



# QUALITY REPORT FOR STATISTICAL SURVEY Traffic in Seaports for 2024

Organisation unit: Spatial Statistics Directorate, Transport Statistics Department

Prepared by: Snježana Kos and Lidija Pilat

#### 0. Basic information

Purpose, goal, and subject of the survey

The purpose of the statistical survey on traffic in seaports is to collect 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

Official Statistics Act (NN, Nos 25/20 and 155/23)

Methodological basics for the statistical survey Traffic in seaports (NN, No. 20/13)

2001/423/EC: 2001/423/EC: Commission Decision 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 (notified under document number C (2001) 1456) (Text with EEA relevance) (OJ L 151, 7 June 2001)

Commission Regulation (EC) No 1304/2007 of 7 November 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) (OJ L 290, 8 November 2007)

2008/861/EZ: 2008/861/EC: Commission Decision 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 (notified under document number C (2008) 6203) (Codified version) (Text with EEA relevance) (OJ L 306, 15 November 2008)

2010/216/EU: 2010/216/EU: Commission Decision 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 (Text with EEA relevance) (OJ L 94, 15 April 2010)

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 (Text with EEA relevance) (OJ L 325, 9 December 2010)

2012/186/EU: 2012/186/EU: Commission Delegated Decision 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 (Text with EEA relevance) (OJ L 101, 11 April 2012)

Classification system

Directory of Seaports
Classification of Ship Agents
Classification of Shippers
Classification of Ship Cargo
Classification of Ship Classes in Gross Tonnage (GT) and Deadweight Tonnage (DWT)

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

## Statistical concepts and definitions

The main monthly, quarterly and annual results are the following:

- Loaded and unloaded goods in seaports
- Loaded and unloaded goods in seaports, by countries
- Loaded and unloaded goods in seaports, by countries 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 that has 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, passenger and cargo movements.

Reporting port is a statistical port for which statistics of inward and outward maritime transport flows of ships, passengers and cargo 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 that are undertaken wholly or partly at sea. Goods shipped to offshore installations, 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 semitrailer, which can be driven or towed on to a vessel. Port or ships' trailers are included in this definition. Classifications should follow the 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 that 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 providing 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

State administration bodies, enterprises, researchers, scientists, journalists, etc.

#### 1.1.1. User needs

Standard prescribed by Eurostat meets the needs of national and international users.

#### 1.1.2. User satisfaction

The first user satisfaction survey of the Croatian Bureau of Statistics was conducted in 2013, the next one in 2015 and 2022, and the last one at the end of 2024. The results of the survey are available on the website of the Central Bureau of Statistics <a href="https://dzs.gov.hr/highlighted-themes/quality/user-satisfaction-surveys/686">https://dzs.gov.hr/highlighted-themes/quality/user-satisfaction-surveys/686</a>.

#### 1.2. Completeness

The survey covers all the variables prescribed by legal acts.

## 1.2.1. Data completeness rate

The data completeness rate is 100%.

#### 2. Accuracy and reliability

#### 2.1. Sampling error

Indicator for this survey is not applicable.

# 2.1.1 Sampling error indicators

Indicator for this survey is not applicable.

# 2.2. Non-sampling error

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

#### 2.2.1. Coverage error

Over-coverage is the inclusion of vessels whose length is less than 12 meters and gross tonnage less than 15 GT, or those authorised to carry less than 12 passengers.

The assessment of over-coverage is made on the basis of the number of reports on arrivals/departures 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 error

During the statistical analysis of administrative data source, data verification according to algorithms for particular types of errors is conducted. For verification purposes, a matrix with 50 conditions for checking and controlling data is set. Out of the total number of conditions, 38 are related to the errors that cannot be tolerated and 12 are warnings that are checked and tolerated.

#### 2.2.4. Non-response error

After the introduction of the Croatian Integrated Maritime Information System (CIMIS) for recording the arrivals and departures of ships in the national maritime line 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

The indicator for this survey is not computed.

