Ministry of Agriculture of the Republic of Lithuania

Fisheries Service under the Ministry of Agriculture of the Republic of Lithuania

Agricultural Information and Rural Business Centre

Klaipedos university

Regulation (EU) 2017/1004 of the European Parliament and of the Council of 17 May 2017

on the establishment of a Union framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the common fisheries policy and repealing Council Regulation (EC) No 199/2008 (recast)

Commission Delegated Decision (EU) 2021/1167 of 27 April 2021

establishing the multiannual Union programme for the collection and management of biological, environmental, technical and socioeconomic data in the fisheries and aquaculture sectors from 2022

Commission Implementing Decision (EU) 2021/1168 of 27 April 2021

establishing the list of mandatory research surveys at sea and thresholds as part of the multiannual Union programme for the collection and management of data in the fisheries and aquaculture sectors from 2022

Commission Implementing Decision (EU) 2021/

laying down rules on the format for the submission of work plans and annual reports for data collection in the fisheries and aquaculture sectors

Lithuanian Work Plan for data collection in the fisheries and aquaculture sectors

2022-2024

Version 3 – 2021

Vilnius,

2021-11-23

CONTENTS

SECTION 1: GENERAL INFORMATION 4

DATA COLLECTION FRAMEWORK AT NATIONAL LEVEL 4

TEXT BOX 1A: TEST STUDIES DESCRIPTION 4

TEXT BOX 1B: OTHER DATA COLLECTION ACTIVITIES 5

SECTION 2: BIOLOGICAL DATA 7

TEXT BOX 2.3: DIADROMOUS SPECIES DATA COLLECTION IN FRESHWATER 7

TEXT BOX 2.4: RECREATIONAL FISHERIES 8

TEXT BOX 2.5: SAMPLING PLAN DESCRIPTION FOR BIOLOGICAL DATA 9

TEXT BOX 2.6: RESEARCH SURVEYS AT SEA 12

SECTION 3: FISHING ACTIVITY DATA 25

TEXT BOX 3.1: FISHING ACTIVITY VARIABLES DATA COLLECTION STRATEGY 25

TEXT BOX 3.2: FISHING ACTIVITY VARIABLES DATA COLLECTION STRATEGY (FOR INLAND EEL COMMERCIAL FISHERIES) 26

SECTION 4: IMPACT OF FISHERIES ON MARINE BIOLOGICAL RESOURCES 28

TEXT BOX 4.2: INCIDENTAL CATCHES OF SENSITIVE SPECIES 28

TEXT BOX 4.3: FISHERIES IMPACT ON MARINE HABITATS 33

SECTION 5: ECONOMIC AND SOCIAL DATA IN FISHERIES 34

TEXT BOX 5.2: ECONOMIC AND SOCIAL VARIABLES FOR FISHERIES DATA COLLECTION 34

SECTION 6: ECONOMIC AND SOCIAL DATA IN AQUACULTURE 35

TEXT BOX 6.1: ECONOMIC AND SOCIAL VARIABLES FOR AQUACULTURE DATA COLLECTION 35

SECTION 7: ECONOMIC AND SOCIAL DATA IN FISH PROCESSING 36

TEXT BOX 7.1: ECONOMIC AND SOCIAL VARIABLES FOR FISH PROCESSING DATA COLLECTION 36

ANNEX 1.1 - QUALITY REPORT FOR BIOLOGICAL DATA SAMPLING SCHEME 37

ANNEX 1.2 - QUALITY REPORT FOR SOCIOECONOMIC DATA SAMPLING SCHEME 115

SECTION 1: GENERAL INFORMATION

Data collection framework at national level

General comment: Use this text box to describe how data collection is organised in your Member State (institutions involved, contact information) and in which regional coordination groups (RCG) your Member State participates.
Lithuania will carry out the National Fisheries Data Collection Programme in 2022-2024 which will be compliant with the Data Collection Framework (DCF) according to Council Regulation EC 2017/1004. The Work plan covers fisheries, biological and economical sampling activities in the next three years collected within the Lithuanian National Programme for the Collection of Fisheries Data (NP). No methodological changes have been introduced in Work plan. The Ministry of Agriculture of the Republic of Lithuania acts as the National Correspondent and is responsible for the overall coordination of NP and for data submission to the European Commission. The work in the Lithuania in 2022-2024 will be carried out by three implementing bodies: 1) Klaipedos University - responsible for biological parameters, surveys at sea; 2) Fisheries Service under the Ministry of Agriculture of the Republic of Lithuania - catches, landings and effort statistics; 3) Agricultural Information and Rural Business Centre - responsible for economic data collection, provision of social and economic analyses of fisheries sector. Lithuania participates in RCG Baltic and NANSEA, RCG LDF and RCG on Economics Issues.

Text Box 1a: Test studies description

General comment: This text box fulfils Chapter II, section 1.2 of the EU MAP Delegated Decision annex.
Preparation of methodology of stomach sampling of *Sander lucioperca* 1. Aim of the study EC Delegated decision (EU)2021/1167 foresees collection of data on impact of fishing activities on food webs. *Sander lucioperca* is predatory species very important for small scale and recreational fisheries. Aim of the study is to prepare the methodology of stomach sampling of *Sander lucioperca* and asses the possibility to adapt the stomach sampling for assessing of impact of fishing activities targeting predatory species on food webs of the coastal marine ecosystem. 2. Duration of the study 2022- review of studies on stomach sampling of predatory fish species. 2023 – preparation of methodology. 2024 – testing of methodology 2025 – final report 3. Methodology and expected outcomes of the study Review of studies on stomach sampling of predatory fish species.

Defining of practices suitable for stomach sampling of *Sander lucioperca* inhabit in the coastal zone of Lithuanian territorial sea and Curonian lagoon.

Testing of these practices by taking stomach samples of *S. lucioperca* from commercial fishermen and during coastal fishing surveys.

Evaluation of test results and compare to the similar technics already described in scientific studies.

Evaluation of possibilities to adapt stomach sampling for assessing of impact of fishing activities targeting predatory species on food webs of the coastal marine ecosystem.

Text Box 1b: Other data collection activities

General comment: Use this text box to provide information on other data collection activities that relate to your EMFAF operational programme and need to be included in the work plan and the annual report. Describe activities that are funded by the DCF but fulfil objectives under other EMFAF priorities, like marine knowledge, or activities funded by the DCF, but without a direct link to the EU MAP specific requirements or WP template tables, like freshwater fisheries. You can also include one-off specific studies for a particular end-user need that do not enter the regular data collection.

Background

The project SecWeb (MARE2020-08) was setup with the aim of developing mechanisms to support the planning and execution of administrative tasks and the branding and online visibility of the Regional Coordination Groups (RCGs), with the aim to establish a long-term supportive structure (the RCGs' Secretariat). This was identified as a clear identified need in previous projects such as FishPi² and STREAM as well by all RCGs.

The activities committed by SecWeb are organised in four work packages:

- WP 1: **Setting up the secretariat in support to RCGs and ISSGs** (and running it as a pilot for at least NANSEA & Baltic RCGs for identifying insights that can strengthen the work of the broader network of RCGs)
- WP2: **Developing an operating a website** as a common entry point for all the stakeholders to better understand the role and structure of the RCGs, to enhance the use of the outcomes from their activities.
- WP3: **Ensuring future operation and funding** by analysing the past experiences and developing suitable business models for the long-term implementation of the secretariat service for the RCGs.
- WP4: **Communication and dissemination activities** to be progressively integrated into the RCGs strategy as a mean for promoting the visibility of the RCGs participants and experts and the engagement of all the relevant stakeholders.

Under the same funding framework the EC also granted support and funding to the FISHN'CO project. FISHN'CO is addressing the needs to develop Regional Work Plans for RCGs NANSEA & Baltic, RCG Large Pelagics and RCG on Economics Issues. Synergy with SecWeb activities has been harnessed, on the

one hand to guarantee consistency in dissemination and communication, but also in the way administrative support is provided to the RCGs and ISSGs' network.

1. **Aim of the data collection activity**

While the activities covered by the SECWEB project funds are for setting the basis for a long-term the RCG's Secretariat (including administrative support, communication and dissemination, and web maintenance) a continuity approach to this supporting structure implementation is o essential for efficiency and for strengthening the regional cooperation in the context of the DCF.

The activity proposed is to ensure that a full-scale operation is adopted for the secretariat activities, without interruption, after the end of the implementation period of the SECWEB initiative.

2. **Duration of the data collection activity**

The activity takes place during the period 01/01/2020 – 31/12/2022.

Implementation of the activity should be from 2023 onwards, until 2027 and beyond.

3. **Methodology and expected outcomes of the data collection activity**

The activities will be carried out consistently with the business models and scenarios found most suitable and acceptable by the Member States and the European Commission, as developed under SecWeb WP3. Consistently, the work of the RCGs' Secretariat beyond SecWeb implementation period should be built upon the outcomes from SecWeb and the services should reach all the RCGs. Given the different background and context of the RCGs, the working methodology for the Secretariat should enable some flexibility to adapt the service to the needs and specificities of each RCG, although in general terms the service lines and protocols will be shared and defined in common.

Overarching, the service lines to be consolidated will cover:

1. Maintenance and update of the RCGs website and of the shared virtual working area (including documents repository management).
2. Maintenance and implementation of a Dissemination and Communication Plan (the DCP needs to be yearly updated and validated by the RCG chairs).
3. Maintenance of the RCGs stakeholders' database.
4. Help-desk orientation for the RCG expert's network and for the stakeholders.
5. Direct support for the organisation of meetings and stakeholder events. Especially the annual RCG meetings, including preparation, administrative support during the meetings and for the corresponding reporting process. This includes also the Liaison Meeting (LM)
6. Follow-up of the intersessional work.
7. Track-record of activity, reporting and yearly fine tuning of the work plan for the Secretariat. (Internal and to guarantee accountability of the service)

Expected outcomes:

1. The provision of dedicated Secretariat support for the RCGs. A consistent approach to administering RCG activities, facilitating communication, helping to drive intersessional work and supporting the work of sub-groups would significantly improve the performance of the RCGs.

2. A dynamic and permanently updated website including as features:

- ✓ Integration –allow seamless synchronization with third-party applications.
- ✓ Responsive – to serve content across multiple screens and platforms.
- ✓ User experience- maintain a consistently good user experience throughout the website.

- ✓ Accessibility – All levels of society and end-users need to be able to access in a friendly used way the website.
- ✓ Retention- keep visitors coming back to the website.
- ✓ Links to protected part outside the website as repository for confidential documents

3. Consolidated and Visual identity for RCGs and enhanced visibility and understanding of the work by the RCGs at least by the relevant stakeholder groups, enhancing the pathways for interaction with them.

4. Regular updated Stakeholders' database useful for the RCG experts and for the stakeholders' community.

5. Internal communication protocols and help-desk in place making it easier for any new comer to efficiently join, adopt responsibilities, and contribute to the RCGs objectives and work commitments.

6. A detailed description of the secretariat functions, operational working protocols and the business model for the provision of Secretariat role.

SECTION 2: BIOLOGICAL DATA

Text Box 2.3: Data collection for diadromous species in freshwater

General comment: This Textbox fulfils Article 5(2)(a), Article 6 (3)(a), (b) and (c) of Regulation (EU) 2017/1004 and Chapter II, point 2.1(b) and point 2.3 of the EU MAP Delegated Decision annex. Use this text box to give an overview of the methodology used to collect data from freshwater commercial fisheries for salmon, sea trout and eel, and from research surveys on salmon and sea trout in freshwater, and on eel in any relevant habitat including coastal waters.

Method selected for collecting data.

Due to very small available TAC for salmon, there is no direct fishing for salmon in the Baltic. No direct fishing for sea trout in the Baltic sea as well. Commercial fishing and by-catch of salmon and sea trout is prohibited in fresh waters including Curonian lagoon. Therefore, no sampling schemes for commercial fishing of these species are planned, only a specific survey sampling scheme

Catches of eel in the Baltic sea are counted as few kilograms per year, so no data could be collected from the Baltic Sea. Concerning inland waters commercial eel fishing in rivers and lakes is decreasing and discussions on commercial eel fishing moratorium in river and lakes is ongoing now. Commercial catches of eel is allowed only in Curonian lagoon.

There is only one eel management unit covering all Lithuanian waters (LT-total).

MS should briefly describe the method for collecting the variables presented in Table 2.3. Detailed descriptions are to be included in the quality document (Annex 1.1). If variables are not directly collected but estimated the method of estimation should be described here.

(max 250 words per species and area)

Salmon and Sea trout. Diadromous variables (length, weight, sex ratio and age) for adults will be collected from three gillnet monitoring sites in Curonian lagoon during second half of the year. Planned size of the sample is 50 individuals of salmon and 50 individuals of sea trout.

Diadromous variables (length, weight, age) for parrs will be collected from 100 electrofishing sites in the rivers of Nemunas river catchment suitable for salmonids as Neris, Dubysa, Minija. Parr abundance will be calculated based on the collected data.

Diadromous variables (length, weight, age) for smolts will be collected from 2 trap sites in the rivers of Nemunas river catchment suitable for salmonids as Neris, Dubysa, Minija. Smolt abundance will be calculated based on the collected data.

Two counters are planned to install in the rivers to collect data on ascending of individuals in rivers.

Following the note salmon and sea trout have been marked as selected for sampling in the table 2.1. Table 2.2 has been updated accordingly as well. However, possibility to sample commercial landings will be almost zero, because there is no direct fishing for salmon and sea trout in the Baltic Sea. Landings of salmon in 2018, 2019, 2020 were respectively 1.9, 2.9, 0.99 tons. According to the newest Council decisions only recreational fishing for salmon will be allowed in 2022. Landings of sea trout were even smaller: 0.07, 0.24, 0.39 tons in 2018, 2019, 2020. Therefore, it was decided to collect data on salmon and sea trout population by surveys only.

Eel. Diadromous variables on yellow and silver eel well be collected by onshore sampling of landings from selected fyke nets located in the Curonian lagoon. Planned number of sample sites is 2, sample size 100 individuals. Abundance of standing stock and silver eel escapement will be estimated based on the sample data.

In other lakes and rivers of Lithuania commercial fishing and by-catch of eel is prohibited, so data collection by specific surveys is planned. 2 monitoring places (2 river trap nets) will be used to collect samples for diadromous variables and estimation of abundance of standing stock and silver eel escapement. It is planned 9 trip days during April- May to collect the sample data.

Yellow eel abundance will be estimated by sampling of catches with small mesh size traps in four lakes, two rivers and Curonian lagoon where 80-90 of total catches of eel were taken. Evaluation of age and comparison with quantities released. Silver eel escapement in addition to the sampling will be estimated by CPUE of commercial fishing.

Text Box 2.4: Recreational fisheries

General comment: This text box fulfils Article 5(2)(a), Article 6 (3)(a), (b) and (c) of Regulation (EU) 2017/1004 and Chapter II, point 2.2 of the EU MAP Delegated Decision annex. Use this text box to give an overview of the methodology used for the data collected on marine and freshwater recreational catches.

Lithuania has recreational fishery only in the Baltic Sea within coastal area of Lithuanian exclusive economic zone and internal waters (Curonian lagoon, rivers and lakes). Before fishery ban cod was used to be fished in the Baltic Sea. Salmon and sea trout are fished both in the Baltic sea and rivers, while eel is fished only in internal waters. Two types of sampling schemes will be used.

SciObsAtSea_Research survey at sea. Surveys at sea are focused on high season salmon and sea trout fishery. Since cod fishing was not available for commercial or recreational purposes from 1 January 2020 sampling of catches is not foreseen. Observation of recreational fishery over the period of 2005-2020 showed the absence of eel catches at sea. Therefore this type of survey is not planned. Data collection during the surveys will includ number of boats observered during the day of inspection, number of anglers and total catch by species (in kg and individuals) as well as size of fish in cm. Some procedures will be conducted on landing sites if inspection is impossible at sea. Number and weight of released individuals will be also recorded if such information is available from interviewing. All data will be recordered in relevant protocols.

Data on total number of charter boats registered during the fishing operations over the year will be extracted from relevant databases.

SciObs water body_recreational (off site surveys). The study for evaluation of caught or released volumes of salmon, sea trout and eel will be conducted by interviewing residents of Lithuania engaged in recreational fishery in inland waters. Recreational study on eel catches will be performed using off-site surveys contact methods, e.g. mail, telephone, diaries, questionnaires etc. (ICES WKSMRF 2009) Data also includes the size of caught or released individuals. All data will be analysed statistically. Results for preceding year will be available in forthcoming year. Figures of total volume for both caught and released fish in kg and individuals will be estimated by raising procedure.

Biological data for salmon and sea trout will be collected by trolling survey at sea and sampling of recreational fishermen in inland waters. Survey and sampling protocols are available in MRI SharePoint.

Text Box 2.5: Sampling plan description for biological data

General comment: This text box fulfils Article 5 (2)(a) and (b), Article 6 (3)(a), (b) and (c) of Regulation (EU) 2017/1004 and Chapter 2, point 2.1(a) and 4.1 of the EU MAP Delegated Decision annex. This text box complements Table 2.5.

Baltic Sea

Additional information on sampling schemes

Member State may add specific contextual information related to a region and the implementation year(s), for instance highlighting new developments not yet detailed in the quality document, regional adaptation and/or perspectives for the future. Insert the information under the same sampling scheme identifier as in Table 2.5.

Two sampling schemes are planned: scientific observers at shore for commercial landings - SO-SHORE-COM SS; scientific observers at sea on commercial fishing trips - SO-SEA-COM-SS Both sampling schemes, covers commercial species selected in the Table 2.1; but the second one includes collection of some biological data for PETS as opportunistic sampling. Further information concerning sampling schemes for commercial fishing provided bellow in this text box and in the Annex 1.1.

In addition to the mandatory surveys, the sampling scheme designate to monitor coastal fishes have been planned – Coastal Fishes Survey (CFS). Information about research sampling schemes is provided in the Text Box 2.6.

Additional description on sampling frames

Member State may add complementary description to what includes the 'Sampling frame description' column of Table 2.5. Insert the information under the same identifier and name as in columns 'Sampling frame

identifier' and 'Sampling frame description' of Table 2.5, and in the same order (Sampling frame identifier + Sampling frame description).

Sampling frames were designed according to the matrix:

	Large scale fleet	Small scale fleet		
Gear type	Trawlers	Gillnetters	Trap netters	Passive gears
Geographic stratification	No stratification	Klaipeda and Palanga		Curonian lagoon
Environmental features		NATURA 2000 area		

The number of large-scale (LS) vessels is constantly decreasing from 27 in 2011 to 13 in 2021. After introducing ban on direct fishing for cod and very strict limitations on by-catch of cod, fishing with gillnets was ceased, fishing with bottom trawls decreased almost to miserable (Table 2.5.1).

Table 2.5.1. Number of trips of LS vessels by main gear types in the Baltic

Gear-code	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
GNS	61	32	33	35	53	60	47	48	8	2	
OTB	136	142	171	134	126	144	171	126	26	17	
OTM	147	138	147	155	256	274	178	241	227	243	130
PTM	18	20	21	22	17	17	22	17	21	16	11

Some vessels owners are planning to scrap their vessels, so most probably in the nearest future number of vessels will be less than 10. Taking it in account only one fishing frame covering all LS fleet in the Baltic – **trawlers in the Baltic (BS-TR**) have been planned.

This sampling frame is using for both types of sampling types: on shore sampling and at sea sampling.

Some Baltic Sea trawlers are never landing in Lithuania consequently, they can't be sampled onshore. These vessels are set as priority for sampling at sea. Unfortunately, due lack of human resources is impossible to implement probabilistic sampling at sea, so sampling is performed based on opportunities. Lithuania planned to participate in the RCG pilot "'Baltic small pelagic Regional Sampling Plan". This pilot includes trawlers with landings 10 and more tons of sprat per year. It is subject to regional work which is in preparation now.

More details see Annex 1.1

Sampling design for small scale coastal fleet was based on five main pillars:
1) landings of species regulated by EU are very small, so data on landing of these species by Lithuanian SSF has no significant impact on estimation of overall state of the stocks regulated by EU law.
2) biggest part of Lithuanian coastal zone is covered by NATURA 2000 areas, so sampling is very important for national fisheries management measures, especially regarding objectives of Marine Strategy Framework Directive (MSFD).
3) Not the number of vessels, but the number of available fishing gears is main factor affecting catch quantities and structure.
4) Most of the vessels are fishing both with gillnets and trap nets during the same season or even the same fishing day/trip (see figures in Annex 1.1.)
5) Most of stocks important for small scale fisheries are fished both in Baltic Sea coastal zone (BC) and Curonian lagoon (CL). Some international organisations dealing with MSFD are asking combined data for BC and CL.

According to the Table 5 of Delegated decision gillnets and trap nets belongs to the different gear classes, gear groups and gear types (Level 2, Level 3 and Level4), therefore these gears should be assigned to the different sampling frames. However, majority of SSF vessels (53% in 2020) are fishing with both gillnets and trap nets during the same season, these vessels produced almost 86% from total landings of SSF in 2020. These vessels can be assigned to both of frames. To avoid such confusion RDES hierarchy 13 was taken as an option. Usually,

per one trip one gear set is carried out and number of trips is equal to landing number, so landings from SSF may be considered as fishing operation and it is in line with RDBES hierarchy 13.

To the background above, three sampling frames covering small scale fleet have been planned:
1) **BS-SSF-GN – landings from SSF gillnetters;** PSU – fishing operation is selected from hypothetical list of fishing operations by SSF gillnets.
2**) BS-SSF-TN - landings from SSF trap netters**; PSU – fishing operation is selected from hypothetical list of fishing operations by SSF trap nets.
3) **BS-CL – landings from Curonian lagoon**; PSU – fishermen*month is from list of legal persons licenced for commercial fishing in Curonian lagoon in the current year.

More details see Annex 1.1

The article 1 of Recast regulation (EU)1004/2017) says: "With a view to contributing to the objectives of the common fisheries policy set out in Article 2 of Regulation (EU) No 1380/2013. According to the point 5 (i) of this article one of the objectives of CFP is "promote coastal fishing activities, taking into account socio-economic aspect". Some of species not listed in the table 1 of Delegated decision as Vimba vimba and especially Osmerus eperlanus and are very important fish stocks for Lithuanian SSF. Long lasting collection of biological data of these species are necessary to prepare adequate measures to promote sustainable coastal fishing activities in line with objectives of CFP.

More details in Annex 1.1.

North Sea and Eastern Arctic

There are two sampling frames planned in the region: bottom trawlers targeting shrimp in ICES areas 1 and 2 (NSAE-BTS); and midwater trawlers targeting redfish in ICES areas 1 and 2 (NSEA-MTR).

Usually, two vessels are fishing for shrimp in the region, each one making 7 - 8 trips per year. Three vessels were fished in 2019 and numbers of total trips was 23 – it makes number of average trips per reference season higher than usual. One trip per vessel per season is selected for sampling and at least 10 hauls (SSUs) must be sampled during the selected trip. Self-sampling was selected as observation type after analysis of logistic costs, time consumption and skills of crew. Highly educated crew member has been instructed how to take samples, measure shrimp and record occurrence of PETS.

One vessel is fishing for redfish in the region, making about 5 trips per year. One trip per vessel per season in the ICES areas 1 and 2 is selected for sampling and at least 10 hauls (SSUs) must be sampled during the selected trip. Self-sampling was selected as observation type after analysis of logistic costs, time consumption and skills of crew. Highly educated crew member has been instructed how to take samples, measure redfish and record occurrence of PETS.

North East Atlantic

One sampling frame is planned in the region: midwater trawlers targeting redfish in ICES areas 12 and 14 (NEA-MTR).

The same vessels fishing for redfish in ICES areas 1,2 12 and 14, therefore the same vessel belongs to the two sampling schemes and sampling frames. One trip per vessel per season in the ICES areas 12 and 14 is selected for sampling and at least 10 hauls (SSUs) must be sampled during the selected trip. Self-sampling was selected as observation type after analysis of logistic costs, time consumption and skills of crew. Highly educated crew member has been instructed how to take samples, measure redfish and record occurrence of PETS

There is another vessel fishing for pelagic species other than redfish in this region. However, this vessel moves between different regions within the year: North East Atlantic – CECAF; North East Atlantic – SPRFMO. Due to this occasionality and quantity of landings less than 10% from EU landings, the vessels is not included for sampling in the North East Atlantic region.

Other Areas, NAFO

There were no fishing activities in NAFO area since 2015 until 2020. Only one trip targeting shrimps (*Pandalus boralis*) in division 3M was conducted in 2020. This vessel conducted fishing in North Sea and Eastern Arctic region as well. According to NAFO 43td annual meeting moratorium for shrimp fishing in division 3M will be introduced in 2022 therefore, no sampling activities may be planned.

The sampling scheme for NAFO was mentioned in the Table 2.5 only because formal requirement: *enter at least one row per Region*RFMO*Sampling scheme identifier combination for out-of-frame parts of the population.*

Other Areas CECAF

Three freezer trawlers fished in the area during 2018-2020. They were targeting small pelagic fishes according to the fishing possibilities available under SFPA between EU and Mauritania and SFPA between EU and Morocco. Lithuanian share in the common quota for all pelagic species is 24.9% in Mauritania EEZ and 25.86% in Morocco EEZ.

There is multi-lateral agreement between Germany, Latvia, Lithuania, The Netherlands and Poland for biological data collection of pelagic fisheries in CECAF waters. This agreement will last until 2024 at least. It is cost shared agreement and according to it the sampling design and sampling effort is responsibility of Poland.

Other Areas SPRFMO

One freezer trawler fishing for small pelagic fishes in SPRFMO area, however the fishing is carried out not every year. Because of economic considerations fishing possibilities are shared between other MS, so one year Lithuanian vessel is fishing, another year another MS.

There is multi-lateral agreement between Germany, Lithuania, The Netherlands and Poland for biological data collection of pelagic fisheries in SPRFMO waters. This agreement will last until 2024 at least. It is cost shared agreement and according to it the sampling design and sampling effort is responsibility of Poland.

Text Box 2.6: Research surveys at sea

Baltic International Trawl Survey – BITS Q1.

1. Objectives of the survey

Mandatory survey. The main aim of the BITS surveys is to estimate cod and other demersal species recruitment indices and abundance in ICES Subdivision IIId.

2. Description of the survey design and methods used in the survey for each type of data collection as listed in Table 2.6 for this specific survey.

The surveys have been conducting within period of February - March in the Lithuanian Exclusive Economic Zone (LEEZ) according to the BITS manual (ICES, 2017. Manual for the Baltic International Trawl Surveys

(BITS). Series of ICES Survey Protocols SISP 7 - BITS. Version 2.0) Provisional allocation of stations is presented in figure 2.6.1. Exact position of stations is decided each year during WGBIFS meetings

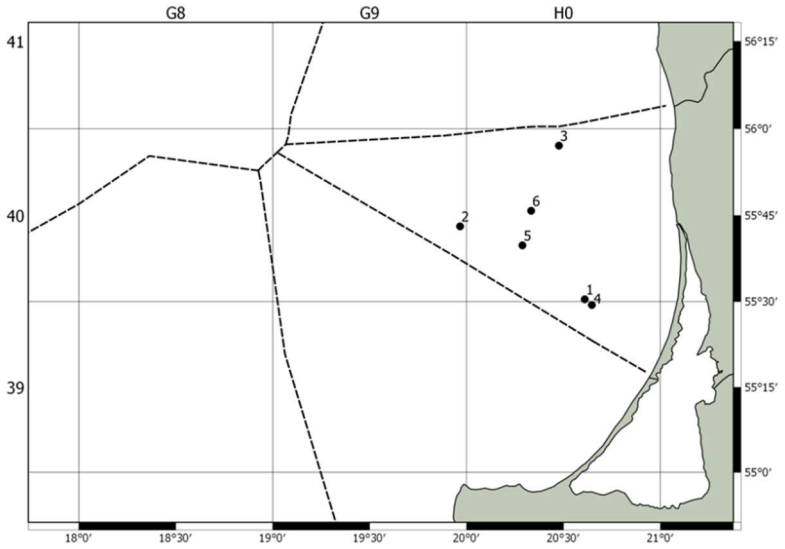


***Figure 2.6.1**. Provisional allocation of stations in the LEEZ for BITS Q1 survey*

Design and methods of each activity within the survey: trawl hauls, hydrography, litter observation; as well as for data collection is described in ICES, 2017. Manual for the Baltic International Trawl Surveys (BITS). Series of ICES Survey Protocols SISP 7 - BITS. Version 2.0

3. For internationally coordinated surveys, describe the participating Member States/vessels.

A fishing vessel is hired for the survey according to public procurement procedure. The selected vessel is equipped by TV3-520 trawl and CDT equipment according to SISP.

4. Where applicable, provide more details on the type of participation and/or threshold agreement applied.

Not applicable

(max 450 words per survey)

Baltic International Trawl Survey – BITS Q4.

1. Objectives of the survey

Mandatory survey. The main aim of the BITS-Q4 survey is to estimate cod and other demersal species recruitment indices and abundance in ICES Subdivision IIId.

2. Description of the survey design and methods used in the survey for each type of data collection as listed in Table 2.6 for this specific survey.

