

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

Commission Implementing Decision (EU) 2016/1701

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 Implementing Decision (EU) 2016/1251 of 12 July 2016
adopting a multiannual Union programme for the collection, management and use of data in the fisheries and aquaculture sectors for the period 2017-2019.

Commission Implementing Decision (EU) 2016/1701

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

Lithuanian Annual Report for data collection in the fisheries and aquaculture sectors

2017-2019

Version 1 – 2017

Vilnius, 2018

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SECTION 1: BIOLOGICAL DATA

Text Box 1C: Sampling intensity for biological variables

This text box is applicable to the AR.

General comment: This box fulfils paragraph 2 point (a)(i)(ii)(iii) of Chapter III, Chapter IV of the multiannual Union programme and Article 2, Article 4 paragraph 1 and Article 8 of the Decision (EU) 2016/1701. This box is applicable to the Annual Report.

Baltic Sea

1. Evidence of data quality assurance

The number of samples for biological parameters were planned based on statistical analysis of previous data using COST software.

2. Deviations from the Work Plan

The deviations in the achieved data collection compared to what was planned in the Work Plan and explanations of the reasons for the deviations that exceeds the threshold: <90 % and >150 % are listed on particular species/stocks in the table 1C.

3. Actions to avoid deviations.

There are several reasons, why sample are not always available in time. Firstly, due to bad cod stock condition fleet captures more smaller individuals. This implies that for length distribution and collection of otoliths less samples is needed because less length groups are presented in landings. Other reasons are economical, when majority of herring and sprat is caught and landed in neighbouring areas and foreign ports. Third reason is opportunities to get access on board of the vessel and this depends on willingness on ship owners. Besides not all fishermen allow handle for length measurement after fish processing. These are some kind of reasons that cannot be controlled.

In 2018 agreement with fishing companies have been signed under which sufficient number of samples will be provided by fishermen (self-sampling) as well as number of discard trips at sea will be organized for observers to ensure sufficient coverage of sampling. Concerning pelagic fishery, planning of trips for sampling is quite conservative. Pelagic fishery is targeting mixed herring-sprat catches. Discards of other species are considered as insignificant or not present at all. Therefore, there is no reason to send observers on board. Besides, nearly 90% of Lithuanian herring and almost 100% sprat are landed in foreign ports. Fishing companies are informed on what should be done in the framework of DCF and they are ready to provide samples of fish for analysis. Number of samples is strongly dependent on fishery strategy during the sampling year. Concerning sprat samples there is a bilateral agreement with Denmark to cover sampling from Lithuanian vessels (see Table 7C).

North Sea and Eastern Arctic

1. Evidence of data quality assurance

The number of samples for biological parameters were planned after statistical analysis of previous data using COST software. Fishery on certain stocks has very short season and Lithuania has only one vessel operating that performs 1, maximum 2 trips per season in this region. Sampling covers almost whole fishing season in sufficient numbers.

2. Deviations from the Work Plan

There are no deviations from WP.

3. Actions to avoid deviations.

No applicable

North Atlantic

1. Evidence of data quality assurance

There were no fishery in this region. Samples were not taken

2. Deviations from the Work Plan

No applicable

3. Actions to avoid deviations.

No applicable

Other regions

1. Evidence of data quality assurance

Sampling and quality check has to be conducted under multilateral agreement by Netherlands from CECAF and by Poland from SPRFMO

2. Deviations from the Work Plan

No applicable

3. Actions to avoid deviations.

No applicable

SECTION 1: BIOLOGICAL DATA

Table 1D: Recreational fisheries

General comment: This box fulfills paragraph 2 point (a) (iv) of Chapter III of the multiannual Union programme and Article 2, Article 3 and Article 4 paragraph 1 of the Decision (EU) 2016/1701. This box is applicable to the Annual Report. This box is intended to provide information on the design, implementation and analysis of all components of sampling schemes/ surveys that are listed in Table 1D.

1. Description of the target population

Lithuania has recreational fishery only in the Baltic Sea within coastal area of Lithuanian exclusive economic zone as well as internal waters (Curonian lagoon, rivers and lakes). Cod is fished in the baltic sea, Salmon and sea trout are fished both in the Baltic sea and rivers, while eels are fished only in internal waters. Target population is resident anglers, who regularly or occasionally participate in recreational fishery in all waters (internal and marine).

2. Type of survey

For data collection the combination of surveys (online and face-to-face) had been performed. For raising procedures data on number of issued licenses and number of charter boats registered during the fishing operations have been extracted from relevant databases.

3. Data Quality

Data was collected using online survey and face to face survey. The questionnaire was developed by taking into account the questionnaire schemes, used by other countries. During the trips interviewing biological parameters as length, weight, fishing place, catch and percentage of released catch will be registered.

4. Data Analysis and processing

Information about data processing is found in the Work Plan, Table 5A. Editing and imputation methods documented and identified

SECTION 1: BIOLOGICAL DATA

Pilot Study 1: Relative share of catches of recreational fisheries compared to commercial fisheries

General comment: This box fulfils paragraph 4 of Chapter V of the multiannual Union programme and Article 2 and Article 4 paragraph (3) point (a) of the Decision (EU) 2016/1701.
No pilot study was planned in WP
No pilot study was planned in WP