#### 2.2.6. Item non-response rate

Indicator was not computed for this survey.

## 2.2.7. Processing error

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	Croatia	0,8	0,8	0,7	2,0	2,2	2,1	1,9	1,9	2,9	2,9	1,1	0,8	1,68

# 2.2.9. Model assumption error

Indicator for this survey is not applicable.

#### 2.2. Data revision

## 2.3.1. Data revision - policy

The users of statistical data are informed about revisions on the website of the Croatian Bureau of Statistics, on the link <u>General Revision Policy of the CBS</u>.

# 2.3.2. Data revision - practice

Provisional data are not published in the survey; therefore, there are no planned data revisions. Unplanned revisions that are caused by events that could not be predicted and could not be influenced in advance (subsequent changes in data sources or subsequently identified errors in previously submitted data) are disseminated as soon as possible.

#### 2.3.3. Data revision – average size

Indicator for this survey is not applicable.

# 2.3. Seasonal adjustment

Indicator for this survey is not applicable.

# 3. Timeliness and Punctuality

#### 3.1. Timeliness

Deadlines for the publication of first monthly results of traffic in seaports is 45 days after the end of the month.

#### 3.1.1. Timeliness - first results

Indicator for this survey is not applicable.

# 3.1.2. Timeliness – final results

Timeliness- final results is T + 43.

# 3.2. Punctuality

There is no time lag between the actual dissemination of the data and the planned date when they were to be disseminated according to the Calendar of Statistical Data Issues.

# 3.2.1. Punctuality – delivery and publication

Delivery and publication is 1.

# 4. Accessibility and clarity

Data are disseminated in electronic form on the website of the Croatian Bureau of Statistics: quarterly First Release, Statistics in Line, database, annual data in other publications of the Croatian Bureau of Statistics

#### 4.1. News release

The First Release "Traffic in seaports" - quarterly data

Aggregate quarterly data at the level of the Republic of Croatia on the total number of arrivals of ships, number of passengers and tonnes of goods, data on the traffic of goods and passengers in selected seaports and data on embarked and disembarked passenger vehicles are published at

https://podaci.dzs.hr/2024/en/77289

https://podaci.dzs.hr/2024/en/77291

https://podaci.dzs.hr/2024/en/77293

https://podaci.dzs.hr/2024/en/77295

#### 4.2. Online database

PC-Axis Database, Transport and Communications, Traffic in Seaports

# 4.3. Microdata access

The conditions under which certain users can access microdata are regulated by the <u>Ordinance on conditions and terms of access and use of confidential statistical data of the Croatian Bureau of Statistics for scientific purposes (NN, No. 5/23).</u>

## 4.4. Documentation on methodology

First Release "Traffic in Seaports"

Statistics in Line

Statistical Information

**PC-Axis Databases** 

Methodological bases for statistical survey Traffic in Seaports (website of the Croatian Bureau of Statistics)

Glossary for Transport Statistics - Fifth edition

# 5. Comparability over time

#### 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

Comparable data harmonized with the statistical standards in the European Union the the Directive No. 2009/42/EC of the European Parliament and the Council (Recast) on statistical returns in respect of carriage of goods and passengers by sea are available since 2004 for variables ships and cargo and since 2011 for variable passengers.

## 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
Croatia	Ships	241	242	243	244	245	246	247	248	249	250	251	252
	Passengers	156	157	158	159	160	161	162	163	164	165	166	167
	Goods	241	242	243	244	245	246	247	248	249	250	251	252

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

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

#### 5.3. Coherence – subannual and annual statistics

Indicator for this survey is not applicable.

# 5.2.3. Coherence – national accounts

Indicator for this survey is not applicable.

#### 5.5. Coherence – administrative sources

Indicator for this survey is not applicable.

#### 6. Cost and burden

#### 6.1. 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.

#### 6.2. 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.