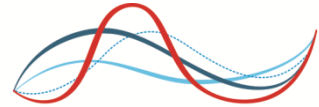




REPUBLIC OF CROATIA



CROATIAN BUREAU OF STATISTICS

## **QUALITY REPORT FOR STATISTICAL SURVEY**

### **Traffic in Seaports**

**For 2015**

Organisational unit: Transport and Communications Statistics Department  
Prepared by: Omerzo Edita and Lidija Pilat

May, 2020

## 0. Basic information

- Purpose, goal, and subject of the survey

The purpose of the statistical survey on traffic on seaports is to collect basic monthly data on traffic of ships, passengers and goods in seaports of the Republic of Croatia.

- Reference period

Month

- Legal acts and other agreements

- Annual Implementation Plan of Statistical Activities of the Republic of Croatia
- Commission Decision No 2001/423/EC of 22 May 2001 on arrangements for publication or dissemination of the statistical data collected pursuant to Council Directive 95/64/EC on statistical returns in respect of carriage of goods and passengers by sea
- Commission Regulation (EC) No 1304/2007 amending Council Directive 95/64/EC, Council Regulation (EC) No 1172/98, Regulations (EC) No 91/2003 and (EC) No 1365/2006 of the European Parliament and of the Council with respect to the establishment of NST 2007 as the unique classification for transported goods in certain transport modes (NST 2007)
- Commission Decision No 2008/861/EC of 29 October 2008 on rules for implementing Council Directive 95/64/EC on statistical returns in respect of carriage of goods and passengers by sea
- Directive No 2009/42/EC of the European Parliament and of the Council of 6 May 2009 on statistical returns in respect of carriage of goods and passengers by sea (Recast)
- Commission Decision No 2010/216/EU of 14 April 2010 amending Directive 2009/42/EC of the European Parliament and of the Council on statistical returns in respect of carriage of goods and passengers by sea
- Regulation (EU) No 1090/2010 of the European Parliament and of the Council of 24 November 2010 amending Directive 2009/42/EC on statistical returns in respect of carriage of goods and passengers by sea
- Commission Delegated Decision No 2012/186/EU of 3 February 2012 amending Directive 2009/42/EC of the European Parliament and of the Council on statistical returns in respect of carriage of goods and passengers by sea

- Classification system

Seaports (HR)

Classification of Ship Agents

Classification of Shippers

Type of Cargo Classification

Classification of Ships Classes in Gross Tonnage (GT) and Deadweight Tonnage (DWT)

Type of Ships Classification

Classification of Dangerous Goods  
Maritime Coastal Area  
Standard Goods Classification for Transport Statistics, 2007 version  
World Ports  
Category of Seagoing Ships Navigation  
Code List of Transportation Modes – Maritime Transport  
Code List of Countries  
Nationality of Registration of Vessels (Flag)  
Reference Database of Foreign Flag Cruise Ships

- Concepts and definitions

Main monthly and annual results are:

- Loaded and unloaded goods in seaports
- Loaded and unloaded goods in seaports, by countries
- Loaded and unloaded goods in seaports, by type of goods and type of cargo
- Loaded and unloaded goods in seaports, by type of traffic
- Loaded and unloaded goods in seaports, dangerous goods
- Loaded and unloaded goods in seaports, by ports
- Embarked and disembarked passengers in seaports
- Embarked and disembarked passengers in seaports, by countries
- Embarked and disembarked passengers in seaports, by ports
- Traffic of ships in seaports, by type, size and nationality of flags.

Port is a place having facilities for merchant ships to moor and to load and/or unload cargo or to disembark and/or embark passengers to or from vessels.

A statistical port consists of one or more ports, normally controlled by a single port authority, able to record ship and cargo movements.

Reporting port is a statistical port for which statistics of inward and outward maritime transport flows are compiled.

A maritime coastal area is normally defined as a contiguous stretch of coastline, together with islands offshore. It is defined either in terms of one or more ranges of ports along the coastline, or in terms of the latitude and longitude of one or more sets of extremities of the coastal area.

Carriage of goods and passengers by sea is the movement of goods and passengers using seagoing vessels, on voyages which are undertaken wholly or partly by sea. Goods shipped to offshore installations and reclaimed from the seabed and unloaded in ports are included.

Seagoing vessels are vessels other than those which navigate exclusively in inland waters or in waters within, or closely adjacent to, sheltered waters or areas where port regulations apply.