The surveys have been conducting within period of November - December in the Lithuanian Exclusive Economic Zone (LEEZ) according to the BITS manual (ICES, 2017. Manual for the Baltic International Trawl Surveys (BITS). Series of ICES Survey Protocols SISP 7 - BITS. Version 2.0) Provisional allocation of stations is presented in figure 2.6.2. Exact position of stations is decided each year during WGBIFS meetings

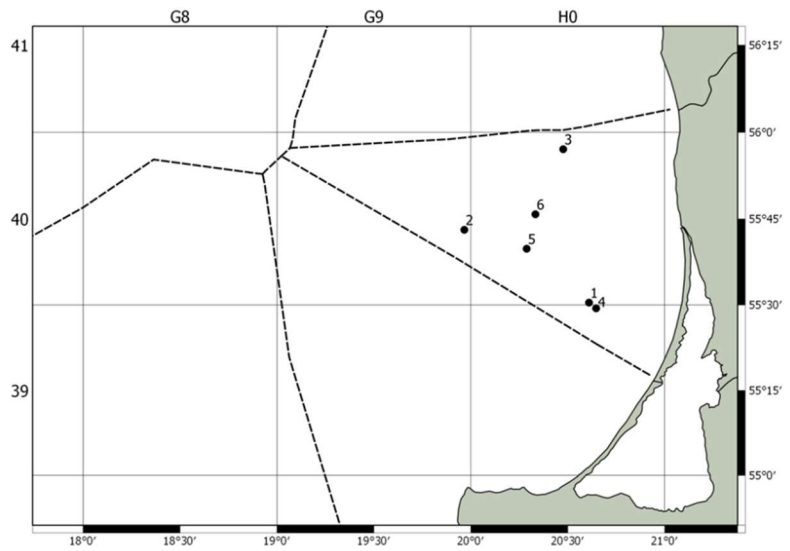


***Figure 2.6.2**. Provisional allocation of stations in the LEEZ for BITS Q4 survey*

Design and methods of each activity within the survey: trawl hauls, hydrography, litter observation; as well as for data collection is described in ICES, 2017. Manual for the Baltic International Trawl Surveys (BITS). Series of ICES Survey Protocols SISP 7 - BITS. Version 2.0

3. For internationally coordinated surveys, describe the participating Member States/vessels.

A fishing vessel is hired for the survey according to public procurement procedure. The selected vessel is equipped by TV3-520 trawl and CDT equipment according to SISP.

4. Where applicable, provide more details on the type of participation and/or threshold agreement applied.

Not applicable

(max 450 words per survey)

1. For internationally coordinated surveys, provide a link to the latest meeting report of the coordination group.

   Member State shall provide a hyperlink to the meeting report from the body coordinating the survey (ICES, MEDITS coordination group, MEDIAS coordination group etc.). For surveys that are not internationally coordinated, Member State shall refer to any status report (e.g. Cruise report).

2. List the main use of the results of the survey (e.g. indices, abundance estimates, environmental indicators).
   Member State shall specify in which context the results are used (on routine basis), both on an international as well as on a national context.

   If the Member State feels the need to present a map of the achieved research survey stations, this can be provided as an annex. Member State shall clearly refer to the Annex and map numbers.

3. Extended comments (refer in AR comments in Table 2.6 to the text box)
   If the Member State has extended AR Comments, these can be placed under this section. If this is the case, a reference to this text box should be provided in the corresponding tables.

(max 450 words per survey)

Sprat Acoustic Survey – SPRAS.

1. Objectives of the survey

Mandatory survey. The main aim of the SPRAS survey is to assess abundance of sprat and herring resources in ICES Subdivision IIId.

2. Description of the survey design and methods used in the survey for each type of data collection as listed in Table 2.6 for this specific survey.

The surveys have been conducting within May in the Lithuanian Exclusive Economic Zone (LEEZ) according to the IBAS manual (ICES, 2017. Manual for the International Baltic Acoustic Surveys (BIAS). Series of ICES Survey Protocols SISP 8 - BIAS. Version 2.0) Provisional track and allocation of stations is presented in figure 2.6.3. Exact position of stations is decided each year during WGBIFS meetings

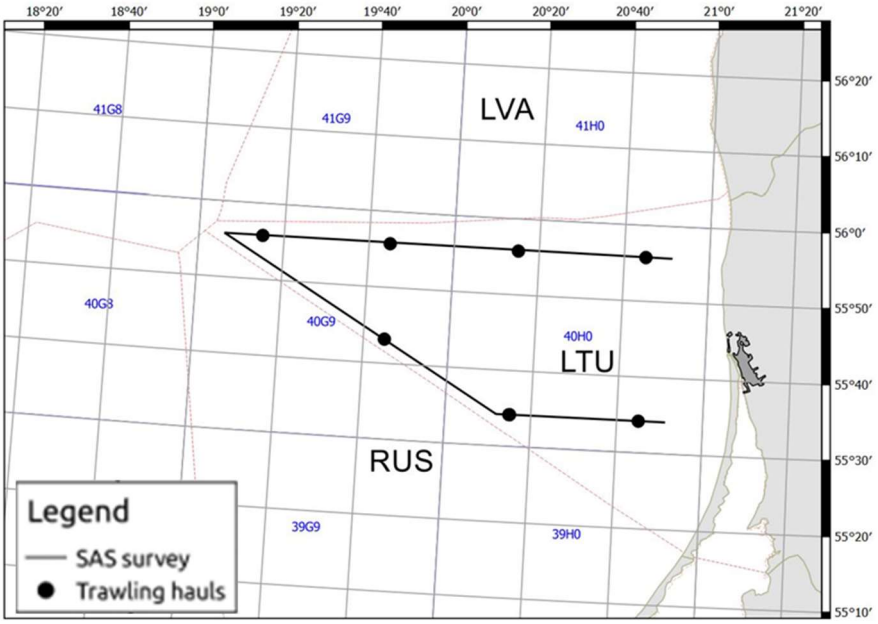


Figure 2.6.3. *Cruise track design and hauls in Lithuanian EEZ of SPRAS*

Design and methods of each activity within the survey: acoustic profiles trawl hauls, hydrography, litter observation; as well as for data collection is described in ICES, 2017. Manual for the International Baltic Acoustic Surveys (BIAS). Series of ICES Survey Protocols SISP 8 - BIAS. Version 2.0

3. For internationally coordinated surveys, describe the participating Member States/vessels.

A fishing vessel is hired for the trawl hauling and speed boat for collecting acoustic data according to public procurement procedure. Speed boat is equipped by SIMRAD EK60 38/120/200 KHZ SPLIT BEAM SYSTEM", fishing vessel is equipped by WP53/64x4 pelagic trawl with mesh size not more than 20mm.

4. Where applicable, provide more details on the type of participation and/or threshold agreement applied.

Not applicable

(max 450 words per survey)

4. For internationally coordinated surveys, provide a link to the latest meeting report of the coordination group.

   Member State shall provide a hyperlink to the meeting report from the body coordinating the survey (ICES, MEDITS coordination group, MEDIAS coordination group etc.). For surveys that are not internationally coordinated, Member State shall refer to any status report (e.g. Cruise report).

5. List the main use of the results of the survey (e.g. indices, abundance estimates, environmental indicators).
   Member State shall specify in which context the results are used (on routine basis), both on an international as well as on a national context.

   If the Member State feels the need to present a map of the achieved research survey stations, this can be provided as an annex. Member State shall clearly refer to the Annex and map numbers.

6. Extended comments (refer in AR comments in Table 2.6 to the text box)
   If the Member State has extended AR Comments, these can be placed under this section. If this is the case, a reference to this text box should be provided in the corresponding tables.

(max 450 words per survey)

Baltic International Acoustic Survey – BIAS.

1. Objectives of the survey

Mandatory survey. The main aim of the SPRAS survey is to assess abundance of sprat and herring resources in ICES Subdivision IIId.

2. Description of the survey design and methods used in the survey for each type of data collection as listed in Table 2.6 for this specific survey.

The surveys have been conducting within September - October in the Lithuanian Exclusive Economic Zone (LEEZ) according to the IBAS manual (ICES, 2017. Manual for the International Baltic Acoustic Surveys (BIAS). Series of ICES Survey Protocols SISP 8 - BIAS. Version 2.0) Provisional track and allocation of stations is presented in figure 2.6.4. Exact position of stations is decided each year during WGBIFS meetings

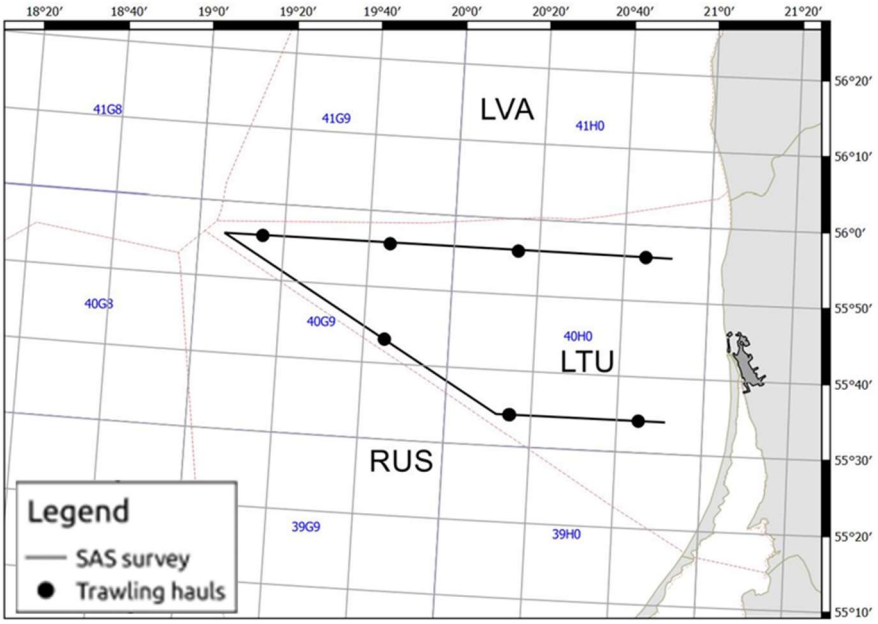


Figure 2.6.4. *Cruise track design and hauls in Lithuanian EEZ of BIAS*

Design and methods of each activity within the survey: acoustic profiles trawl hauls, hydrography, litter observation; as well as for data collection is described in ICES, 2017. Manual for the International Baltic Acoustic Surveys (BIAS). Series of ICES Survey Protocols SISP 8 - BIAS. Version 2.0

3. For internationally coordinated surveys, describe the participating Member States/vessels.

A fishing vessel is hired for the trawl hauling and speed boat for collecting acoustic data according to public procurement procedure. Speed boat is equipped by SIMRAD EK60 38/120/200 KHZ SPLIT BEAM SYSTEM“, fishing vessel is equipped by WP53/64x4 pelagic trawl with mesh size not more than 20mm.

4. Where applicable, provide more details on the type of participation and/or threshold agreement applied.

Not applicable

(max 450 words per survey)

7. For internationally coordinated surveys, provide a link to the latest meeting report of the coordination group.

   Member State shall provide a hyperlink to the meeting report from the body coordinating the survey (ICES, MEDITS coordination group, MEDIAS coordination group etc.). For surveys that are not internationally coordinated, Member State shall refer to any status report (e.g. Cruise report).

8. List the main use of the results of the survey (e.g. indices, abundance estimates, environmental indicators).
   Member State shall specify in which context the results are used (on routine basis), both on an international as well as on a national context.

   If the Member State feels the need to present a map of the achieved research survey stations, this can be provided as an annex. Member State shall clearly refer to the Annex and map numbers.

9. Extended comments (refer in AR comments in Table 2.6 to the text box)
   If the Member State has extended AR Comments, these can be placed under this section. If this is the case, a reference to this text box should be provided in the corresponding tables.

(max 450 words per survey)

Survey of fishes in the Lithuanian coastal waters of the Baltic sea – LT-CFS.

1. Objectives of the survey

Biggest part of Lithuanian coastal zone is covered by NATURA 2000. The Lithuanian coastal zone in the Baltic Sea is very rich and diverse community of hydro biotic organisms. It consists of lot ecological niches and fish nursery grounds important for commercial and non-commercial fishes especially for juveniles.

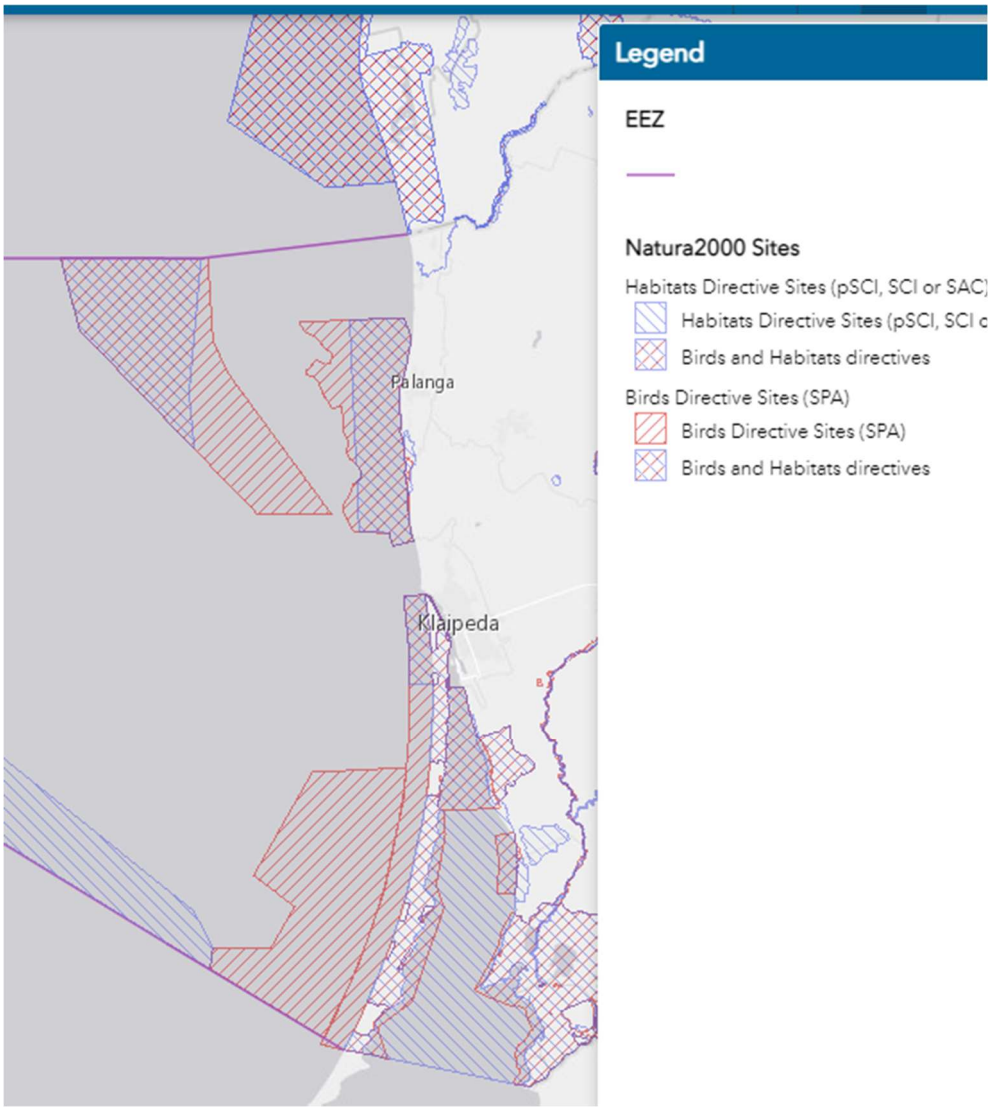


Figure 2.6.5. *NATURA 2000 territories in Lithuanian territorial sea* Natura 2000 Network Viewer (europa.eu)

Objectives of survey is long-lasting collection of data on abundancy index, biomass index and diversity of fishes in the coastal ecosystem.

2. Description of the survey design and methods used in the survey for each type of data collection as listed in Table 2.6 for this specific survey.

Gillnet hauls

The multi mesh-sized gillnets (from 14mm to 70 mm) are casted in four scientific monitoring stations (SMS) alongside the Lithuania's coastal zone: (Nida, Smiltynė, Melnragė-Giruliai and Šventoji) The gillnet hauls are made monthly at least 8 months in the year in each SMS. Gillnet hauls are made by researchers of MRI in

Smiltynė SMS, in other SMSs selected fishermen are equipped by multi-mesh-sized gillnets and makes the hauls according to instructions from MRI. The procedures of gillnetting and data collection are carried out according to HELCOM Guidelines for coastal fish monitoring 2019 and Thoresson,G. Guidelines For Coastal Fish Monitoring, 1996.

Beach seine hauls

The object of beach seine hauls is to collect data on juvenile fish in Lithuanian littoral (juvenile survey). Documentation on hauling and data collection provided in MRI SharePoint

Benthic invertebrate samples

During juvenile survey, special drag, constructed in the laboratory is used to collect invertebrate samples and samples of juveniles of flatfishes. Documentation on hauling and data collection provided in MRI SharePoint

Hydrography

Data on water temperature, salinity and oxygen concentration are collected in Smiltynė SMS and in all stations during juvenile survey.

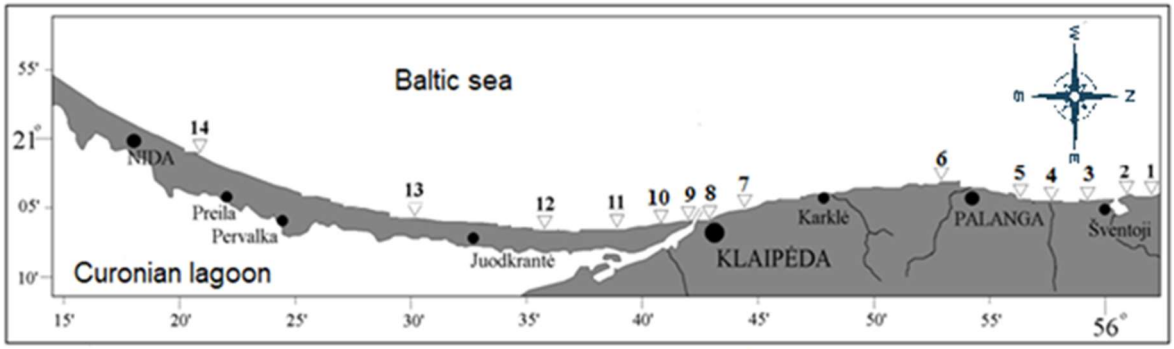


Figure 2.6.6. *Planned sites of juvenile survey in Lithuanian coastal zone*

3. For internationally coordinated surveys, describe the participating Member States/vessels.

The survey isn't coordinated internationally, however international recommendations (ICES, HELCOM) https://helcom.fi/helcom-at-work/publications/ are followed.

4. Where applicable, provide more details on the type of participation and/or threshold agreement applied.

Not applicable

(max 450 words per survey)

10. For internationally coordinated surveys, provide a link to the latest meeting report of the coordination group.

    Member State shall provide a hyperlink to the meeting report from the body coordinating the survey (ICES, MEDITS coordination group, MEDIAS coordination group etc.). For surveys that are not internationally coordinated, Member State shall refer to any status report (e.g. Cruise report).

11. List the main use of the results of the survey (e.g. indices, abundance estimates, environmental indicators).
    Member State shall specify in which context the results are used (on routine basis), both on an international as well as on a national context.

    If the Member State feels the need to present a map of the achieved research survey stations, this can be provided as an annex. Member State shall clearly refer to the Annex and map numbers.

12. Extended comments (refer in AR comments in Table 2.6 to the text box)
    If the Member State has extended AR Comments, these can be placed under this section. If this is the case, a reference to this text box should be provided in the corresponding tables.

(max 450 words per survey)

Survey on by-catch of birds and other PETS in Lithuanian territorial sea– LT-BYCS.

1. Objectives of the survey

Observation of by-catch of birds and other PETS

2. Description of the survey design and methods used in the survey for each type of data collection as listed in Table 2.6 for this specific survey.

Since it is the highest risk of by-catch of sea birds, methodology of survey will follow the practices acquired during international research project “Seabird Task Force: 2014-2017” Detailed methodology shall be available in second part of 2022.

See Annex 1.1 for more details

13. For internationally coordinated surveys, provide a link to the latest meeting report of the coordination group.

    Member State shall provide a hyperlink to the meeting report from the body coordinating the survey (ICES, MEDITS coordination group, MEDIAS coordination group etc.). For surveys that are not internationally coordinated, Member State shall refer to any status report (e.g. Cruise report).

14. List the main use of the results of the survey (e.g. indices, abundance estimates, environmental indicators).
    Member State shall specify in which context the results are used (on routine basis), both on an international as well as on a national context.

    If the Member State feels the need to present a map of the achieved research survey stations, this can be provided as an annex. Member State shall clearly refer to the Annex and map numbers.

15. Extended comments (refer in AR comments in Table 2.6 to the text box)
    If the Member State has extended AR Comments, these can be placed under this section. If this is the case, a reference to this text box should be provided in the corresponding tables.

(max 450 words per survey)

Surveys of the recreational fisheries at the Baltic Sea

In the Baltic Sea angling of cod, salmon and sea trout is performed from seacrafts. All recreational craft up to 6 m in length are registered in the Register of inland water transport of the Republic of Lithuania. Recreational craft longer than 6 m are registered in the Register of Seagoing Ships of the Republic of Lithuania. All water transport used for recreational purposes are monitored daily by the State Border Guard Service.

During the surveys at sea the following data and information is collected:

1.Vessel or boat ID;

2.Number of fishermen;

3. Number of fishing gears;

4. Total volume of catches in kg and units by species;

5. Number of released individuals in kg and units by species;

6. Register total length of individual fish.

All information is recorded in special protocols and placed in the Integrated fisheries database (FDIS: https://zdis.zuv.lt/tarnyba/pages/welcome.xhtml) (access for approved users only).

When we know the number of vessels in the fleet, then the catch of the fleet can be estimated from:

(Catch of fleet in a month) = (Catch of one vessel in a month) x (Number of vessels in fleet). Note that the "(Catch of one vessel in a month)" means the "average catch" of the sampled vessels. Monthly *report on the number of recreational boats and vessels are available from State Border Guard Service.*

16. For internationally coordinated surveys, provide a link to the latest meeting report of the coordination group.

    Member State shall provide a hyperlink to the meeting report from the body coordinating the survey (ICES, MEDITS coordination group, MEDIAS coordination group etc.). For surveys that are not internationally coordinated, Member State shall refer to any status report (e.g. Cruise report).

17. List the main use of the results of the survey (e.g. indices, abundance estimates, environmental indicators).
    Member State shall specify in which context the results are used (on routine basis), both on an international as well as on a national context.

    If the Member State feels the need to present a map of the achieved research survey stations, this can be provided as an annex. Member State shall clearly refer to the Annex and map numbers.

18. Extended comments (refer in AR comments in Table 2.6 to the text box)
    If the Member State has extended AR Comments, these can be placed under this section. If this is the case, a reference to this text box should be provided in the corresponding tables.

(max 450 words per survey)

Off-site surveys of the recreational fisheries

The study for evaluation of caught or released volumes of salmon, sea trout and eel are conducted by interviewing residents of Lithuania engaged in recreational fishery in inland waters. Recreational study is performed using off-site surveys contact methods, e.g. mail, telephone, diaries, questionnaires etc. During the surveys the following data and information is collected:

1. Caught individuals in units, weight and length by species;
2. Released individuals in units, weight and length by species;
3. Fishing gear;
4. Basic demographic characteristics of fishermen.

All data is analysed statistically. Results for preceding year are available in forthcoming year. Figures of total volume for both caught and released fish in kg and individuals are estimated by raising procedure.

19. For internationally coordinated surveys, provide a link to the latest meeting report of the coordination group.

    Member State shall provide a hyperlink to the meeting report from the body coordinating the survey (ICES, MEDITS coordination group, MEDIAS coordination group etc.). For surveys that are not internationally coordinated, Member State shall refer to any status report (e.g. Cruise report).

20. List the main use of the results of the survey (e.g. indices, abundance estimates, environmental indicators).
    Member State shall specify in which context the results are used (on routine basis), both on an international as well as on a national context.

    If the Member State feels the need to present a map of the achieved research survey stations, this can be provided as an annex. Member State shall clearly refer to the Annex and map numbers.

21. Extended comments (refer in AR comments in Table 2.6 to the text box)
    If the Member State has extended AR Comments, these can be placed under this section. If this is the case, a reference to this text box should be provided in the corresponding tables.

(max 450 words per survey)

SECTION 3: FISHING ACTIVITY DATA

Text Box 3.1: Fishing activity variables data collection strategy

General comment: This text box fulfils Article 5 (2)(c), Article 6 (3)(a), (b) and (c) of Regulation (EU) 2017/1004 and Chapter II point 3.1 of the EU MAP Delegated Decision annex. It is intended to describe the method used to derive estimates for representative samples where data are not to be recorded under Control Regulation (EC) No 1224/2009 or where data collected under Regulation (EC) No 1224/2009 are not at the right aggregation level for the intended scientific use. Text Box 3.1 should be filled only if complementary data collection is planned

For all fleet segments by regions the Fishing activity variables is deriving from database system FDIS, which contains the primary data referred to Commission Regulation (EC) No 26/2004 of 30 December 2003 on the Community fishing fleet register in Annex I ,Council Implementing Regulation (EC) No 404/2011 in Annex X and the national legislation contains information regarding the restrictions on national logbook completion for vessels up to 10 metres' length overall. Community fishing vessels up to 12 metres' length overall are obliged to keep a fishing logbook and submit landing declarations. Fishing vessels of 18 metres' length overall or more, the fishing logbook is in electronic form and the landing declarations are submitting electronically. The Lithuanian fleet does not consist of any active vessels with the length class of 12 to 18 meters. The National fisheries fleet register is integrated in FDIS.

Based on sales notes the average price by species, presentation and region is computing by dividing the total value of fish available for sale by the total weight available for sale during the period. Each sale note is related to the vessel trip or monthly report, which allow computing the average price on base of vessel trips or monthly report.
To approach reliable and high quality of data Lithuania uses a "census" type of logbooks for vessel, which is not recorded data under the Regulation (EU) No 1224/2009. National logbooks are completing by a company engaged in commercial fishing in the Baltic Sea coastal area. List of vessels is approved by national legislation and covers the whole segment population. The landings and metier-based effort variables are provided by abovementioned logbooks. The logbooks information shall be transmitted to the authority 2 times per month. When classifying a data transmission failure regarding timeliness or completeness the company is notified and report is re/submitted. The logbooks landing information are cross-checking with sales notes.
VMS data collection covers the fleet of fishing vessels of 18 metres' length overall or more. For assessing the impact of fisheries on marine habitats (ref: 2017/1004 Article 6(3) (b) and (c)), a routine has been set up using a combination of VMS and logbook, sales notes and vessel register data. For creating dataset, the sales notes information of average price on the region level is distributed on the logbook data using area, trip and species information. In addition, the vessel capacity data is added using the National fisheries fleet register.

(max. 900 words)

Text Box 3.2: Fishing activity variables data collection strategy (for inland eel commercial fisheries)

General comment: This text box fulfils Article 5(2)(c), Article 6(3)(a), (b) and (c) of Regulation (EU) 2017/1004 and Chapter II point 3.2 of the EU MAP Delegated Decision annex. It is intended to describe the methods and data sources used to estimate fishing capacity, effort and landings data.

All inland waters (rivers and lakes) together with Curonian lagoon are designated as one eel management unit (EMU – LT-total). Control of fishing effort and catches (including eel) in inland waters and Curonian lagoon is based on limitation of legal persons and fishing gears, not the number of vessels. Fishing gear mesh sizes, fishing periods and other technical measures are defined in the "Rules for commercial fishing in inland waters and Curonian lagoon" adopted by Ministry of Environment. Licences for fishing gears in a certain water body are issued to the legal persons by Ministry of Agriculture, while control of actual effort, implementation of technical measures, as well as catch control is responsibility of Environment Ministry.

Number of licences for eel traps in rivers and lakes is constantly decreasing: in 2018 it was 39 eel traps licences for 29 legal persons, in 2021 only 10 eel traps for 10 legal persons. The discussions on moratorium of eel fishing in lakes and rivers is ongoing now. In Curonian lagoon 32 legal persons have licences for 169 eel fyke nets.

Fishing period for use of eel traps in rivers and lakes is from 15th of March until 1st of June; in Curonian lagoon eel fyke nets may by operated form 21st of April to 31st of October.

According to national regulations each legal person shall keep records on each fishing operation and catches during this operation in the fishing logbook/sheet. Legal person fishing in lakes and rivers once per quarter shall provide summary report on fishing effort and catch by fishing gear to the regional environment protection

department. Legal person fishing in Curonian lagoon shall provide each month summary report on fishing effort and catches by fishing gear to the regional environment protection department. Therefore, official statistics on eel fishery contains data not by vessel*trip, but by company*month.

To fulfil requirement on collection of data on eel fishing activities set out in the Table 6 of Delegated decision (EU)2021/1167, following sampling strategy is planned for 2022- 2024:

1 Eel fishing in lakes and rivers: census data with resolution company*quarter; 10% of fishermen's sheets during the eel fishing season shall be analysed for calculation of average fishing days.

2. Eel fishing in Curonian lagoon: census data with resolution company*month; 10% of fishermen's logbooks from at least 5 fishing companies during the eel fishing season shall be analysed for calculation of average fishing days.

Text Box 4.2: Incidental catches of sensitive species

Baltic Sea

General Comment: This text box fulfils Article 5(2)(a) and (b), Article 6(3)(a), (b) and (c) of Regulation (EU) 2017/1004 and Chapter 2 point 4.1 of the EU-MAP Delegated Decision annex. This text box complements Table 2.5.

This text box is complementary to information on the sampling schemes provided in the quality document (Annex 1.1). It serves to highlight information on sampling schemes and sampling frames related to incidental catches of sensitive species.