SECTION 1: BIOLOGICAL DATA

Table 1E: Anadromous and catadromous species data collection in fresh water

General comment: This box fulfils paragraph 2 points (b) and (c) of Chapter III of the multiannual Union programme and Article 2 of the Decision (EU) 2016/1701.
General comment: This box is applicable to the Annual Report.
Method selected for collecting data. Salmon and sea trout From 10 to 20 trips are planned to perform during the spring (January 1 – May 15) and 15-20 trips during the autumn (August 15 – October 15) for sampling in 10 rivers that are indicated in the Table 1E. During the trips interviewing of amateur fishermen using face to face questionnaires (ICES WGFRS recommendation) method will be performed, biological parameters such as total length and weight will be registered. Collection of scales and otoliths for age determination are also foreseen. Eel Recreationally fishery Using the questionnaires strategy more than 1000 fishermen will be interviewed in Inland waters for estimating of recreationally fishery. Eels fishing season continues from April to October and in order to this the interviews will be carried out after the eel fishing season (from October to March). During the trips interviewing biological parameters as length, weight, fishing place, catch and percentage of released catch will be registered (Table 1 D). Commercial fishery. A minimum of 100 individuals shall be analysed per management unit as specified in Regulation (EC) No 1100/2007 for yellow and silver eels separately. Samples for biological analysis (100 units in Inland and 100 units in Curonian Lagoon) will be obtained on shore (Table 1C, 1F, 5A). In Inland 3 monitoring places (3 river trap nets) will be used to estimated eel migratory intensity, CPUE, biological data. Data indicated in Tables 1B, 1C, 1F, 4A, 4B will be collected. 9 trip days per season (April – May) is planned to visit monitoring places (Table 4A). In Curonian Lagoon 3 monitoring places (about 15 fykenets) will be used to estimated eel density , CPUE,

biological data. Data indicated in Tables 1B, 1C, 1F, 4A, 4B will be collected. 12 trip days per season (MayOctober) is planned to visit monitoring places (Table 4A).

In case of salmon, sea trout and eel the numbers were achieved, except *Salmo salar* and *Salmo trutta* in life stage adult due equipment failure. The data on salmon and sea trout juveniles (pars) were collected according the electrofishing sampling protocol in 110 sampling sites. The method “trap nets” indicated in the WP was because of typing error. This error will be fixed during next update of WP.

SECTION 1: BIOLOGICAL DATA

Table 1F: Incidental by-catch of birds, mammals, reptiles and fish

General Comment: This box fulfils paragraph 3 point (a) of Chapter III of the multiannual Union programme and Article 2 of the Decision (EU) 2016/1701. This box is applicable to the Annual Report. This box is applicable only for those sections where Member States have reported that they have been carrying out regular sampling. Results and deviations for Pilot studies should be reported under Pilot Study 2.

1. Results

All observers are instructed to register bycatch of any animal or single/rear species of fish. In the Baltic Sea there is a project named Sea Bird task Force (<https://seabirdbycatch.com/2017/09/29/seabird-task-force-report-released>) dedicated to research of bycatch of seabirds in gillnets of coastal fishery. This project is not a part of data collection program. Results on birds' bycatch have been extracted from the report of project and provided to relevant expert group WGBYC. Data from other fishery types have been registered on regular basis from observation trips.

2. Deviations from Work Plan

There are no deviations from WP as all possible data sources have been used for data collection (logbooks, observation trips, projects, surveys, etc.)

3. Data quality

Member States shall provide information on sampling protocols and sampling design for incidental by-catch data collection.

Questions to be addressed are listed below:

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

Answer: *Yes in both cases*

- In gill nets - and hook-and-line fisheries: does the onboard observer protocol instruct the observer to indicate how much of the hauling process has been observed for (large) incidental bycatches which never came on board (because they fall out of the net)? 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"?

Answer: *No*

- Does the onboard observer protocol instruct to report on the use of mitigation (i.e. Escape Devices or Acoustic Deterrent Devices)?

Answer: *No. This information is available from logbooks of the vessel*

- 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.

Answer: *Expert group WGBYC did not provide any recommendations on sampling design. 2017 is the pilot year, when all MS have to collect data on their own way.*

- Are data quality issues taken into account?

Answer: *Yes*

- How are data (and samples) stored

Answer: *All data related to data collection are stored in national database. Data related to registration of incidental catch have to be included into database, i. e. some modifications have to be done adding extra column in it.*

SECTION 1: BIOLOGICAL DATA

Pilot Study 2: Level of fishing and impact of fisheries on biological resources and marine ecosystem

This text box is applicable to the AR. MS should transfer the information from their accepted WP before filling in the additional section highlighted in grey.

General comment: This Box fulfills paragraph 3 point (c) of Chapter III of the multiannual Union programme and Article 2 and Article 4 paragraph (3) point (b) of the Decision (EU) 2016/1701.
General comment: This box is applicable to the Annual Report. This box is intended to provide information on the results obtained from the implementation of the pilot study.
There were no pilot study planned in national WP
Stomachs of cod during the surveys have been collected in the period of 2012-2014 and coordinated by WGBIFS. Since then there were no requirements to collect stomach samples for any species.

SECTION 1: BIOLOGICAL DATA

Text Box 1G: List of research surveys at sea

This text box is applicable to the AR. MS should transfer the information from their accepted WP before filling in the additional section highlighted in grey.

General comment: This box fulfills Chapter IV of the multiannual Union programme and Article 2 and Article 7 paragraph (3) of the Decision (EU) 2016/1701. It is intended to specify which research surveys at sea set out in Table 10 of the multiannual Union programme will be carried out. Member States shall specify whether the research survey is included in Table 10 of the multiannual Union programme or whether it is an additional survey.

General comment: This box is applicable to the Annual Report. This box should provide complementary information on the performance of the surveys, the results and their main use.

1. Objectives of the survey

Baltic International Trawl Survey – BITS Q1. *The main aim of the BITS surveys is to estimate cod and other demersal species recruitment indices and abundance in ICES Subdivision IIIId.*

2. Description of the methods used in the survey. For mandatory surveys, link to the manuals. Include a graphical representation (map)

The surveys has been conducting within period of February-March in the Lithuanian Exclusive Economic Zone (LEEZ) according to the BITS manual (ICES, 2014. Manual for the Baltic International Trawl Surveys (BITS). Series of ICES Survey Protocols SISP 7 - BITS. 71 pp.)

