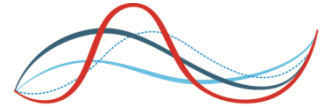




REPUBLIC OF CROATIA



CROATIAN BUREAU OF STATISTICS

**QUALITY REPORT FOR STATISTICAL SURVEY**  
**Monthly Report on Traffic in Airports (PZ/M-21)**  
**For 2019**

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## 0. Basic information

- Purpose, goal, and subject of the survey

The purpose of the survey is to collect data on the number of aircraft movements as well as on the traffic of passengers and freight in airports and air landing places of the Republic of Croatia.

- Reference period

Month

- Legal acts and other agreements

Annual Implementation Plan of Statistical Activities of the Republic of Croatia

Regulation (EC) No 437/2003 of the European Parliament and of the Council of 27 February 2003 on statistical returns in respect of the carriage of passengers, freight and mail by air (OJ L 66, 11. 3. 2003)

Commission Regulation (EC) No 1358/2003 of 31 July 2003 implementing Regulation (EC) No 437/2003 of the European Parliament and of the Council on statistical returns in respect of the carriage of passengers, freight and mail by air and amending Annexes I and II thereto (Text with EEA relevance) (OJ L 194, 1. 8. 2003)

Commission Regulation (EC) No 546/2005 of 8 April 2005 adapting Regulation (EC) No 437/2003 of the European Parliament and of the Council as regards the allocation of reporting country codes and amending Commission Regulation (EC) No 1358/2003 as regards the updating of the list of Community airports (Text with EEA relevance) (OJ L 91, 9. 4. 2005 and OJ L 338M, 17. 12. 2008)

Commission Regulation (EC) No 158/2007 of 16 February 2007, amending Commission Regulation (EC) No 1358/2003 as regards the list of Community airports (Text with EEA relevance) (OJ L 49, 17. 2. 2007 and SL L 56M, 29. 2. 2008)

- Classification system

International Civil Aviation Organization (ICAO) classification of airports

International Civil Aviation Organization (ICAO) classification of aircraft carriers

International Civil Aviation Organization (ICAO) classification of type of aircrafts

- Concepts and definitions

Airport is a defined area of land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of an aircraft and it is open for commercial air transport operations.

Flight stage is the operation of an aircraft from take-off to its next landing.

Air passengers on board are all passengers on board of the aircraft upon landing at the reporting airport or at taking off from the reporting airport. All revenue and non-revenue passengers on board an aircraft during a flight stage. Direct transit passengers are included.

Direct transit passengers are passengers who, after a short stop, continue their journey on the same aircraft on a flight having the same flight number as the flight on which they arrived. Passengers who change the aircraft because of technical problems, but continue on a flight

with the same flight number, are also counted as direct transit passengers. On some flights with intermediate stops, the flight number changes at a particular airport to designate the change of an inbound flight to an outbound flight. Passengers who continue their journey on the same aircraft in such circumstances should be counted as direct transit passengers.

Freight and mail on board include all freight and mail on board an aircraft upon landing at an airport and at take-off from an airport. Direct transit freight is included and it is counted both at landing and at take-off.

On-flight origin and destination is traffic on a commercial air service identified by a unique flight number subdivided by airport pairs in accordance with the point of embarkation and the point of disembarkation on that flight. For passengers, freight or mail for which the airport of embarkation is not known, the aircraft origin should be deemed the point of embarkation. Similarly, if the airport of disembarkation is not known, the aircraft destination should be deemed the point of disembarkation.

Air passengers carried are all passengers on a particular flight (with one flight number) counted once only and not repeatedly on each individual stage of that flight.

All revenue and non-revenue passengers whose journey begins or terminates at the reporting airport and transfer passengers joining or leaving the flight at the reporting airport are included. Direct transit passengers are excluded.

Freight and mail loaded or unloaded is any freight and mail loaded onto or unloaded from an aircraft. Direct transit freight is excluded.

- Statistical units

Airport operators in the Republic of Croatia open for public transport of passengers and freight.

