Environmental Bulletin of Mitilini Airport
“Odysseas Elytis” (MJT) - 2022**



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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
E.T. Amendment Decision Reference Number	Ref. No οικ. 23984/11.05.2016
	Ref. No οικ. 1004/16.01.2018

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)	00:01 – 24:00

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	-
Employees	High season (31.08.2022)			Low season (30.11.2022)	
Fraport Greece (FG) employees	33			30	
Employees of other companies	287			254	

Terminal	
➤ Total area (m ²)	7.135

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

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

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

Installations inside the airport	SKYSERV	SWISSPORT	GOLDAIR
Environmental Management System (EMS)	YES	YES	YES

2. TRAFFIC DATA STATISTICS

2.1. Annual Traffic Data

Annual Traffic Data for the year 2022	
Overall Annual Air Traffic Movements ¹	6.184
Percent of increase or decrease in relation to the previous year	25,4%
Annual passenger traffic	439.185
Percent of increase or decrease in relation to the previous year	53,9%
Annual cargo transferred (tn)	164
Percent of increase or decrease in relation to the previous year	-23,2%

Aircraft types	
Prevailing aircraft types for domestic flights	
Aircraft type	No. of flights
AT76	2.938
A320	743
AT45	452
DH8D	332
AT72	314
A32A	270
A20N	64
AT75	62
A319	50
A321	50
Other	150
Prevailing aircraft types for international flights	
Aircraft type	No. of flights
B73H	347
A20N	126
A320	91
7M8	81
B738	56
B737	12
ASTR	6
A319	4
C55B	4
C650	4
Other	24

¹ Military and training flights not included.

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	652
Air traffic movements daily average number during the month with highest traffic	21

2.3. Low season traffic data

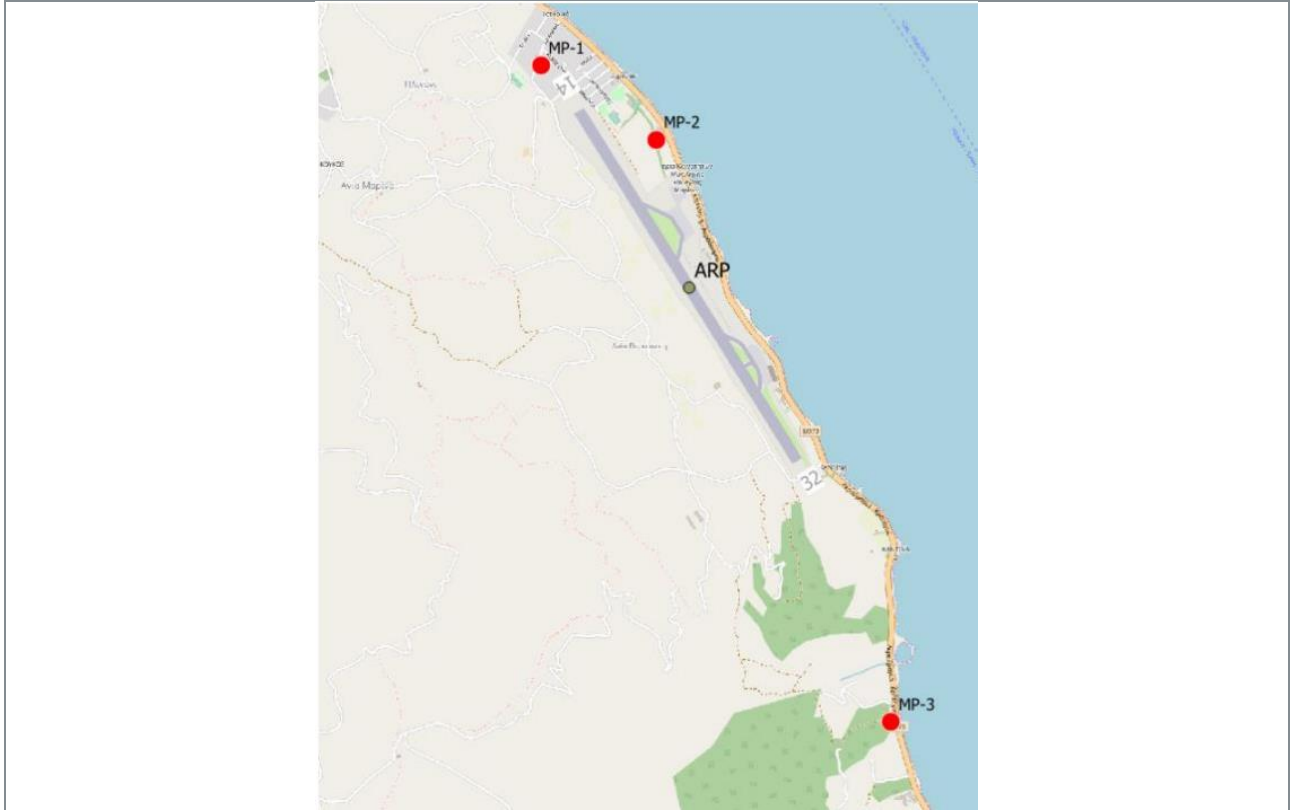
Low season traffic data (October-May)	
Lowest traffic month	February
Air traffic movements during the month with lowest traffic	376
Air traffic movements daily average number during the month with lowest traffic	13

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?	YES
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Measurement points



Measurement points coordinates	Measurement points description
Θέση 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 32.
Θέση 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
Θέση 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	22.07.2022-23.07.2022
Noise indicators	L _{den} , L _{night}

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.

