
# INTRODUCTION AND BACKGROUND

In Europe, inland waterways play an important role in the transport system and there is significant potential for their role to increase. Within the European Union, 20 Member States have inland waterways and 12 of them have an interconnected waterway network.

In its Report on unleashing the potential of waterborne passenger transport[[1]](#footnote-1), the European Parliament underlines the importance of freight and passenger statistics for developing plans and policies for the waterborne transport sector. Furthermore, it requests the European Commission to ‘develop a system for harmonised collection of statistics on accidents and incidents for inland waterway vessels, including cross-border traffic’.

The Commission aims to promote and strengthen the competitive position of inland waterways in the transport system and to facilitate its integration into the intermodal logistics chain[[2]](#footnote-2).

Regulation (EU) 2018/974[[3]](#footnote-3) does not cover statistics on passenger transport by inland waterways. The key data required to assess the size of this market and its potential for growth would be the number of passengers by country and by individual market sector, such as river cruises, mini cruises, ferries and urban transport. If it proves possible, the collection of passenger-kilometres would be a solid indicator for measuring the performance of the sector.

Article 5 of Regulation (EU) 2018/974 requires the Commission, together with the Member States, to investigate the development of statistics on passenger transport by inland waterways, including cross-border transport services.

 *‘Article 5*

 *Pilot studies*

*1. By 8 December 2018, the Commission, in cooperation with the Member States, shall develop the appropriate methodology for compiling statistics on passenger transport by inland waterways, including by cross-border transport services.*

*2. By 8 December 2019, the Commission shall launch voluntary pilot studies to be carried out by Member States that provide data within the scope of this regulation on the availability of statistical data relating to passenger transport by inland waterways, including by cross-border services. Those pilots shall aim to assess the feasibility of those new data collections, the costs of the related data collections and the statistical quality implied.*

*3. By 8 December 2020, the Commission shall submit a report to the European Parliament and to the Council on the result of such pilot studies. Depending on the results of that report, and within a reasonable period, the Commission shall submit, if appropriate, a legislative proposal to the European Parliament and to the Council to amend this regulation with regard to statistics on passenger transport by inland waterways, including by cross-border transport services.*

*4. The general budget of the Union shall, where appropriate and taking into account the Union's added value, contribute to the financing of those pilot studies.’*

Eurostat, in cooperation with the Member States, started to develop a methodology for compiling statistics on passenger transport by inland waterways.

In October 2016, Eurostat set up a Task Force with the mandate to work on the draft methodology for collecting data on statistics relating to passenger transport by inland waterways. The Task Force consisted of volunteer Member States (Austria, Croatia, France, Germany, the Netherlands, Poland and Romania), the Commission (Eurostat and the Directorate-General for Mobility and Transport) and the Central Commission for the Navigation of the Rhine*.* Its first meeting took place on 28 February 2017 and the second one was organised on 18 October 2017 back-to-back with the 2017 meeting of the Expert Group on Inland Waterways. The Expert Group and the Coordinating Group for Statistics on Transport (CGST) supervised and discussed the work on the methodology in their 2017 and 2018 meetings.

In line with Regulation (EU) 2018/974, this draft methodology was finalised in December 2018 and provided for a trial phase with pilot studies funded by EU grants. In June/July 2019, seven countries launched pilot studies: Germany, Croatia, the Netherlands, Austria, Poland, Romania and Sweden. The pilot studies assessed the draft methodology and commented on the feasibility, costs, burden and statistical quality of their data on passenger transport by inland waterways.

The countries supplied their pilot studies and reports on the collection of data and the implementation of the draft methodology in June/July 2020.

This report presents the results of the pilot studies on the feasibility of collecting new data and its statistical quality, on the related methodology, and on the costs and burdens for Member States.

Furthermore, the report briefly presents the results of a country survey on statistics relating to passenger transport by inland waterways carried out in March 2020. The survey aimed to provide an overview of the situation in the Member States beyond the seven countries that carried out pilot studies.

# RESULTS OF PILOT STUDIES ON PASSENGER STATISTICS

The pilot studies had two deliverables:

1. A report commenting on the implementation of the draft methodology, proposing methodological improvements and assessing the feasibility, costs, burden and statistical quality of potentially collecting data on passenger transport statistics.
2. Data collected in each country for the following tables:
* A1 (Number of passengers transported by country of embarkation, country of disembarkation, type of transport and type of vessel);
* A2 (River cruises - number of passengers, passenger-kilometres and number of trips by region of embarkation, region of disembarkation, nationality of vessel and type of cruise);
* B1 (Number of passenger-kilometres travelled by type of vessel other than a river cruise vessel); and
* C1 (Number of vessels registered in a country by type of vessel, vessel capacity and vessel age).