- Statistical population

Data relate to the airports in Zagreb, Split, Dubrovnik, Pula, Rijeka, Zadar, Osijek, Brač and Mali Lošinj.

## **1. Relevance**

### **1.1. Data users**

National Accounts Department

Eurostat

DG MOVE

State institutions, enterprises, researchers, scientists, journalists etc.

#### 1.1.1 User needs

The standard established by Eurostat meets the needs of national and international users.

#### 1.1.2 User satisfaction

User satisfaction survey is not conducted.

## **1.2. Completeness**

In accordance with Regulation (EC) No 437/2003 of the European Parliament and of the Council on statistical returns in respect of the carriage of passengers, freight and mail by air, all required variables are available and transmitted to Eurostat.

In relation to the publication of Eurostat database, the Croatian Bureau of Statistics publishes a wider coverage of airports (all airports open to public transport, regardless of the number of pax units), but with more concise aggregate data at the level of the Republic of Croatia and at the airport level (e.g., detailed national data on the airport for the traffic of passengers and goods are not published by routes; data on passengers on board are not published). Comparison with all tables published by Eurostat shows that 60% of indicators are covered by the national dissemination. The Croatian Bureau of Statistics does not publish data on passengers and freight on board an aircraft.

### **1.2.1 Data completeness rate**

Data completeness rate is 100%.

## **2. Accuracy and reliability**

### **2.1. Sampling error**

Not applicable.

#### **2.1.1 Sampling error indicators**

The indicator for this survey is not applicable.

#### **2.1.2 Bias due to sample selection process**

The indicator for this survey is not applicable.

### **2.2. Non-sampling error**

Non-sampling error appears in the form of measurement error and processing error.

#### **2.2.1 Coverage error**

Not applicable.

#### **2.2.2 Over-coverage rate**

The indicator for this survey is not computed.

#### **2.2.3 Measurement errors**

During the statistical processing, data validation is implemented according to the established algorithms for particular types of errors. A matrix containing 30 conditions for checking and controlling the material has been set. Of the total number of conditions, 26 are related to the errors that are not tolerated, and four are the warnings that are checked and tolerated. Based

on the data validation results, reporting units are contacted to provide clarifications or corrections that are implemented during data processing. In the case of erroneous classifications or unknown coding, feedback is necessary to assure the quality of data processing. During statistical data processing, coherence and inter-dataset checks are performed, as well as mirror analyses of national traffic.

After data processing, reporting units are informed about the new codes found during processing in the classifications used, with a requirement to update their operational classifications to improve data quality.

#### 2.2.4 Non-response errors

Not applicable.

#### 2.2.5 Unit non-response rate

The indicator for this survey is not applicable.

#### 2.2.6 Item non-response-rate

The indicator for this survey is not applicable.

#### 2.2.7 Processing errors

The input data file format is checked before uploading to the data processing system. Visual control of the data set structure is done on the required number of fields. When loading data to the processing system, the length of the input file field is controlled. Processing errors can occur when reporting units assign erroneous or unknown codes to a partner airport, air carrier, aircraft and flight, or incorrectly enter the number of passenger seats with regard to the aircraft configuration and number of passengers. The reduction of processing errors is achieved by contacting airports and collecting the correct information and by manual corrections in the data processing system. The code entry quality of the partner airport, air carrier and aircraft increases by sending feedback on updating classifications to all airports.

#### 2.2.8 Imputation rate

The indicator for this survey is not applicable.

#### 2.2.9 Editing rate

The indicator for this survey is not computed.

#### 2.2.10 Hit rate

The indicator for this survey is not computed.

#### 2.2.11 Model assumption error

Not applicable.

### **2.3. Data revision**

#### 2.3.1 Data revision – policy

Provisional figures are not published in this survey and therefore regular revisions are not planned.

#### 2.3.2 Data revision – practice

Provisional figures are not published in this survey and therefore regular revisions are not planned. Unplanned revisions caused by events that could not be predicted and that are impossible to prevent (subsequent changes in data sources or subsequently identified errors in previously submitted data) are generally disseminated as soon as possible.