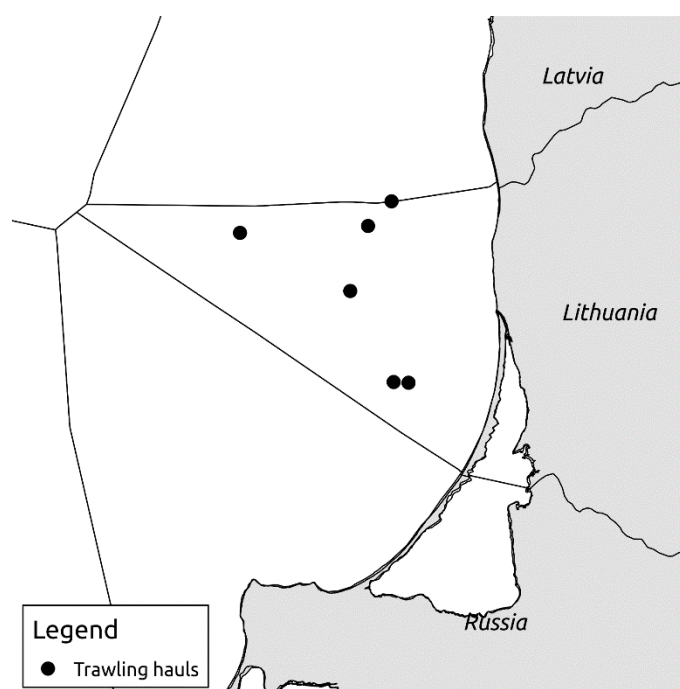


Figure 1. Allocation of stations defined in the LEEZ for BITS survey over 2013-2015 period

3. For internationally coordinated surveys, describe the participating Member States/vessels and the relevant international group in charge of planning the survey

Survey is coordinated by Baltic International Fish Survey Working Group (WGBIFS). All Baltic countries, including Russia, are participating in this survey. Countries and vessels, involved into BITS survey are mentioned in the manual mentioned above.

4. Where applicable, describe the international task sharing (physical and/or financial) and the cost sharing agreement used

Not relevant

5. Explain where thresholds apply

Not relevant

1. Objectives of the survey

Baltic International Trawl Survey – BITS Q4. *The main aim of the BITS surveys is to estimate cod and other demersal species recruitment indices and abundance in ICES Subdivision IIIId.*

2. Description of the methods used in the survey. For mandatory surveys, link to the manuals. Include a graphical representation (map)

The surveys has been conducting within period of November – December in the Lithuanian Exclusive Economic Zone (LEEZ) according to the BITS manual (ICES, 2014. Manual for the Baltic International Trawl Surveys (BITS). Series of ICES Survey Protocols SISP 7 - BITS. 71 pp.)

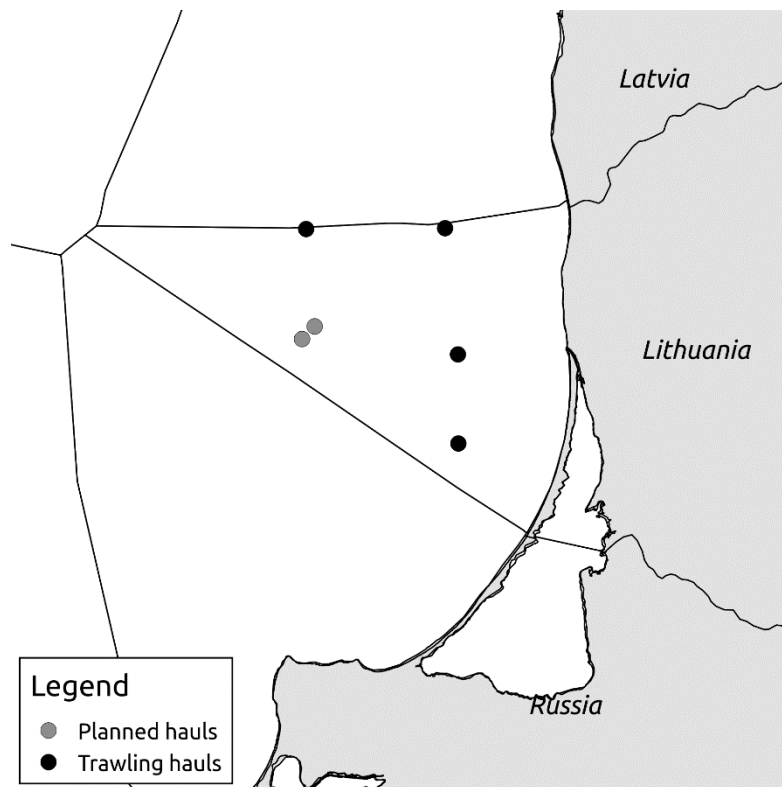


Figure 2. Allocation of stations defined in the LEEZ for BITS survey over 2013-2015 period

3. For internationally coordinated surveys, describe the participating Member States/vessels and the relevant international group in charge of planning the survey

Survey is coordinated by Baltic International Fish Survey Working Group (WGBIFS). All Baltic countries, including Russia, are participating in this survey. Countries and vessels, involved into BITS survey are mentioned in the manual mentioned above.