## Data sources and methodology

This section summarises the data sources that were used and the methodology that was applied in the seven countries that conducted pilot studies.

**Austria**

The Automatic Identification System (AIS) is used to track and trace vessels and qualifies as a data source; the AIS transponder on board a vessel enables the exchange of information relevant to positioning and identification between vessels. To support this system, Austria has 23 Danube River Information Services base stations to receive inland AIS data. The AIS datasets contain one dataset per ship and day; these datasets are extractions of the AIS information and include 23 variables.

The names of shipping companies are taken from the Statistical Business Register, although foreign shipping companies are not obliged to notify Austrian authorities when they transport passengers in Austria. The AIS data provide information on all ships that operate on the Austrian section of the Danube, including data and positions, but foreign companies are more difficult to contact.

The AIS data is not sufficient to identify the location of embarkation and disembarkation for long cross-border cruises, as AIS data is only received for the Austrian section of the Danube and for a few kilometres after the border. Web scraping can be used for timetables and routes, and the website [www.cruisecompete.com](http://www.cruisecompete.com) serves as a benchmark for itineraries related to Austria. Given the simple and clear layout and implementation of the website, it is well-suited to web scraping. Furthermore, information on timetables for ferries and other day-trip passages was obtained by consulting the websites of individual companies.

The ship register allows for both obligatory and optional registrations, depending on certain criteria. The pilot study found that the quality of the register is not sufficient to provide the data requested for dataset C1; moreover, the register in its current form is only available in hard copy, although digitalisation of the register is planned.

Further sources for passenger data are Viadonau (collecting passenger data for day-trip vessels on a voluntary basis for their annual report), Donauraum Wien (providing a yearly aggregate of passenger numbers for every ship) and a lock at the German/Austrian border (publishing passenger numbers and data on the numbers of vessels passing through the lock).

The methodology for collecting data differentiated between river cruise companies and other companies offering passenger transport.

The five river cruise companies located in Austria were contacted (via expert interviews, phone and email). In order to collect relevant data for passenger transport other than river cruises, a questionnaire was prepared and about half of the 36 questionnaires were completed.

For the data analysis, AIS data were combined with itineraries and the AIS data were analysed for cruise vessels and day-trip vessels.

In order to calculate a general estimator for the passenger occupancy rate for all vessels, information from the AIS data was used along with additional passenger data for docks. The calculation was carried out by identifying the vessels and assigning their maximum passenger capacity.

**Croatia**

Croatia identified the Harbour Master’s Offices and port authorities as the main data source. Harbour Master’s Offices collect some passenger data for their own purposes from various sources, including reports on the arrival and departure of the vessel, port authorities and vessel owners (shippers, municipalities, etc.). Meetings with four Harbour Master’s Offices concluded that data are available on vessels’ previous and next ports of arrival or departure. These meetings also concluded that data are available on the numbers of embarked and disembarked passengers, types of vessel and vessels’ flags. However, data on the port of first embarkation of passengers and last disembarkation are not available for three out of the four Offices; one Office receives this information, but on a voluntary basis.

In terms of methodology, Croatia applies the territoriality principle for data collection. Data for all vessels arriving and departing from ports on Croatian inland waterways are collected irrespective of the vessel’s country of registration. The collection of data on passenger transport is thus in line with freight transport statistics, as it includes national and international transport of passengers.

For data on river cruises, the port of first embarkation of passengers and last disembarkation are not available and it is not possible to determine the region of embarkation and disembarkation. This might change in the future when there are administrative sources of data. For data on day-trip vessels, a reporting threshold should be set for small transport operations, taking cost effectiveness and confidentiality into account. Regarding passenger transport on ferries, Harbour Master’s Offices collect data on numbers of passengers for their own needs and request data annually from ship owners, concessionaries, municipalities and ferry companies; Croatia considers that the definition of ferries should be more detailed.

**Germany**

The statistical business register qualifies as a data source and is used both to analyse the business population and to prepare and coordinate surveys. It contains information on legal units, companies and their local units, and on the connection between register units. Structural business statistics are another data source, providing information on production, cost structure, fixed assets, employment and annually produced information on business demography.