The type of cargo classification, set according to the UNECE Codes for Types of Cargo, Packages and Packaging Materials, Recommendation 21, describes how the goods are being transported in terms of the vessels being used and the port facilities required to handle them. It is very different from the categories of goods classification.

Freight container means an article of transport equipment:

1. of a permanent character and accordingly strong enough to be suitable for repeated use;
2. specially designed to facilitate the carriage of goods, by one or more modes of transport, without intermediate reloading;
3. fitted with devices permitting its ready handling, particularly its transfer from one mode of transport to another;
4. so designed as to be easy to fill and empty;
5. having a length of 20 feet or more.

Ro-Ro unit means wheeled equipment for carrying cargo, such as a truck, trailer or semi-trailer, which can be driven or towed on to a vessel. Port or ships' trailers are included in this definition. Classifications should follow United Nations ECE Recommendation No 21 'Codes for Types of Cargo, Packages and Packaging Materials'.

Container cargo means containers with or without cargo which are lifted on or off the vessels which carry them by sea.

Ro-Ro cargo means goods, whether or not in containers, on Ro-Ro units, and Ro-Ro units which are rolled on and off the vessels which carry them by sea.

Gross weight of goods means the tonnage of goods carried, including packaging but excluding the tare weight of containers or Ro-Ro units.

Gross tonnage (GT) means the measure of the overall size of a ship determined in accordance with the provisions of the International Convention on Tonnage Measurement of Ships, 1969.

Deadweight (DWT) means the difference in tonnes between the displacement of a ship on summer load-line in water with a specific gravity of 1.025 and the total weight of the ship, i.e. the displacement in tonnes of a ship without cargo, fuel, lubricating oil, ballast water, fresh water and drinking water in the tanks, usable supplies as well as passengers, crew and their possessions.

Sea passenger is any person who makes a sea journey on a merchant ship.

Cruise passenger means a sea passenger making a sea journey on a cruise ship. Passengers on day excursions are excluded.

Cruise ship means a passenger ship intended to provide passengers with a full tourist experience. All passengers have cabins. Facilities for entertainment aboard are included. Ships operating normal ferry services are excluded, even if some passengers treat the service as a cruise. In addition, cargo-carrying vessels able to carry a very limited number of passengers with their own cabins are also excluded. Ships intended solely for day excursions are also excluded.

Cruise passenger excursion means a short visit by a cruise passenger to a tourist attraction associated with a port while retaining a cabin on board.

- Statistical units

Statistical units are all ships under domestic and foreign flags that arrived in or departed from the seaports in the Republic of Croatia, regardless of the activity they perform in the seaport.

- Statistical population

All seaports in the Republic of Croatia opened for public traffic of ships, passengers and goods.

## 1. Relevance

### 1.1. Data users

Eurostat

State institutions, enterprises, research and scientific community, journalists etc.

#### 1.1.1 User needs

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

The survey covers all the variables prescribed by legal basis.

#### 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

Indicator for this survey is not applicable.

#### 2.1.2 Bias due to sample selection process

Indicator for this survey is not applicable.

### 2.2. Non-sampling error

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

#### 2.2.1 Coverage error

Over-coverage is the inclusion of vessels whose length is less than 12 meters and a gross tonnage is less than 15 GT, or those authorised to carry less than 12 passengers. Assessment of over-coverage is made on the basis of the number of reports of arrival/departure of ships whose gross tonnage is less than 15 GT and which have neither a call sign, nor IMO number, nor national identification number on the basis of which it is possible to check their length or carrying capacity of passengers.

### 2.2.2 Over-coverage rate

Over-coverage rate is: 0%

### 2.2.3 Measurement errors

During the statistical analysis of administrative data source, a data verification according to algorithms for particular types of errors is conducted. For verification purposes, a matrix containing 48 conditions for checking and controlling data has been set. Out of the total number of conditions, 36 are related to the errors that cannot be tolerated and 12 are warnings that are checked and tolerated.

### 2.2.4 Non-response errors

After the introduction of the Croatian Integrated Maritime Information System (CIMIS) for recording arrivals and departures of ships in the national maritime liner service, since September 2014, shippers have no longer estimated the weight of the cargo in road freight vehicles and accompanying trailers in inward traffic. Therefore, this information is no longer available.

### 2.2.5 Unit non-response rate

Indicator for this survey is not computed.

### 2.2.6 Item non-response-rate

Indicator for this survey is not computed.