4. Where applicable, describe the international task sharing (physical and/or financial) and the cost sharing agreement used

Not relevant

5. Explain where thresholds apply

Not relevant

1. Objectives of the survey

Baltic International Acoustic Survey (Autumn) – BIAS. *The main aim of the BIAS surveys is to assess abundance of herring and sprat resources in ICES Subdivision III_d.*

2. Description of the methods used in the survey. For mandatory surveys, link to the manuals. Include a graphical representation (map)

The surveys has been conducting within period of September – October in the Lithuanian Exclusive Economic Zone (LEEZ) according to the IBAS manual (ICES. 2014. Manual of International Baltic Acoustic Surveys (IBAS). Series of ICES Survey Protocols SISP 8 - IBAS. 24 pp.)

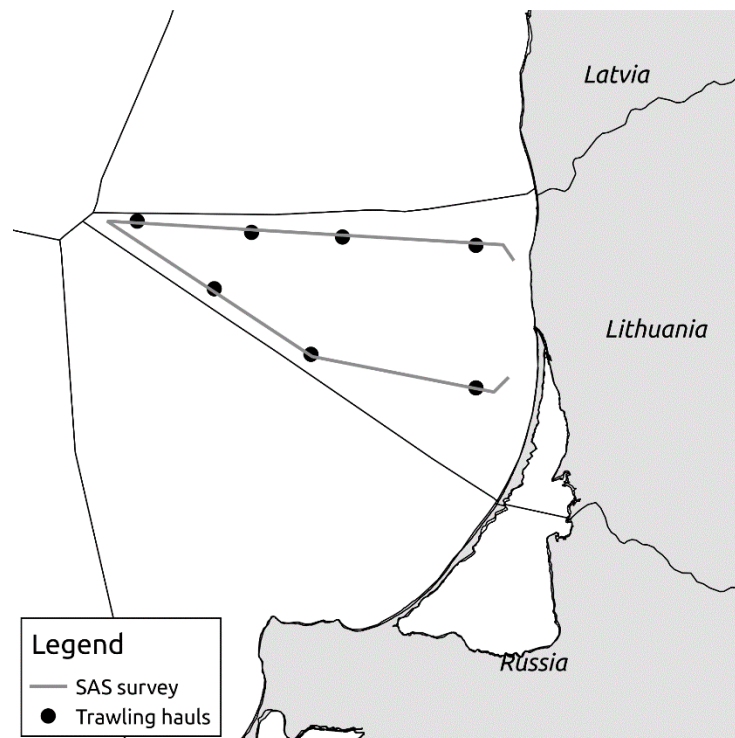


Figure 3. *Cruise track design and hauls of BIAS in LEEZ*

3. For internationally coordinated surveys, describe the participating Member States/vessels and the relevant international group in charge of planning the survey

Survey is coordinated by Baltic International Fish Survey Working Group (WGBIFS). All Baltic countries, including Russia, are participating in this survey. Countries and vessels, involved into BIAS survey are mentioned in the BITS manual mentioned above.

4. Where applicable, describe the international task sharing (physical and/or financial) and the cost sharing agreement used

Not relevant

5. Explain where thresholds apply

Not relevant

1. Objectives of the survey

Sprat Acoustic Survey – SPRAS. The main aim of the SPRAS surveys is to assess abundance of sprat and herring resources in ICES Subdivision IIIId.

2. Description of the methods used in the survey. For mandatory surveys, link to the manuals. Include a graphical representation (map)

The surveys has been conducting within May in the Lithuanian Exclusive Economic Zone (LEEZ) according to the IBAS manual (ICES. 2014. Manual of International Baltic Acoustic Surveys (IBAS). Series of ICES Survey Protocols SISP 8 - IBAS. 24 pp.)

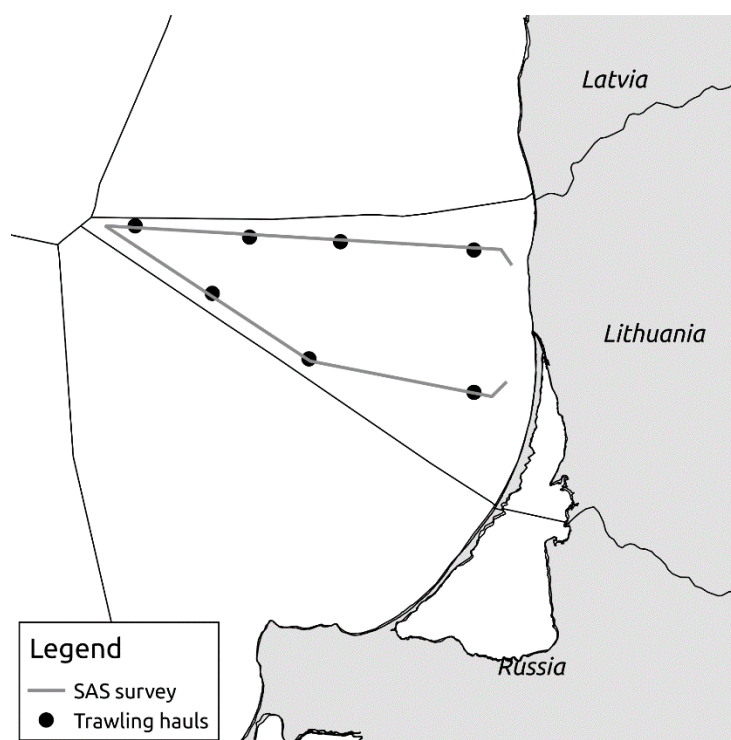


Figure 4. Cruise track design and hauls of SPRAS in LEEZ

3. For internationally coordinated surveys, describe the participating Member States/vessels and the relevant international group in charge of planning the survey

Survey is coordinated by Baltic International Fish Survey Working Group (WGBIFS). All Baltic countries, including Russia, are participating in this survey. Countries and vessels, involved into SPRAS survey are mentioned in the BITS manual mentioned above.