Surveys of businesses engaged in transport on inland waterways are conducted annually. These include information on the type of inland navigation activity, the number of persons employed in inland navigation, turnover from activities, and the number, loading and space capacity and engine power of the vessels.

Furthermore, quarterly turnover figures for passengers on inland navigation routes are available, and the implementation of Regulation (EU) 2019/2152 on European Business Statistics[[4]](#footnote-4) is not expected to change the content of the data that is currently provided.

The Central Commission for the Navigation of the Rhine provides data on the market monitoring of European navigation on inland waterways, including information on the fleet size and on supply and demand on river cruises and day-trip vessels. Basic information about the river cruise industry is also published by the River Cruise Community of Interests.

The statistics presented by Germany only include companies headquartered in the country, resulting in a lack of information on services provided by foreign companies.

The Central Inland Waterway Stock File (ZBBD) provides administrative data on the stock of vessels for table C1 from which information can be taken at the required level of detail.

As it was not possible to identify a source that contains information in a structured, complete and reliable form on foreign companies, the study only included companies based in Germany.

In terms of methodology, research on alternative data sources (e.g. administrative data) was carried out, but the conclusion was that such alternative sources are not available.

An online questionnaire was developed for the survey, which was designed to be used by all businesses irrespective of their market segment. The survey units were based on the legal units that make up these businesses, as defined in the national regulation on statistical units.

No quantitative information was collected in the business survey. Instead, businesses were asked whether the relevant data was available and what costs would be incurred in collecting this data. This approach was chosen since there is no possibility to oblige businesses to provide information.

**The Netherlands**

Data sources stem from the reference frame of ships, where a number of institutions have to record ship-related information. However, most of the information is not up-to-date or the institutions do not have a comprehensive overview of the necessary information. The existing data could be used to produce Table C1 and could be complemented later with information provided by ship operators.

Passenger transport constitutes another source. The River Information System exchanges information about ships on inland waterways, including information on passenger transport, routes and loads. As only a small part of passenger ships are registered in the River Information System, the data are not of sufficient quality. Shippers can voluntarily submit the number of passengers on the ship recorded in the AIS and, since there is limited access to it, the AIS data are likely to be incomplete.

The reference frame of enterprises is another data source, and businesses on the register functioned as the sampling population for the pilot study. However, one problem is that the register only contains businesses that have passenger transport on inland waterways as their main activity and does not contain information on the ships owned or operated by the enterprises.

Data was collected by means of a web survey, to which a threshold of more than 12 passengers was applied. The response rate to the web survey was about 50%.

The responses to the survey showed the lack of clear differences between ferries and urban and regional transport. It is therefore recommended either to have a more specific definition of a ferry or to integrate ferries and urban and regional transport into one category.

**Poland**

Data on passenger transport is obtained by a questionnaire addressed directly to entities registered in Poland who transport passengers. Thus, the study did not cover entities registered in countries outside Poland that carry passengers on Polish inland waterways. Poland selected entities from the National Official Register of National Economy, whose main registered activities are passenger transport and freight transport on inland waterways, based on the Polish Classification of Activities. An online electronic questionnaire was sent to operators providing passenger services on inland waterways.

Data for Polish-registered passenger vessels on inland waterways were obtained from registers kept by the Inland Waterways Authorities. The differentiation between inland waterways river cruise vessels and day-trip vessels does not result directly from the register, but from the technical documentation of the registered vessels. In Poland, vessels are registered according to the type of vessel and not by the functions they perform. Based on technical data, vessels with 12 and more passenger seats are divided into vessels with and without passenger cabins. It is not possible to distinguish registered transport vessels from urban transport vessels since such services can be performed both by vessels registered as inland waterways day cruise vessels and those registered as other non-cruise ships.

Web scraping was also used to search for relevant content and identify businesses classified under the Polish Classification of Activities as ‘Inland waterways passenger transport’ and ‘Inland waterways freight transport’.

In addition, information from industry journals, associations, initiatives and institutions related to inland waterway transport, as well as information gained from media monitoring, was used to develop the survey.

For verification purposes, the information obtained during a statutory quarterly survey on the number of vessels involved in transport by inland waterways was another source used when developing the survey.

Among all transport modes, passenger transport by inland waterways accounts for only 0.3% of the total number of passengers, excluding public transport. National inland waterways therefore play a marginal role in passenger transport in Poland.