### 2.2.7 Processing errors

Entry errors are eliminated in the automatic data processing procedures. In the case of the missing, inconsistent or inaccurate input data, imputation of data is carried out using the historical deterministic method (based on historical data). The imputation is carried out on the variables that affect the calculation of the total aggregate and improve the quality of the final result. The imputation procedure helps eliminate potential bias that could arise as a result of erroneous or missing data, and correct distribution of data in order to present the most realistic and representative picture possible of the traffic of ships, passengers and goods in seaports of the Republic of Croatia to users. The Croatian Bureau of Statistics carries out the analysis of the consistency over time in order to identify discrepancies in the rise or fall of the traffic, and the verification of mirror statistics. Consistency and mirror statistics analysis is conducted on a monthly, quarterly and annual basis.

### 2.2.8 Imputation rate

Unweighted imputation rate:

Variable	Domain	Domain value	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
All	Croatia		2.8	3	2.9	2.7	2.2	3.7	3.2	3.9	4.5	4.4	4.3	4	3.47

%

## 2.2.9 Editing rate

Unweighted editing rate:

Variable	Domain	Domain value	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
All	Croatia		0.1	0.2	0.2	0.5	1.8	0.6	0.3	0.3	0.3	0.3	0.9	0.1	0.47

## 2.2.10 Hit rate

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 are 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

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

Indicator for this survey is not applicable.

#### 3.1.2 Time lag – final results

Time lag – final results is: T + 40.667

### **3.2. Punctuality**

#### **3.2.1 Punctuality – delivery and publication**

Delivery and publication is: 1

## **4. Accessibility and clarity**

Data are disseminated in paper form and on the web site 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 Seaports" – monthly data

### **4.2. Other publications**

Statistics in Line  
Statistical Yearbook of the Republic of Croatia  
Statistical information  
Croatia in Figures  
Statistical Reports "Transport and Communications"

### **4.3. On-line database**

Data are not available.

### **4.4. Micro-data access**

The conditions under which certain users can access microdata are regulated by the Ordinance on the Conditions and Terms of Using Confidential Data for Scientific Purposes.

### **4.5. Documentation on methodology**

First Release "Traffic in Seaports"  
Statistics in Line  
Statistical Yearbook of the Republic of Croatia  
Statistical Information  
Croatia in Figures  
Statistical Reports "Transport and Communications"  
Methodological basics for statistical survey Traffic in Seaports (CBS web site)  
Glossary for Transport Statistics – fourth edition (CBS web site)



## 5. Comparability

### 5.1. Asymmetry for mirror flows statistics

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

### 5.2. Comparability over time

#### 5.2.1 Length of comparable time series

Length of comparable time series is:

Domain	Domain value	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
Croatia	Ships	133	134	135	136	137	138	139	140	141	142	143	144	138.5
Croatia	Passengers	48	49	50	51	52	53	54	55	56	57	58	59	53.5
Croatia	Goods	133	134	135	136	137	138	139	140	141	142	143	144	138.5

#### 5.2.2 Reasons for break in time series

Pursuant to the Commission Decision No. 2005/366/EC, the passengers on cruise ships on a day excursion are counted only at disembarkation.

## 6. Coherence

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

Indicator for this survey is not applicable.

### 6.2. Coherence – national accounts

Indicator for this survey is not applicable.

### 6.3. Coherence – administrative sources

Indicator for this survey is not applicable.

## **7. Cost and burden**

### **7.1. Cost**

Since the data are taken over from the existing administrative source, the Croatian Integrated Maritime Information System, and due to the fact that, in cooperation with the Ministry of Maritime Affairs, Transport and Infrastructure, certain entry controls have been built into the information system, costs of production and processing are minimal compared to the amount of data that are processed. This survey is a good example of the synergy between the development of e-maritime of a competent maritime authority and statistical needs.

### **7.2. Burden**

The administrative data source is the Croatian Integrated Maritime Information System (CIMIS), which was created as a national single interface to facilitate the delivery of information to all relevant state authorities in the process of the registration of an arrival/departure of a ship. Among other data, authorised maritime agents and shippers submit information on the traffic of goods and passengers on ships to CIMIS. The accuracy and completeness of the data in the official process of registration is verified by harbour master's offices.

Through a national system for recording the traffic of ships, selected datasets are distributed to all stakeholders according to their needs. One of the stakeholders involved in the system is the Croatian Bureau of Statistics.