Additional information on planning the observation of incidental catches of sensitive species (if already filled in in Annex 1.1, please indicate where it can be found):

- Has an assessment of the relative risk of bycatch for the different gear types/metiers taken place and been taken into account for the sampling design?

Risk of by-catch of PETS in the Baltic Sea was assessed in the pilot study "Level of fishing and impact of fisheries on biological resources and marine ecosystem" conducted in 2019 – 2020. Briefly: the highest risk of by-catch of PETS is for the SSF fishing with gillnets in Lithuanian territorial sea. The highest risk is for by-catch of sea birds, but these by-catches are very fragmented so design of separate sampling scheme covering commercial fishing trips of SSF gillnetters deemed to be very costly, and inaccurate. Therefore, it was proposed to conduct targeted surveys periodically. Risk of by-catch of sea mammals is very low, just risk of destroying of catch and/or fishing gears by sea mammals. Due to introduction of ban on fishing for cod demersal trawling become unrewarding, so most of demersal trawlers shifted to the pelagic trawling or are going to cease fishing activities at all. There are very low activities of pelagic fisheries in the Baltic during June – September (period indicated for observations in the Annex XIII of Regulation (EU)2019/1241).

- What are the gear types/metiers that present the highest risk of bycatch per species/taxa of PETS in a given region?

Passive gears in the coastal area of the Baltic Sea presents highest risk of birds bycatch. Other gears in other regions have the lowest risk of incidental bycatch of PETS.

- What are the methods to calculate the observation effort?

Small trawlers in the Baltic Sea are obligated to record any incidental by-catch of animals in their log-books. Observation on such types of vessels is impossible due to lack of space on-board and safety reasons. Fishermen from coastal fishery of the Baltic Sea may also make records of incidental by-catch in the log-books..

Observation of PETS is included into national coastal fishing survey (LT-CFS). This survey uses the same gillnets as commercial fishermen, lasts at least 8 months per year and covers all the Lithuanian coastal zone,

Special survey LT-BYCS is planned in 2023 – 2024 this survey covers the period with highest risk of by-catch of protected seabirds staying in Lithuanian territorial sea for winter season. (see Annex 1.1)

- Does the sampling design and protocol follow the recommendations from relevant expert groups? Provide appropriate references. If there are no relevant expert groups, the design and protocol have to be explained in the text.

Expert group WGBYC did not provide any recommendations on sampling design.

Additional information on observer protocols (if already filled in in Annex 1.1, indicate where it can be found):

- Does the on-board observer protocol contain a check for rare specimens in the catch at opening of the cod-end? If YES is the observer instructed to indicate if the cod-end was NOT checked in a haul?

In case of small catches observers have opportunity to check rare species in the codend. If catches are too large only subsample of catches might be taken for catch composition. There are no specific indications for checking haul included in sampling protocol.

- In gill nets - and hook-and-line fisheries: does the on-board observer protocol instruct the observer to indicate how much of the hauling process has been observed for (large) incidental bycatches that slip out of the net?

There are no specific instructions for recording of such case in sampling protocol.

- In large catches: does the protocol instruct to check for rare specimens during sorting of the catch (i.e. at conveyor belt)? Is the observer instructed to indicate what percentage of the sorting or hauling process has been checked at "haul level"?

During the sorting procedure observers are checking every haul and the results are reflected in their reports. If the percentage is required, it could be estimated from that report.

Additional information on sampling schemes

Member State may add specific contextual information related to a region and the implementation year(s), for instance highlighting new developments not yet detailed in the quality document, regional adaptation and/or perspectives for the future. Insert the information under the same sampling scheme identifier as in Table 2.5.

NA

Additional description on sampling frames

Member State may add complementary description to what includes the 'Sampling frame description' column of Table 2.5. Insert the information under the same identifier and name as in columns 'Sampling frame identifier' and 'Sampling frame description' of Table 2.5, and in the same order (Sampling frame identifier + Sampling frame description).

NA

North Sea and Eastern Arctic

General Comment: This text box fulfils Article 5(2)(a) and (b), Article 6(3)(a), (b) and (c) of Regulation (EU) 2017/1004 and Chapter 2 point 4.1 of the EU-MAP Delegated Decision annex. This text box complements Table 2.5.

This text box is complementary to information on the sampling schemes provided in the quality document (Annex 1.1). It serves to highlight information on sampling schemes and sampling frames related to incidental catches of sensitive species.

Additional information on planning the observation of incidental catches of sensitive species (if already filled in in Annex 1.1, please indicate where it can be found):

- Has an assessment of the relative risk of bycatch for the different gear types/metiers taken place and been taken into account for the sampling design?

Risk assessment of bycatch for different types/metiers was not performed. Sampling design is based on the experience and data that had been collected in previous years.

- What are the gear types/metiers that present the highest risk of bycatch per species/taxa of PETS in a given region?

Available data do not allow to identify the gear-specific risk level of bycatch

- What are the methods to calculate the observation effort?

There are no methodology to calculate the observation effort. Allocation of observers on board depends on space availability and fulfillment of safety requirements. By-catch of any animals from trawlers, which operate in distant waters, are being registered by master in the log-books. If observer is available on-board, this part of data collection is performed by observer. Small trawlers in the Baltic Sea are also obligated to record any incidental by-catch of animals in their log-books. Observation on such types of vessels is impossible due to lack of space on-board and safety reasons. Fishermen from coastal fishery of the Baltic Sea may also make records of incidental by-catch in the log-books.

- Does the sampling design and protocol follow the recommendations from relevant expert groups? Provide appropriate references. If there are no relevant expert groups, the design and protocol have to be explained in the text.

Expert group WGBYC did not provide any recommendations on sampling design

Additional information on observer protocols (if already filled in in Annex 1.1, indicate where it can be found):

- Does the on-board observer protocol contain a check for rare specimens in the catch at opening of the cod-end? If YES is the observer instructed to indicate if the cod-end was NOT checked in a haul?

In case of small catches observers have opportunity to check rare species in the codend. If catches are too large only subsample of catches might be taken for catch composition. There are no specific indications for checking haul included in sampling protocol.

- In gill nets - and hook-and-line fisheries: does the on-board observer protocol instruct the observer to indicate how much of the hauling process has been observed for (large) incidental bycatches that slip out of the net?

Lithuanian fleet does not use that type of fishery in North Sea and Eastern Arctic area- In large catches: does the protocol instruct to check for rare specimens during sorting of the catch (i.e., at conveyor belt)? Is the observer instructed to indicate what percentage of the sorting or hauling process has been checked at "haul level"?

On fishing trawlers operating in distant waters during the sorting procedure at conveyor belt observers are instructed to check rare specimens. During the sorting procedure observers are checking every haul and the results are reflected in their reports. If the percentage is required, it could be estimated from that report.

Additional information on sampling schemes

Member State may add specific contextual information related to a region and the implementation year(s), for instance highlighting new developments not yet detailed in the quality document, regional adaptation and/or perspectives for the future. Insert the information under the same sampling scheme identifier as in Table 2.5.

NA

Additional description on sampling frames

Member State may add complementary description to what includes the 'Sampling frame description' column of Table 2.5. Insert the information under the same identifier and name as in columns 'Sampling frame identifier' and 'Sampling frame description' of Table 2.5, and in the same order (Sampling frame identifier + Sampling frame description).

NA

North east Atlantic

General Comment: This text box fulfils Article 5(2)(a) and (b), Article 6(3)(a), (b) and (c) of Regulation (EU) 2017/1004 and Chapter 2 point 4.1 of the EU-MAP Delegated Decision annex. This text box complements Table 2.5.

This text box is complementary to information on the sampling schemes provided in the quality document (Annex 1.1). It serves to highlight information on sampling schemes and sampling frames related to incidental catches of sensitive species.

Additional information on planning the observation of incidental catches of sensitive species (if already filled in in Annex 1.1, please indicate where it can be found):

- Has an assessment of the relative risk of bycatch for the different gear types/metiers taken place and been taken into account for the sampling design?

Risk assessment of bycatch for different types/metiers was not performed. Sampling design is based on the experience and data that had been collected in previous years.

- What are the gear types/metiers that present the highest risk of bycatch per species/taxa of PETS in a given region?

Available data do not allow to identify the gear-specific risk level of bycatch

- What are the methods to calculate the observation effort?

There are no methodology to calculate the observation effort. Allocation of observers on board depends on space availability and fulfillment of safety requirements. By-catch of any animals from trawlers, which operate in distant waters, are being registered by master in the log-books. If observer is available on-board, this part of data collection is performed by observer. Small trawlers in the Baltic Sea are also obligated to record any incidental by-catch of animals in their log-books. Observation on such types of vessels is impossible due to lack of space on-board and safety reasons. Fishermen from coastal fishery of the Baltic Sea may also make records of incidental by-catch in the log-books.

- Does the sampling design and protocol follow the recommendations from relevant expert groups? Provide appropriate references. If there are no relevant expert groups, the design and protocol have to be explained in the text.

Expert group WGBYC did not provide any recommendations on sampling design

Additional information on observer protocols (if already filled in in Annex 1.1, indicate where it can be found):

- Does the on-board observer protocol contain a check for rare specimens in the catch at opening of the cod-end? If YES is the observer instructed to indicate if the cod-end was NOT checked in a haul?

In case of small catches observers have opportunity to check rare species in the codend. If catches are too large only subsample of catches might be taken for catch composition. There are no specific indications for checking haul included in sampling protocol.

- In gill nets - and hook-and-line fisheries: does the on-board observer protocol instruct the observer to indicate how much of the hauling process has been observed for (large) incidental bycatches that slip out of the net?

Lithuanian fleet does not use that type of fishery in North east Atlantic area- In large catches: does the protocol instruct to check for rare specimens during sorting of the catch (i.e. at conveyor belt)? Is the observer instructed to indicate what percentage of the sorting or hauling process has been checked at "haul level"?

On fishing trawlers operating in distant waters during the sorting procedure at conveyor belt observers are instructed to check rare specimens. During the sorting procedure observers are checking every haul and the results are reflected in their reports. If the percentage is required, it could be estimated from that report.

Additional information on sampling schemes

Member State may add specific contextual information related to a region and the implementation year(s), for instance highlighting new developments not yet detailed in the quality document, regional adaptation and/or perspectives for the future. Insert the information under the same sampling scheme identifier as in Table 2.5.

NA

Additional description on sampling frames

Member State may add complementary description to what includes the 'Sampling frame description' column of Table 2.5. Insert the information under the same identifier and name as in columns 'Sampling frame identifier' and 'Sampling frame description' of Table 2.5, and in the same order (Sampling frame identifier + Sampling frame description).

NA

Other regions (NAFO)

General Comment: This text box fulfils Article 5(2)(a) and (b), Article 6(3)(a), (b) and (c) of Regulation (EU) 2017/1004 and Chapter 2 point 4.1 of the EU-MAP Delegated Decision annex. This text box complements Table 2.5.

This text box is complementary to information on the sampling schemes provided in the quality document (Annex 1.1). It serves to highlight information on sampling schemes and sampling frames related to incidental catches of sensitive species.

Additional information on planning the observation of incidental catches of sensitive species (if already filled in in Annex 1.1, please indicate where it can be found):

- Has an assessment of the relative risk of bycatch for the different gear types/metiers taken place and been taken into account for the sampling design?

Risk assessment of bycatch for different types/metiers was not performed. Sampling design is based on the experience and data that had been collected in previous years.

- What are the gear types/metiers that present the highest risk of bycatch per species/taxa of PETS in a given region?

Available data do not allow to identify the gear-specific risk level of bycatch

- What are the methods to calculate the observation effort?

There are no methodology to calculate the observation effort. Allocation of observers on board depends on space availability and fulfillment of safety requirements. By-catch of any animals from trawlers, which operate in distant waters, are being registered by master in the log-books. If observer is available on-board, this part of data collection is performed by observer. Small trawlers in the Baltic Sea are also obligated to record any incidental by-catch of animals in their log-books. Observation on such types of vessels is impossible due to lack of space on-board and safety reasons. Fishermen from coastal fishery of the Baltic Sea may also make records of incidental by-catch in the log-books.

- Does the sampling design and protocol follow the recommendations from relevant expert groups? Provide appropriate references. If there are no relevant expert groups, the design and protocol have to be explained in the text.

Expert group WGBYC did not provide any recommendations on sampling design

Additional information on observer protocols (if already filled in in Annex 1.1, indicate where it can be found):

- Does the on-board observer protocol contain a check for rare specimens in the catch at opening of the cod-end? If YES is the observer instructed to indicate if the cod-end was NOT checked in a haul?

In case of small catches observers have opportunity to check rare species in the codend. If catches are too large only subsample of catches might be taken for catch composition. There are no specific indications for checking haul included in sampling protocol.

- In gill nets - and hook-and-line fisheries: does the on-board observer protocol instruct the observer to indicate how much of the hauling process has been observed for (large) incidental bycatches that slip out of the net?

Lithuanian fleet does not use that type of fishery in NAFO area

- In large catches: does the protocol instruct to check for rare specimens during sorting of the catch (i.e. at conveyor belt)? Is the observer instructed to indicate what percentage of the sorting or hauling process has been checked at "haul level"?

On fishing trawlers operating in distant waters during the sorting procedure at conveyor belt observers are instructed to check rare specimens. During the sorting procedure observers are checking every haul and the results are reflected in their reports. If the percentage is required, it could be estimated from that report.

Additional information on sampling schemes

Member State may add specific contextual information related to a region and the implementation year(s), for instance highlighting new developments not yet detailed in the quality document, regional adaptation and/or perspectives for the future. Insert the information under the same sampling scheme identifier as in Table 2.5.

NA

Additional description on sampling frames

Member State may add complementary description to what includes the 'Sampling frame description' column of Table 2.5. Insert the information under the same identifier and name as in columns 'Sampling frame identifier' and 'Sampling frame description' of Table 2.5, and in the same order (Sampling frame identifier + Sampling frame description).

NA

Text Box 4.3: Fisheries impact on marine habitats

General comment: This text box fulfils Article 5 paragraph 2(a) and 2(b), Article 6 paragraph 3(a), 3(b) and 3(c) of Regulation (EU) 2017/1004 and Chapter 2, section 4.2 of the EU MAP Delegated Decision annex. It contains information on additional studies on the fisheries impact on marine habitats.

Preparation of methodology of stomach sampling of *Sander lucioperca*

1. Aim of the study

EC Delegated decision (EU)2021/1167 foresees collection of data on impact of fishing activities on food webs. *Sander lucioperca* is predatory species very important for small scale and recreational fisheries. Aim of the study is to prepare the methodology of stomach sampling of *Sander lucioperca* and asses the possibility to adapt the stomach sampling for assessing of impact of fishing activities targeting predatory species on food webs of the coastal marine ecosystem.

2. Duration of the study

2022- review of studies on stomach sampling of predatory fish species.

2023 – preparation of methodology.

2024 – testing of methodology

2025 – final report

3. Methodology and expected outcomes of the study

Review of studies on stomach sampling of predatory fish species.

Defining of practices suitable for stomach sampling of *Sander lucioperca* inhabit in the coastal zone of Lithuanian territorial sea and Curonian lagoon.

Testing of these practices by taking stomach samples of *S. lucioperca* from commercial fishermen and during coastal fishing surveys.

Evaluation of test results and compare to the similar technics already described in scientific studies.

Evaluation of possibilities to adapt stomach sampling for assessing of impact of fishing activities targeting predatory species on food webs of the coastal marine ecosystem.

Text Box 5.2: Economic and social variables for fisheries data collection

General comment: This text box fulfils Article 5(2)(d), Article 6(3)(a), (b) and (c) of Regulation (EU) 2017/1004, and Chapter II point 5 of the EU MAP Delegated Decision annex. It is intended to specify the data to be collected under Tables 7, 8 and 9 of the EU MAP Delegated Decision annex.

1. Description of clustering

Scheme of clustering of Lithuanian fishing fleet is provided in WP Table 5.1. The clustering option is chosen due to the low number of vessels per segment and to avoid confidentiality issues segments are merged by the scheme "Segments similar to other segments". Importance of the fleet segments were assessed taking into account fishing patterns and dominance of the fishing effort.
The largest cluster in terms of number of vessels merge large scale fleet operating in the Baltic Sea with dominant pelagic trawlers. Cluster combines different length of pelagic trawlers (18-24 m; 24-40 m; 40 m or larger) and demersal trawlers (18-24 m; 24-40 m) which target mixed fisheries (demersal and pelagic, depending from quota allocated), but due to the closed cod fisheries in the Baltic Sea, operates only with pelagic trawler and having just bycatch of cod and insignificant number of landings of demersal species as flounder.
Due to confidentiality, drift and/or fixed netters 10-12 m and 24-40 m are clustered together.
For the same confidentiality reason, long distance fleet is represented by the pelagic trawlers with are dominant in landings (81% of weight of landings from the cluster) and effort for small pelagic species in CECAF including two vessels (2020 data) which operates with demersal trawler in NAFO and NEAFC. All together are clustered to the long distance fleet named Pelagic trawlers 40 m or larger, operating in Other fishing regions. Long distance cluster in 2020 operated with 6 vessels.

2. Description of activity indicator

Disaggregation of the fleet economic data by the activity indicator is not foreseen.

3. Deviation from the RCG ECON (ex. PGECON) definitions

No deviation from the RCG ECON definitions.

Text Box 6.1: Economic and social variables for aquaculture data collection

General comment: This text box fulfils Article 5(2)(e), Article 6(3)(a), (b) and (c) of Regulation (EU) 2017/1004, and Chapter II point 6 of the EU MAP Delegated Decision annex. It is intended to specify the data to be collected under Tables 10 and 11 of the EU MAP Delegated Decision annex.

1. Description of the threshold application

According to the latest EUROSTAT data, in 2019 EU-27 aquaculture production was 1 114.4 thousand tonnes, whereas Lithuanian aquaculture industry produced 3.8 thousand tonnes of freshwater aquaculture production which accounts for 0.3% of EU production. Marine aquaculture production is not carried out in Lithuania.

2. Deviation from the RCG ECON (ex. PGECON) definitions

NA.

Text Box 7.1: Economic and social variables for fish processing data collection

General comment: This text box fulfils Article 5(2)(f), Article 6(3)(a), (b) and (c) of Regulation (EU) 2017/1004, and Chapter II point 7 of the EU MAP Delegated Decision annex. The Member State should provide justifications for complementary data collection for fish processing.
Lithuanian fish processing industry plays an important socioeconomic role in the overall national fisheries sector. In 2020 fish processing industry contributed by 86% of total employment in fisheries sector (around 5200 employees) and around 88% of turnover (around 596 million Eur). Under DCF framework, socioeconomic data from fish processing industry was collected from 2006. Data end-users for socioeconomic data of fish processing industry are STECF, international organizations, producer organizations, scientific bodies and national authorities which are in charge of preparation and implementation of sectoral strategies as well as monitoring and evaluating achievements and impacts of fishery policy implementation in Lithuania. For the 2022-2024 period economic data collection from fish processing industry will be continued on the annual census survey, whereas social data on triannual basis. Concerning data collection of fish processing industry, information on the sampling schemes, survey design, estimation methods for non-responses as well as other QAF information is provided in the Methodological report (annex 1.2).

The quality report fulfils Article 6(3)(d) of Regulation (EU) 2017/1004. This document is intended to specify data to be collected under Chapter II, point 2 of the EU MAP Delegated Decision annex: 'Biological data on exploited biological resources caught by Union commercial and recreational fisheries'. Use this annex to state whether documentation in the data collection process (design, sampling implementation, data capture, data storage, sample storage and data processing) exists and identify where this documentation can be found. Names of sampling schemes and strata shall be identical to those in Tables 2.2, 2.3, 2.4, 2.5, 2.6 and 4.1 of the WP/AR. For quality information on scientific surveys, use the survey acronym as a sampling scheme identifier. For mandatory surveys, refer to Table 1 of the EU MAP Implementing Decision annex, see also MasterCodeList 'Mandatory survey at sea'.

Baltic SOW-DIAD-COM

MS : LTU
Region: Baltic Sea
Sampling scheme identifier: SOW-DIAD-COM, according to Table 2.5: SOW-DIAD-COM-SS
Sampling scheme type: Diadromous (commercial)
Observation type: SciObs water body
Time period of validity: 2020-2024
Short description (max 100 words): *e.g. sampling scheme aiming at collecting length samples from commercial landings on-shore for all species listed in Table 1 of the EU MAP Delegated Decision annex. The scheme covers mainland and all outermost regions ('RUP' in French, Portuguese, and Spanish).* Sampling scheme aims to collect diadromous variables from commercial landings of ell in Curonian lagoon. The scheme contains only one sampling frame landings from fyke nets set in Curonian lagoon (CL-EEL-FYK).
Description of the population
Population targeted: *Specify which are the primary sampling units (PSU), e.g. all national port*days (information present in former Table 4B). For research surveys: specify the main target species from a survey perspective (as opposed to Table 1 in the Annex to the Implementing Decision) and the main survey area.* Population targeted is landings of eel from fyke nets set in Curonian lagoon Fishing effort and catches in Croonian lagoon are recorded by Ministry of Environment according to monthly reports by fishing companies, not by vessel, so PSUs is fishermen*landing*month; SSU – fishing operation by fyke net. ***Population sampled:*** *Specify which part of the target population will be sampled and specify which part of the target population is unreachable for sampling or excluded for some reason to explain, e.g. major ports being listed as auctions excluding all minor ports and no sampling during the week-ends. For research surveys at sea describe target species in single-species surveys or ecosystem component (e.g. demersal, pelagic) in multispecies surveys.* There are about 15 companies licenced for commercial fishing of eel by selective fyke nets (in total about 55 fyke nets). According to the data from monthly reports during 2018 – 2020 it was about 68 landings of eel per year in average, average yearly quantity of landings of eel was about 2,3 tons.

Stratification: *Explain the logic taken to stratify the population and the number of strata generated, e.g. population stratified in 3 geographical lots (from A to B, from B to C and from C to D). Each lot is then stratified by auction.*

No stratification

Sampling design and protocols

Sampling design description: *Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies.*

Methodology and other supplementary documentation is available in MRI SharePoint.

Is the sampling design compliant with the 4S principle? *Y/N/NA (NA for e.g. surveys and diadromous and recreational sampling schemes)*

NA

Regional coordination: *Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.*

NA

Link to sampling design documentation: *Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, Member State shall provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.*

Methodology and other supplementary documentation is available in MRI SharePoint.

Compliance with international recommendations: *Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text, and should be available upon request for the evaluators.*

Y, WGEEL

Link to sampling protocol documentation: *Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.*

Protocols and other supplementary documentation is available in MRI SharePoint.

Compliance with international recommendations: *Member State shall state 'Y' (yes) if the sampling protocol is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling protocol should be shortly explained in the text, and should be available upon request for the evaluators.*

Y, WGEEL

Sampling implementation

Recording of refusal rate: *Indicate with 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.*

NA

Monitoring of sampling progress within the sampling year: *Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?*

NA

Data capture

Means of data capture: *short description (+ photo optionally). Indicate what are the means for collecting the data, e.g. scales, measuring board, dedicated software, ...*

Protocols and other supplementary documentation is available in MRI SharePoint.

Data capture documentation: *Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.*

Protocols and other supplementary documentation is available in MRI SharePoint.

Quality checks documentation: *Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.*

Protocols and other supplementary documentation is available in MRI SharePoint.

Data storage

National database: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.

Sampling data are imported into MRI DCF share point as csv and Rdata files, Final version of data is imported national fisheries data information system (FDIS).

International database: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.

ICES WGEEL

Quality checks and data validation documentation: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.

See data capture

Sample storage

Storage description: Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.

Sample analysis: Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.

Data processing

Evaluation of data accuracy (bias and precision): Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.

NA

Editing and imputation methods: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.

NA

Quality document associated to a dataset: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?

Validation of the final dataset: How are datasets validated (quality checked) before providing to end-user?

Baltic SOW-DIAD-SCS

MS : LTU

Region: Baltic Sea

Sampling scheme identifier: SOW-DIAD-SCS

Sampling scheme type: Diadromous (scientific)

Observation type: SciObs water body

Time period of validity: 2020-2024

Short description (max 100 words): *e.g. sampling scheme aiming at collecting length samples from commercial landings on-shore for all species listed in Table 1 of the EU MAP Delegated Decision annex. The scheme covers mainland and all outermost regions ('RUP' in French, Portuguese, and Spanish).*

This sampling scheme aims to collect diadromous variables for eel, salmon and sea trout in the fresh waters were commercial fish and by-catch of eel, salmon and sea trout is prohibited.

Description of the population

Population targeted: *Specify which are the primary sampling units (PSU), e.g. all national port*days (information present in former Table 4B). For research surveys: specify the main target species from a survey perspective (as opposed to Table 1 in the Annex to the Implementing Decision) and the main survey area.*

targeted and sampled diadromous populations of Baltic Sea

Population sampled: Specify which part of the target population will be sampled and specify which part of the target population is unreachable for sampling or excluded for some reason to explain, *e.g. major ports being listed as auctions excluding all minor ports and no sampling during the week-ends.* For research surveys at sea describe target species in single-species surveys or ecosystem component *(e.g. demersal, pelagic)* in multispecies surveys.

NA – survey

Stratification: Explain the logic taken to stratify the population and the number of strata generated, *e.g. population stratified in 3 geographical lots (from A to B, from B to C and from C to D). Each lot is then stratified by auction.*

NA – survey

Sampling design and protocols

Sampling design description: *Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies.*
Methodology and other supplementary documentation is available in MRI SharePoint.

Is the sampling design compliant with the 4S principle? *Y/N/NA (NA for e.g. surveys and diadromous and recreational sampling schemes)*
NA

Regional coordination: *Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.*
NA

Link to sampling design documentation: *Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, Member State shall provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.*
Methodology and other supplementary documentation is available in MRI SharePoint.

Compliance with international recommendations: *Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text and should be available upon request for the evaluators.*

Y, WGEEL

Link to sampling protocol documentation: *Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.*

Protocols and other supplementary documentation is available in MRI SharePoint.

Compliance with international recommendations: *Member State shall state 'Y' (yes) if the sampling protocol is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling protocol should be shortly explained in the text and should be available upon request for the evaluators.*

Y, WGEEL

Sampling implementation

Recording of refusal rate: *Indicate with 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.*

NA

Monitoring of sampling progress within the sampling year: *Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?*

NA

Data capture

Means of data capture: *short description (+ photo optionally). Indicate what are the means for collecting the data, e.g. scales, measuring board, dedicated software, ...*

Protocols and other supplementary documentation is available in MRI SharePoint.

Data capture documentation: *Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.*

Protocols and other supplementary documentation is available in MRI SharePoint.

Quality checks documentation: *Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.*

Protocols and other supplementary documentation is available in MRI SharePoint.

Data storage

National database: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.

Sampling data are imported into MRI DCF share point as csv and Rdata files, Final version of data is imported national fisheries data information system (FDIS).

International database: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.

ICES WGEEL

Quality checks and data validation documentation: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.

See data capture

Sample storage

Storage description: Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.

Sample analysis: Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.

Data processing

Evaluation of data accuracy (bias and precision): Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.

NA

Editing and imputation methods: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.

NA

Quality document associated to a dataset: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?

Validation of the final dataset: How are datasets validated (quality checked) before providing to end-user?

Baltic SO-SHORE-COM

MS: LTU

Region: Baltic sea

Sampling scheme identifier: SO-SHORE-COM (SO-SHORE-COM-SS according to Table 2.5)

Sampling scheme type: Commercial fishing trip

Observation type: Scientific observer on shore (SciObsOnShore)

Time period of validity: from when until when **2022-2027**

Short description (max 100 words): *e.g. sampling scheme aiming at collecting length samples from commercial landings on-shore for all species listed in Table 1 of the EU MAP Delegated Decision annex. The scheme covers mainland and all outermost regions ('RUP' in French in French, Portuguese, and Spanish).*

Sampling scheme aiming to collect length samples and samples for biological variables from landings in Lithuania of commercial species selected for sampling in the Table 2.1. The scheme covers large scale vessels fishing with active gears in EU waters in the Baltic sea, and small-scale vessels fishing in Lithuanian territorial sea and Curonian lagoon.

Description of the population

Population targeted*: Specify the primary sampling units (PSU), e.g. all national port*days (information present in former Table 4B). For research surveys: specify the main target species from a survey perspective (as opposed to Table 1 in the Annex to the Implementing Decision) and the main survey area.*

Population targeted is landings of selected species in Lithuanian ports. PSU for all the scheme is vessel*landing in Lithuanian ports. The targeted population and PSUs are different depending on sampling frame.

Sampling frame BS-TR population targeted is landings of commercial species selected for sampling in the Table 2.1 from trawlers fishing in the Baltic. These landings consisted mainly of two demersal species - cod and flounder and two pelagic species - herring and sprat. Landings of other species consists less than 1% from total landings. Due to prohibition of direct fishing and strict limitation of bycatch for cod in 2019, landings of demersal fishes reduced drastically. Landings of pelagic species are fluctuating but remains big (figures I.1 and I.2). PSU for this sample frame is vessel*landing. If fish is landed in boxes the SSU is box.