#### 2.3.3 Data revision – average size

The indicator for this survey is not applicable.

### 2.4. Seasonal adjustment

Not applicable.

## 3. Timeliness and Punctuality

### 3.1. Timeliness

#### 3.1.1 Time lag – first results

The indicator for this survey is not applicable.

#### 3.1.2 Time lag – final results

Time lag – final results is: T+41.5.

### 3.2. Punctuality

#### 3.2.1 Punctuality – delivery and publication

Delivery and publication is 1.

## 4. Accessibility and clarity

Data are disseminated in paper and electronic form and are published on the website of the Croatian Bureau of Statistics: monthly First Release, Statistics in Line, annual data in other publications of the Croatian Bureau of Statistics.

### 4.1. News release

First Release "Traffic in Airports" – monthly data

Aggregate data at the level of the Republic of Croatia on the total number of aircraft operations, number of passengers and tons of freight, passenger traffic at airports and top ten countries by traffic of passengers realised with Croatian airports are published at [https://www.dzs.hr/Hrv\\_Eng/publication/2019/05-01-03\\_12\\_2019.htm](https://www.dzs.hr/Hrv_Eng/publication/2019/05-01-03_12_2019.htm).

### 4.2. Other publications

Statistics in Line – monthly data on passenger and freight traffic at the level of the Republic of Croatia

Statistical Report “Transport and Communications” – annual detailed data on aircraft, passenger and freight traffic in airports, commercial traffic in airports, airport performance and employees at airports.

Statistical Information – annual data on traffic of passengers

#### 4.3. Online database

Data are not published in online databases.

#### 4.4. Micro-data access

Not applicable.

#### 4.5. Documentation on methodology

First Release "Traffic in Airports"

Statistics in Line

Statistical Information

Illustrated Glossary for Transport Statistics – fourth edition (website of the Croatian Bureau of Statistics)

Reference Manual on Air Transport Statistics (Eurostat website)

### 5. Comparability

#### 5.1. Asymmetry for mirror flows statistics

Mirror analysis is conducted in order to compare the consistency of traffic between the two partner airports. The check is carried out for internal traffic on a monthly basis and the comparison of international declarations is possible when the data on traffic in airports for EU Member States are available (usually annually).

#### 5.2. Comparability over time

##### 5.2.1 Length of comparable time series

Length of comparable time series is:

| Domain  | Domain value | January | February | March | April | May | June | July | August | September | October | November | December | Average |
|---------|--------------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|---------|
| Croatia | Movements    | 133     | 134      | 135   | 136   | 137 | 138  | 139  | 140    | 141       | 142     | 143      | 144      | 138.5   |
| Croatia | Passengers   | 133     | 134      | 135   | 136   | 137 | 138  | 139  | 140    | 141       | 142     | 143      | 144      | 138.5   |
| Croatia | Freight      | 133     | 134      | 135   | 136   | 137 | 138  | 139  | 140    | 141       | 142     | 143      | 144      | 138.5   |

##### 5.2.2 Reasons for break in time series

Historical data on traffic in airports have been available since 1960. Since 2008, a new methodology and a new technology in data collection have been applied. Data are harmonised with acquis communautaire and are not comparable to previous years.

## **6. Coherence**

### **6.1. Coherence – short-term and structural data**

The indicator for this survey is not applicable.

### **6.2. Coherence – national accounts**

The indicator for this survey is not applicable.

### **6.3. Coherence – administrative sources**

The indicator for this survey is not applicable.

## **7. Cost and burden**

### **7.1. Cost**

The analysis of costs and benefits has not been implemented.

### **7.2. Burden**

The response burden is put on airport operators that use operational airport software to generate the data required for statistical purposes. The use of operational data minimises the burden, data are delivered via e-mail and reporting units are contacted only to clarify the errors that cannot be solved by the Croatian Bureau of Statistics.