4. Where applicable, describe the international task sharing (physical and/or financial) and the cost sharing agreement used

Not relevant

5. Explain where thresholds apply

Not relevant

1. Graphical representation (map) showing the position (location) of the realized samples.

Baltic International Trawl Survey (BITS Q1 and Q4). The main aim of the BITS surveys is to estimate cod recruitment indices and cod abundance in the Lithuanian Exclusive Economic Zone (LEEZ) ICES Division IIIId. The surveys were conducted in February – March and November – December using the TV3 trawl according to the BITS manual (ICES. 2014. Manual of International Baltic Acoustic Surveys (IBAS). Series of ICES Survey Protocols SISP 8 - IBAS. 24 pp.). In total 6 stations in

BITS Q1 and 6 stations in Q4 had to be carried out by Lithuania (Fig. 1 and Fig. 2). Due to bad weather conditions only 5 hauls in BITSQ1 survey have been performed.

Samples for measurement and age determination of cod, flounder and other species were taken.

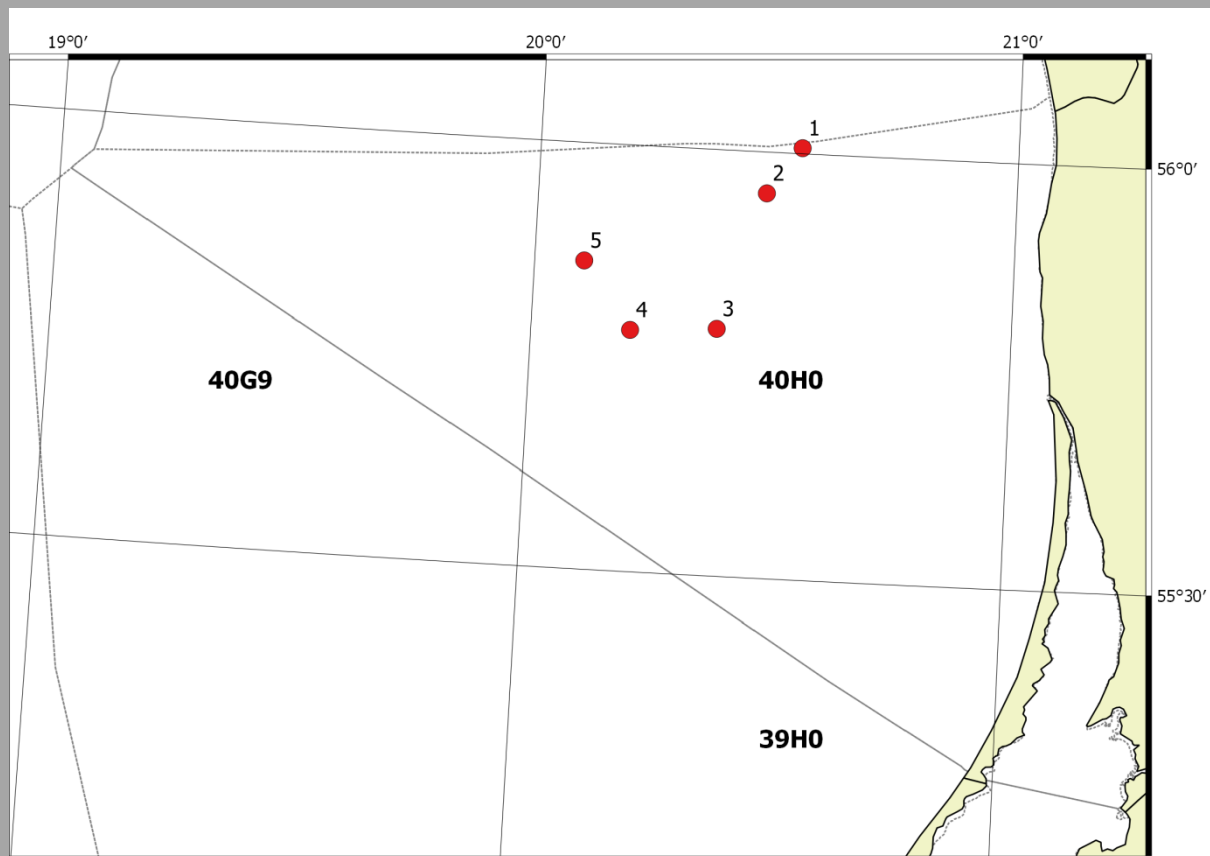