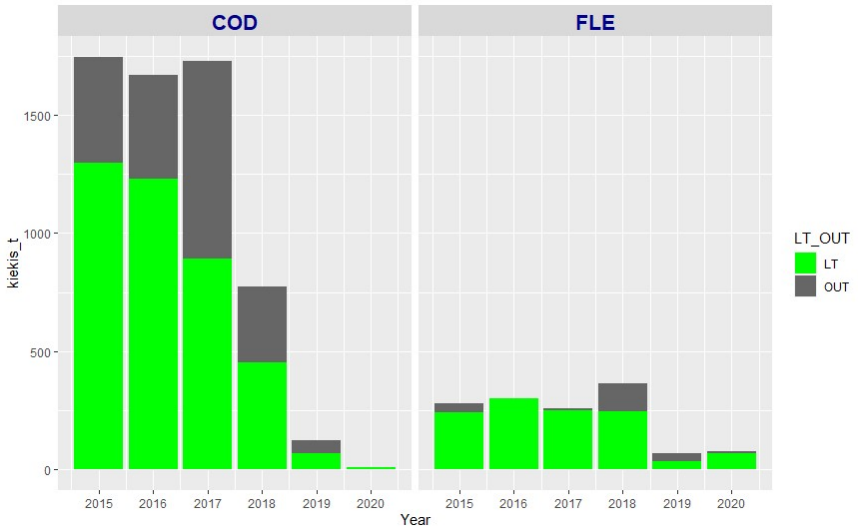


Figure I.1. dynamic of cod and flounder landings from Lithuanian vessels. in 2015- 2020 (LT – landings in Lithuanian ports, OUT- landings in foreign ports,

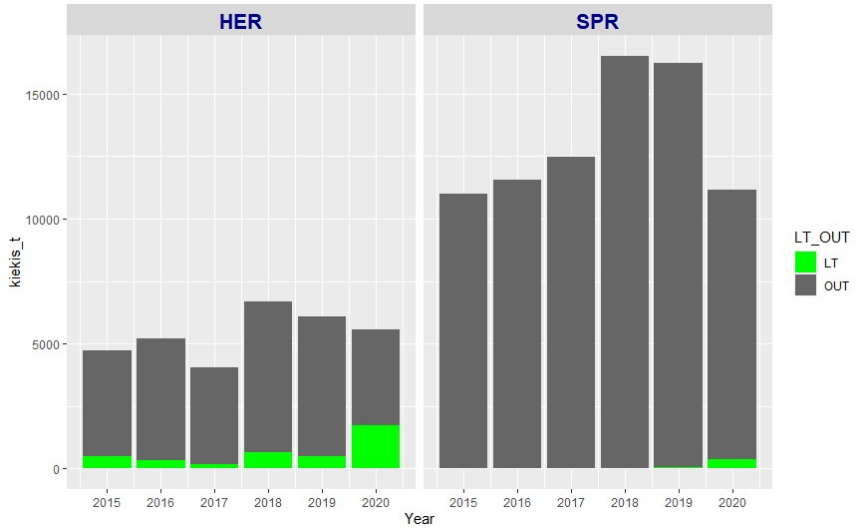


Figure I.2. dynamic of herring and sprat landings from Lithuanian vessels. in 2015- 2020 (LT – landings in Lithuanian ports, OUT- landings in foreign ports,

Sampling frames BS-SSF-GN, BS-SSF-TR and BS-CL target population is landings of commercial species selected for sampling in the Table 2.1 from small scale vessels fishing in Lithuanian territorial sea and Curonian lagoon. Population targeted covers demersal species – *Gadus morhua,, Platychthis flesus, Scophtalmus maximus*, small pelagic – *Clupea harengus*; anadromous – *Osmerus eperlanus* and freshwater species important for SSF as *Perca fluviatilis, Sander lucioperca* and *Vimba vimba*.

PSU for sampling frames BS-SSF-GN and BS-SSF-TN is vessel*landing (one landing = one trip). Fishing effort and catches in Croonian lagoon are recorded according to monthly reports by fishing companies, not by vessel, so PSU for the frame BS-CL is fishermen*landing*month; SSU – fishing operation by passive gear.

for BS-CL – fishermen*landing (landings are recorded by fishing company, one recorded landing = sum of landings per trips for one month).

As it was stated in the Text box 2.5. most of the SSF vessels are fishing both with gillnets and trap nets during the same season or even the same fishing day/trip (figure I.3). These vessels can be assigned to both of frames. To avoid such confusion RDES hierarchy 13 was taken as an option. Usually, per one trip one gear set is carried out and number of trips is equal to landing number, so landings from SSF may be considered as fishing operation and it is in line with RDBES hierarchy 13.

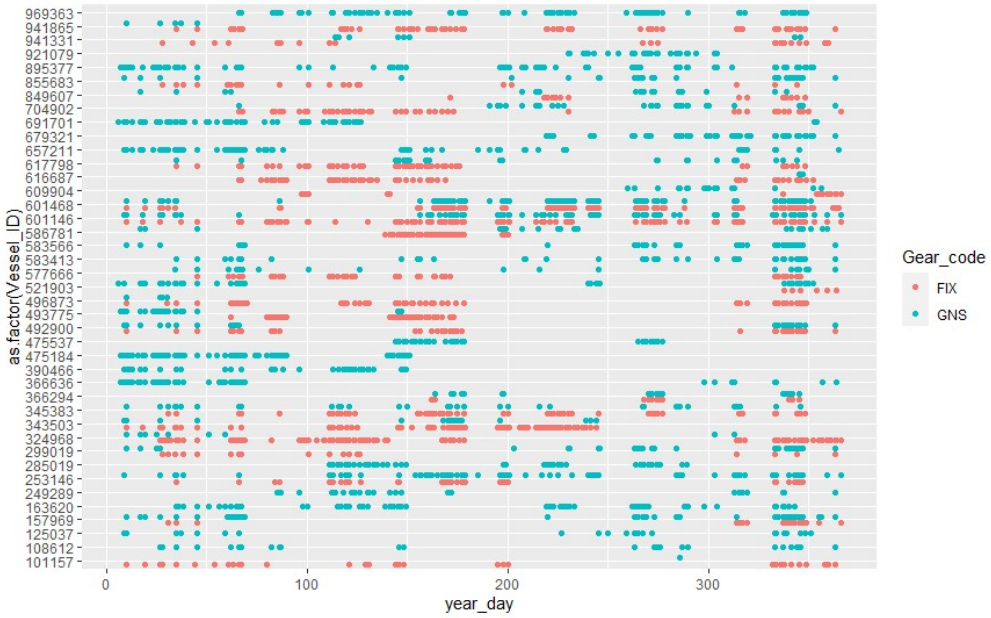


Figure I.3. Distribution of landings from SSF vessels comprised 90% of total SSF landings by main gear type during the 2020 year

***Population sampled**: Specify which part of the target population will be sampled and specify which part of the target population is unreachable for sampling or excluded for some reason to explain, e.g. major ports being listed as auctions excluding all minor ports and no sampling during the week-ends. For research surveys at sea describe target species in single-species surveys or ecosystem component (e.g. demersal, pelagic) in multispecies surveys.*

The sampling frame consists BS-TR of 13 vessels (active in 2021). However, some of these vessels never do landings in Lithuania (figure I.4.). Therefore, only part of these 13 vessels is covered by population sampled of the sampling scheme SO-SHORE-COM. Other vessels are set as priority for sampling within sampling scheme SO-SEA-COM. (see description of the sampling scheme SO-SEA-COM in this annex below).

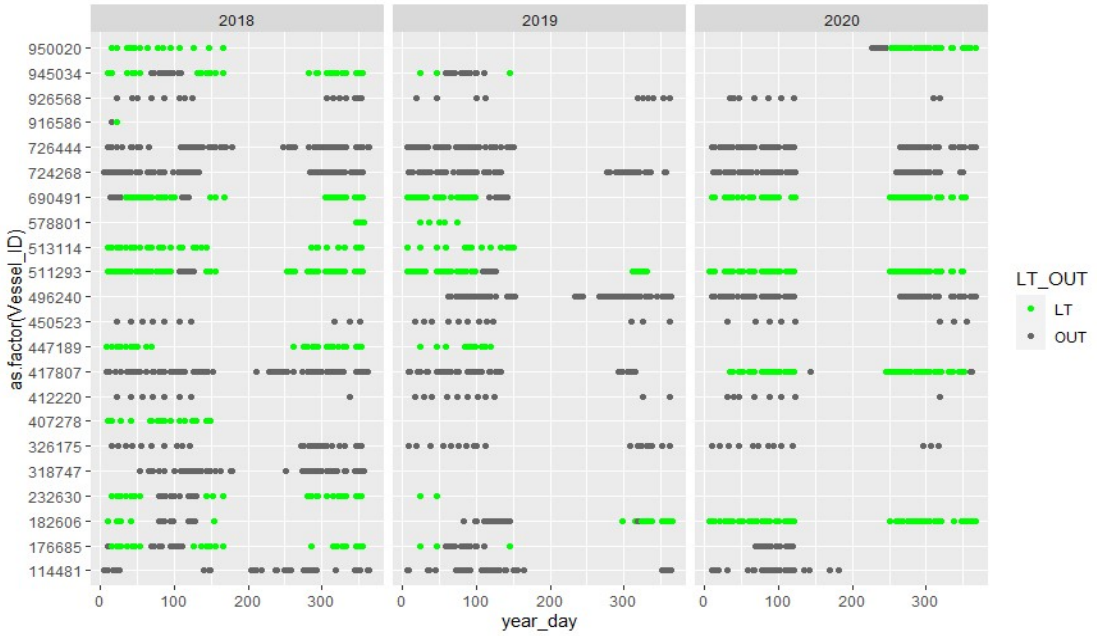


Figure I.4. Distribution of landings from Baltic sea trawlers in Lithuania (LT) and in foreign ports (OUT) during 2018 -2020

As it was stated in the Text box 2.5 the catches taken by SSF fleet consist very small part of total catches of EU regulated species, so it has negligible impact on assessment of these stocks, however biggest part of Lithuanian coastal waters and Curonian lagoon is covered by NATURA 2000 areas, therefore sampled population and PSUs were adjusted accordingly (see stratification).

Number of small SSF vessels is quite big (56 in 2020), but many of them are fishing occasionally and produce very small catch. Number of vessels producing one tone and more of landings per year are included into the sampling calculation. It covers 75% from total number of SSF vessels and 98% from total SFF landings.

Consequently, 14 vessels (25% from 56), 277 PSUs (15.7% from all PSUs) but only 2% of landings are "out-of-frame population"

Stratification: Explain the logic taken to stratify the population and the number of strata generated, *e.g. population stratified in 3 geographical lots (from A to B, from B to C and from C to D). Each lot is then stratified by auction.*

There is only one harbour in Lithuania where LS trawlers are landing fish, therefore no geographical stratification for the sampling frame BS-TR is needed.

Small scale vessels are fishing in Lithuanian territorial sea and most of fishing effort are in coastal zone - the area with depth up to 20 meters. This zone is divided into 29 coastal fish squares (bars). Even coastal zone is very small (less than 100 km length) catch distribution is very unequal (figure I.5). Most catches and efforts are in the bars close to the mouth of Curonian lagoon and Shventoji river, where biggest number of fishes are migrating. Taking this background two fixed areas were selected for sampling area: Klaipeda – 13 – 19 bars and Palanga – 26 -29 bars.

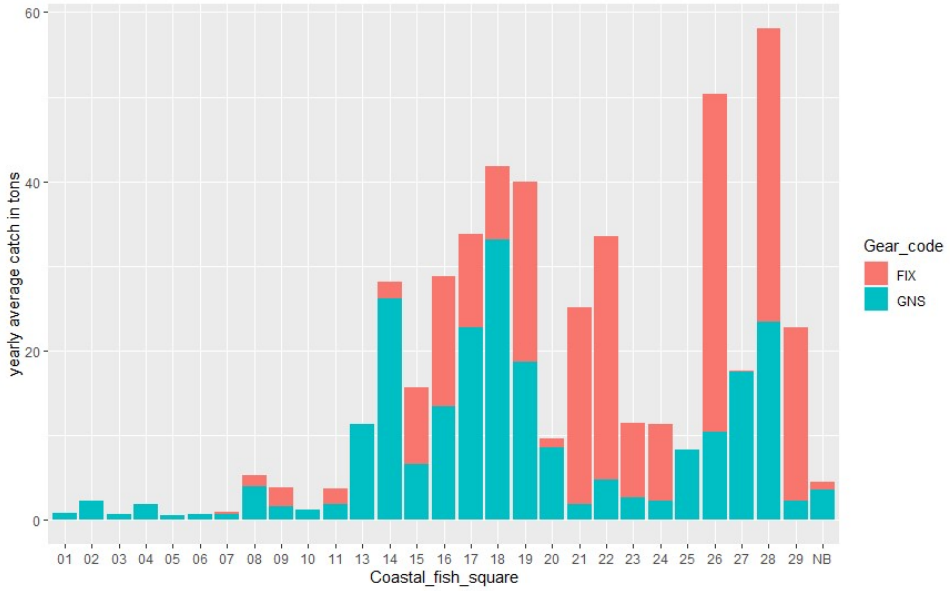


Figure I.5. Yearly average catch during 2015-2020 by coastal fish square and main fishing gear

AR comment: Indicate any deviations.

Sampling design and protocols

Sampling design description: *Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies.*

Sampling frame BS-TR

Sample selection:

Upper hierarchy 8 of RDBES – **landing event on even week-** is planned for sampling selection It was already tested in 2020 and 2021. One vessel per first, second and fourth quarter is randomly selected form the list of trawlers. If selected vessel is not planned to land in Klaipeda port during the quarter, another vessel is selected form the list. Each even week of this quarter one landing of the selected vessel should be sampled. If it was no landings during selected even week, the sample is taken next week (selected even week +1).

Subsample procedure:

In a case of unsorted landings of pelagic species one bucket of fish is taken for sampling; if landings are sorted by size from 1 to 8 boxes, depending on fish size are taken for sampling.

Length sampling:

The fishes in subsample are measured for length; but for pelagic fishes at least 200 pieces, for sorted landings about 100 pieces per size category.

Sampling of biological variables:

Some number of fishes from the subsample are randomly selected for measuring individual weight, sex and maturity sampling and taking of otoliths for age determination. The number of fish sampled for biological variables for species with clear length-age key (as sprat) shall be at least 10 pieces quarter for each length group within 5 – 95

percentiles of length distribution set. For species with blur length-age key (as herring) it shall be at least 15 pieces per quarter for each length group within 5 – 95 percentiles of the length distribution set.

If number of fishes sampled for biological variables is insufficient for certain length group, some fishes of this length group should be selected on purpose during next sampling, or additional vendor sampling procedure should be done.

Is the sampling design compliant with the 4S principle? *Y/N/NA (NA for e.g. surveys and diadromous and recreational sampling schemes)*

Y: population defined, sampling frames defined, sampling selection (unequal) probabilistic with justification of reasons, except sampling frames covering SSF where sampling selection is FIXED, but it is in line with sampling purpose.

Regional coordination*: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.*

N

Link to sampling design documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.*

All methodologies, protocols and supporting documents are stored in the MRI SharePoint.

Compliance with international recommendations: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text and should be available upon request for the evaluators.

Y – for LSF in compliance with ICES recommendations; for SSF in compliance with HELCOM recommendations.

Link to sampling protocol documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.*

All methodologies, protocols and supporting documents are stored in the MRI SharePoint.

AR comment: Indicate any deviations.

Sampling implementation

Recording of refusal rate*: Indicate 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.*

Note: It concerns **refusal rate** as defined in ICES. 2012. Report of the Study Group on Practical Implementation on Discard Sam-pling Plans, 18–22 June 2012, ICES HQ, Copenhagen, Denmark. ICES CM 2012/ACOM:51. 87 pp. (SGPIDS-2): "*The refusal rate is the proportion of vessel skippers who, having been successfully contacted, ultimately failed to allow the observer to go on board to obtain the sample*". Other non-responses shall be not the subject of this annex.

NA. Vessel owners or masters of the vessels never refused observer for sampling of landings in ports during all the period of sampling collection, so there is no need to create a refusal recording system for the onshore sampling schemes in this region.

Monitoring of sampling progress within the sampling year*: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?*

Since number of sampling effort is not big, simple excel file is created (meginiu-atranka-yyyy.xlsx), where information on sample efforts is stored. This file is available on MRI share point so observers and other relevant persons may monitor sampling progress.

AR comment: Indicate any deviations.

Data capture

Means of data capture*: short description (+ photo optionally). Indicate what the means for collecting the data are, e.g. scales, measuring board, dedicated software, etc.*

Measuring bords, electronic scales, knifes, scissors, pinsetters, otolith slicing machine, binoculars

Data capture documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.*

Data capture procedures are documented and available om MRI SharePoint.

Quality checks documentation: Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.

Y. Quality checks are performed by some validation rules and formulas integrated in MS excel, and by some basic r-scripts are. Data quality checks in 3 phases:

1.Primary data (measuring data) are entering into excel spread sheets. There are templates for commercial fishing samples data and for coastal monitoring survey sample data. for shrimp sample data (Eastern Arctic); for redfish in Eastern arctic and North Western waters. There are some validation rules in these templates: code lists for sex, age, maturity; as well conditional formatting for dates, numbers.

2.Gaps – length groups with no weight measurements or otoliths. For shrimps and redfish, it is integrated into excel worksheet, so researcher may collect required information during the sampling trip. For samplings of landings from Baltic Sea it is checked by r-scrip after entering all data into excel document VERSLIN-SAMPL-IMPORT.xlsx.

3.After entering the data simple r-script (matavim-import-check.R) is run. It checks some possible errors, e.g. missing values, intermix between individual measurements and group measurements and some possible typing errors which may have significant impact (externalities between length and weight). If r-script generates records with possible errors, manual checks with primary data sources is performed and corresponding corrections are made in excel work sheet.

AR comment: Indicate any deviations.

Data storage

National database: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.

Sampling data are imported into MRI DCF share point as csv and Rdata files, Final version of data is imported national fisheries data information system (FDIS).

International database: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.

FishFrame ,by ICES

Quality checks and data validation documentation: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.

See chapter Data quality checks documentation.

AR comment: Indicate any deviations.

Sample storage

Storage description: *Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.*

Fish pieces collected for sampling of biological variables are stored in the freezer. After measuring of individual weight and defining sex and maturity, otoliths or scales are collected and placed in plastic bags for each individuum separately.

Sample analysis: *Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.*

There are some evaluations of the basic parameters of sampling data included into the r-scripts created for processing of sampling data. **These scripts are stored in MRI share point for private use only.**

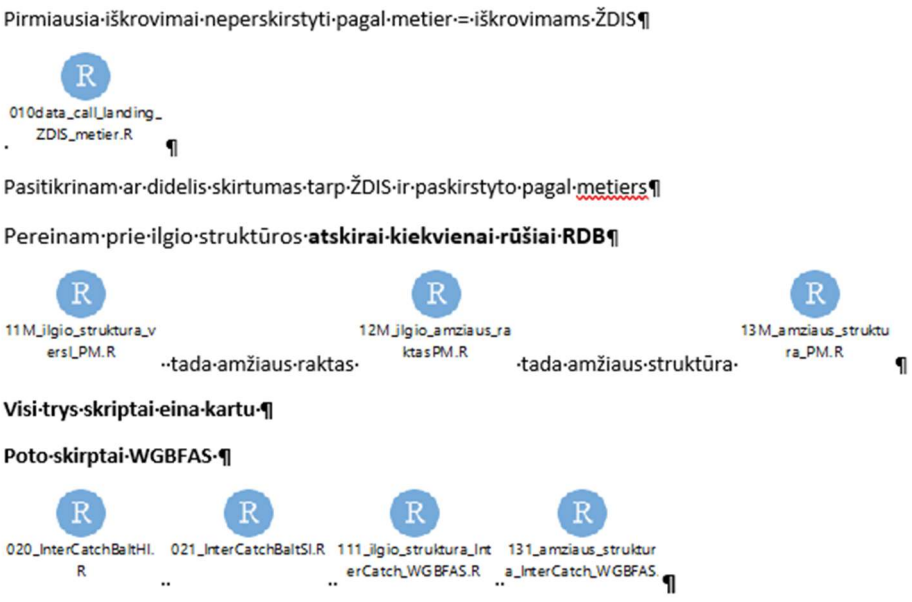


Figure I.6. extract of list of R-scripts designed for processing of sample data

Mean weighted coefficient of variation (MWCV) according to methodology described in WKOPTIM-2019 report is calculated (figure

Quarter	subArea	FAC_EC_lvl6	N	mean_length	std_length	q1	median	q3	min_length	max_length	length_span	MWCV_
1	27.3.	FYK_SPF_>0_0_0	548	187.8	18	175	190	200	100	255	155	17.12
1	27.3.	OTM_SPF_32-104_0_0	509	172.65	29	160	180	190	95	265	170	21.5
2	27.3.	FYK_SPF_>0_0_0	683	182.22	32	165	190	205	100	285	185	19.61
2	27.3.	OTM_SPF_32-104_0_0	603	177.27	19	170	180	185	110	245	135	16.92
3	27.3.	OTB_DEF_>=105_1_120	7	170.71	39	148	175	195	110	225	115	83.22
3	27.3.	OTM_SPF_32-104_0_0	185	187.32	19	170	185	200	145	230	85	28.34
4	27.3.	OTM_SPF_16-31_0_0	95	180.11	18	165	180	195	120	215	95	37.68
4	27.3.	OTM_SPF_32-104_0_0	493	176.36	17	165	175	185	130	230	100	17.25

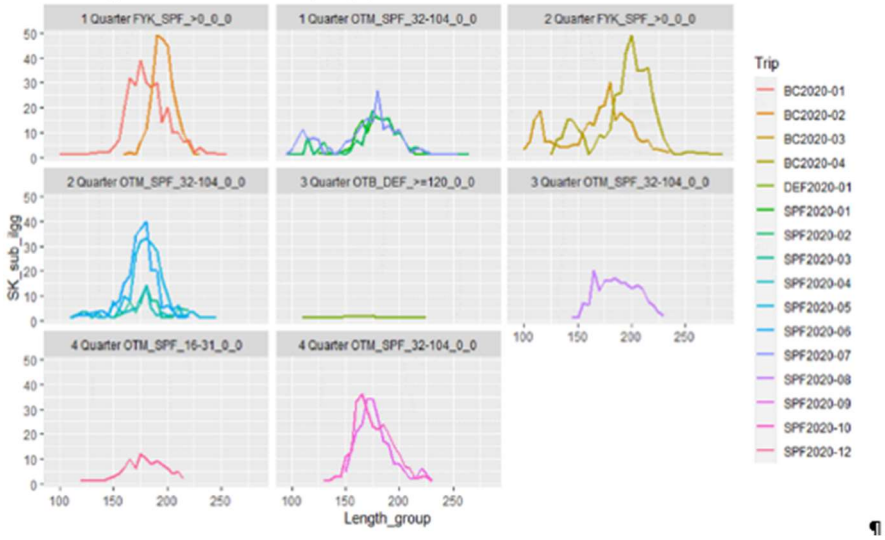


Figure I.7. extract of some evaluations of sample quality and visualisations

AR comment: Indicate any deviations.

Data processing

Evaluation of data accuracy (bias and precision): *Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.*

Y. Data editing and validation procedures are documented and available in MRI SharePoint.

Editing and imputation methods: *Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.*

Y. Data editing and validation procedures are documented and available in MRI SharePoint.

Quality document associated to a dataset: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?

Data editing and validation procedures are documented and available in MRI SharePoint.

Validation of the final dataset: How are datasets validated (quality checked) before providing to end-user? Data editing and validation procedures are documented and available in MRI SharePoint.
AR comment: Indicate any deviations.
AR comment: Use this text box for providing any additional comments if necessary.

Baltic SO-SEA-COM

MS: LTU

Region: Baltic

Sampling scheme identifier: SO-SEA-COM (SO-SEA-COM-SS according to the table 2.5)

Sampling scheme type: Commercial fishing trip

Observation type: SciObsAtSea

Time period of validity: from when until when **2022-2024**

Short description (max 100 words): *e.g. sampling scheme aiming at collecting length samples from commercial landings on-shore for all species listed in Table 1 of the EU MAP Delegated Decision annex. The scheme covers mainland and all outermost regions ('RUP' in French in French, Portuguese, and Spanish).*

Sampling scheme aiming to collect length samples and samples for biological variables from commercial catches and discards from the vessels with LOA more than 12 meters for species selected for sampling in the Table 2.1 and PETS (opportunistic) in the Baltic Sea region. Due to very small number of active vessels with LOA more than 12 meters only one sampling frame is planned: Baltic Sea trawlers – BS-TR.

Description of the population

Population targeted*: Specify the primary sampling units (PSU), e.g. all national port*days (information present in former Table 4B). For research surveys: specify the main target species from a survey perspective (as opposed to Table 1 in the Annex to the Implementing Decision) and the main survey area.*

Population targeted is fishing trips of vessels fishing with trawls in the Baltic Sea. PSU is a trip, SSU is a trawl haul of sampled trip.

Population sampled*: Specify which part of the target population will be sampled and specify which part of the target population is unreachable for sampling or excluded for some reason to explain, e.g. major ports being listed as auctions excluding all minor ports and no sampling during the week-ends. For research surveys at sea describe target species in single-species surveys or ecosystem component (e.g. demersal, pelagic) in multispecies surveys.*

All fishing trips theoretically may be selected for sampling, however due to unequal distribution of trips connected to Lithuanian ports it is impossible to implement simple random selection. Sea further descriptions bellow.

Stratification: Explain the logic taken to stratify the population and the number of strata generated, *e.g. population stratified in 3 geographical lots (from A to B, from B to C and from C to D). Each lot is then stratified by auction.*

As it was described in previous text box of this Annex (sampling scheme SO-SHORE-COM), there were 13 vessels belonging to the sampling frame BS_TR in 2021, but significant part of these vessels NEVER landed in Lithuania (see figure I.2). Catches of herring and especially sprat taken by these vessels consists most majority of total catches of herring and sprat, however there are no possibilities to sample these vessels within the scheme SO-SHORE-COM. Therefore, these vessels are on the priority for selection for sampling at sea – sampling. Other trawlers are not excluded from this scheme, so there is no formal stratification, but unequal possibility to be selected for sampling.

AR comment: Indicate any deviations.

Sampling design and protocols

Sampling design description: *Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies.*

Most active trawl fishing for pelagic species and most of landings of these species usually carried out in is in first, second and fourth quarters of the year (figure I.8). Therefore, one vessel in I-st, II-nd and IV-th quarter is selected for sampling. Then depending on availability of observer exact fishing trip is selected for sampling.

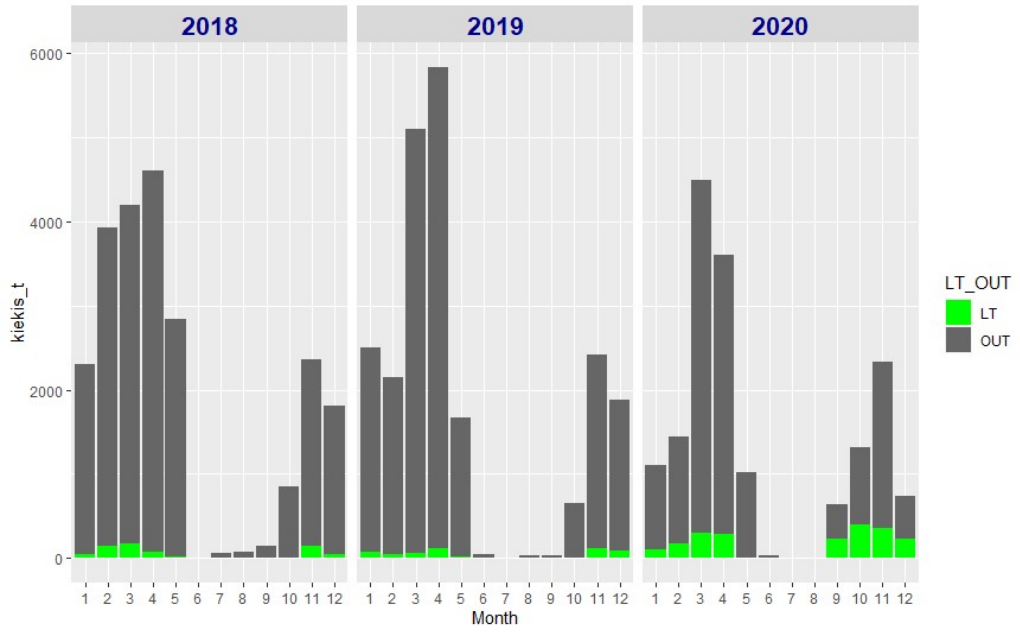


Figure I.8. Monthly distribution of landings of pelagic species in 2018-2020 (LT – in Lithuanian ports, OUT – in foreign ports)

Unfortunately, due logistic problems (especially COVID-19) restrictions it is not possible to send observer to other country, so ad hoc replacement of selected vessel is quite often, or even cancelling of sampling effort (see Recording of refusals).

Is the sampling design compliant with the 4S principle? *Y/N/NA (NA for e.g. surveys and diadromous and recreational sampling schemes)*

Y. Population defined, sampling frame defined, selection of samples (unequal) probabilistic.

Regional coordination*: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.*

N

Link to sampling design documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.*

Protocols and other supplementary documentation available in MRI SharePoint.

Compliance with international recommendations*: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text and should be available upon request for the evaluators.*

Y with some exemptions explained above.

Link to sampling protocol documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.*

Protocols and other supplementary documentation available in MRI SharePoint.

AR comment: Indicate any deviations.

Sampling implementation

Recording of refusal rate*: Indicate 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.*

Note: It concerns **refusal rate** as defined in ICES. 2012. Report of the Study Group on Practical Implementation on Discard Sam-pling Plans, 18–22 June 2012, ICES HQ, Copenhagen, Denmark. ICES CM 2012/ACOM:51. 87 pp. (SGPIDS-2): "*The refusal rate is the proportion of vessel skippers who, having been successfully contacted, ultimately failed to allow the observer to go on board to obtain the sample*". Other non-responses shall not be the subject of this annex.