**Romania**

Data were collected through a quarterly survey in 2019 to produce the indicators for statistics on transport by inland waterways. Within this project, the authorities developed an IT tool for data collection based on the Eurostat methodology.

Data on passenger transport by inland waterways were collected from operators authorised to provide this type of transport, who self-registered for the survey; data on inland waterways cruises were collected from Regional Harbour Masters and from authorised companies.

The questionnaire collected data for the indicators in datasets A1, A2 and B1. Data on registered passengers refer to passengers transported by inland waterways vessels. In dataset B1, the passenger-kilometre indicator is calculated by summing up the results of the number of passengers multiplied by the distances in kilometres actually travelled by these passengers. The indicator for passengers transported is aggregated in dataset A1, with the number of passengers summed up by origin/destination. The passenger-kilometre indicator for cruise passengers in dataset A2 is calculated according to the type of cruise and the distance travelled within Romania. Data is aggregated according to the type of cruise, the nationality of the ship, the region of embarkation/disembarkation and the number of trips.

For the information on ports of embarkation and disembarkation, a list of ports offering passenger transport was selected from the list of ports for freight transport by inland waterways. It was completed by including ports whose activities exclusively involve passenger transport by inland waterways.

The Regional Harbour Masters were the source for data on passengers on cruise ships passing through ports along the Danube. The information regarding the origin and destination of the cruise, communicated by the ship’s captain to the representative of the Regional Harbour Master, was used to establish the distance travelled within Romania. The distance, expressed in kilometres, was calculated based on the navigation map of the Danube and the location of the ports in the list of ports for inland waterways.

For dataset C1, statistics on the number of vessels registered in the country by type of vessel, vessel capacity and vessel age were based on data from the Romanian Naval Authority.

**Sweden**

The Business Database constitutes one of the data sources in Sweden and provides a selection of data from companies. Another source is a register (supervisory system) that includes vessels with a capacity of more than 12 passengers, commercial vessels at least five metres long and leisure craft exceeding 12 metres. This register is obligatory for all passenger vessels and contains information about the registered owners and the party registered as a company. Furthermore, the Swedish industry organisation for the owners of commercial vessels operating at national level qualifies as a data source and serves to supplement the other sources given the considerable overlap in terms of companies and vessels. In addition to that, information on routes and departure frequencies on public transport ferry lines can be obtained from the Swedish collaboration of public transport companies. It is also possible to view the position of the vessels with AIS transponders and to track their movements.

In terms of methodology, an online questionnaire was used to gather information on the vessel, the mileage sailed and the number of passengers. The response rate was about 50% and the data was sufficient to draw conclusions regarding future data collection.

In view of Sweden’s unique conditions in terms of waterborne travel around the coast, Sweden proposes to introduce ‘Archipelago traffic’ as an additional vessel category.

## Feasibility, cost, burden and statistical quality

This section summarises the assessments of the seven countries regarding the feasibility, cost, burden and statistical quality of the data collection.

**Austria**

For river cruises, it is considered feasible to produce passenger transport statistics combining the AIS data, web scraping techniques and passenger occupancy rates. Interviews with a few Austrian companies led to additional information about this sector; however, as Austria-based cruise companies represent a minority of cruise companies operating in the country, a collection of passenger data only from them would not be sufficient.

Regarding passenger transport on inland waterways other than river cruises, the development of a questionnaire for companies is considered to be an adequate way to produce the relevant statistics. AIS data could also be used to estimate kilometres and verify reported distances.

Austria suggests establishing a ship register based on the country of registration and to set it up solely on the basis of AIS data. Since there is currently no up-to-date ship register in Austria, either a new register could be created, based on AIS information on Austrian ships, or the existing vessel register could be digitalised and updated.

If passenger data were to be collected regularly, appropriate IT infrastructure equivalent to the systems used to collect other data would have to be built. Furthermore, the cost of an appropriate preliminary handling time has to be considered. This cost is particularly high for the first year of data collection. In addition to that, resources for building and maintaining web scrapers would have to be taken into account.

With a view to ensuring statistical quality and improving the methodology, there should be an obligation to transmit AIS data rather than the passenger capacity of the vessel. Furthermore, transmitting only the region of embarkation and the region of disembarkation as the furthest point of the cruise would underestimate the calculated distance. This issue could be addressed if countries were able to transmit passenger-kilometres for cruises as they do for freight transport.

