

# *Environmental Bulletin of Aktion Airport (PVK)*

*Reference year 2023*



*Issue Year: 2024*

*Fraport Regional Airports of Greece A S.A.*



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# 1. Introduction

## 1.1 Location

Aktion (PVK) airport is located in the west part of Sterea Ellada, at a distance of 4 km from Preveza, 16km from Vonitsa and 20km from Lefkada. Cape Aktio is surrounded to the east by Amvrakikos Gulf and to the west by the Ionian Sea.

## 1.2 Administration

The airport administratively belongs to the Regional Unit (RU) of Aitolokarnania of the Region of West Greece and the Ionian and more specifically to the Municipal Unit of Anaktorio of the Municipality of Aktio – Vonitsa, Local Community of Aghios Nikolaos Vonitsis.

## 1.3 Environmental licensing

### Approved Environmental Terms

|  |  |
|--|--|
| E.T. Decision Reference number           | 11543/07.03.2017                         |
| E.T. Amendment Decision Reference Number | 50502/08.12.2017                         |
| E.T. Amendment Decision Reference Number | E.T. Amendment Decision Reference Number |

## 1.4 Airport Basic Data

|  |  |
|--|--|
| Airport name IATA / ICAO                         | PVK / LGPZ   |
| Airport location – Airport Reference Point (ARP) | Latitude: 38° 55' 32" N<br>Longitude: 20° 45' 55" E  |
| Altitude   | 3.32m  |
| Number of runways                                | 2  |
| Operation hours (summer)                         | Monday/Saturday 06:30 – 00:15<br>Tuesday/ Wednesday/Thursday 06:30 – 21:45<br>Friday 06:30 – 23:00<br>Sunday 08:30 – 22:30 |
| Operation hours (winter)                         | Monday/Wednesday/Thursday/Friday/Sunday 09:30 – 15:30<br>Tuesday/Saturday 09:30 – 16:30                                    |



| Runways                         | Length/Width | Code    |
|---------------------------------|--------------|---------|
| Runway                          | 2,871m x 45m | 07L-25R |
| Runway                          | 2,974 x 30m  | 07R-25L |
| Full length of parallel taxiway | 2,974m       |         |
| Number of taxiways              | 3            |         |
| Apron capacity                  | A B C D E    |         |
|                                 | - - 3 - 1    | (MARS)  |



| Terminal        |       |
|-----------------|-------|
| Total area (m²) | 9.649 |



### Other buildings and service/storage areas

|                  |                          |
|------------------|--------------------------|
| RFF Station (m²) | Housed in HAF facilities |
|------------------|--------------------------|



### Parking Areas

|                     |    |
|---------------------|----|
| Car parking spaces  | 81 |
| Bus parking spaces  | 14 |
| Taxi parking spaces | 17 |



| Employees                     | High season<br>(31.08.2023) | Low season<br>(30.11.2023) |
|-------------------------------|-----------------------------|----------------------------|
| Fraport Greece (FG) employees | 26                          | 20                         |
| Employees of other companies  | 324                         | 124                        |

## 1.5 Airport facilities

### 1.5.1 Fuel Handlers

#### Number of fuel handler companies

|   |   |
|---|---|
| Number of fuel handler companies operating at the Airport | 1 |
|---|---|

| Installations inside the airport      | EKO                          | GISSCO | HAFCO                        |
|---------------------------------------|------------------------------|--------|------------------------------|
| Environmental Management System (EMS) | Not operating at the airport | 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      | 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 <sup>1</sup><br><b>6.684</b> | Percent of increase or decrease in relation to the previous year |  <b>1,1%</b> |
|  Annual passenger traffic<br><b>817.206</b>                        |  |  <b>5,6%</b> |
|  Annual cargo transferred (tn)<br><b>0</b>                         |  |  <b>-</b>    |

<sup>1</sup> Military and training flights not included.

#### Aircraft types

| Prevailing aircraft types for domestic flights      |                |
|---|----------------|
| Aircraft type                                       | No. of flights |
| AT45  | 572            |
| AT75  | 70             |
| A109  | 27             |
| AT76  | 14             |
| AT72  | 10             |
| B738  | 9              |
| AS65  | 8              |
| BE20  | 8              |
| C550  | 8              |
| E55P  | 8              |
| Other   | 102            |
| Prevailing aircraft types for international flights |                |
| Aircraft type                                       | No. of flights |
| B738  | 2.017          |
| A320  | 1.503          |
| A321  | 484            |
| A20N  | 393            |
| A319  | 372            |
| A21N  | 232            |
| B734  | 89             |
| B737  | 88             |
| C56X  | 55             |
| E170  | 44             |
| Other   | 571            |

### 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                      | 1.434  |
| Air traffic movements daily average number during the month with highest traffic | 46     |

### 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                      | 42       |
| Air traffic movements daily average number during the month with lowest traffic | 1        |

# 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**

Noise complaints: 0

Summary of measurement results

Noise levels are monitored according to the airport's monitoring program and new approved environmental terms.  
According to approved Environmental Terms, in 2023 noise measurement was not foreseen.