Figure 1. Allocation of stations assigned to Lithuania for BITSQ1 survey in 2017

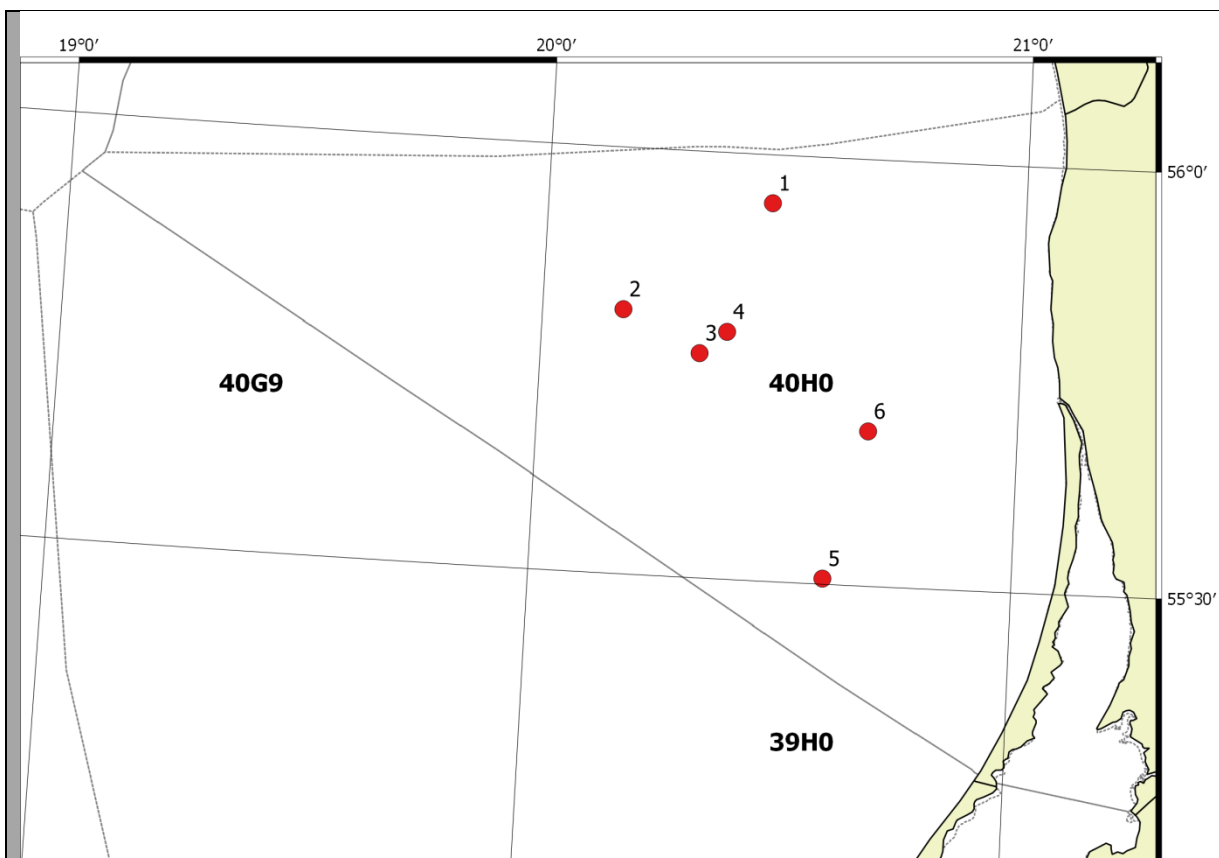


Figure 2. Allocation of stations defined in the LEEZ for BITSQ4 survey in 2017

All survey data are stored in database of Fisheries Service and uploaded to DATRAS for international data storage. The surveys provide data to the ICES international data storage to Baltic International Fish Survey Working Group (WGBIFS) and Baltic Fisheries Assessment Working Group (WGBFAS).

Sprat Acoustic Survey. The main objective of SAS is to assess sprat biomass and abundance in the Lithuanian Exclusive Economic Zone (LEEZ) Baltic Sea ICES Division IIIId. The survey has been conducted in May using the midwater trawl according to the BIAS manual (ICES, 2014, Manual of International Baltic Acoustic Surveys (IBAS). Series of ICES Survey Protocols SISP 8 - IBAS, 24 pp.). In total 7 hauls have been carried out and the cruise covered 120 echo Nm of LEEZ (ICES subdivision 26) (Fig. 3). Samples of herring and sprat for otoliths, weight and maturity have been collected.