**Croatia**

The collection of passenger data is generally considered to be feasible. However, data on country/region of embarkation and disembarkation in most cases is not available or only partially available, and it was not possible to determine the type of each cruise. It would therefore be better to collect and publish data on passenger traffic in ports for inland waterways, rather than data on the numbers of passengers transported, since data on the passengers who embark and disembark at each port are available.

The cost of conducting regular statistical surveys on passenger transport by inland waterways would be acceptable, as would the reporting burden on the Harbour Master’s Offices. The digitalisation of the survey and the use of administrative data from the Ministry would reduce even more the costs and reporting burden.

Croatia concludes that the data collected through the pilot study is of good quality.

**Germany**

In terms of feasibility, administrative data can be used in some cases or will be available in the future as a data source without the need for a business survey. However, a business survey is needed to produce data on the characteristics of passenger shipping for tables A1, A2 and B1.

In terms of statistical quality, businesses noted several reporting problems. For data request B1, three-fifths of businesses do not have the information required to calculate passenger-kilometres. About half of businesses do not have the information required for tables A1 and A2. Thus, businesses will have to work on estimates, which will have an impact on the quality of the information. Against this background, reporting at multi-year intervals could be considered.

The issue of domestic transport services provided by foreign businesses could be addressed by establishing a European register of businesses.

Regarding the burden on businesses, there is a need to limit the list of characteristics to those that are necessary, reduce the burden on smaller businesses and exempt micro-businesses. A passenger capacity of 12 should be considered as a cut-off point.

The annual cost of the project on passenger transport on inland waterways is estimated at roughly EUR 100 000 for businesses. For the public authorities and the statistical office, there will be a total one-off cost of around EUR 640 000 and annual running costs of around EUR 135 000.

**The Netherlands**

The Netherlands considers it feasible to generate statistics on passenger transport and many parties contacted for the research have shown interest in the related statistical information. However, more research is needed to link ships to companies and to scale up sample data to the complete population. Whilst most variables can be obtained from companies, there are concerns about passenger-kilometres, as the survey showed difficulties for companies operating day-trips to establish this data. The quality of data on ships’ characteristics is not sufficient in the current database, but could be improved in the long run with the use of an up-to-date European ship database.

On statistical quality, problems arise for foreign companies operating on Dutch waterways, resulting in an under-coverage of foreign companies. Data on numbers of passengers and passenger-kilometres constitute a particular problem, which could be at least partially addressed by exchanging data on relevant European companies. Since foreign companies account for a significant part of passenger transport on inland waterways in the Netherlands, especially in the river cruise market, the methodology would have to be developed to make up for the missing data.

The Netherlands recommends applying a passenger capacity threshold of over 12 passengers, applying an extra restriction to include only motorised vessels, not sailing vessels, and to consider replacing the term ‘type of vessel’ with ‘type of journey’. It is proposed to collect data annually and to conduct the survey at the beginning of the year. The ‘territoriality principle’ should also be applied.

The Netherlands emphasises the importance of not over-burdening smaller companies or companies with a complicated pattern of routes by, for example, not asking them to report annually.

The costs for new statistics on passenger transport include further methodological research, scaling up data from the sample to the population and developing and executing the new survey and analysis. These costs are estimated at about EUR 76 000.

**Poland**

The collection of passenger statistics for inland waterways is basically feasible, even though there are limitations.

Dataset A1 does not include data on the number of passengers transported on inland waterways by river cruise vessels, as the entities covered by the pilot study did not use this type of vessel. There was also no passenger transport carried out by vessels classified in the set as ‘unknown’. For dataset B1, based on the analysis of the passenger transport market, information was obtained on river cruise vessels operating under foreign flags that also call at seaports.

The pilot study helped to develop datasets A1 and B1. However, on the basis of the data obtained from the port authority, it is not possible to fill in the A2 dataset, as only the number of passengers who returned on board after disembarkation is known and the total number of passengers carried is therefore not known. Another difficulty is the fact that data on the number of passengers are provided by the harbour master’s office collectively for the entire month and not separately for each cruise.

It was possible to develop dataset C1 based on the data that was obtained through the survey. Official statistics provide information on the number of passenger vessels registered in the country, but these data do not include a division in the type of vessel, specifying the age and load capacity of the vessel in a particular type. Inland Waterways Authorities are responsible for keeping registers of inland waterways vessels.

It was not possible to distinguish urban transport ships among registered vessels based on the data that was obtained.