N. Refusals have been happened because masters of the vessels did not take observers on board was because national safety requirements. Most of Lithuanian vessels fishing in the Baltic Sea are far from modern fishing vessels and requires quite big crew. Installed stationary safety equipment on these vessels covers only number of persons equal to the number of crew. Embarking of additional person is possible only when vessel is operating with reduced crew. The system of recording of all non-responses including refusals will be implemented in parallel to RDBES.

Monitoring of sampling progress within the sampling year: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?

Monitoring of sampling progress is done in the same way as described for sampling scheme SO-SHORE-COM.

AR comment: Indicate any deviations.

Data capture

Means of data capture: short description (+ photo optionally). Indicate what the means for collecting the data are, e.g. scales, measuring board, dedicated software, etc.

Only length measurements are caried on the fishing vessel, the subsample for biological variable is collected and analysed in the laboratory after the trip.

Data capture documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.*

Data capture procedures are documented and available in MRI SharePoint.

Quality checks documentation*: Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.*

Y. See description for the sample scheme SO-SHORE-COM.

AR comment: Indicate any deviations.

Data storage

National database: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.

Sampling data are imported into MRI DCF share point as csv and Rdata files, Final version of data is imported national fisheries data information system (FDIS).

International database: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.

FishFrame ,by ICES

Quality checks and data validation documentation*: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.*

See description for the sample scheme SO-SHORE-COM.

AR comment: Indicate any deviations.

Sample storage

Storage description*: Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.*

See description for the sample scheme SO-SHORE-COM.

Sample analysis: *Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.*

See description for the sample scheme SO-SHORE-COM.

AR comment: Indicate any deviations.

Data processing

Evaluation of data accuracy (bias and precision): *Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox*.

Y. Data editing and validation procedures are documented and available in MRI SharePoint.

Editing and imputation methods: *Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.*

Y. Data editing and validation procedures are documented and available available in MRI SharePoint. ***Quality document associated to a dataset****: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?* Data editing and validation procedures are documented and available in MRI SharePoint. ***Validation of the final dataset****: How are datasets validated (quality checked) before providing to end-user?* Data editing and validation procedures are documented and available in MRI SharePoint.
AR comment: Indicate any deviations.
AR comment: Use this text box for providing any additional comments if necessary.

NSEA SS-SEA-COM

MS: LTU

Region: North Sea and Eastern Arctic

Sampling scheme identifier: SS-SEA-COM (SS-SEA-COM-SS according to the table 2.5)

Sampling scheme type: Commercial fishing trip

Observation type: SelfAtSea

Time period of validity: from when until when **2022-2024**

Short description (max 100 words): *e.g. sampling scheme aiming at collecting length samples from commercial landings on-shore for all species listed in Table 1 of the EU MAP Delegated Decision annex. The scheme covers mainland and all outermost regions ('RUP' in French in French, Portuguese, and Spanish).*

Sampling scheme aiming to collect length samples and samples for biological variables from commercial catches and discards from the vessels fishing in ICES areas 1 and 2. for species selected for sampling in the Table 2.1 and PETS (opportunistic). Two sampling frames planned in this scheme: NSAE-BTS – bottom trawlers fishing for northern shrimp in the area and NSEA-MTR – midwater trawlers fishing for redfish in the area.

Description of the population

Population targeted*: Specify the primary sampling units (PSU), e.g. all national port*days (information present in former Table 4B). For research surveys: specify the main target species from a survey perspective (as opposed to Table 1 in the Annex to the Implementing Decision) and the main survey area.*

For the sampling frame NSEA-BTS population targeted is fishing trips targeted for northen shrimp *Panadalus borealis.* For the sampling frame NSEA-MTR population targeted is fishing trips targeted for redfish *Sebastes mentella.* For both fishing frames PSU is fishing trip; SSU – trawl haul within sampled trip.

Collecting bags - PLA

Population sampled*: Specify which part of the target population will be sampled and specify which part of the target population is unreachable for sampling or excluded for some reason to explain, e.g. major ports being listed as auctions excluding all minor ports and no sampling during the week-ends. For research surveys at sea describe target species in single-species surveys or ecosystem component (e.g. demersal, pelagic) in multispecies surveys.*

Usually, two vessels are fishing for shrimp in the region, each one making 7 - 8 trips per year. Three vessels were fished in 2019 and numbers of total trips was 23 – it makes number of average trips per reference season higher than usual. One vessel is fishing for redfish in the region, making about 5 trips per year. All these trips are covered by population sampled.

Stratification: Explain the logic taken to stratify the population and the number of strata generated, *e.g. population stratified in 3 geographical lots (from A to B, from B to C and from C to D). Each lot is then stratified by auction.*

Different sample frames are planned for different fisheries in the area. No reasons for other stratification within this scheme in this region.

AR comment: Indicate any deviations.

Sampling design and protocols

Sampling design description: *Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies.*

Vessels of both of sampling frames are fishing in long distance from Lithuania, these vessels never make landings in Lithuanian ports. Self-sampling was selected as observation type after analysis of logistic costs, time consumption and skills of crew. Highly educated crew member has been instructed how to take samples, measure redfish and record occurrence of PETS.

Due to small number of trips simple random selection of sampling trip may result total unsampling: e.g. 7-th trip was selected but due technical failures vessel made only 5 trips. Therefore, the second trip for each vessel is preselected for sampling. If second trip was interrupted accidentally, the sample form next trip will be collected.

The subsamples from 10 SSUs (trawl hauls) should be taken within the sampled trip.

Is the sampling design compliant with the 4S principle? *Y/N/NA (NA for e.g. surveys and diadromous and recreational sampling schemes)*

Y. Population defined, sampling frame defined, selection of samples quasi systematic without replacement.

Regional coordination*: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.*

N

Link to sampling design documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.*

Protocols and other supplementary documentation is available in MRI SharePoint.

Compliance with international recommendations*: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text and should be available upon request for the evaluators.*

Y

Link to sampling protocol documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.*

Protocols and other supplementary documentation is available in MRI SharePoint.

AR comment: Indicate any deviations.

Sampling implementation

Recording of refusal rate*: Indicate 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.*

Note: It concerns **refusal rate** as defined in ICES. 2012. Report of the Study Group on Practical Implementation on Discard Sam-pling Plans, 18–22 June 2012, ICES HQ, Copenhagen, Denmark. ICES CM 2012/ACOM:51. 87 pp. (SGPIDS-2): "*The refusal rate is the proportion of vessel skippers who, having been successfully contacted,*

ultimately failed to allow the observer to go on board to obtain the sample". Other non-responses are not subject of this annex.

N. No refusals occurred during all period of data collection within this scheme. The system of recording of all non-responses including refusals will be implemented in parallel to RDBES.

Monitoring of sampling progress within the sampling year: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?

The spread sheet is integrated into the file for data entering. Number of measured species is counted as well as number of individual weights and otoliths taken within a length group. Links to the documents provided in the chapter Data capture documentation.

AR comment: Indicate any deviations.

Data capture

Means of data capture: short description (+ photo optionally). Indicate what the means for collecting the data are, e.g. scales, measuring board, dedicated software, etc.

Only length measurements are caried on the fishing vessel, the subsample for biological variable is collected and analysed in the laboratory after the trip.

Data capture documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.*

Data capture procedures are documented and available in MRI SharePoint.

Quality checks documentation*: Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.*

Y. See description in the chapter Data capture documentation

AR comment: Indicate any deviations.

Data storage

National database: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.

Sampling data are imported into MRI DCF share point as csv and Rdata files, Final version of data is imported national fisheries data information system (FDIS).

International database: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.

FishFrame ,by ICES

Quality checks and data validation documentation*: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.*

Basic checks are integrated into data entering excel file (see chapter Data capture documentation). The R-script to detect possible typing mistakes are run when data from primary data file are imported into the local data base. (see chapter quality checks for the scheme SO-SHORE-COM)

AR comment: Indicate any deviations.

Sample storage

Storage description*: Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.*

Otoliths are collected and stored in the laboratory

Sample analysis: *Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.*

Principals of sample analysis are the same for all sampling schemes. See description for the sample scheme SO-SHORE-COM.

AR comment: Indicate any deviations.

Data processing

Evaluation of data accuracy (bias and precision): *Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox*.

Y. Simple evaluations on ad hoc requests. The number of samples is up to 5 per one year, so there is no reason to create sophisticated IT tool.

Editing and imputation methods: *Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.*

Y. See links in the chapter Data capture documentation.

Quality document associated to a dataset*: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?*

See links in the chapter Data capture documentation.

Validation of the final dataset*: How are datasets validated (quality checked) before providing to end-user?*

See links in the chapter Data capture documentation.

AR comment: Indicate any deviations.

AR comment: Use this text box for providing any additional comments if necessary.

NEA SS-SEA-COM

MS: LTU

Region: North East Atlantic

Sampling scheme identifier: SS-SEA-COM (SS-SEA-COM-SS according to the table 2.5)

Sampling scheme type: Commercial fishing trip

Observation type: SelfAtSea

Time period of validity: from when until when **2022-2024**

Short description (max 100 words): *e.g. sampling scheme aiming at collecting length samples from commercial landings on-shore for all species listed in Table 1 of the EU MAP Delegated Decision annex. The scheme covers mainland and all outermost regions ('RUP' in French in French, Portuguese, and Spanish).*

Sampling scheme aiming to collect length samples and samples for biological variables from commercial catches and discards from the vessels fishing in ICES areas 1 and 2. for species selected for sampling in the Table 2.1 and PETS (opportunistic). Only one sampling frame NEA-MTR – midwater trawlers fishing for redfish in the area.

Description of the population

Population targeted*: Specify the primary sampling units (PSU), e.g. all national port*days (information present in former Table 4B). For research surveys: specify the main target species from a survey perspective (as opposed to Table 1 in the Annex to the Implementing Decision) and the main survey area.*

Population targeted is fishing trips targeted for redfish *Sebastes mentella.* For both fishing frames PSU is fishing trip; SSU – trawl haul within sampled trip.

Population sampled*: Specify which part of the target population will be sampled and specify which part of the target population is unreachable for sampling or excluded for some reason to explain, e.g. major ports being listed as auctions excluding all minor ports and no sampling during the week-ends. For research surveys at sea describe target species in single-species surveys or ecosystem component (e.g. demersal, pelagic) in multispecies surveys.*

One vessel is fishing for redfish in the region, making about 4 trips per year. All these trips are covered by population sampled.

Stratification: Explain the logic taken to stratify the population and the number of strata generated, *e.g. population stratified in 3 geographical lots (from A to B, from B to C and from C to D). Each lot is then stratified by auction.*

No reasons for other stratification within this scheme in this region.

AR comment: Indicate any deviations.

Sampling design and protocols

Sampling design description: *Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies.*

The fishing is carried out in long distance from Lithuania with no landings in Lithuanian ports. Self-sampling was selected as observation type after analysis of logistic costs, time consumption and skills of crew. Highly educated crew member has been instructed how to take samples, measure redfish and record occurrence of PETS.

Due to small number of trips simple random selection of sampling trip may result total unsampling: e.g. 4-th trip was selected but due technical failures vessel made only 3 trips. Therefore, the second trip preselected for sampling. If second trip was interrupted accidentally, the sample form next trip will be collected.

The subsamples from 10 SSUs (trawl hauls) should be taken within the sampled trip.

Is the sampling design compliant with the 4S principle? *Y/N/NA (NA for e.g. surveys and diadromous and recreational sampling schemes)*

Y. Population defined, sampling frame defined, selection of samples quasi systematic without replacement.

Regional coordination*: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.*

N

Link to sampling design documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.*

Protocols and other supplementary documentation is available in MRI SharePoint.

Compliance with international recommendations*: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text and should be available upon request for the evaluators.*

Y

Link to sampling protocol documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.*

Protocols and other supplementary documentation is available in MRI SharePoint.

AR comment: Indicate any deviations.

Sampling implementation

Recording of refusal rate*: Indicate 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.*

Note: It concerns **refusal rate** as defined in ICES. 2012. Report of the Study Group on Practical Implementation on Discard Sam-pling Plans, 18–22 June 2012, ICES HQ, Copenhagen, Denmark. ICES CM 2012/ACOM:51. 87 pp. (SGPIDS-2): "*The refusal rate is the proportion of vessel skippers who, having been successfully contacted, ultimately failed to allow the observer to go on board to obtain the sample*". Other non-responses are not subject of this annex.

N. No refusals occurred during all period of data collection within this scheme. The system of recording of all non-responses including refusals will be implemented in parallel to RDBES.

Monitoring of sampling progress within the sampling year: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?

The spread sheet is integrated into the file for data entering. Number of measured species is counted as well as number of individual weights and otoliths taken within a length group. Links to the documents provided in the chapter Data capture documentation.

AR comment: Indicate any deviations.

Data capture

Means of data capture: short description (+ photo optionally). Indicate what the means for collecting the data are, e.g. scales, measuring board, dedicated software, etc.

Only length measurements are caried on the fishing vessel, the subsample for biological variable is collected and analysed in the laboratory after the trip.

Data capture documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.*

Data capture procedures are documented and available in MRI SharePoint.

Quality checks documentation*: Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.*

Y. See description in the chapter Data capture documentation

AR comment: Indicate any deviations.

Data storage

National database: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.

Sampling data are imported into MRI DCF share point as csv and Rdata files, Final version of data is imported national fisheries data information system (FDIS).

International database: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.

FishFrame ,by ICES

Quality checks and data validation documentation*: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.*

Basic checks are integrated into data entering excel file (see chapter Data capture documentation). The R-script to detect possible typing mistakes are run when data from primary data file are imported into the local data base. (see chapter quality checks for the scheme SO-SHORE-COM)

AR comment: Indicate any deviations.

Sample storage

Storage description*: Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and*

maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.

Otoliths are collected and stored in the laboratory

Sample analysis: *Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.*

Principals of sample analysis are the same for all sampling schemes. See description for the sample scheme SO-SHORE-COM.

AR comment: Indicate any deviations.

Data processing

Evaluation of data accuracy (bias and precision): *Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox*.

Y. Simple evaluations on ad hoc requests. The number of samples is up to 5 per one year, so there is no reason to create sophisticated IT tool.

Editing and imputation methods: *Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.*

Y. See links in the chapter Data capture documentation.

Quality document associated to a dataset*: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?*

See links in the chapter Data capture documentation.

Validation of the final dataset*: How are datasets validated (quality checked) before providing to end-user?*

See links in the chapter Data capture documentation.

AR comment: Indicate any deviations.

AR comment: Use this text box for providing any additional comments if necessary.

NAFO SS-SEA-COM

MS :LTU

Region : Other Areas

Sampling scheme identifier : SS-SEA-COM-SS (Table 2.5 only)

Sampling scheme type: Commercial trip

Observation type: SelfAtSea

Time period of validity : 2022-2024

Short description (max 100 words): *e.g. sampling scheme aiming at collecting length samples from commercial landings on-shore for all species listed in Table 1 of the EU MAP Delegated Decision annex. The scheme covers mainland and all outermost regions ('RUP' in French in French, Portuguese, and Spanish).*

There were no fishing activities in NAFO area since 2015 until 2020. Only one trip targeting shrimps (*Pandalus boralis*) in division 3M was conducted in 2020. This vessel conducted fishing in North Sea and Eastern Arctic region as well. According to NAFO 43td annual meeting moratorium for shrimp fishing in division 3M will be introduced in 2022 therefore, no sampling activities may be planned.

The sampling scheme for NAFO was mentioned in the Table 2.5 only because formal requirement: enter at least one row per Region*RFMO*Sampling scheme identifier combination for out-of-frame parts of the population.

Taking this background no information according to other requests of this annex could be provided

Description of the population

Population targeted*: Specify the primary sampling units (PSU), e.g. all national port*days (information present in former Table 4B). For research surveys: specify the main target species from a survey perspective (as opposed to Table 1 in the Annex to the Implementing Decision) and the main survey area.*

NA

Population sampled*: Specify which part of the target population will be sampled and specify which part of the target population is unreachable for sampling or excluded for some reason to explain, e.g. major ports being listed as auctions excluding all minor ports and no sampling during the week-ends. For research surveys at sea describe target species in single-species surveys or ecosystem component (e.g. demersal, pelagic) in multispecies surveys.*

NA

Stratification*: Explain the logic taken to stratify the population and the number of strata generated, e.g. population stratified in 3 geographical lots (from A to B, from B to C and from C to D). Each lot is then stratified by auction.*

NA

AR comment: Indicate any deviations.

Sampling design and protocols

Sampling design description: *Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies.*

NA

Is the sampling design compliant with the 4S principle?*: Y/N/NA (NA for e.g. surveys and diadromous and recreational sampling schemes)*

NA

Regional coordination*: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.*

ICES coordinated survey

Link to sampling design documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.

NA

Compliance with international recommendations*: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text and should be available upon request for the evaluators.*

NA

Link to sampling protocol documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.*

NA

AR comment: Indicate any deviations.

Sampling implementation

Recording of refusal rate*: Indicate 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.*

NA

Monitoring of sampling progress within the sampling year*: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?*

NA

AR comment: Indicate any deviations.

Data capture

Means of data capture*: short description (+ photo optionally). Indicate what the means for collecting the data are, e.g. scales, measuring board, dedicated software, etc.*

NA

Data capture documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g.*

internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.

NA

***Quality checks documentation**: Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.*

NA

AR comment: Indicate any deviations.

Data storage

***National database**: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

NA

***International database**: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

NA

***Quality checks and data validation documentation**: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.*

NA

AR comment: Indicate any deviations.

Sample storage

***Storage description:** Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.*

NA

***Sample analysis:** Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.*

NA

AR comment: Indicate any deviations.

Data processing

Evaluation of data accuracy (bias and precision): Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is

available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.

NA

Editing and imputation methods: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.

NA

Quality document associated to a dataset: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?

NA

Validation of the final dataset: How are datasets validated (quality checked) before providing to end-user?

NA

AR comment: Indicate any deviations.

CECAF SO-SEA-COM

MS :LTU

Region : Other Areas

Sampling scheme identifier : SO-SEA-COM (SO-SEA-COM-SS in Table 2.5)

Sampling scheme type: Commercial trip

Observation type: SciObsfAtSea

Time period of validity : 2022-2024

Short description (max 100 words): *e.g. sampling scheme aiming at collecting length samples from commercial landings on-shore for all species listed in Table 1 of the EU MAP Delegated Decision annex. The scheme covers mainland and all outermost regions ('RUP' in French in French, Portuguese, and Spanish).*

There is multi-lateral agreement between Germany, Latvia, Lithuania, The Netherlands and Poland for biological data collection of pelagic fisheries in CECAF waters. This agreement will last until 2024 at least. It is cost shared agreement and according to it the sampling design and sampling effort is responsibility of Poland; data handling is responsibility of Netherlands.

Taking this background, no information according to other requests of this annex could be provided

Description of the population

Population targeted*: Specify the primary sampling units (PSU), e.g. all national port*days (information present in former Table 4B). For research surveys: specify the main target species from a survey perspective (as opposed to Table 1 in the Annex to the Implementing Decision) and the main survey area.*

NA

Population sampled*: Specify which part of the target population will be sampled and specify which part of the target population is unreachable for sampling or excluded for some reason to explain, e.g. major ports being listed as auctions excluding all minor ports and no sampling during the week-ends. For research surveys at sea describe target species in single-species surveys or ecosystem component (e.g. demersal, pelagic) in multispecies surveys.*

NA

Stratification*: Explain the logic taken to stratify the population and the number of strata generated, e.g. population stratified in 3 geographical lots (from A to B, from B to C and from C to D). Each lot is then stratified by auction.*

NA

AR comment: Indicate any deviations.

Sampling design and protocols

Sampling design description: *Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies.*

NA

Is the sampling design compliant with the 4S principle?*: Y/N/NA (NA for e.g. surveys and diadromous and recreational sampling schemes)*

NA

***Regional coordination**: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.*

ICES coordinated survey

Link to sampling design documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.

NA

***Compliance with international recommendations**: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text and should be available upon request for the evaluators.*

NA

***Link to sampling protocol documentation**: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.*

NA

AR comment: Indicate any deviations.

Sampling implementation

***Recording of refusal rate**: Indicate 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.*

NA

***Monitoring of sampling progress within the sampling year**: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?*

NA

AR comment: Indicate any deviations.

Data capture

***Means of data capture**: short description (+ photo optionally). Indicate what the means for collecting the data are, e.g. scales, measuring board, dedicated software, etc.*

NA

***Data capture documentation**: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.*

NA

Quality checks documentation*: Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.*

NA

AR comment: Indicate any deviations.

Data storage

National database*: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

NA

International database*: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

NA

Quality checks and data validation documentation*: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.*

NA

AR comment: Indicate any deviations.

Sample storage

Storage description: *Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.*

NA

Sample analysis: *Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.*

NA

AR comment: Indicate any deviations.

Data processing

Evaluation of data accuracy (bias and precision): Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.

NA

Editing and imputation methods: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.

NA

Quality document associated to a dataset: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?

NA

Validation of the final dataset: How are datasets validated (quality checked) before providing to end-user?

NA

AR comment: Indicate any deviations.

SPRFMO SO-SEA-COM

MS :LTU

Region : Other Areas

Sampling scheme identifier : SO-SEA-COM-SS (SO-SEA-COM-SS in Table 2.5)

Sampling scheme type: Commercial trip

Observation type: SciObsfAtSea

Time period of validity : 2022-2024

Short description (max 100 words): *e.g. sampling scheme aiming at collecting length samples from commercial landings on-shore for all species listed in Table 1 of the EU MAP Delegated Decision annex. The scheme covers mainland and all outermost regions ('RUP' in French in French, Portuguese, and Spanish).*

There is multi-lateral agreement between Germany, Lithuania, The Netherlands and Poland for biological data collection of pelagic fisheries in SPRFMO waters. This agreement will last until 2024 at least. It is cost shared agreement and according to it the sampling design and sampling effort is responsibility of Poland; data handling is responsibility of Netherlands.

Taking this background, no information according to other requests of this annex could be provided

Description of the population

Population targeted*: Specify the primary sampling units (PSU), e.g. all national port*days (information present in former Table 4B). For research surveys: specify the main target species from a survey perspective (as opposed to Table 1 in the Annex to the Implementing Decision) and the main survey area.*

NA

Population sampled*: Specify which part of the target population will be sampled and specify which part of the target population is unreachable for sampling or excluded for some reason to explain, e.g. major ports being listed as auctions excluding all minor ports and no sampling during the week-ends. For research surveys at sea describe target species in single-species surveys or ecosystem component (e.g. demersal, pelagic) in multispecies surveys.*

NA

Stratification*: Explain the logic taken to stratify the population and the number of strata generated, e.g. population stratified in 3 geographical lots (from A to B, from B to C and from C to D). Each lot is then stratified by auction.*

NA

AR comment: Indicate any deviations.

Sampling design and protocols

Sampling design description: *Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies.*

NA

Is the sampling design compliant with the 4S principle?*: Y/N/NA (NA for e.g. surveys and diadromous and recreational sampling schemes)*

NA

***Regional coordination**: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.*

ICES coordinated survey

Link to sampling design documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.

NA

***Compliance with international recommendations**: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text and should be available upon request for the evaluators.*

NA

***Link to sampling protocol documentation**: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.*

NA

AR comment: Indicate any deviations.

Sampling implementation

***Recording of refusal rate**: Indicate 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.*

NA

***Monitoring of sampling progress within the sampling year**: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?*

NA

AR comment: Indicate any deviations.

Data capture

***Means of data capture**: short description (+ photo optionally). Indicate what the means for collecting the data are, e.g. scales, measuring board, dedicated software, etc.*

NA

***Data capture documentation**: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.*

NA

Quality checks documentation*: Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.*

NA

AR comment: Indicate any deviations.

Data storage

National database*: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

NA

International database*: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

NA

Quality checks and data validation documentation*: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.*

NA

AR comment: Indicate any deviations.

Sample storage

Storage description: *Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.*

NA

Sample analysis: *Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.*

NA

AR comment: Indicate any deviations.

Data processing

Evaluation of data accuracy (bias and precision): Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.

NA

Editing and imputation methods: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.

NA

Quality document associated to a dataset: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?

NA

Validation of the final dataset: How are datasets validated (quality checked) before providing to end-user?

NA

AR comment: Indicate any deviations.

BITS_Q1

MS :LTU

Region : Baltic Sea

Sampling scheme identifier : BITS_Q1

Sampling scheme type: Research survey at sea

Observation type: SciObsAtSea

Time period of validity : 2022-2024

Short description (max 100 words): *e.g. sampling scheme aiming at collecting length samples from commercial landings on-shore for all species listed in Table 1 of the EU MAP Delegated Decision annex. The scheme covers mainland and all outermost regions ('RUP' in French in French, Portuguese, and Spanish).*

See Text box 2.6

Description of the population

Population targeted*: Specify the primary sampling units (PSU), e.g. all national port*days (information present in former Table 4B). For research surveys: specify the main target species from a survey perspective (as opposed to Table 1 in the Annex to the Implementing Decision) and the main survey area.*

Gadus morhua, Pleuronectes platessa

Population sampled*: Specify which part of the target population will be sampled and specify which part of the target population is unreachable for sampling or excluded for some reason to explain, e.g. major ports being listed as auctions excluding all minor ports and no sampling during the week-ends. For research surveys at sea describe target species in single-species surveys or ecosystem component (e.g. demersal, pelagic) in multispecies surveys.*

Gadus morhua, Pleuronectes platessa. Length and biological variables shall be collected; stomach sampling shall be integrated gradually until 2024.

Stratification*: Explain the logic taken to stratify the population and the number of strata generated, e.g. population stratified in 3 geographical lots (from A to B, from B to C and from C to D). Each lot is then stratified by auction.*

NA

AR comment: Indicate any deviations.

Sampling design and protocols

Sampling design description: *Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies.*

NA

Is the sampling design compliant with the 4S principle?*: Y/N/NA (NA for e.g. surveys and diadromous and recreational sampling schemes)*

NA

Regional coordination*: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.*

ICES coordinated survey

Link to sampling design documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.

ICES, 2017. Manual for the Baltic International Trawl Surveys (BITS). Series of ICES Survey Protocols SISP 7 - BITS. Version 2.0

Compliance with international recommendations*: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text and should be available upon request for the evaluators.*

Y

Link to sampling protocol documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.*

ICES, 2017. Manual for the Baltic International Trawl Surveys (BITS). Series of ICES Survey Protocols SISP 7 - BITS. Version 2.0

AR comment: Indicate any deviations.

Sampling implementation

Recording of refusal rate*: Indicate 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.*

NA

Monitoring of sampling progress within the sampling year*: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?*

ICES, 2017. Manual for the Baltic International Trawl Surveys (BITS). Series of ICES Survey Protocols SISP 7 - BITS. Version 2.0

AR comment: Indicate any deviations.

Data capture

Means of data capture*: short description (+ photo optionally). Indicate what the means for collecting the data are, e.g. scales, measuring board, dedicated software, etc.*

Only length measurements are caried on the fishing vessel, the subsample for biological variable is collected and analysed in the laboratory after the trip.

Data capture documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.*

Data capture according to the guidelines in DATRAS

Quality checks documentation*: Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.*

Quality checks according to the guidelines in DATRAS

AR comment: Indicate any deviations.

Data storage

National database*: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

Primary data stored in MRI share point, after validation and quality checks are uploaded into DATRAS

International database*: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

ICES DATRAS

Quality checks and data validation documentation*: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.*

Quality checks according to the guidelines in DATRAS

AR comment: Indicate any deviations.

Sample storage

Storage description: *Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.*

Fish pieces collected for sampling of biological variables are stored in the freezer. After measuring of individual weight and defining sex and maturity, otoliths or scales are collected and placed in plastic bags for each individuum separately.

Sample analysis: *Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.*

Quality checks according to the guidelines in DATRAS

AR comment: Indicate any deviations.

Data processing

Evaluation of data accuracy (bias and precision): Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is

available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.

Y DATRAS

Editing and imputation methods: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.

Y DATRAS

Quality document associated to a dataset: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?

DATRAS

Validation of the final dataset: How are datasets validated (quality checked) before providing to end-user?

DATRAS

AR comment: Indicate any deviations.

BITS_Q4

MS :LTU

Region : Baltic Sea

Sampling scheme identifier : BITS_Q4

Sampling scheme type: Research survey at sea

Observation type: SciObsAtSea

Time period of validity : 2022-2024

Short description (max 100 words): *e.g. sampling scheme aiming at collecting length samples from commercial landings on-shore for all species listed in Table 1 of the EU MAP Delegated Decision annex. The scheme covers mainland and all outermost regions ('RUP' in French in French, Portuguese, and Spanish).*

See Text box 2.6

Description of the population

Population targeted*: Specify the primary sampling units (PSU), e.g. all national port*days (information present in former Table 4B). For research surveys: specify the main target species from a survey perspective (as opposed to Table 1 in the Annex to the Implementing Decision) and the main survey area.*

Gadus morhua, Pleuronectes platessa

Population sampled*: Specify which part of the target population will be sampled and specify which part of the target population is unreachable for sampling or excluded for some reason to explain, e.g. major ports being listed as auctions excluding all minor ports and no sampling during the week-ends. For research surveys at sea describe target species in single-species surveys or ecosystem component (e.g. demersal, pelagic) in multispecies surveys.*

Gadus morhua, Pleuronectes platessa. Length and biological variables shall be collected; stomach sampling shall be integrated gradually until 2024.

Stratification*: Explain the logic taken to stratify the population and the number of strata generated, e.g. population stratified in 3 geographical lots (from A to B, from B to C and from C to D). Each lot is then stratified by auction.*

NA

AR comment: Indicate any deviations.