3.2. Noise levels calculation based on noise simulation software

Aircraft noise levels calculation based on noise simulation software	NO
Software used: N/A	
Noise indicators and respective contours calculation: N/A	
Noise contours: N/A	

Summary of results:

According to environmental term, 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?		YES
Measurement points		
		
Measurement points	Measurement points description	
Position 1	Settlement Agrilia Kratigos at a distance of approximately 2 km from the runway	
Position 2	At a distance of approximately 700m to the north of the runway.	
Measurement period:	22.09.2022 - 07.10.2022 24.01.2023 - 08.02.2023	
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
Software used: N/A	
Pollutants concentrations and respective contours calculation: N/A	

Summary of results:
According to environmental term, there is no obligation for air pollutants emission and dispersion 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, according to the provisions of the legislation in force.
4. 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
<p>(if YES) Short description: Mitilini Airport “Odysseas Elytis” is near to the Natura 2000 sites:</p> <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
<p>(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>)</p>	

7. WILDLIFE HAZARD MANAGEMENT

Wildlife strikes and wildlife hazard management measures	
Wildlife species that suffered a strike	Strikes (%)
Small passerines	67%
Pigeons	17%
Gulls	16%
Wildlife strike risk mitigation measures:	
<p>The presence and behavior of wildlife species at Mitilini airport is monitored in regular intervals, daily, from dawn to dusk. Some of the wildlife control methods applied at Mitilini 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.</p>	

8. CULTURAL HERITAGE

Have new cultural heritage properties been discovered during the reporting period?	NO
<i>(if YES)</i> Details provided in the table below:	

Location	Date of discovery	Type of discovery	Additional protection measures taken

9. RESOURCES CONSUMPTION

9.1. Energy consumption

Energy consumption (monthly electric energy consumption, in Kwh)	
Total annual electric energy consumption (in Kwh)	1.417.989,24

9.2. Fuel consumption

Fuel consumption		
Number of FG vehicles at the airport	11	
Total annual fuel consumption	Diesel (lt)	9.159,57
	Unleaded gasoline (lt)	400,75

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

9.4. Fuel consumption for generator

Fuel consumption	
Total annual consumption (m ³)	1.705,19

9.5. Water consumption

Water consumption	
Total annual consumption (m ³)	8.687,51

10. GREENHOUSE GAS EMISSIONS & CARBON FOOTPRINT

Greenhouse gas emissions that were included in the carbon footprint calculation are the CO₂ 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 Emissions (t)
	2022
Direct emissions form heating fuel (scope 1)	0,0
Direct emissions from fuel used for fleet vehicles (scope 1)	25,4
Direct emissions from fuel used for generators (scope 1)	4,5
Indirect emissions from electricity consumption (scope 2)	595,6
Total (t)	625,5
Kg CO₂ /passenger	1,42

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 COMSUMPTION 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 Γ1 (δ)/ΓΠ οικ. 67322/ GG 3282 B/19-9-2017 regarding the quality of human consumption water	

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:	Yearly
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. Surface rainwater monitoring for 2022, was not performed.	

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, benzene, MTBE, PAH (16 priority compounds according to USEPA, except Naphthalene) PAH [Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3,c,d)pyrene, Benzo(g,h,i)perylene], Naphthalen & Soil gas: Acetone, Benzene, 2-Butanone, Chlorobenzene, Chloroform, Chloromethane, 1,2-Dichloroethane 1,2-Dicholoroethene (trans), Ethylbenzene, n-hexane, 4-methyl-2-perntanone (MIBK), methyl-tertiary-butylether (MTBE), Napthalene, Styrene, Tetracholoroethylene (PCE), Toluene, 1,1,1-Trichloroethane, Tricholoroethylene (TCE), Vinyl chloride (VC), Xylene (total)	
Summary of results:	
Groundwater quality is monitored according to the airport's monitoring program. Groundwater monitoring for 2022 was not performed. According to the approved environmental terms, monitoring of groundwater and air from the Fuel Handlers is not foreseen for the year 2022.	

14. 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*

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

Waste water treatment plant description (where applicable)	
<i>Description of characteristics and condition of the airport’s WWTP including possible problems. Type and frequency of the effluent quality measurements.</i>	
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

**For the year 2022, the sewage were transferred to the local WWTP, for operational reasons. The WWTP restart is scheduled for 2023.*