The quality of the results from the pilot study was assessed as satisfactory. For businesses, data on the number of passengers transported are estimated according to the number of tickets sold and the loading factor. Similarly, the quality of the available data for registered passenger vessels on inland waterways was regarded as satisfactory. The data was obtained from administrative registers, in accordance with national legislation.

In view of the difficulties encountered, the biggest challenge was to correctly identify the entities carrying out passenger transport activities. Furthermore, entities conducting this activity often do not keep strict records of the data covered by the survey. Thus, these data are often estimated on the basis of the average vessel capacity, which implies difficulties in verifying whether they are correct.

For costs and burdens, a study with a narrower scope has been carried out for many years on registered passenger vessels for inland waterways. Given the scope of data currently obtained from official statistics, which is based on the secondary use of administrative sources, the additional burden of extending the scope of the study was assessed as negligible. The use of administrative sources for the development of new statistics also does not create significant costs.

If the scope of the current research were to be extended, to include information on the direction of passenger transport on inland waterways and to entities providing ferry transport and urban transport vessels, it could mean additional burdens and costs for companies. However, as this would just imply an extension of the existing survey, the additional burden would be insignificant.

**Romania**

In order to collect data, the statistical questionnaire, methodological approach and supplementary specifications were sent by mail to the Territorial Statistical Offices.

Variables regarding the number of passengers by type of vessel in national transport were available and provided by the respondents according to the methodological requirements; these variables can be included in the usual production of data. The collection of data on the number of passengers transported by port of embarkation/disembarkation was carried out without any processing problems.

The collection and production of data for day-trip vessels, ferries and urban and regional transport vessels is feasible and could be organised on a regular basis (quarterly and/or annually). Furthermore, a detailed collection of variables on ship capacity and age, regarding the number of ships registered by the Romanian Naval Authority, was carried out without any problems in interpreting the methodology. Therefore, the data needed to complete dataset C1 can be collected and transmitted annually.

However, with a view to upholding data quality, data collection cannot be carried out on cruise vessels on inland waterways. The difficulties encountered relate mainly to the reliability of passenger data on cruises along the Danube and are due to the subjective way in which information is processed; this includes establishing the origin/destination of the trip, distance travelled, number of passengers and type of cruise. Accordingly, this type of data on cruise vessels will be excluded from annual data production.

No additional burden was reported for the collection of passenger transport statistics, and there were no comments about additional costs.

**Sweden**

Sweden confirms that it is possible to collect data for all passengers transported and the numbers of kilometres travelled, to be able to calculate passenger-kilometres. While some respondents do not currently measure vessel-kilometres, it would be possible to obtain such data if the systems were reconfigured. It is therefore possible to generate passenger statistics on vessel movements on inland waterways, albeit with certain difficulties. These difficulties relate mainly to data for passenger-kilometres and the disclosure of data regarding the type of vessel.

Concerning statistical quality, Sweden will be unable to provide complete data for Tables A1 and A2 for river cruise vessels with cabins for overnight stays, although such difficulties could be overcome with a modified breakdown. Furthermore, register data cannot be used to provide all the data for Table C1. Data regarding river cruise vessels, day-trip vessels and urban/regional transport vessels are lacking, while only vessels classified as ferries can be reported.

Any future data collection process will have to clearly state the purpose of the collection. A reporting obligation will be imposed in case of a permanent survey.

As to the burden, most respondents were able to quickly provide the information sought and most respondents reported that they did not find the questionnaire very demanding. Sweden therefore concludes that the reporting burden is moderate.

To facilitate matters for the respondents and to lower the costs, data could be obtained from AIS and passenger-kilometres could thus be calculated. In terms of benefits to users, statistics on passenger traffic could be used in trend monitoring, market development and general external monitoring.

Sweden considers the cost, as measured in time per respondent, to be relatively low and estimates it to be less than SEK 60 000 per survey.

## Summary of the results of the pilot studies

The seven pilot studies give an overview of the feasibility of collecting data on passenger transport by inland waterways. The main comments by the countries involved, as described in their detailed reports, are summarised below.

The studies have shown significant differences in the collection of data on passenger transport by inland waterways between the seven countries, so it is not appropriate to compare all indicators obtained.

The studies revealed a large range of data sources on which statistics for passenger transport by inland waterways could be built. The sources most referred to were web scraping, the enhanced use of the AIS and ship registers. Other relevant sources are harbour masters’ offices, port authorities, statistical business registers, structural business statistics, short-term turnover figures, the River Information System and external data providers.