Sampling design and protocols

Sampling design description: *Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies.*

NA

Is the sampling design compliant with the 4S principle?*: Y/N/NA (NA for e.g. surveys and diadromous and recreational sampling schemes)*

NA

Regional coordination*: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.*

ICES coordinated survey

Link to sampling design documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.

ICES, 2017. Manual for the Baltic International Trawl Surveys (BITS). Series of ICES Survey Protocols SISP 7 - BITS. Version 2.0

Compliance with international recommendations*: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text and should be available upon request for the evaluators.*

Y

Link to sampling protocol documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.*

ICES, 2017. Manual for the Baltic International Trawl Surveys (BITS). Series of ICES Survey Protocols SISP 7 - BITS. Version 2.0

AR comment: Indicate any deviations.

Sampling implementation

Recording of refusal rate*: Indicate 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.*

NA

Monitoring of sampling progress within the sampling year*: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?*

ICES, 2017. Manual for the Baltic International Trawl Surveys (BITS). Series of ICES Survey Protocols SISP 7 - BITS. Version 2.0

AR comment: Indicate any deviations.

Data capture

Means of data capture*: short description (+ photo optionally). Indicate what the means for collecting the data are, e.g. scales, measuring board, dedicated software, etc.*

Only length measurements are caried on the fishing vessel, the subsample for biological variable is collected and analysed in the laboratory after the trip.

Data capture documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.*

Data capture according to the guidelines in DATRAS

Quality checks documentation*: Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.*

Quality checks according to the guidelines in DATRAS

AR comment: Indicate any deviations.

Data storage

National database*: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

Primary data stored in MRI share point, after validation and quality checks are uploaded into DATRAS

International database*: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

ICES DATRAS

Quality checks and data validation documentation*: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.*

Quality checks according to the guidelines in DATRAS

AR comment: Indicate any deviations.

Sample storage

Storage description: *Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.*

Fish pieces collected for sampling of biological variables are stored in the freezer. After measuring of individual weight and defining sex and maturity, otoliths or scales are collected and placed in plastic bags for each individuum separately.

Sample analysis: *Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.*

Quality checks according to the guidelines in DATRAS

AR comment: Indicate any deviations.

Data processing

Evaluation of data accuracy (bias and precision): Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is

available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.

Y DATRAS

Editing and imputation methods: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.

Y DATRAS

Quality document associated to a dataset: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?

DATRAS

Validation of the final dataset: How are datasets validated (quality checked) before providing to end-user?

DATRAS

AR comment: Indicate any deviations.

BIAS

MS :LTU

Region : Baltic Sea

Sampling scheme identifier : BIAS

Sampling scheme type: Research survey at sea

Observation type: SciObsAtSea

Time period of validity : 2022-2024

Short description (max 100 words): *e.g. sampling scheme aiming at collecting length samples from commercial landings on-shore for all species listed in Table 1 of the EU MAP Delegated Decision annex. The scheme covers mainland and all outermost regions ('RUP' in French in French, Portuguese, and Spanish).*

See Text box 2.6

Description of the population

Population targeted*: Specify the primary sampling units (PSU), e.g. all national port*days (information present in former Table 4B). For research surveys: specify the main target species from a survey perspective (as opposed to Table 1 in the Annex to the Implementing Decision) and the main survey area.*

Clupea harengus, sprattus sprattus

Population sampled*: Specify which part of the target population will be sampled and specify which part of the target population is unreachable for sampling or excluded for some reason to explain, e.g. major ports being listed as auctions excluding all minor ports and no sampling during the week-ends. For research surveys at sea describe target species in single-species surveys or ecosystem component (e.g. demersal, pelagic) in multispecies surveys.*

Pelagic surveys

Stratification*: Explain the logic taken to stratify the population and the number of strata generated, e.g. population stratified in 3 geographical lots (from A to B, from B to C and from C to D). Each lot is then stratified by auction.*

NA

AR comment: Indicate any deviations.

Sampling design and protocols

Sampling design description: *Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies.*

NA

Is the sampling design compliant with the 4S principle?*: Y/N/NA (NA for e.g. surveys and diadromous and recreational sampling schemes)*

NA

Regional coordination*: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.*

ICES coordinated survey

Link to sampling design documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.

ICES, 2017. Manual for the International Baltic Acoustic Surveys (BIAS). Series of ICES Survey Protocols SISP 8 - BIAS. Version 2.0)

Compliance with international recommendations*: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text and should be available upon request for the evaluators.*

Y

Link to sampling protocol documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.*

ICES, 2017. Manual for the International Baltic Acoustic Surveys (BIAS). Series of ICES Survey Protocols SISP 8 - BIAS. Version 2.0)

AR comment: Indicate any deviations.

Sampling implementation

Recording of refusal rate*: Indicate 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.*

NA

Monitoring of sampling progress within the sampling year*: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?*

ICES, 2017. Manual for the International Baltic Acoustic Surveys (BIAS). Series of ICES Survey Protocols SISP 8 - BIAS. Version 2.0)

AR comment: Indicate any deviations.

Data capture

Means of data capture*: short description (+ photo optionally). Indicate what the means for collecting the data are, e.g. scales, measuring board, dedicated software, etc.*

Only length measurements are caried on the fishing vessel, the subsample for biological variable is collected and analysed in the laboratory after the trip.

Data capture documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.*

Data capture according to the guidelines in ICES Acoustic trawl surveys data portal

Quality checks documentation*: Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.*

Quality checks according to the guidelines in ICES Acoustic trawl surveys data portal

AR comment: Indicate any deviations.

Data storage

National database*: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

Primary data stored in MRI share point, after validation and quality checks are uploaded into DATRAS

International database*: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

ICESAcoustic trawl surveys

Quality checks and data validation documentation*: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.*

Quality checks according to the guidelines in ICES Acoustic trawl surveys data portal

AR comment: Indicate any deviations.

Sample storage

Storage description: *Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.*

Fish pieces collected for sampling of biological variables are stored in the freezer. After measuring of individual weight and defining sex and maturity, otoliths or scales are collected and placed in plastic bags for each individuum separately.

Sample analysis: *Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.*

Quality checks according to the guidelines in ICES Acoustic trawl surveys data portal

AR comment: Indicate any deviations.

Data processing

Evaluation of data accuracy (bias and precision): Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is

available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.

Y ICESAcoustic trawl surveys

Editing and imputation methods: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.

Y ICESAcoustic trawl surveys

Quality document associated to a dataset: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?

ICESAcoustic trawl surveys

Validation of the final dataset: How are datasets validated (quality checked) before providing to end-user?

ICESAcoustic trawl surveys

AR comment: Indicate any deviations.

SPRAS

MS :LTU

Region : Baltic Sea

Sampling scheme identifier : SPRAS

Sampling scheme type: Research survey at sea

Observation type: SciObsAtSea

Time period of validity : 2022-2024

Short description (max 100 words): *e.g. sampling scheme aiming at collecting length samples from commercial landings on-shore for all species listed in Table 1 of the EU MAP Delegated Decision annex. The scheme covers mainland and all outermost regions ('RUP' in French in French, Portuguese, and Spanish).*

See Text box 2.6

Description of the population

Population targeted*: Specify the primary sampling units (PSU), e.g. all national port*days (information present in former Table 4B). For research surveys: specify the main target species from a survey perspective (as opposed to Table 1 in the Annex to the Implementing Decision) and the main survey area.*

Sprattus sprattus, Clupea harengus

Population sampled*: Specify which part of the target population will be sampled and specify which part of the target population is unreachable for sampling or excluded for some reason to explain, e.g. major ports being listed as auctions excluding all minor ports and no sampling during the week-ends. For research surveys at sea describe target species in single-species surveys or ecosystem component (e.g. demersal, pelagic) in multispecies surveys.*

Pelagic surveys

Stratification*: Explain the logic taken to stratify the population and the number of strata generated, e.g. population stratified in 3 geographical lots (from A to B, from B to C and from C to D). Each lot is then stratified by auction.*

NA

AR comment: Indicate any deviations.

Sampling design and protocols

Sampling design description: *Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies.*

NA

Is the sampling design compliant with the 4S principle?*: Y/N/NA (NA for e.g. surveys and diadromous and recreational sampling schemes)*

NA

Regional coordination*: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.*

ICES coordinated survey

Link to sampling design documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.

ICES, 2017. Manual for the International Baltic Acoustic Surveys (BIAS). Series of ICES Survey Protocols SISP 8 - BIAS. Version 2.0)

Compliance with international recommendations*: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text and should be available upon request for the evaluators.*

Y

Link to sampling protocol documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.*

ICES, 2017. Manual for the International Baltic Acoustic Surveys (BIAS). Series of ICES Survey Protocols SISP 8 - BIAS. Version 2.0)

AR comment: Indicate any deviations.

Sampling implementation

Recording of refusal rate*: Indicate 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.*

NA

Monitoring of sampling progress within the sampling year*: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?*

ICES, 2017. Manual for the International Baltic Acoustic Surveys (BIAS). Series of ICES Survey Protocols SISP 8 - BIAS. Version 2.0)

AR comment: Indicate any deviations.

Data capture

Means of data capture*: short description (+ photo optionally). Indicate what the means for collecting the data are, e.g. scales, measuring board, dedicated software, etc.*

Only length measurements are caried on the fishing vessel, the subsample for biological variable is collected and analysed in the laboratory after the trip.

Data capture documentation*: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.*

Data capture according to the guidelines in ICES Acoustic trawl surveys data portal

Quality checks documentation*: Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.*

Quality checks according to the guidelines in ICES Acoustic trawl surveys data portal

AR comment: Indicate any deviations.

Data storage

National database*: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

Primary data stored in MRI share point, after validation and quality checks are uploaded into DATRAS

International database*: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

ICESAcoustic trawl surveys

Quality checks and data validation documentation*: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.*

Quality checks according to the guidelines in ICES Acoustic trawl surveys data portal

AR comment: Indicate any deviations.

Sample storage

Storage description: *Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.*

Fish pieces collected for sampling of biological variables are stored in the freezer. After measuring of individual weight and defining sex and maturity, otoliths or scales are collected and placed in plastic bags for each individuum separately.

Sample analysis: *Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.*

Quality checks according to the guidelines in ICES Acoustic trawl surveys data portal

AR comment: Indicate any deviations.

Data processing

Evaluation of data accuracy (bias and precision): Indicate 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is

available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.

Y ICESAcoustic trawl surveys

Editing and imputation methods: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.

Y ICESAcoustic trawl surveys

Quality document associated to a dataset: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?

ICESAcoustic trawl surveys

Validation of the final dataset: How are datasets validated (quality checked) before providing to end-user?

ICESAcoustic trawl surveys

AR comment: Indicate any deviations.

LT-CFS

***MS :*LTU**

***Region:* Baltic Sea**

***Sampling scheme identifier:* LT-CFS**

Sampling scheme type: Research survey at sea

Observation type: SciObsAtSea

Time period of validity : 2022-2024

Short description (max 100 words): e.g. sampling scheme aiming at collecting length samples from commercial landings on-shore for all species listed in Table 1 of the EU MAP Delegated Decision annex. The scheme covers mainland and all outermost regions ('RUP' in French, Portuguese, and Spanish).

Objectives of survey is long-lasting collection of data on abundancy index, biomass index and diversity of fishes in the coastal ecosystem.

Description of the population

Population targeted: *Specify which are the primary sampling units (PSU), e.g. all national port*days (information present in former Table 4B). For research surveys: specify the main target species from a survey perspective (as opposed to Table 1 in the Annex to the Implementing Decision) and the main survey area.*

Commercial and non-commercial fish species and other hydro biotic organisms in the coastal zone of Lithuanian Territorial Sea

Population sampled: *Specify which part of the target population will be sampled and specify which part of the target population is unreachable for sampling or excluded for some reason to explain, e.g. major ports being listed as auctions excluding all minor ports and no sampling during the week-ends. For research surveys at sea describe target species in single-species surveys or ecosystem component (e.g. demersal, pelagic) in multispecies surveys.*

Anadromous, demersal and pelagic species

Stratification: *Explain the logic taken to stratify the population and the number of strata generated, e.g. population stratified in 3 geographical lots (from A to B, from B to C and from C to D). Each lot is then stratified by auction.*

NA

Sampling design and protocols

Sampling design description: *Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies.*

Four sampling stations for gillnet surveys, are sampled every month during the season free from ice. For juvenile survey 14 beach seine and dragging samples are taken during August- September.

Is the sampling design compliant with the 4S principle?: *Y/N/NA (NA for e.g. surveys and diadromous and recreational sampling schemes)*

NA

Regional coordination: *Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.*

NA

Link to sampling design documentation: *Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, Member State shall provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.*

available in MRI SharePoint ; HELCOM Guidelines for coastal fish monitoring 2019; Thoresson,G. Guidelines For Coastal Fish Monitoring, 1996.

Compliance with international recommendations: *Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text, and should be available upon request for the evaluators.*

NA

Link to sampling protocol documentation: *Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.*

available in MRI SharePoint ; HELCOM Guidelines for coastal fish monitoring 2019; Thoresson,G. Guidelines For Coastal Fish Monitoring, 1996.

Compliance with international recommendations: *Member State shall state 'Y' (yes) if the sampling protocol is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling protocol should be shortly explained in the text, and should be available upon request for the evaluators.*

Y – HELCOM recommendations

Sampling implementation

Recording of refusal rate: *Indicate with 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.*

NA

Monitoring of sampling progress within the sampling year: *Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?*

NA

Data capture

Means of data capture: *short description (+ photo optionally). Indicate what are the means for collecting the data, e.g. scales, measuring board, dedicated software, ...*

For gillnet surveys length and weight measurements made on field, data recorded on paper notebook, then into excel worksheet, then after some quality checks data stored on MRI share point as Rdata and csv files.

For juvenile surveys catch is collected and measurements are carried out in the laboratory. Data are recorded into excel worksheet, then after some quality checks data stored on MRI share point as Rdata and csv files.

Data capture documentation: *Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.*

available in MRI SharePoint ; HELCOM Guidelines for coastal fish monitoring 2019; Thoresson,G. Guidelines For Coastal Fish Monitoring, 1996.

Quality checks documentation: *Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.*

See chapter "Means of data capture"

Data storage

National database: *Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

See chapter "Means of data capture"

International database: *Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*

N

Quality checks and data validation documentation: *Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.*

See chapter "Means of data capture"

Sample storage

Storage description: Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.

Sample analysis: Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.

See chapter "Means of data capture"

Data processing

Evaluation of data accuracy (bias and precision): *Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.*

See chapter "Means of data capture"

Editing and imputation methods: *Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.*

See chapter "Means of data capture"

Quality document associated to a dataset: *Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?*

See chapter "Means of data capture"

Validation of the final dataset: *How are datasets validated (quality checked) before providing to end-user?*

See chapter "Means of data capture"

Supplement I to Table 2.4.

MS: LTU
Region: Baltic Sea
Sampling scheme identifier: SciObsAtSea_Research survey at sea
Sampling scheme type: Research survey at sea
Observation type: SciObsAtSea
Time period of validity: from January 2022 to December 2024
Sampling scheme aiming at collecting catch volumes from recreational fishery at sea for all species listed in Table 4 of the EU MAP Delegated Decision annex. The scheme covers coastal are within Lithuanian Exclusive Economic zone of the Baltic Sea
Description of the population

Population targeted: *Survey at sea targeting inspection of catch for salmon, sea trout, eel and cod. During the inspection the target population is population of both resident anglers and charter boats operating at sea*.

Population sampled:

Surveys at sea are planned so that enable to cover days of high season. Only part of target population could be physically sampled and only on working days due to high number of trips performed by charter boats and/or private anglers.

Stratification: *There are no specific stratification of sampling, location, population, etc. Surveys at sea are performed on regular basis and focused on high season of cod and salmon/sea trout fishery. Since cod fishing is not available for commercial or recreational purposes from 1 January 2020 no data of cod catch will not be registered. Data collected during the surveys includes number of boats observed during the day of inspection, number of anglers and total catch by species (in kg and individuals) as well as size of fish in cm. Some procedures may be conducted on landing sites as extra measure.*

Sampling design and protocols

Sampling design description: Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies

There are no sampling allocations designed. Sampling scheme intends to cover fishing season and PSU is chartering boats engaged in recreational fishery. *The data on total number of boats at sea is available from border police register.*

Is the sampling design compliant with the 4S principle?:

NA

Regional coordination: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.

There are no any agreements on sampling design or protocols.

Link to sampling design documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, Member State shall provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.

Data and sampling protocols are stored in national database with limited access. Sampling methodology approved by the Fisheries service under MoA. However, the document is not placed on any website yet.

Compliance with international recommendations: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text, and should be available upon request for the evaluators.

Y (WKSMRF 2009

Link to sampling protocol documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.

Sampling design is approved by order of Director of Fisheries service under the Ministry of Agriculture. Sampling protocol contains the following data: the date of survey, vessel ID, number of persons per boat, number of gears, weight by species, length of single specimen. Data and protocols are stored in the national database with limited access for external users.

Compliance with international recommendations: Member State shall state 'Y' (yes) if the sampling protocol is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling protocol should be shortly explained in the text, and should be available upon request for the evaluators.
Y.

Sampling implementation

Recording of refusal rate: Indicate with 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.
NA

Monitoring of sampling progress within the sampling year: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?
There is no need to adjust sampling allocations

Data capture

Means of data capture: short description (+ photo optionally). Indicate what are the means for collecting the data, e.g. scales, measuring board, dedicated software, ...
Camera, special forms of the document, pencil.

Data capture documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.
Data and protocols are stored in the national database with limited access for external users **Quality checks documentation:** Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.
There is documentation on quality checks. All data are collected live and quality depends on competence of data collector.

Data storage

National database: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.
NA

International database: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.
NA

Quality checks and data validation documentation: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.
There are no any documents on quality checks and validation.

Sample storage

Storage description: Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.

Sample analysis: Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided. *NA*
Data processing
Evaluation of data accuracy (bias and precision): Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox. ***P**recision estimates from surveys at sea will not be estimated. Analytical method is used for catch estimation.* **Editing and imputation methods:** Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox. *There is no special documentation on data editing and imputation. Basic instructions how to input and edit data are integrated into sampling protocols and working files as it was described above.* **Quality document associated to a dataset:** Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed? *NA* **Validation of the final dataset:** How are datasets validated (quality checked) before providing to end-user? *There is no need to validate data records. All records are stored under protocol requirements.*

Supplement II to Table 2.4.

MS: LTU
Region: Baltic Sea
Sampling scheme identifier: SciObs water body recreational (off site surveys)
Sampling scheme type: recreational (off site surveys)
Observation type: SciObs water body
Time period of validity: from January 2022 to December 2024
Sampling scheme aiming at collecting catch volumes from recreational fishery in the internal waters for all species listed in Table 4 of the EU MAP Delegated Decision annex. The scheme covers rivers, lakes and Curonian lagoon of Lithuania
Description of the population
Population targeted: *The target population is residents of Lithuania and the proportion of anglers engaged in recreational fishery exclusively in inland waters of Lithuania.* **Population sampled:** *Over 1000 fishermen are planned to interview.* **Stratification:** *The study for evaluation of caught and/or released volumes of salmon, sea trout and eel will be conducted by interviewing residents of Lithuania engaged in recreation fishery in inland waters. Data also included the size (length, weight) of caught and/or released individuals.*
Sampling design and protocols
Sampling design description: Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies

Questionnaires aims to interview residents between 18 and 75 years old within whole country. Over 1000 fishermen are planned to interview. PSU are those who engaged in recreational fishery. SSU are those who have ever had caught and/or released species listed in Table 4 of the EU MAP Delegated Decision annex. Individuals' length and weight of species will also be registered.

Is the sampling design compliant with the 4S principle?:

NA

Regional coordination: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.

There are no any agreements on sampling design or protocols.

Link to sampling design documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, Member State shall provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.

Link to the report of previous study (in Lithuanian):

https://zum.lrv.lt/uploads/zum/documents/files/LT_versija/Veiklos_sritys/Zuvininkyste/%C5%BDuvininkyst%C4%97s%20politika/DRP/Questionaire%20for%20recreational%20fishery%202020%20(in%20Lithuanian).pdf

Sampling methodology approved by the Fisheries service under MoA. However, the document is not placed on any website yet. **Compliance with international recommendations:** Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text, and should be available upon request for the evaluators.

Y ((WKSMRF 2009)

Link to sampling protocol documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.

Link to the report of previous study (in Lithuanian):

https://zum.lrv.lt/uploads/zum/documents/files/LT_versija/Veiklos_sritys/Zuvininkyste/%C5%BDuvininkyst%C4%97s%20politika/DRP/Questionaire%20for%20recreational%20fishery%202020%20(in%20Lithuanian).pdf

Compliance with international recommendations: Member State shall state 'Y' (yes) if the sampling protocol is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling protocol should be shortly explained in the text, and should be available upon request for the evaluators.

Y.

Sampling implementation

Recording of refusal rate: Indicate with 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.

NA

Monitoring of sampling progress within the sampling year: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?

There is no need to adjust sampling allocations

Data capture

Means of data capture: short description (+ photo optionally). Indicate what are the means for collecting the data, e.g. scales, measuring board, dedicated software, ...
Not relevant to questionnaires
Data capture documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.
Link to the report of previous study (in Lithuanian):
https://zum.lrv.lt/uploads/zum/documents/files/LT_versija/Veiklos_sritys/Zuvininkyste/%C5%BDuvininkyst%C4%97s%20politika/DRP/Questionaire%20for%20recreational%20fishery%202020%20(in%20Lithuanian).pdf
Quality checks documentation: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.
Link to the report of previous study (in Lithuanian):
https://zum.lrv.lt/uploads/zum/documents/files/LT_versija/Veiklos_sritys/Zuvininkyste/%C5%BDuvininkyst%C4%97s%20politika/DRP/Questionaire%20for%20recreational%20fishery%202020%20(in%20Lithuanian).pdf

Supplement III to Table 2.5.

MS: LTU
Region: Baltic Sea
Sampling scheme identifier: Baltic Sea_ICES_SelfAtSea_Commercial fishing trip_list of PETS species and Baltic Sea_ICES_SciObsOnShore_Commercial fishing trip list of PETS species
Sampling scheme type: Commercial fishing trip
Observation type: SelfAtSea and SciObsOnShore respectively
Time period of validity: from January 2022 to December 2024
Sampling is aiming at monitoring of species that are to be monitored under protection programmes in the *Union or under international obligations listed in Table 2 of the EU MAP Delegated Decision annex.* *The scheme covers national commercial fleet operating within subdivisions 25-32 of the Baltic Sea*
Description of the population
Population targeted: *Coastal and open sea vessels and boats engaged in commercial fishery.* **Population sampled:** *Whole fleet via logbook information.* **Stratification:** *Data will be collected at the trip level by gear, date, ICES subdivision, metier levels.*
Sampling design and protocols
Sampling design description: Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies *Registration of any bycatch is obligatory and data must be recorded on haul-by-haul in case of trawlers and trip basis in case of gillnetters.* **Is the sampling design compliant with the 4S principle?:** *NA*

Regional coordination: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.

There are no any agreements on sampling design or protocols.

Link to sampling design documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, Member State shall provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.

Data from logbooks is stored in national database with limited access.

Compliance with international recommendations: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text, and should be available upon request for the evaluators.

N. There is no sampling design specified internationally.

Link to sampling protocol documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.

Data from logbooks is stored in national database with limited access.

Compliance with international recommendations: Member State shall state 'Y' (yes) if the sampling protocol is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling protocol should be shortly explained in the text, and should be available upon request for the evaluators.

Data from logbooks is stored in national database with limited access.

Sampling implementation

Recording of refusal rate: Indicate with 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.

NA

Monitoring of sampling progress within the sampling year: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?

There is no need to adjust sampling allocations

Data capture

Means of data capture: short description (+ photo optionally). Indicate what are the means for collecting the data, e.g. scales, measuring board, dedicated software, ...

Integrated e-logbook Fishery Data Informational System *(FDIS).*

Data capture documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.

Integrated e-logbook FDIS. Data and protocols are stored in the national database with limited access for external users

Quality checks documentation: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.

Records of bycatch in the logbooks do not require quality check.

Data storage

National database: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.
https://zdis.zuv.lt/tarnyba/pages/login.xhtml (limited access for external users)

International database: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.
NA

Quality checks and data validation documentation: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.
There are no any documents on quality checks and validation.

Sample storage

Storage description: Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.

Sample analysis: Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.
NA

Data processing

Evaluation of data accuracy (bias and precision): Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.
Data accuracy cannot be evaluated. Number of specimens that may occur in the catch is recorded in the logbook and this do not require estimation of accuracy.

Editing and imputation methods: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.
There is no special documentation on data editing and imputation. Basic instructions how to input and edit data are integrated into logbooks and working files.

Quality document associated to a dataset: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?
NA

Validation of the final dataset: How are datasets validated (quality checked) before providing to end-user?
There is no need to validate data records. All records are stored under protocol requirements.

MS: LTU

Region: North Sea and Eastern Arctic

Sampling scheme identifier: SelfAtSea_Commercial fishing trip_list of PETS species

Sampling scheme type: Commercial fishing trip

Observation type: SelfAtSea

Time period of validity: from January 2022 to December 2024

Sampling is aiming at monitoring of species that are to be monitored under protection programmes in the
Union or under international obligations listed in Table 2 of the EU MAP Delegated Decision annex. The scheme covers national commercial fleet operating within ICES Divisions 1-2, 4 and 7d

Description of the population

Population targeted: *Open Sea trawlers engaged in commercial fishery.*
Population sampled:
Whole fleet via logbook information.
Stratification: *Data will be collected at the trip level by gear, date, ICES subdivision, metier levels.*

Sampling design and protocols

Sampling design description: Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies
Registration of any bycatch is obligatory and data must be recorded on haul-by-haul in case of trawlers.
Is the sampling design compliant with the 4S principle?:
NA
Regional coordination: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.
There are no any agreements on sampling design or protocols.
Link to sampling design documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, Member State shall provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.
Data from logbooks is stored in national database with limited access.
Compliance with international recommendations: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text, and should be available upon request for the evaluators.
N. There is no sampling design specified internationally.
Link to sampling protocol documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.
Data from logbooks is stored in national database with limited access.
Compliance with international recommendations: Member State shall state 'Y' (yes) if the sampling protocol is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling protocol should be shortly explained in the text, and should be available upon request for the evaluators.
Data from logbooks is stored in national database with limited access.

Sampling implementation

Recording of refusal rate: Indicate with 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.

NA

Monitoring of sampling progress within the sampling year: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?

There is no need to adjust sampling allocations

Data capture

Means of data capture: short description (+ photo optionally). Indicate what are the means for collecting the data, e.g. scales, measuring board, dedicated software, ...

Integrated e-logbook Fishery Data Informational System (FDIS).

Data capture documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.

Integrated e-logbook FDIS. Data and protocols are stored in the national database with limited access for external users

Quality checks documentation: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.

Records of bycatch in the logbooks do not require quality check.

Data storage

National database: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.

https://zdis.zuv.lt/tarnyba/pages/login.xhtml (limited access for external users)

International database: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.

NA

Quality checks and data validation documentation: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.

There are no any documents on quality checks and validation.

Sample storage

Storage description: Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.

Sample analysis: Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.

NA

Data processing

Evaluation of data accuracy (bias and precision): Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature

reference (author(s), year and type of publication - e.g., internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.
Data accuracy cannot be evaluated. Number of specimens that may occur in the catch is recorded in the logbook and this do not require estimation of accuracy.
Editing and imputation methods: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.
There is no special documentation on data editing and imputation. Basic instructions how to input and edit data are integrated into logbooks and working files.
Quality document associated to a dataset: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?
NA
Validation of the final dataset: How are datasets validated (quality checked) before providing to end-user?
There is no need to validate data records. All records are stored under protocol requirements.

MS: LTU
Region: North east Atlantic
Sampling scheme identifier: SelfAtSea_Commercial fishing trip_list of PETS species
Sampling scheme type: Commercial fishing trip
Observation type: SelfAtSea
Time period of validity: from January 2022 to December 2024
Sampling is aiming at monitoring of species that are to be monitored under protection programmes in the *Union or under international obligations listed in Table 2 of the EU MAP Delegated Decision annex.* *The scheme covers national commercial fleet operating within ICES Divisions 5-4 and 14*
Description of the population
Population targeted: *Open Sea trawlers engaged in commercial fishery.* **Population sampled:** *Whole fleet via logbook information.* **Stratification:** *Data will be collected at the trip level by gear, date, ICES subdivision, metier levels.*
Sampling design and protocols
Sampling design description: Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies *Registration of any bycatch is obligatory and data must be recorded on haul-by-haul in case of trawlers and trip basis in case of gillnetters.* **Is the sampling design compliant with the 4S principle?:** *NA* **Regional coordination:** Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating. *There are no any agreements on sampling design or protocols.* **Link to sampling design documentation:** Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, Member State shall provide a literature

reference (author(s), year and type of publication - e.g., internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.
Data from logbooks is stored in national database with limited access.
Compliance with international recommendations: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text, and should be available upon request for the evaluators.
N. There is no sampling design specified internationally.
Link to sampling protocol documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g., internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.
Data from logbooks is stored in national database with limited access.
Compliance with international recommendations: Member State shall state 'Y' (yes) if the sampling protocol is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling protocol should be shortly explained in the text, and should be available upon request for the evaluators.
Data from logbooks is stored in national database with limited access.