3.2 Noise levels calculation based on noise simulation software

|  |    |
|--|----|
| Aircraft noise levels calculation based on noise simulation software | NO |
|--|----|

Summary of results

Noise levels are monitored according to the airport’s monitoring program and new approved environmental terms.  
According to approved Environmental Terms, in 2023 noise modeling was not foreseen

## 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 the new approved environmental terms.  
No air quality measurements are foreseen in 2023.

### 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.  
No air quality modeling is foreseen in 2023.

## 5. Waste management

| Waste  | Collection   | Management/Disposal                                  |
|--|--|--|
| Recyclables<br>(paper, plastic, metals, glass) | Separate collection by the Municipality of Vonitsa | Disposal in material recovery facility for recycling |
| Residues (Mixed Waste) and Bulky Waste         | Collection by the Municipality of Vonitsa          | 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 A (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 A, after Tender according to the provisions of the legislation in force.

4. In the year 2023 Fraport Greece A managed a total of 3.54 tons of Hazardous waste (FG A 1.79 tn, third parties 1.75 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 A 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 |
| In the broader area of Amvrakikos bay, sites that belong to the "NATURA 2000" network exist, such as the broader area of the delta of the rivers Louros and Aracthos, the lagoons (Rodia, Tsoukalio, Logarou, and other smaller ones), and the marine area that surrounds them (GR2110001, GR2110004), as well as the lakes Voulkaria and Saltini. |     |



#### Fauna

|   |     |
|---|-----|
| Are there protected species of fauna/birds in the broader airport area?   | YES |
| The protected bird species that have been observed at the vicinity of Aktio Airport since April 2017 are presented below:<br>White stork ( <i>Ciconia ciconia</i> )<br>Griffon vulture ( <i>Gyps fulvus</i> ) at Kleisoura area, southeast of Aktio Airport<br>The field survey dates will gradually increase during the following years. |     |

# 7. Wildlife hazard management

Wildlife strikes and wildlife hazard management measures

0\*

\* The Hellenic Air Force (HAF) is responsible for the management of birdstrike risk.

# 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) | 1.772.858,47* |
|---|---------------|

\*Third parties' consumption is excluded

### 9.2 Fuel consumption

#### Fuel consumption

|                                      |                              |
|--------------------------------------|------------------------------|
| Number of FG vehicles at the airport | 8                            |
|                                      | Diesel (lt) 4.149,35         |
| Total annual fuel consumption        | Unleaded gasoline (lt) 559,6 |

### 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) | 1.416,88 |
|-------------------------------|----------|

### 9.5 Water consumption

#### Water consumption

|                               |       |
|-------------------------------|-------|
| Total annual consumption (m³) | 8.775 |
|-------------------------------|-------|

# 10. Greenhouse gas emissions & carbon footprint



Greenhouse gas emissions that were included in the carbon footprint calculation are the CO<sub>2</sub>, CH<sub>4</sub> & N<sub>2</sub>O 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 <sub>2</sub> e (t) Emissions (t) |
|--|---|
|  | 2023                                      |
| Direct emissions form heating fuel (scope 1)                 | 0,0                                       |
| Direct emissions from fuel used for fleet vehicles (scope 1) | 12,4                                      |
| Direct emissions from fuel used for generators (scope 1)     | 3,7                                       |
| Direct emissions from refrigerants (scope 1)                 | 0.0                                       |
| Indirect emissions from electricity consumption (scope 2)    | 946,9                                     |
| Total (t)  | 963,0                                     |
| Kg CO <sub>2</sub> e /passenger                              | 1,18                                      |

## Notes

Fraport Greece A 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

|  |   |
|--|---|
| Water supply (public water network or airport's boreholes) | Municipal network of Lefkada & Aetoloakamania |
| 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 (GG 3525/B` 25.5.2023) 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:   | Annual |
| Parameters analyzed: pH, conductivity, TSS, DO, NO <sub>3</sub> , NO <sub>2</sub> , 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. 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 2023, was performed and quality of the water is in accordance with the IFC guidelines. However presence of hydrocarbons and pathogens is recorded, in one sampling point, which is being further investigated.

## 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:

Annual

Parameters analyzed: TPH, BTEX, MTBE

### 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.

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

According to the approved environmental terms, monitoring of groundwater and soil from the Fuel Handlers for reference year 2023 was performed by GISSCO. Groundwater and soil tested showed no exceedances.

# 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* |

\*Due to the maintenance/upgrade works the WWTP operation has ceased and sewage transported to Vonitsa WWTP via tank trucks. The WWTP restarted in September 2023 and normal operation began in January 2024.

## Blue water

|   |
|---|
| <b>Collection and disposal:</b>   |
| 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 | Tertiary treatment & chlorination  |
| Treatment method                      | Prolonged ventilation  |
| Disposal of treated wastewater        | Drain ditch to the Ionian Sea based on Joint Ministerial Decision KYA 328925/7912 (Government Gazette 35/Δ/2017) |
| Sludge disposal                       | Landfill   |
| Sampling frequency of WWTP effluent   | Monthly based on the decision determining the recipient  |
| Parameters analyzed                   | BOD, COD, TSS, T. Coliforms, E.coli, pH, Dissolved Oxygen, Grease and Oils, Residual Chlorine                    |
| Summary of quality of WWTP effluent   | The WWTP effluent quality is within the limits set out in the decision specifying the recipient                  |