Existing administrative data are not comprehensive enough to meet the requirements of sound statistical collection. Targeted surveys would have to be conducted in order to complement the various sources and to obtain more complete and standardised data. The extent to which additional targeted surveys would be needed differs between the seven countries.

Current sources need to be improved in terms of volume and quality of their data in order to provide information required for Tables A1 (Number of passengers transported by country of embarkation, country of disembarkation, type of transport and type of vessel), A2 (River cruises - number of passengers, passenger-kilometres and number of trips by region of embarkation, region of disembarkation, nationality of vessel and type of cruise), B1 (Number of passenger-kilometres travelled by type of vessel other than a river cruise vessel) and C1 (Number of vessels registered in a country by type of vessel, vessel capacity and vessel age). At the current stage, not all seven countries are able to provide all variables.

The pilot studies have raised quality issues related to the shortcomings of the administrative data and the reporting by companies. Particular problems were identified for passenger-kilometres, as many companies are not in a position to provide all the information required to calculate passenger-kilometres; reporting difficulties regarding day-trips and the average occupancy rate were also frequently noted. In addition, some companies do not have all the required information in the case of ship charters or specific ticket offers. Given these shortcomings, companies have to make estimates, which has an impact on the quality of the information they provide.

Information gaps in ship registers affect reporting on vessels, and one way to collect data on vessels is to link any survey directly to business registers. This way, vessels are identified through the company that owns them. However, in business registers, only companies that carry out passenger transport by inland waterways as their main activity are listed under NACE/Rev.2 Class 50.30. Consequently, companies that provide passenger transport by inland waterways as a secondary activity will be omitted, although they do account for an important volume of this type of transport.

The studies raised a special issue regarding reporting on domestic transport provided by foreign companies. There is no obligation for foreign companies to notify national authorities when they carry out passenger transport. Reliable and structured information on foreign companies and their services is lacking, and a European ship register could address problems of domestic transport by foreign companies.

Generally, requirements for detailed data need to be reconciled with simplifying the methodology to limit the burden on businesses. The countries that submitted pilot studies stressed the need to limit the burden of data collection, which is particularly high for smaller companies. There are various ways to limit this burden: the threshold for vessel capacity could be set at more than 12 passengers; multi-annual intervals could be introduced for reporting of transport activities; and small companies could be exempt from reporting. The burden could be limited further by restricting the scope to motorised vessels. Thus, sailing vessels, which are usually operated by small companies and which have large variations in the routes of the trips they undertake, would be exempt from reporting.

Given the problems with definitions, ferries could be defined more specifically or ferry transport could be integrated with urban/regional transport. The introduction of an additional category for ‘Archipelago traffic’ could be considered in view of the unique conditions of waterborne travel in Sweden.

Based on the studies, the estimated costs of collecting data vary significantly between countries. No country explicitly considers the costs to be disproportionate to the benefits; however, there are significant cost differences among them. Some consider it easy to integrate the collection of passenger transport data into their current work, while others take into consideration the expenses related to the new infrastructure that would need to be developed.

In summary, while some data gaps exist, the seven pilot studies consider the production of tables A1, A2, B1 and C1 to be basically feasible.

# RESULTS OF SURVEY ON PASSENGER TRANSPORT STATISTICS CARRIED OUT IN MARCH 2020

In March 2020, Eurostat carried out a survey to get an overview from all EU countries that use inland waterways for transport of the various considerations relating to passenger transport statistics. The questions addressed the costs and additional burden of collecting data, reasons for not collecting passenger data and the feasibility of collecting data in the future.

## General information

Altogether, 15 countries replied to the survey. Of these countries, nine replied that they already collect some data on passenger transport by inland waterways, while six indicated that they do not collect such data.

## Cost of collecting data on passenger transport by inland waterways in terms of financial and human resources

In the countries that currently collect statistics on passenger transport by inland waterways, the cost and burden are not considered to be disproportionate. Three countries assessed the costs of collecting data as minimal in terms of both financial and human resources. However, these countries commented that the current workforce is small and that work on completing the questionnaire, collecting and checking data, and aggregating and preparing data for publication is carried out by several departments.

Data is collected on a very limited and general level, with only a few small companies operating in this market segment. Statistical reports are submitted to the relevant data preparation units and only data that are aggregated at country level are published.