Sampling implementation

Recording of refusal rate: Indicate with 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.
NA
Monitoring of sampling progress within the sampling year: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?
There is no need to adjust sampling allocations

Data capture

Means of data capture: short description (+ photo optionally). Indicate what are the means for collecting the data, e.g., scales, measuring board, dedicated software, ...
Integrated e-logbook Fishery Data Informational System (FDIS)
Data capture documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g., internal report). If no documentation on data capture (e.g., measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.
Integrated e-logbook FDIS. Data and protocols are stored in the national database with limited access for external users
Quality checks documentation: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.
Records of bycatch in the logbooks do not require quality check.

Data storage

National database: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.
https://zdis.zuv.lt/tarnyba/pages/login.xhtml (limited access for external users)

International database: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.

NA

Quality checks and data validation documentation: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.

There are no any documents on quality checks and validation.

Sample storage

Storage description: Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.

Sample analysis: Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.

NA

Data processing

Evaluation of data accuracy (bias and precision): Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g., internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.

Data accuracy cannot be evaluated. Number of specimens that may occur in the catch is recorded in the logbook and this do not require estimation of accuracy.

Editing and imputation methods: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.

There is no special documentation on data editing and imputation. Basic instructions how to input and edit data are integrated into logbooks and working files.

Quality document associated to a dataset: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?

NA

Validation of the final dataset: How are datasets validated (quality checked) before providing to end-user?

There is no need to validate data records. All records are stored under protocol requirements.

MS: LTU

Region: Other regions

Sampling scheme identifier: SciObsAtSea _Commercial fishing trip_list of PETS species

Sampling scheme type: Commercial fishing trip

Observation type: SciObsAtSea

Time period of validity: from January 2022 to December 2024

Sampling is aiming at monitoring of species that are to be monitored under protection programmes in the

Union or under international obligations listed in Table 2 of the EU MAP Delegated Decision annex. The scheme covers national commercial fleet operating within NAFO area

Description of the population

Population targeted: *Open Sea trawlers engaged in commercial fishery.*

Population sampled:

Whole fleet via logbook information.

Stratification: *Data will be collected at the trip level by gear, date, NAFO division, metier levels.*

Sampling design and protocols

Sampling design description: Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies

Registration of any bycatch is obligatory and data must be recorded on haul-by-haul in case of trawlers and trip basis in case of gillnetters.

Is the sampling design compliant with the 4S principle?:

NA

Regional coordination: Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.

There are no any agreements on sampling design or protocols.

Link to sampling design documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, Member State shall provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.

Data from logbooks is stored in national database with limited access.

Compliance with international recommendations: Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text, and should be available upon request for the evaluators.

N. There is no sampling design specified internationally.

Link to sampling protocol documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.

Data from logbooks is stored in national database with limited access.

Compliance with international recommendations: Member State shall state 'Y' (yes) if the sampling protocol is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling protocol should be shortly explained in the text, and should be available upon request for the evaluators.

Data from logbooks is stored in national database with limited access.

Sampling implementation

Recording of refusal rate: Indicate with 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.

NA

Monitoring of sampling progress within the sampling year: Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?

There is no need to adjust sampling allocations

Data capture

Means of data capture: short description (+ photo optionally). Indicate what are the means for collecting the data, e.g. scales, measuring board, dedicated software, ...
Integrated e-logbook database ZDIS.
Data capture documentation: Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.
Integrated e-logbook database ZDIS. Data and protocols are stored in the national database with limited access for external users
Quality checks documentation: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.
Records of bycatch in the logbooks do not require quality check.

Data storage

National database: Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.
https://zdis.zuv.lt/tarnyba/pages/login.xhtml (limited access for external users)
International database: Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.
NA
Quality checks and data validation documentation: Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.
There are no any documents on quality checks and validation.

Sample storage

Storage description: Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.

Sample analysis: Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.
NA

Data processing

Evaluation of data accuracy (bias and precision): Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.
Data accuracy cannot be evaluated. Number of specimens that may occur in the catch is recorded in the logbook and this do not require estimation of accuracy.
Editing and imputation methods: Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found.

If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.

There is no special documentation on data editing and imputation. Basic instructions how to input and edit data are integrated into logbooks and working files.

Quality document associated to a dataset: Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?

NA

Validation of the final dataset: How are datasets validated (quality checked) before providing to end-user?

There is no need to validate data records. All records are stored under protocol requirements.

LT-BYCS

***MS* :LTU**

***Region:* Baltic Sea**

***Sampling scheme identifier:* LT-BYCS**

Sampling scheme type: Research survey at sea

Observation type: SciObsAtSea

Time period of validity : 2023-2024

Short description (max 100 words): e.g. sampling scheme aiming at collecting length samples from commercial landings on-shore for all species listed in Table 1 of the EU MAP Delegated Decision annex. The scheme covers mainland and all outermost regions ('RUP' in French, Portuguese, and Spanish).

Evaluation of by-catch of seabirds and other PETS by gillnets used in the commercial fisheries in Lithuanian territorial sea

Description of the population

Population targeted: *Specify which are the primary sampling units (PSU), e.g. all national port*days (information present in former Table 4B). For research surveys: specify the main target species from a survey perspective (as opposed to Table 1 in the Annex to the Implementing Decision) and the main survey area.*

Fishing activities with gillnets in Lithuanian Territorial Sea

Population sampled: *Specify which part of the target population will be sampled and specify which part of the target population is unreachable for sampling or excluded for some reason to explain, e.g. major ports being listed as auctions excluding all minor ports and no sampling during the week-ends. For research surveys at sea describe target species in single-species surveys or ecosystem component (e.g. demersal, pelagic) in multispecies surveys.*

10 - 15% of total fishing efforts in small-scale fishing using vessels of <12 m length

Stratification: *Explain the logic taken to stratify the population and the number of strata generated, e.g. population stratified in 3 geographical lots (from A to B, from B to C and from C to D). Each lot is then stratified by auction.*

NA

Sampling design and protocols

Sampling design description: *Describe how the sampling allocation is defined; how PSU and SSU are selected for sampling; indicate for which catch fraction the sampling scheme applies.*

Bird and mammals bycatch data will be collected by observers and self-reporting system covering entire year of operating fishing fleet. Fishermen will be contracted to provide bycatch data by completing data collection sheets, or to allow an observer onboard their vessels to collect data. Reference number of fishing enterprises cover 10 -15% of total fishing efforts in small-scale fishing using vessels of <12 m

length will be monitored intensively. Data collection will cover all fishing gear in use by these enterprises covering gillnets and fish trap data collection.
Information on species bycatch events would be collected: species, age, sex, bycatch gear type, mesh size, setting time, hauling time, depths and location. Animals will be labeled with unique code system to precede for further analysis.

Is the sampling design compliant with the 4S principle?: *Y/N/NA (NA for e.g. surveys and diadromous and recreational sampling schemes)*

NA

Regional coordination: *Indicate if the sampling design and protocols were developed as part of a regional or multi-lateral agreement, and if yes, refer to the agreement (table 1.3) and list all MS participating.*

NA

Link to sampling design documentation: *Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, Member State shall provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, Member State shall provide some details in the textbox.*

available in MRI SharePoint ;

Compliance with international recommendations: *Indicate 'Y' (yes) if the sampling design is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling design should be shortly explained in the text, and should be available upon request for the evaluators.*

NA

Link to sampling protocol documentation: *Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the sampling design exists, provide details on the sampling protocol in this textbox.*

available in MRI SharePoint ;

Compliance with international recommendations: *Member State shall state 'Y' (yes) if the sampling protocol is in line with international recommendations, and 'N' if not. If no relevant expert or coordination groups exist, the sampling protocol should be shortly explained in the text, and should be available upon request for the evaluators.*

Y – BirdLife International

Sampling implementation

Recording of refusal rate: *Indicate with 'Y' (yes) or 'N' (no), or 'NA' (not applicable, in case of research surveys). If 'N' (no), indicate when (year) documentation will be available.*

NA

Monitoring of sampling progress within the sampling year: *Indicate how sampling allocations are adjusted (if needed) and followed-up, what are the mechanisms in place to resolve issues and adopt mitigation measures during the sampling year?*

NA

Data capture

Means of data capture: *short description (+ photo optionally). Indicate what are the means for collecting the data, e.g. scales, measuring board, dedicated software, ...*

Data capture documentation: *Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on data capture (e.g. measuring protocols, maturity staging, manual for the data capture means etc.) exists, provide some details in the textbox.*

available in MRI SharePoint ;

Quality checks documentation: *Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the quality checks exists, provide some details in the text box.*
See chapter "Means of data capture"

Data storage

National database: *Provide the name of national database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*
See chapter "Means of data capture"

International database: *Provide the name of international database(s) and the organisation hosting the database, if applicable. Otherwise, insert 'NA' (not applicable). Provide a link if the database is accessible through a website.*
N

Quality checks and data validation documentation: *Provide link to webpage where the documentation can be found. Otherwise, provide some details in the text box.*
See chapter "Means of data capture"

Sample storage

Storage description: Indicate the type of soft tissues and hard parts stored (e.g. age structures, stomach, plankton, genetics) and the location used for samples storage; how long the samples are stored; how conservation and maintenance as well as access to samples are organised; whether the samples are stored under the auspices/responsibility of an international organization; if yes, which one. Provide a link to information on quantities of sampled stored by species/stock, geographic sub-area and by year.

Sample analysis: Provide a brief description or the references to documents, including link to webpages (e.g. age reading manuals, EGs reports and protocols) if adequate, where information on the processing of the samples is provided.
See chapter "Means of data capture"

Data processing

Evaluation of data accuracy (bias and precision): *Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the evaluation of data accuracy exists, provide some details in the textbox.*
See chapter "Means of data capture"

Editing and imputation methods: *Indicate with 'Y' (yes) or 'N' (no). If 'N' (no), indicate when (year) documentation will be available. Provide a link to a webpage where the documentation can be found. If no link is available, but documentation exists, provide a literature reference (author(s), year and type of publication - e.g. internal report). If no documentation on the editing and imputation methods exists, provide some details in the textbox.*
See chapter "Means of data capture"

Quality document associated to a dataset: *Is there a publication digital object identifier (DOI) created? Is there a document summarising the estimation process followed?*
See chapter "Means of data capture"

Validation of the final dataset: *How are datasets validated (quality checked) before providing to end-user?*
See chapter "Means of data capture"

ANNEX 1.2 - QUALITY REPORT FOR SOCIOECONOMIC DATA SAMPLING SCHEME

The quality report fulfils Article 6 (3) (d) of Regulation (EU) 2017/1004. This document is intended to specify data to be collected under Chapter II, points 3, 5, 6, and 7 of the Delegated Decision annex: 'Socioeconomic data on fisheries, aquaculture and any complementary data collection of fishing activity and fish processing'. Use this annex to describe quality aspects of the data collection process (design, sampling implementation, data capture, data storage and data processing etc.). The annex should be filled for each sampling scheme. Where applicable, use the handbook on sampling design (Deliverable 2.1 from MARE/2016/22 SECFISH study), available on the DCF website.

Survey Specifications
Sector name refers to socio economic data on fisheries, aquaculture and any complementary data collection of fishing activity and processing as given in the EU MAP Delegated Decision annex. *Sampling scheme refers to survey technique: by census, by sampling, random or non-random, other (with explanation). If sampling then outline sampling design.* *Variables refer to Tables 7, 9 and 10 of the EU MAP Delegated Decision annex. Supra region refers to Table 2 of the EU MAP Implementing Decision annex. If the sampling scheme is the same in all supra regions put 'All Supra regions'.*
Sector name(s): Fishing activity variables
Sampling scheme: Census
Variables: Fishing activity variables from Table 6 of EU MAP Delegated Decision
Supra region(s): All Supra regions
Survey planning
Provide a short description of the population the sampling scheme applies to; e.g. '*less active vessels using passive gears*'. The total population for fleet Fishing activity variables is all active and inactive vessels registered in the National Fisheries Fleet Register on 31 December of the reporting year and vessels that do not appear on the Register at that date but have fished at least one day during the reporting year. The population of Fishing activity variables, which are not covered by Control Regulation, are all active and inactive vessels, registered in the Fishing Fleet Register on 31 December of the reporting year and vessels that do not appear on the Register at that date but have a fisheries activity at least one day during the reporting year. The National logbooks applied at census basis to all vessels with length less than 10 m, which had activities in fishing effort. Inactive fleet variables is deriving from the National Fisheries Fleet Register (NFFR). The Sales notes covers landings variables for all segment.
Survey design and strategy

List data sources; e.g. interviews, registers, log books, sales notes, VMS, financial accounts etc.

Effort data for all fleet segments is collected through National and EU logbooks form and uploaded in FDIS. Also, the sale notes data collaborated in FDIS. Fleet variable group is deriving from the National Fisheries Fleet Register (NFFR) integrated in FDIS. Active and inactive vessels are included in NFFR.

Describe how the sample sizes were determined.

The data collection scheme for all variables is census.

Describe survey methods and distribution; e.g. questionnaire forms by post, by email, on website, by phone etc. access to other datasets etc.

To approach reliable and high quality of data Lithuania uses a "census" type of logbooks for vessel, which is not recordered data under the Regulation (EU) No 1224/2009. National logbooks are completing by a company engaged in commercial fishing in the Baltic Sea coastal area. List of vessels is approved by national legislation and covers the whole segment population. The landings and metier based effort variables are provided by abovementioned logbooks. The logbooks information shall be transmitted to the authority 2 times per month. When classifying a data transmission failures regarding timeliness or completeness the company is notified and report is re/submitted. The logbooks landing information are cross-checking with sales notes.

Describe the role of auxiliary information, if any, in the strategy: e.g. for validation, cross referencing, fall back data source etc.

Cross-checking, analyses and verifications through automated computerised algorithms and mechanisms on vessel monitoring systems, catch, effort and sales data and data related to the NFFR as well as verification of licences and fishing authorisations are developed in FDIS.

Estimation design

Describe method of calculating population estimate from sample.

Not applicable as data collection is census

Describe method of calculating derived data: e.g. imputed values.

Data on landings and effort for all segments is derived from the national or Comunity vessel's logbooks which have been cross-checked with sales notes and/or VMS data. For fleet segments value is estimating based on prices derived from sales notes multiplying by weight from landing declarations.

Describe treatment of nonresponse.

For small scale fisheries the mandate for data reporting in the National logbooks is established by the Ministry of Agriculture in the Regulation Nr. 3D-94 of 12 February 2009. The Regulation (Point 15) defines the duties of respondents in providing the logbook data. Other fleet segments are covered by EU legal acts restrictions. The mandate is clarified in the rules of fisheries data provision and the legal responsibility concerning non-response. In order to avoid and reduce non-responses of data submission a policy of proactive measures in form of periodical reminders to data small scale fisheries providers are in place. Fisheries data, collected to FDIS has an administrative data status and is used to administrate EMFF measures, therefore sector has an interest to provide data and assure it quality.

Error checks

Describe potential errors and how and where in the process these are detected, avoided or eliminated e.g., data; duplication, double counting, respondent error, upload error, processing error etc.

In FDIS has been performed cross-checking, analyses and verifications through automated computerised algorithms and mechanisms on vessel monitoring systems, catch, effort and sales notes data and data related to the Community fishing fleet register as well as the verification of licences and fishing authorisations that ensure Fleet, Effort (excluding Energy consumption), Number of fishing enterprises/ units and Production value per species variables quality.

Data storage and documentation

Describe how the data is stored.

Fisheries statistical data is stored in FDIS data base. Managing authority for FDIS is Lithuanian Ministry of Agriculture. FIDIS is administrated by ATEA which possess necessary capabilities and IT infrastructure to guarantee the safe storage and use of data.

Provide link to webpage where additional methodological documentation can be found, if any.

Not applicable

Revision

Describe the frequency of the methodology review e.g., revision of; segmentation, survey method per segment, per variable etc.

Data collection process is regularly monitored for implementation and efficiency. For the quality assurance ATEA has adopted internal validation system. Among other elements it includes monitoring and measurement of data collection and dissemination efficiency, completeness and timeliness. Data collection methodologies are regularly reviewed and adopted to the new requirements and recommendations. Revisions follow standard as defined in the procedure for organization of data presentation, verification.

Confidentiality

Are procedures for confidential data handling in place and documented?

Statistical confidentiality is guaranteed by the Law on Official Statistics of the Republic of Lithuania. Personal data confidentiality is guaranteed by the General Data Protection Regulation**,** Law on Legal Protection of Personal Data of Republic of Lithuania

Are protocols to enforce confidentiality between DCF partners in place and documented?

For complimentary data collection is adopted a national legal act containing confidentiality provisions. Whereas external users are not permitted to access to data sources, there is no need of protocols and documentation to enforce confidentiality with them.

Are protocols to enforce confidentiality with external users in place and documented?

Not applicable.

Are there any issues with publication of data due to confidentiality reasons? Provide an explanation.

To avoid confidentiality issues in reporting, fleet economic data at segment level are aggregated to the clusters.

Survey Specifications
Sector name refers to socio economic data on fisheries, aquaculture and any complementary data collection of fishing activity and processing as given in the EU MAP Delegated Decision annex. *Sampling scheme refers to survey technique: by census, by sampling, random or non-random, other (with explanation). If sampling then outline sampling design.* *Variables refer to Tables 7, 9 and 10 of the EU MAP Delegated Decision annex. Supra region refers to Table 2 of the EU MAP Implementing Decision annex. If the sampling scheme is the same in all supra regions put 'All Supra regions'.*
Sector name(s): ECONOMIC AND SOCIAL DATA OF FISHING FLEET
Sampling scheme: Census
Variables: Fleet economic variables from Table 7 of EU MAP Delegated Decision excluding Consumption of fixed capital, Value of physical capital and Value of quotas and other fishing rights for which separate Methodological Reports are provided
Supra region(s): All Supra regions
Survey planning
Provide a short description of the population the sampling scheme applies to; e.g. '*less active vessels using passive gears*'. The total population for fleet economic and social variables is all active and inactive vessels registered in the Fishing Fleet Register on 31 December of the reporting year and vessels that do not appear on the Register at that date but have fished at least one day during the reporting year. Census survey is applied to the enterprises which had activities in fishing effort. For inactive fleet economic variables are estimated.
Survey design and strategy

List data sources; e.g. interviews, registers, log books, sales notes, VMS, financial accounts etc.

Collection of economic variables of the Lithuanian fleet will be based on following major data sources which contains census data:

- Lithuanian Agricultural and Food Product Market Information System (LAFPMIS) administered by State enterprise Agricultural Information and Rural Business Center (AIRBC) for Economic and social variables covering variable groups from EU MAP as Income, Operating costs, Capital costs, Investments, Financial position, Employment, variable energy consumption and Social variables. Gross value of landings is collected from the enterprise accountancy as income of landings from income/cost statement together with corresponding expenditures. For the crosschecking and in case of non-response value of landings from FDIS (sale notes) is used.
- Fishery Data Informational System (FDIS) administered by Fisheries Service covers Variable groups as Fleet, Effort, Number of fishing enterprises/units.

LAFPMIS economic and social data of fleet is collected through officially approved census survey forms. Effort data for all fleet segments is collected through National and EU logbooks in paper or electronic form and uploaded in FDIS Fleet variable group is derived from the National Fisheries Fleet Register (NFFR) integrated in FDIS. Active and inactive vessels are included in NFFR.

Fleet economic data collection is based at enterprise level, but survey unit is a vessel. If enterprise operates two vessels or more which belongs to different fleet segments, data is reported separately for each segment. In the case when all vessels in the enterprise belongs to one segment, only one questionnaire for all vessels in the segment is provided. However, due to the low number of vessels per each segment, similar characteristic fleets are merged to the clusters to avoid any issues coming from confidentiality.

Before starting annual census survey for economic and social variables the composition of fleet segments is checked from the fleet activity information (effort data from FDIS). Logbook based data on effort for each active population vessel is extracted from FDIS and taking into account vessel length, fishing area and activity by gear, fleet segments are formed.

Social data is collected at the enterprise level and aggregated to the fishing region as recommended by PGECON 2017. “Small scale fleet”, “Large scale fleet” and “Long distance fleet” aggregation groups of social variables are used from PGECON 2017 3-9 recommendations.

Describe how the sample sizes were determined.

Sample size is total population as data collection scheme is census. Fishing activity data for the determination of active fleet population is derived from FDIS data base. Inactive fleet is derived from the NFFR.

Describe survey methods and distribution; e.g. questionnaire forms by post, by email, on website, by phone etc. access to other datasets etc.

Survey method is census. Data are collected by statistical forms (code DR-1) approved by the order of the Minister of Agriculture No 3D-707 on 4-th August of 2010 (**link**). Legal act approves “The rules of fisheries data provision” including statistical forms as well as “Methodology for the survey of production, sales, employment and economic indicators of aquaculture, marine fisheries and fish processing industry”. For the fisheries data submission, Interactive Data Input System is developed to facilitate data collection process and data storage. Enterprises have an option to provide data directly to the data base or alternatively can send completed survey forms by email and then data is uploaded to the system by the data collector.
FDIS and NFFR possess census data from logbooks and vessels register documents respectively.

Describe the role of auxiliary information, if any, in the strategy: e.g. for validation, cross referencing, fall back data source etc.

- Auxiliary data is used for the FTE calculation from the number of working hours. The annual number of hours per FTE is taken from the annually approved legal act of Social and Labour Ministry on the approval of annual average monthly working days and average monthly working hours (**link**).
- For the crosschecking purposes and estimation of missing variables, publicly available information on the Total income, net profit, total assets and debts published from the State Enterprise Center of Registers (Income Statement report and Balance sheets) is used (**link**).
- For the crosschecking of data and estimation of missing employment variables publicly available data from State Social Insurance Fund is used.

Estimation design

Describe method of calculating population estimate from sample.

Not applicable as data collection is census

Describe method of calculating derived data: e.g. imputed values.

Imputed value of unpaid labour is calculated as the number of unpaid family members involved in production, or number of their working hours (if provided) multiplied by average annual wage calculated for "paid labour" at particular segment level. All data is available from LAFPMIS.
Working hours of employees in fisheries is collected at gender level. Therefore, FTE by gender as well as National FTE is calculated from annual working hours divided from the annual number of hours for 1 full time employee indicated in national law (data of Social and Labour Ministry).

Describe treatment of nonresponse.

The mandate for statistical data reporting is established in the Law on Official Statistics in Article 5 Part 1 and Article 17 (**link**). The Law on Official Statistics (Article 17) defines the duties of respondents in providing statistical data. The mandate is clarified in the rules of fisheries data provision and the legal responsibility concerning non-response (**link**). In order to avoid and reduce non-responses of data submission a policy of proactive measures in form of periodical reminders, questionnaire facilitation and supportive communication as well as feedback with statistical products to data providers are in place. Fisheries data, collected to LAFPMIS has administrative data status and is used to administrate EMFF measures, therefore sector has an interest to provide data and assure it quality.

In the case, when response rate is less than 100% of population, missing variables are estimated from the independent variables from FDIS effort and landings data. Independent variables for estimation of missing economic indicators were selected taking into account the results and recommendations from the Workshop on allocation of Economic Data at disaggregated level as related to the DCF (July 4-8 2011, Hamburg). Missing variables are estimated by the equation:

$$X_j = \frac{\sum_{i=1}^{n} x_i}{\sum_{i=1}^{n} y_i} * Y_j$$

where:
X_j – missing variable of the vessel;
x_i– collected variable of the sample (census survey responses);
n – sample size;
Y_j – independent variable of the vessel;
y_i– independent variable of the sample.

Table of corresponding information of missing variables, independent variables and auxiliary information for estimation of non-response:

Missing variable of non-response	Independent variable
Personnel costs, Value of unpaid labour, Other variable costs, Other non-variable costs	Value of landings (FDIS sale notes)
Energy costs, Repair and maintenance costs, Energy consumption, Full-time equivalent (FTE)	Days at sea (FDIS logbooks)
Unpaid labour	Paid labour (Census survey data + State Social Insurance Fund data for non-response)

Social indicators	Paid labour (Census survey data + State Social Insurance Fund data for non-response), based on the proportional distribution of social indicators of the achieved sample.

Missing variable of non-response	Auxiliary information
Operating subsidies, Subsidies on investments	National Paying Agency data
Total assets, Gross debt, Investments in tangible assets	SE Center of Registers (income statement report)
Paid labour	State Social Insurance Fund data

Missing variable of non-response	Other methods
Consumption of fixed capital, Value of physical capital	Perpetual Inventory Method (PIM)
Value of quotas and other fishing rights	Discounted Cash Flow method
Total assets	PIM as alternative method for individual companies if auxiliary information in Center of Registers is not available.
Gross debt	Average financial position ratio (debt/assets) from response of the segment is applied on the estimated total assets.

Missing variable of non-response	Comment
Other income	Is assumed as 0 in non-response if no auxiliary information is available that vessel had other income
Income from leasing out quota or other fishing rights, Lease/rental payments for quotas or other fishing rights	Is assumed as 0 in non-response if no auxiliary information (Transferable Fishing rights register) is available that vessel had this type income and cost.

Error checks

Describe potential errors and how and where in the process these are detected, avoided or eliminated e.g., data; duplication, double counting, respondent error, upload error, processing error etc.

LAFPMIS Interactive Data Input System contains:

- logical verification and data validation at different data processing stages;
- automatic data aggregation during data input process;
- for external users, especially data providers, system ensure easy accessibility of methodologies;
- system is flexible in terms of development according requirements from end users and external users;
- update and storage of exhaustive administrative data for comparison and crosschecking.

In addition, primary data, intermediate results and statistical outputs are regularly assessed by the expert knowledge of personnel. Statistical data form survey is checked for inconsistencies (logical checks), completeness, and timeliness. Detected errors are registered in non-compliance register which is used for annual risk assessment analysis, prepared according to the approved procedure (**link**). Based on the risk assessment analysis AIRBC Data Audit Unit on annual basis visit selected fishing companies and perform primary data quality and accuracy audition by checking submitted data with companies accounting documents. Around 80% (audit in 2021) of total population is audited (checked with primary data from accountancy documents) by Data Audit Unit for errors, completeness and other quality assurance aspects.

In FDIS has been performed cross-checking, analyses and verifications through automated computerised algorithms and mechanisms on vessel monitoring systems, catch, effort and sales notes data and data related to the Community fishing fleet register as well as the verification of licences and fishing authorisations that ensure Fleet, Effort (excluding Energy consumption, LAFPMIS), Number of fishing enterprises/ units and Production value per species variables quality.

Data storage and documentation

Describe how the data is stored.

Fisheries statistical data is stored in LAFPMIS data base. Managing authority for LAFPMIS is Lithuanian Ministry of Agriculture and LAFPMIS regulation is approved by legal acts (**link**) which defines LAFPMIS purpose, manager, data processors, data providers, recipients of information, their functions and responsibilities, data processing, data collection, provision, storage and use procedures, sources of financing and data security requirements. LAFPMIS is administrated by AIRBC which possess necessary capabilities and IT infrastructure to guarantee the safe storage and use of data.

Provide link to webpage where additional methodological documentation can be found, if any.

Methodological documents at AIRBC webpage **(link)**.

Revision

Describe the frequency of the methodology review e.g., revision of; segmentation, survey method per segment, per variable etc.

Data collection process is regularly monitored for implementation and efficiency. For the quality assurance AIRBC has adopted internal legal acts on the list of quality monitoring and measurement indicators of the processes and services of AIRBC. Among other elements it includes monitoring and measurement of data collection and dissemination efficiency, completeness and timeliness (*internal document*). Data collection methodologies are regularly reviewed and adopted to the new requirements and recommendations. Revisions follow standard as defined in the procedure for organization of data presentation, verification, processing and aggregation in Agricultural and Food Market Information System and reporting to the European Commission and other European Union institutions and national authorities and publication of the outcome (*internal document*).
Fleet segmentation is reviewed annually as fishing vessels depending on the effort and allocated fish quotas can shift between different feet segments. Fleet segments are defined each year before economic data collection.

Confidentiality

Are procedures for confidential data handling in place and documented?

Statistical confidentiality is guaranteed by the Law on Official Statistics of the Republic of Lithuania **(link)**. Personal data confidentiality is guaranteed by the General Data Protection Regulation **(link),** Law on Legal Protection of Personal Data of Republic of Lithuania **(link)** and AIRBC internal legislation on data protection **(link)**.

Are protocols to enforce confidentiality between DCF partners in place and documented?

All descriptive procedures concerning statistical confidentiality and data protection are laid down in the internal AIRBC documents: AIRBC data protection policy (**link**), AIRBC information security policy (**link**).

Are protocols to enforce confidentiality with external users in place and documented?

All descriptive procedures concerning statistical confidentiality and data protection are laid down in the internal AIRBC documents: AIRBC data protection policy, AIRBC information security policy.

Are there any issues with publication of data due to confidentiality reasons? Provide an explanation.

To avoid confidentiality issues in reporting, fleet economic data at segment level are aggregated to the clusters.

Survey Specifications
Sector name refers to socio economic data on fisheries, aquaculture and any complementary data collection of fishing activity and processing as given in the EU MAP Delegated Decision annex. *Sampling scheme refers to survey technique: by census, by sampling, random or non-random, other (with explanation). If sampling then outline sampling design.* *Variables refer to Tables 7, 9 and 10 of the EU MAP Delegated Decision annex. Supra region refers to Table 2 of the EU MAP Implementing Decision annex. If the sampling scheme is the same in all supra regions put 'All Supra regions'.*
Sector name(s): ECONOMIC DATA (CAPITAL VALUE AND CONSUMPTION OF FIXED CAPITAL OF FISHING FLEET)
Sampling scheme: Estimation using Perpetual Inventory Method (PIM)
Variables: Fleet economic variables of Consumption of fixed capital and Value of physical capital from Table 7 of EU MAP Delegated Decision
Supra region(s): All Supra regions
Survey planning
Provide a short description of the population the sampling scheme applies to; e.g. '*less active vessels using passive gears*'. The total population for fleet economic variables of Consumption of fixed capital and Value of physical capital is all active and inactive vessels registered in the Fishing Fleet Register on 31 December of the reporting year and vessels that do not appear on the Register at that date but have fished at least one day during the reporting year.
Survey design and strategy

List data sources; e.g. interviews, registers, log books, sales notes, VMS, financial accounts etc.