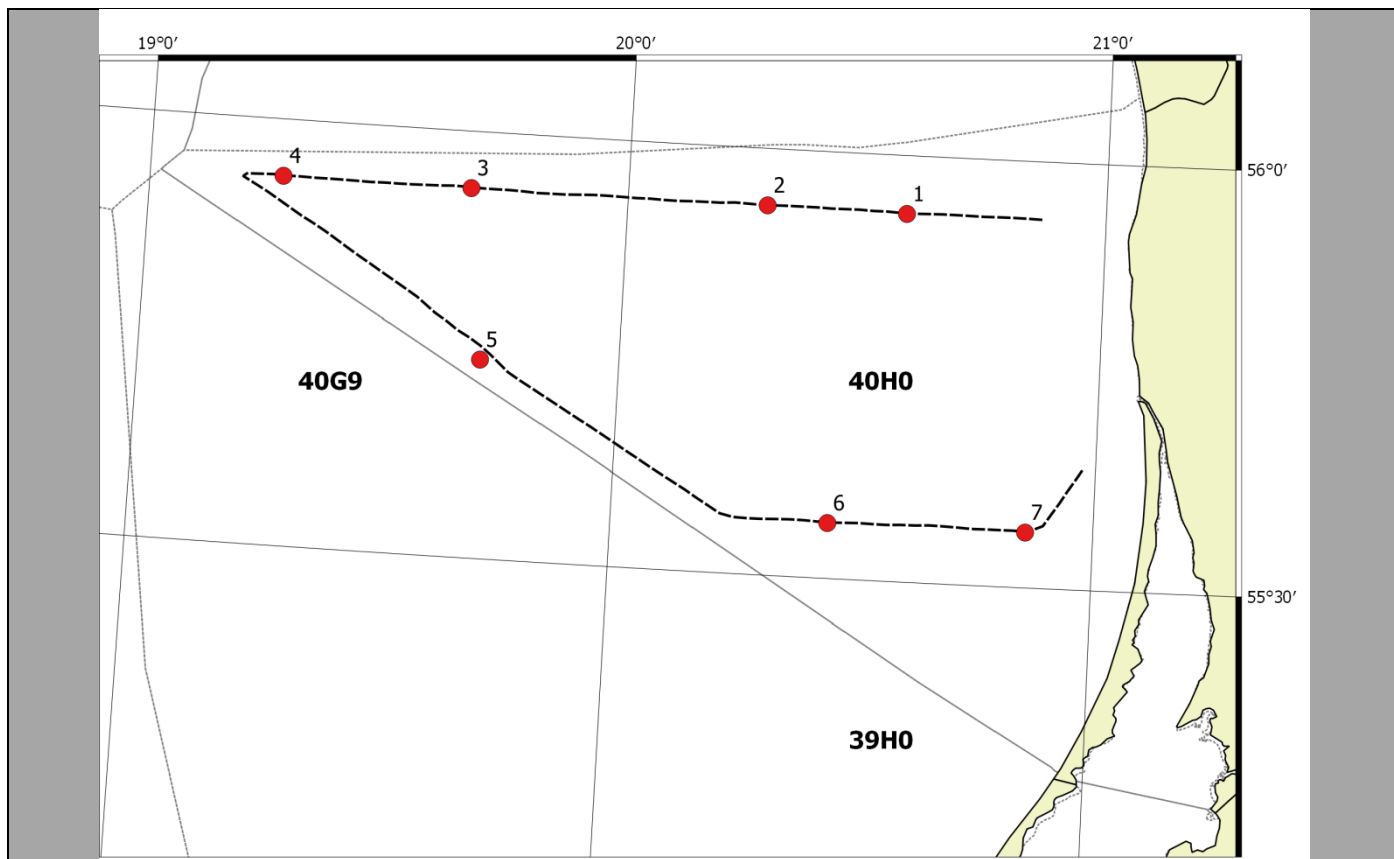


Figure 3. Cruise track design and hauls of SAS survey in LEEZ in 2017

Baltic International Acoustic Survey (Autumn). The main objective of BIAS is to assess herring biomass and abundance in the Lithuanian Exclusive Economic Zone (LEEZ) Baltic Sea ICES Division IIIId. The survey has been conducted in October using the midwater trawl according to the BIAS manual ((ICES. 2014. Manual of International Baltic Acoustic Surveys (IBAS). Series of ICES Survey Protocols SISP 8 - IBAS. 24 pp.). In total 5 hauls have been carried out and the cruise covered 120 echo Nm of LEEZ (ICES subdivision 26) (Fig. 4). Samples of herring and sprat for otoliths, weight and maturity have been collected.

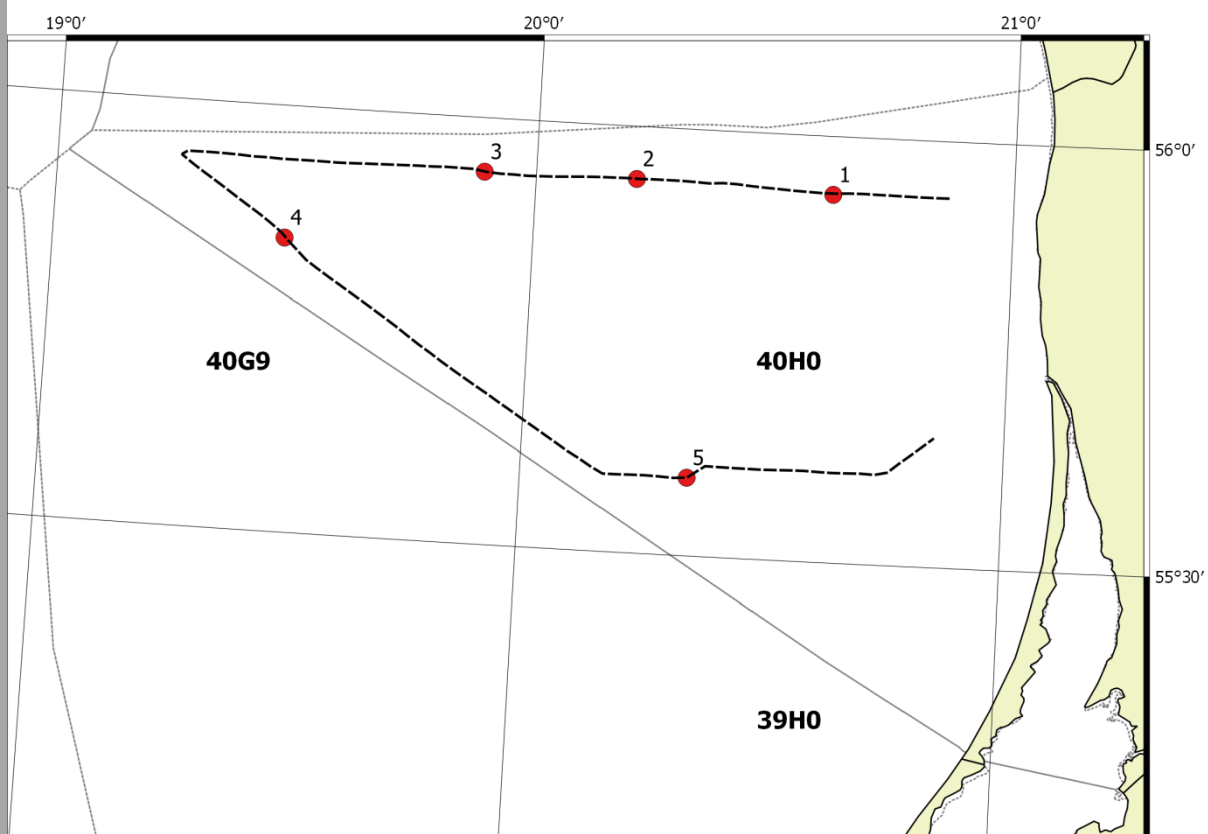


Figure 4. Cruise track design and hauls of BIAS survey in LEEZ in 2017

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

<http://ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/SSGIEOM/2017/WGBIFS/WGBIFS%202017.pdf>

3. List the main use of the results of the survey (e.g. indices, abundance estimates, environmental indicators).

Data from BITS have been uploaded to DATRAS database for further use by stock coordinators, while data from BASS and BIAS were used for biomass and abundance estimation of herring and sprat within LEEZ. The results of estimation have been also uploaded to DATRAS.