Countries noted that information on costs for passenger transport statistics could not be provided separately, because such costs are included in the overall cost of providing statistics on transport by inland waterways, for which data are collected on a yearly basis using a specific survey. One country noted that the financial resources mainly include all expenditure directly or indirectly related to collecting statistics, such as staff salaries, IT infrastructure, electricity, etc.

## Additional burden of collecting data on passenger transport by inland waterways

Countries reported a diverse array of additional burdens encountered in their collection of passenger data.

Three countries commented that they have not faced additional burdens.

Other countries commented on the development of a national methodology and highlighted the burden of identifying additional data sources and compiling information from different data sources, as well as contacting respondents several times for clarifications. The time frame for adopting national legislation was identified as another additional burden, and the time frame and financial resources were considered the main burdens when upgrading and implementing statistical information systems.

Another comment regarded the sources from which data is collected. Sources range from administrative registers, ports and regional tourism committees to companies that carry out transport by inland waterways and municipalities that manage and provide transport services.

One country remarked that data on passenger transport by inland waterways is collected but cannot be processed. Another country specified that only information on transport by passenger vessels and ferries was collected, but not on transport by cruise vessels, day vessels, excursion vessels, waterbuses and water taxis.

## Reasons for countries not to collect data on passenger transport by inland waterways

Countries that do not collect data on passenger transport by inland waterways specified that there has been a lack of user demand for such data. The fact that there is no legal obligation was mentioned as another reason.

One country highlighted the high administrative burden for the small and very numerous companies operating in this sector as the main argument against collecting passenger transport data. Data is not available from other governmental organisations (or commercial parties, for that matter). Moreover, there is a significant number of foreign companies (EU and non-EU) operating in this particular country’s inland waterways, implying there is a problem to obtain data from foreign companies.

One country explicitly mentioned that it does not have any passengers who are transported via inland waterways, as there is only a small number of inland waterways and these are exclusively used for recreational purposes, while two other countries referred to the small numbers of passengers transported by inland waterways.

## Feasibility of collecting data on passenger transport by inland waterways and intentions to collect such data in the future

Among the countries that currently do not collect passenger transport data, some of them mentioned that collecting data would be a burden on them given the limited volume of passenger transport by inland waterways compared with other types of transport.

Three countries relied on the results of their own pilot studies to answer this question. One of these countries said that definitions and thresholds should be considered before moving on to data collection. Another country considered that data collection for passenger transport by inland waterways is feasible in the near future. This country specified that there is an ongoing process to establish a new information system for inland waterways, which could be used as an administrative data source for both freight and passenger data in the future.

One country confirmed their intention to start collecting data on passenger transport by inland waterways. Two countries commented that they do not plan to collect such data, while another two countries would start to collect data only if there was a legal obligation to do so.

# CONCLUSIONS

The Commission notes that the seven pilot studies have thoroughly investigated the feasibility of collecting data on passenger transport by inland waterways. The countries involved find the collection of passenger data achievable to a greater or a lesser extent.

The studies have revealed differences in the parameters that affect the collection of passenger data in each country, such as data sources, types of vessels used for transport on inland waterways and the physical geography of countries. While all the pilot studies identify a large range of data sources, from administrative data to web scraping, they also acknowledge the need to limit the burden of reporting for small businesses. They emphasise that the effort to be invested needs to be proportionate to the share of inland waterways among all passenger transport modes. Concerns are also raised in relation to quality issues and data gaps. The cost of collecting data is significantly different from one country to another and is linked to the extent that inland waterways are used for passenger transport in each country.

The pilot studies have shown that, in the seven participating countries, it would be feasible to collect data on passenger transport by inland waterways to a certain extent, but this would have to balance the need for data with the availability of information and the burden on respondents.

1. [Report on unleashing the potential of waterborne passenger transport (2015/2350 (INI)), 19.10.2016.](http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+REPORT+A8-2016-0306+0+DOC+PDF+V0//EN) [↑](#footnote-ref-1)
2. [Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system, COM(2011) 144 final.](https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52011DC0144) [↑](#footnote-ref-2)
3. [Regulation (EU) 2018/974 of the European Parliament and of the Council of 4 July 2018 on statistics of goods transport by inland waterways, OJ 179, 16.7.2018, p. 14.](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018R0974&from=EN) [↑](#footnote-ref-3)
4. Regulation (EU) 2019/2152 of the European Parliament and of the Council of 27 November 2019 on European business statistics, repealing 10 legal acts in the field of business statistics (OJ L 327, 17.12.2019, p. 1). [↑](#footnote-ref-4)