Variables Consumption of fixed capital and Value of physical capital are estimated in accordance with Perpetual Inventory Method (PIM) through a template model initially developed by EC study No. FISH/2005/03. Data for estimation is derived from following data sources:

- Lithuanian Agricultural and Food Product Market Information System (LAFPMIS) administered by State enterprise Agricultural Information and Rural Business Center (AIRBC) for data on vessel purchasing prices, historic depreciated prices and vessel second hand prices.
- Fishery Data Informational System (FDIS) administered by Fisheries Service for fleet activity and capacity indicators.
- Statistics Lithuania for Consumer Price Index

LAFPMIS economic and social data of fleet is collected through officially approved census survey forms. FDIS effort data is collected through log books and monthly reports, Fleet variable group from Fleet Register.

Fleet economic data collection is based at enterprise level, but survey unit is a vessel. If enterprise operates two vessels or more which belongs to different fleet segments, data is reported separately for each segment. In the case when all vessels in the enterprise belongs to one segment, only one questionnaire for all vessels in the segment is provided.

Before starting annual census survey for economic and social variables the composition of fleet segments are checked from the fleet activity information (effort data from FDIS). Logbook based data on effort for each active population vessel is extracted from FDIS and taking into account vessel length, fishing area and activity by gear, fleet segments are formed.

Consumption of fixed capital and Value of physical capital are estimated at fleet segment level.

Describe how the sample sizes were determined.

Sample size for estimation is total population. Fishing activity data for the determination of active fleet population is derived from FDIS data base. Inactive fleet is derived from the Fleet Register.

Describe survey methods and distribution; e.g. questionnaire forms by post, by email, on website, by phone etc. access to other datasets etc.

Not applicable as variables are estimated.

Describe the role of auxiliary information, if any, in the strategy: e.g. for validation, cross referencing, fall back data source etc.

In order to test applicability of PIM method for Lithuanian fishing fleet, the Case Study on the "Capital value estimation for the fishing fleet and comparative analysis between Perpetual Inventory Method and other approaches determining the capital value" was launched and based on the results methodology was prepared (**link**). Data on the depreciation rates, renewal age, vessel structure, residual values used for modelling Variables of Consumption of fixed capital and Value of physical capital is used from case study.

Estimation design

Describe method of calculating population estimate from sample.

Estimation is applied on the total population, which used for census survey.

Describe method of calculating derived data: e.g. imputed values.

Variables of Consumption of fixed capital and Value of physical capital is calculated using PIM by these steps:

- Compiling a list of all active and inactive vessels of Lithuanian fishing fleet at fleet segment level: According to the effort data from FDIS and Fleet register data, activity of the vessels are defined. If no commercial fishing activities were carried out with the vessel during the reporting period, the vessel is indicated as inactive. Based on the Supra region of activity, vessel length and dominant fishing gear, fleet segments are formed.

- Estimation of Net current value of the vessel. Data on vessel purchasing prices (historic depreciated prices) (2nd hand prices) are obtained from LAFPMIS, collected by DR-1 survey forms. A list of individual vessels historic purchasing prices on specific years is created. Net current value is calculated by multiplying depreciated historical value of a vessel by Consumer Price Index. Yearly heavy machinery index is used as CPI for calculating current values, and is taken from Statistics Lithuania.
- Estimation of Gross current value of the vessel. Gross current value is necessary for Price per capacity unit calculation and is estimated by adding cumulated depreciation costs for every single part of a vessel to the Net current value minus investments. Depreciation rates are chosen in accordance to Case Study.
- Calculating Prices per capacity unit (PCU):
  PCU is used for calculation of Gross current value of the vessels for which initial historic purchase value is missing as well as for inactive vessels. PCU for vessels with initial observed purchasing prices is calculated by dividing Gross current value of a vessel by capacity of the vessel in terms of GT. Prices per capacity unit for vessels without initial purchasing price or inactive vessels is calculated by dividing Gross current value for fleet segments by GT of the that segment.
- Value of physical (depreciated) capital is estimated applying the depreciation function on the Gross value of the vessel (obtained from LAFPMIS data or calculated by PCU). Depreciation and gross value are calculated for each part of vessel separately applying linear depreciation function based on the Case Study results.

Describe treatment of nonresponse.

Treatment of nonresponse is not applicable as Consumption of fixed capital and Value of physical capital are estimated using PIM.

Error checks

Describe potential errors and how and where in the process these are detected, avoided or eliminated e.g., data; duplication, double counting, respondent error, upload error, processing error etc.

LAFPMIS Interactive Data Input System contains:
- logical verification and data validation at different data processing stages;
- automatic data aggregation during data input process;
- for external users, especially data providers, system ensure easy accessibility of methodologies;
- system is flexible in terms of development according requirements from end users and external users;
- update and storage of exhaustive administrative data for comparison and crosschecking.

In addition, primary data, intermediate results and statistical outputs are regularly assessed by the expert knowledge of personnel. Statistical data form survey is checked for inconsistencies (logical checks), completeness, and timeliness. Detected errors are registered in non-compliance register which is used for annual risk assessment analysis, prepared according to the approved procedure (**link**). Based on the risk assessment analysis AIRBC Data Audit Unit on annual basis visit selected fishing companies and perform primary data quality and accuracy audition by checking submitted data with companies accounting documents. Around 80% (audit in 2021) of total population is audited (checked with primary data from accountancy documents) by Data Audit Unit for errors, completeness and other quality assurance aspects.
In FDIS has been performed cross-checking, analyses and verifications through automated computerised algorithms and mechanisms on vessel monitoring systems, catch, effort and sales notes data and data related to the Community fishing fleet register as well as the verification of licences and fishing authorisations that ensure Fleet, Effort (excluding Energy consumption, LAFPMIS), Number of fishing enterprises/ units and Production value per species variables quality.
In addition, LAFPMIS on purchasing vessel values is cross checked with historical values for any inconsistencies and changes, which may affect calculated values of Consumption of fixed capital and Value of physical capital.

Data storage and documentation

Describe how the data is stored.

Fisheries statistical data is stored in LAFPMIS data base. Managing authority for LAFPMIS is Lithuanian Ministry of Agriculture and LAFPMIS regulation is approved by legal acts (**link**) which defines LAFPMIS

purpose, manager, data processors, data providers, recipients of information, their functions and responsibilities, data processing, data collection, provision, storage and use procedures, sources of financing and data security requirements. LAFPMIS is administrated by AIRBC which possess necessary capabilities and IT infrastructure to guarantee the safe storage and use of data.

Provide link to webpage where additional methodological documentation can be found, if any.

Methodological documents at AIRBC webpage **(link)**.

Revision

Describe the frequency of the methodology review e.g., revision of; segmentation, survey method per segment, per variable etc.

Data collection process is regularly monitored for implementation and efficiency. For the quality assurance AIRBC has adopted internal legal acts on the list of quality monitoring and measurement indicators of the processes and services of AIRBC. Among other elements it includes monitoring and measurement of data collection and dissemination efficiency, completeness and timeliness (*internal document*). Data collection methodologies are regularly reviewed and adopted to the new requirements and recommendations. Revisions follow standard as defined in the procedure for organization of data presentation, verification, processing and aggregation in Agricultural and Food Market Information System and reporting to the European Commission and other European Union institutions and national authorities and publication of the outcome (*internal document*). Fleet segmentation is reviewed annually as fishing vessels depending on the effort and allocated fish quotas can shift between different feet segments. Fleet segments are defined each year before economic data collection.

Confidentiality

Are procedures for confidential data handling in place and documented?

Statistical confidentiality is guaranteed by the Law on Official Statistics of the Republic of Lithuania **(link)**. Personal data confidentiality is guaranteed by the General Data Protection Regulation **(link),** Law on Legal Protection of Personal Data of Republic of Lithuania **(link)** and AIRBC internal legislation on data protection **(link)**.

Are protocols to enforce confidentiality between DCF partners in place and documented?

All descriptive procedures concerning statistical confidentiality and data protection are laid down in the internal AIRBC documents: AIRBC data protection policy (**link**), AIRBC information security policy (**link**).

Are protocols to enforce confidentiality with external users in place and documented?

All descriptive procedures concerning statistical confidentiality and data protection are laid down in the internal AIRBC documents: AIRBC data protection policy, AIRBC information security policy.

Are there any issues with publication of data due to confidentiality reasons? Provide an explanation.

To avoid confidentiality issues in reporting, fleet economic data at segment level are aggregated to the clusters.

Survey Specifications

Sector name refers to socio economic data on fisheries, aquaculture and any complementary data collection of fishing activity and processing as given in the EU MAP Delegated Decision annex.
Sampling scheme refers to survey technique: by census, by sampling, random or non-random, other (with explanation). If sampling then outline sampling design.
Variables refer to Tables 7, 9 and 10 of the EU MAP Delegated Decision annex. Supra region refers to Table 2

of the EU MAP Implementing Decision annex. If the sampling scheme is the same in all supra regions put 'All Supra regions'.

Sector name(s): ECONOMIC DATA (VALUE OF QUOTAS AND OTHER FISHING RIGHTS OF FISHING FLEET)

Sampling scheme: Estimation using Discounted Cash Flow Method (DCFM)

Variables: Value of quotas and other fishing rights from Table 7 of EU MAP Delegated Decision

Supra region(s): All Supra regions

Survey planning

Provide a short description of the population the sampling scheme applies to; e.g. '*less active vessels using passive gears*'.

The total population for fleet economic variables of Value of quotas and other fishing rights is all active and inactive vessels registered in the Fishing Fleet Register on 31 December of the reporting year and vessels that do not appear on the Register at that date but have fished at least one day during the reporting year.

Survey design and strategy

List data sources; e.g. interviews, registers, log books, sales notes, VMS, financial accounts etc.

Value of quota and other fishing rights is estimated in accordance with Discounted Cash Flow Method (DCFM) as was initially proposed by the SECFISH WP4 (Strengthening regional cooperation in the area of fisheries data collection – Socio-economic data collection for fisheries, aquaculture and the processing industry at EU level) through PGECON 2020 ToR 5.2 and Recommendation 6. Data for estimation is derived from following data sources:

- Lithuanian Agricultural and Food Product Market Information System (LAFPMIS) administered by State enterprise Agricultural Information and Rural Business Center (AIRBC) for the fleet economic data to calculate profitability indicators as input to DCFM.
- Fishery Data Informational System (FDIS) administered by Fisheries Service for fleet activity indicators to disaggregate economic indicators at level of fisheries.
- STECF fleet economic data for the application of regional approach to the calculation of gross profit margin in other MS fleets.
- MareFrame (Ecosystem-based Fisheries Management Solutions) open data sets on the forecast of landings in different marine regions at species level to estimate value of landings in the future periods (**link**).

Describe how the sample sizes were determined.

Sample size for estimation is total population.

Describe survey methods and distribution; e.g. questionnaire forms by post, by email, on website, by phone etc. access to other datasets etc.

Not applicable as variables are estimated.

Describe the role of auxiliary information, if any, in the strategy: e.g. for validation, cross referencing, fall back data source etc.

Auxiliary information from MareFrame was used for the estimation of values in future period of allocated fishing right.

Estimation design

Describe method of calculating population estimate from sample.

Estimation is applied on the total population.

Describe method of calculating derived data: e.g. imputed values.

Following PGECON 2020 Recommendation 6 for MS to explore the possibilities to apply the guidelines to calculate the value of intangible assets, Case study "Preparation of methodology for the estimation of value of quotas and other fishing rights in Lithuanian fishing fleet" (Further – Case study) was launched and based on the study outcomes, methodology was prepared.

Fishing rights to fishing opportunities in Lithuanian fishing fleet are allocated by quoted species (cod, sprat, herring, salmon) to the enterprises, operating in the Baltic Sea, whereas fishing rights for coastal fisheries are distributed as maximum number of nets (total length in m) for assigned fishing territorial area. Long distance fleet have a fishing right for quotas of small pelagic species (dominant in landings) in CECAF, as well as at smaller amount quotas in NAFO n NEAFC and SPRFMO regions. For some species long distance fishing rights are allocated as number of days at sea. Fishing rights in all Supra regions are allocated for 2017–2034-year period.

Taking into account different types of quotas and fishing rights complexity, value of fishing rights is estimated for Baltic large scale fleet, small scale coastal fleet and long distance fleet separately.

Value of fishing rights is estimated by Discounted Cash Flow Method (DCFM) as recommended by the SECFISH WP4 through PGECON 2020. Based on the Case study results, DCFM was modified and adapted to the Lithuanian fleet. Value of fishing rights is estimated by the equation:

$$V_{FR} = \frac{GP_{ft=1}}{(1+k_f)^1} + \sum_{t=2}^{z} \frac{\widehat{GP}_{ft}}{(1+k_f)^t}$$

V_{FR} – Value of fishing rights;
GP_{ft}– Gross profit (without depreciation costs) from quoted fisheries (*f*) in particular year (*t*);
$\widehat{GP}_{ft}$– forecasted gross profit from quoted fisheries (f) in future periods (t);
z – number of remaining years for allocated fishing right;
t – year of fishing right;
k_f – discount rate for quoted fisheries (*f*).

$$k_f = GPM * (1 - r)$$

GPM – Gross profit margin (applying regional approach)
r – profit tax rate

For the reference year V_{FR} is estimated using LAFPMIS fleet economic statistical data whereas future period values are forecasted.

Main steps of estimation of value of fishing rights (V_{FR}):

Large scale Baltic fleet

- As V_{FR} are estimated for every quoted fishery (at stock level for Baltic Sea and group of stocks for long distance fleet), gross profit is calculated for each quoted species by disaggregating economic variables of the vessel to the corresponding fisheries based on the fishing activity indicators. Disaggregation of economic variables was tested in the Case study taking into consideration the results and recommendations from the PGECON WS on allocation of Economic Data at disaggregated level (2011 Hamburg).
- Gross profit margin for discount rate is calculated from disaggregated economic variables by fisheries (at stock level) and for cases when one vessel is specialized for specific target species, data was used without disaggregation.
- For the future periods allocated with fishing rights, forecasted data was used. For the forecast of future landings by fisheries, MareFrame bioeconomic model data based on the ecosystem approach was used. Model datasets are publicly available. Forecasted value of landings multiplied by the 9-year multiannual gross profit margin by the linear forecast function was applied for calculation of future gross profit at fisheries level.

- Future discount rates were calculated taking into consideration regional aspect as Lithuanian large scale fisheries are economically related (by landings and capital investments form other MS) with Baltic sea marine region. For the Baltic Sea fleet, multiannual economic data from Latvian, Estonian, Lithuanian and Polish fleet at the corresponding segment level (STECF data) was used to calculate regional gross profit margin for the particular fisheries. Fleet segment allocation to the fisheries is provided in the Case study.
- Above-mentioned indicators are used for V_{FR} estimation for large scale Lithuanian Baltic fleet.

Small scale coastal fleet

- For the coastal fleet, fishing rights are allocated by the maximum number of fishing nets in the allocated coastal region.
- Economic indicators necessary for the estimation of V_{FR} for coastal fleet are calculated by segment level, because fishery approach is not applicable for allocation of fishing rights to coastal fleet.
- Taking into account that separate coastal territorial regions allocated as part of fishing right have different economic efficiency based on the economic and fishing effort statistical data. Case study shows the different coastal regions had a considerable variance in the days at sea, catch per unit effort, value of landings and profitability. Therefore, indicator "Value of landings by one fishing unit per seaday in the particular region ("Eur/1000tmd")" was calculated for each fleet segment. Having allocated maximum number of nets per coastal region as fishing right for the one economic unit (enterprise), using Eur/1000tmd indicator the Maximal value of landings per fishing right V_{MAXit} is calculated. Multiannual average of Gross profit margin per coastal fleet segment multiplied by the V_{MAXit} will show theoretical maximum Gross profit per fishing right. Value of future landings in coastal region was calculated based on the forecast function of the days at sea (estimated in the Case study). Forecasted value of landings used for the gross profit calculation for the whole period of allocated fishing right. Then V_{FR} of fishing rights is estimated by the DCFM equation.

Long distance fleet

- For the long distance fleet fishing rights are allocated by the fisheries (quota for the separate stocks or group of stocks) therefore the same approach as for large scale Baltic fleet is applied. Difference is only that for discount rate, regional approach is not applied as long distance fleet is operating in the wide range of different regions and represents different fisheries. Regional approach will be complicated to apply. Long distance fleet is represented only by very few companies, therefore due to the confidentiality reasons, value of fishing rights per different fisheries (CECAF small pelagic species, NAFO demersal species and etc.) is not calculated separately and overall V_{FR} for overall long-distance fleet segment is estimated.

Describe treatment of nonresponse.

Treatment of nonresponse is not applicable as Value of quota and other fishing rights are estimated using DCFM.

Error checks

Describe potential errors and how and where in the process these are detected, avoided or eliminated e.g., data; duplication, double counting, respondent error, upload error, processing error etc.

Error checks for LAFPMIS data which is used for DCFM method. LAFPMIS Interactive Data Input System contains:

- logical verification and data validation at different data processing stages;
- automatic data aggregation during data input process;
- for external users, especially data providers, system ensure easy accessibility of methodologies;
- system is flexible in terms of development according requirements from end users and external users;
- update and storage of exhaustive administrative data for comparison and crosschecking.

In addition, primary data, intermediate results and statistical outputs are regularly assessed by the expert knowledge of personnel. Statistical data form survey is checked for inconsistencies (logical checks), completeness, and timeliness. Detected errors are registered in non-compliance register which is used for annual risk assessment analysis, prepared according to the approved procedure (**link**). Based on the risk assessment

analysis AIRBC Data Audit Unit on annual basis visit selected fishing companies and perform primary data quality and accuracy audition by checking submitted data with companies accounting documents. Around 80% (audit in 2021) of total population is audited (checked with primary data from accountancy documents) by Data Audit Unit for errors, completeness and other quality assurance aspects.
In FDIS has been performed cross-checking, analyses and verifications through automated computerised algorithms and mechanisms on vessel monitoring systems, catch, effort and sales notes data and data related to the Community fishing fleet register as well as the verification of licences and fishing authorisations that ensure Fleet, Effort (excluding Energy consumption, LAFPMIS), Number of fishing enterprises/ units and Production value per species variables quality.
Error checks for other data sources in DCFM is not provided.

Data storage and documentation

Describe how the data is stored.

Fisheries statistical data is stored in LAFPMIS data base. Managing authority for LAFPMIS is Lithuanian Ministry of Agriculture and LAFPMIS regulation is approved by legal acts (**link**) which defines LAFPMIS purpose, manager, data processors, data providers, recipients of information, their functions and responsibilities, data processing, data collection, provision, storage and use procedures, sources of financing and data security requirements. LAFPMIS is administrated by AIRBC which possess necessary capabilities and IT infrastructure to guarantee the safe storage and use of data.

Provide link to webpage where additional methodological documentation can be found, if any.

Methodological documents at AIRBC webpage **(link).**

Revision

Describe the frequency of the methodology review e.g., revision of; segmentation, survey method per segment, per variable etc.

Data collection process is regularly monitored for implementation and efficiency. For the quality assurance AIRBC has adopted internal legal acts on the list of quality monitoring and measurement indicators of the processes and services of AIRBC. Among other elements it includes monitoring and measurement of data collection and dissemination efficiency, completeness and timeliness (*internal document*). Data collection methodologies are regularly reviewed and adopted to the new requirements and recommendations. Revisions follow standard as defined in the procedure for organization of data presentation, verification, processing and aggregation in Agricultural and Food Market Information System and reporting to the European Commission and other European Union institutions and national authorities and publication of the outcome (*internal document*).
Fleet segmentation is reviewed annually as fishing vessels depending on the effort and allocated fish quotas can shift between different feet segments. Fleet segments are defined each year before economic data collection.

Confidentiality

Are procedures for confidential data handling in place and documented?

Statistical confidentiality is guaranteed by the Law on Official Statistics of the Republic of Lithuania **(link)**. Personal data confidentiality is guaranteed by the General Data Protection Regulation **(link),** Law on Legal Protection of Personal Data of Republic of Lithuania (link) and AIRBC internal legislation on data protection **(link).**

Are protocols to enforce confidentiality between DCF partners in place and documented?

All descriptive procedures concerning statistical confidentiality and data protection are laid down in the internal AIRBC documents: AIRBC data protection policy (**link**), AIRBC information security policy (**link**).

Are protocols to enforce confidentiality with external users in place and documented?

All descriptive procedures concerning statistical confidentiality and data protection are laid down in the internal AIRBC documents: AIRBC data protection policy, AIRBC information security policy.

Are there any issues with publication of data due to confidentiality reasons? Provide an explanation.

To avoid confidentiality issues in reporting, fleet economic data at segment level are aggregated to the clusters.

Survey Specifications

Sector name refers to socio economic data on fisheries, aquaculture and any complementary data collection of fishing activity and processing as given in the EU MAP Delegated Decision annex.
Sampling scheme refers to survey technique: by census, by sampling, random or non-random, other (with explanation). If sampling then outline sampling design.
Variables refer to Tables 7, 9 and 10 of the EU MAP Delegated Decision annex. Supra region refers to Table 2 of the EU MAP Implementing Decision annex. If the sampling scheme is the same in all supra regions put 'All Supra regions'.

Sector name(s): ECONOMIC AND SOCIAL DATA OF FISH PROCESSING INDUSTRY

Sampling scheme: Census

Variables: Economic and Social variables (excluding variable group Raw material) of fish processing industry, listed in WP table 7.1 and in line with Annex V of PGECON 2020 report.

Supra region(s): NA

Survey planning

Provide a short description of the population the sampling scheme applies to; e.g. '*less active vessels using passive gears*'.

The population for economic and social variables will refer to enterprises whose main activity is defined according to the Eurostat definition under NACE Code 10.20: "Processing and preserving of fish, crustaceans and molluscs". Number of enterprises and Turnover will be collected also from those enterprises that carry out fish processing but not as a main activity. The list of all fish processing companies will be obtained from Lithuanian State Food and Veterinary Service on a yearly basis.

Survey design and strategy

List data sources; e.g. interviews, registers, log books, sales notes, VMS, financial accounts etc.

Collection of economic variables of the Lithuanian fleet will be based on following major data sources which contains census data:

- Lithuanian Agricultural and Food Product Market Information System (LAFPMIS) administered by State enterprise Agricultural Information and Rural Business Center (AIRBC), annual census survey (ŽF-1) for economic data, triannual for social variables and semi-annual census survey (ŽP-1) for employment variables.
- Number of enterprises is obtained from Lithuanian State Food and Veterinary Service (SFVS) register for the entities with having veterinary license for food (fish and crustaceans) product processing.

Describe how the sample sizes were determined.

Sample size is total population as data collection scheme is census.

Describe survey methods and distribution; e.g. questionnaire forms by post, by email, on website, by phone etc. access to other datasets etc.

Economic and social data is collected from fish processing industry by statistical forms (code ŽF-1 and ŽP-1) approved by the order of the Minister of Agriculture No 3D-707 on 4-th August of 2010 (**link**). Legal act approves "The rules of fisheries data provision" including statistical forms as well as "Methodology for the survey of production, sales, employment and economic indicators of aquaculture, marine fisheries and fish processing industry". Survey is included in the official statistics work programs (OSWP) which is regulated by Lithuanian Law on Statistics and is mandatory for all type of economical entities. As data collection is census, data has a higher coverage and more adjusted to DCF needs compare to the Statistics Lithuania. Census survey covers all of the fish processing companies and is used to meet the need for national administrative purposes. Therefore, data from statistical forms ŽF-1 and ŽP-1 will be the main source for economics and part of social data. Social variables are collected every three years started from 2018 and will be continued by specialized triannual census survey.

Describe the role of auxiliary information, if any, in the strategy: e.g. for validation, cross referencing, fall back data source etc.

- Auxiliary data is used for the FTE calculation from the number of working hours. The annual number of hours per FTE is taken from the annually approved legal act of Social and Labour Ministry on the approval of annual average monthly working days and average monthly working hours (**link**).
- For the crosschecking purposes and for estimation of missing variables, publicly available data (Income Statement report and Balance sheet) from State Enterprise Center of Registers (CoR) is used (**link**).
- For the crosschecking of data and estimation of missing variables, data on the employment from State Social Insurance Fund (SSIF) is used.

Estimation design

Describe method of calculating population estimate from sample.

Not applicable as data collection is census

Describe method of calculating derived data: e.g. imputed values.

Imputed value of unpaid labour is calculated as the number of unpaid family members involved in production, or number of their working hours (if provided) multiplied by average annual wage calculated for "paid labour". All data is available from LAFPMIS.
Working hours of employees is collected at gender level. Therefore, FTE by gender as well as National FTE is calculated from annual working hours divided from the annual number of hours for 1 full time employee indicated in national law (data of Social and Labour Ministry).

Describe treatment of nonresponse.

The mandate for statistical data reporting is established in the Law on Official Statistics in Article 5 Part 1 and Article 17 (**link**). The Law on Official Statistics (Article 17) defines the duties of respondents in providing statistical data. The mandate is clarified in the rules of fisheries data provision and the legal responsibility concerning non-response (**link**). In order to avoid and reduce non-responses of data submission a policy of proactive measures in form of periodical reminders, questionnaire facilitation and supportive communication as well as feedback with statistical products to data providers are in place.

In the case, when response rate is less than 100% of population, missing variables are estimated from the independent variables from CoR (Income statement report and Balance sheets) and SSIF. Missing variables are estimated by the equation:

$$X_j = \frac{\sum_{i=1}^{n} x_i}{\sum_{i=1}^{n} y_i} * Y_j$$

where:
X_j – missing variable;
x_i– collected variable of the sample (census survey responses);
n – sample size;
Y_j – independent variable (from CoR or SSIF);
y_i– independent variable of the sample.

Error checks

Describe potential errors and how and where in the process these are detected, avoided or eliminated e.g., data; duplication, double counting, respondent error, upload error, processing error etc.

LAFPMIS Interactive Data Input System contains:

- logical verification and data validation at different data processing stages;
- automatic data aggregation during data input process;
- for external users, especially data providers, system ensure easy accessibility of methodologies;
- system is flexible in terms of development according requirements from end users and external users;
- update and storage of exhaustive administrative data for comparison and crosschecking.

In addition, primary data, intermediate results and statistical outputs are regularly assessed by the expert knowledge of personnel. Statistical data form survey is checked for inconsistencies (logical checks), completeness, and timeliness. Detected errors are registered in non-compliance register which is used for annual risk assessment analysis, prepared according to the approved procedure (**link**). Based on the risk assessment analysis AIRBC Data Audit Unit on annual basis visit selected fish processing companies and perform primary data quality and accuracy audition by checking submitted data with companies accounting documents. Around 80% (audit in 2021) of total population is audited (checked with primary data from accountancy documents) by Data Audit Unit for errors, completeness and other quality assurance aspects.

Data storage and documentation

Describe how the data is stored.

Fish processing industry statistical data is stored in LAFPMIS data base. Managing authority for LAFPMIS is Lithuanian Ministry of Agriculture and LAFPMIS regulation is approved by legal acts (**link**) which defines LAFPMIS purpose, manager, data processors, data providers, recipients of information, their functions and responsibilities, data processing, data collection, provision, storage and use procedures, sources of financing and data security requirements. LAFPMIS is administrated by AIRBC which possess necessary capabilities and IT infrastructure to guarantee the safe storage and use of data.

Provide link to webpage where additional methodological documentation can be found, if any.

Methodological documents at AIRBC webpage **(link)**.

Revision

Describe the frequency of the methodology review e.g., revision of; segmentation, survey method per segment, per variable etc.

Data collection process is regularly monitored for implementation and efficiency. For the quality assurance AIRBC has adopted internal legal acts on the list of quality monitoring and measurement indicators of the processes and services of AIRBC. Among other elements it includes monitoring and measurement of data collection and dissemination efficiency, completeness and timeliness (*internal document*). Data collection methodologies are regularly reviewed and adopted to the new requirements and recommendations. Revisions follow standard as defined in the procedure for organization of data presentation, verification, processing and aggregation in Agricultural and Food Market Information System and reporting to the European Commission and other European Union institutions and national authorities and publication of the outcome (*internal document*).

Confidentiality

Are procedures for confidential data handling in place and documented?

Statistical confidentiality is guaranteed by the Law on Official Statistics of the Republic of Lithuania **(link)**. Personal data confidentiality is guaranteed by the General Data Protection Regulation **(link),** Law on Legal Protection of Personal Data of Republic of Lithuania **(link)** and AIRBC internal legislation on data protection **(link)**.

Are protocols to enforce confidentiality between DCF partners in place and documented?

All descriptive procedures concerning statistical confidentiality and data protection are laid down in the internal AIRBC documents: AIRBC data protection policy (**link**), AIRBC information security policy (**link**).

Are protocols to enforce confidentiality with external users in place and documented?

All descriptive procedures concerning statistical confidentiality and data protection are laid down in the internal AIRBC documents: AIRBC data protection policy, AIRBC information security policy.

Are there any issues with publication of data due to confidentiality reasons? Provide an explanation.

No issues for confidentiality.