4. Extended comments (Tables 1G and 1H)

There are no extended comments

SECTION 2: FISHING ACTIVITY DATA

Text Box 2A: Fishing activity variables data collection strategy

This text box is applicable to the AR. MS should transfer the information from their accepted WP before filling in the additional section highlighted in grey.

General comment: This box fulfills paragraph 4 of Chapter III of the multiannual Union programme and Article 2, Article 4 paragraph (2) point (b) and Article 5 paragraph (2) of the Decision (EU) 2016/1701. It is intended to describe the method used to derive estimates on representative samples where data are not to be recorded under Regulation (EU) No 1224/2009 or where data collected under Regulation (EU) No 1224/2009 are not at the right aggregation level for the intended scientific use.

General comment: This box is applicable to the Annual Report. This box should provide information on the implementation of the data collection of fishing activity variables of Member States.

1. For all fleet segments by regions the transversal variables is deriving from database system IFDIS, which contains the data referred to Commission Regulation (EC) No 26/2004 of 30 December 2003 on the Community fishing fleet register in Annex I and Council Implementing Regulation (EC) No 404/2011 in Annex X. As well IFDIS contains an obligatory by National legislation monthly declarative forms, that derived from national logbook, for vessels of less than 8 m length overall which is operating in the Baltic Sea. Community fishing vessels from 8 to 12 metres' length overall are obliged to keep a fishing logbook and submit landing and transshipment 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 vessels with the length class of 12 to 18 metres in length. Active and inactive vessels are included in the vessel register. The maintenance and continuous updates are up to dates. Using a conversion factor established in accordance with the Council Regulation (EC) No 404/2011 ANNEXES XIII-XV, IFDIS includes a built in function that converts processed fish weight into live fish weight. Lithuania has 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. Data is available in the form of primary data to the all national institutions implementing the workplans.

2. Data on landings for vessels less than 8 m length overall, which is not covered under Control Regulation, are derived from the combination of the monthly declarative forms which have been cross-checked with sales notes. These provide the key details on the species, presentation, location of landings, weight and value of fish being landed that is entered into computer system. For all fleet segments value is estimating based on prices derived from sales notes multiplying by weight from landing declarations.

3. 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.

4. To approach reliable and high quality of data Lithuania uses a "census" type of declarative form for vessel, which is not recordered data under the Regulation (EU) No 1224/2009. Monthly declarative forms that derived

from national logbook 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 forms. The forms shall be transmitted to the authority by the tenth day of the following month. When classifying a data transmission failures regarding timeliness or completeness the company is notified and report is re/submitted. The monthly declarative forms as well as landing declarations are cross-checking with sales notes.

5. Deviations from Work Plan methodology used to cross-validate the different sources of data

No deviations.

Actions to avoid deviations.

No actions needed.

6. Deviations from Work Plan methodology used to estimate the value of landings.

No deviations.

Actions to avoid deviations

No actions needed.

7. Deviations from Work Plan methodology used to estimate the average price.

No deviations.

Actions to avoid deviations.

No actions needed.

8. Deviations from Work Plan methodology used to plan collection of the complementary data

No deviations.

Actions to avoid deviations

No actions needed.

SECTION 3: ECONOMIC AND SOCIAL DATA

Text Box 3A: Population segments for collection of economic and social data for fisheries

General comment: This box fulfils paragraph 5 points (a) and (b) of Chapter III of the multiannual Union programme and Article 2, Article 4 paragraphs (1), (2) and (5) and Article 5 paragraph (2) of the Decision (EU) 2016/1701. It is intended to specify data to be collected under Tables 5(A) and 6 of the multiannual Union programme.

General comment: This box is applicable to the Annual Report. This box should provide information on the implementation of the fleet socio-economic data collection of Member States.

1. Description of methodologies used to choose the different sources of data
2. Description of methodologies used to choose the different types of data collection
3. Description of methodologies used to choose sampling frame and allocation scheme
4. Description of methodologies used for estimation procedures
5. Description of methodologies used on data quality

6. Deviations from Work Plan methodology for selection of data source

No deviations from Work Plan.

Actions to avoid deviations

NA.

7. Deviations from Work Plan methodology to choose type of data collection

No deviations from Work Plan.

Actions to avoid deviations

NA

8. Deviations from Work Plan methodology regarding sampling frame and allocation scheme

No deviations from Work Plan.

Actions to avoid deviations

NA

9. Deviations from Work Plan methodology used for estimation procedures

As foreseen in the Work Plan, for estimation of capital value and consumption of fixed capital, Perpetual Inventory Method is used. Following PGECON 2016 recommendation (Rec. 2) “As the application of the PIM method affects the value of other variables such as the capital costs and investments, PGECON (Zagreb, 2016) observes the need of a new study or working group to review the calculation of the capital value and eventually update the underlying assumptions” In 2017 Lithuania launched pilot study in order to update underlying assumptions of PIM and revise input data (depreciation rates, renovation years, vessel structure) according to Lithuania fleet and actual market, legislative, etc. conditions. Also, PIM spreadsheet for calculating capital value was revised in order to directly include initial known values of vessels, and use aggregated Price/GT for vessels with unknown initial values.

Actions to avoid deviations

No deviations from work plan

10. Quality assurance

10.1 Sound methodology

For data collection, Lithuania use census survey ([DR-1 form in legal act provided in 10.3.1. subparagraph](#)) and vast majority of economic and social variables are provided from enterprise accountancy. However, variables as capital value, consumption of fixed capital, and imputed value of unpaid labour are estimated using best practice and common methodologies agreed in expert working groups. Compilation of all the methodologies already suggested in previous STECF reports, PGECON reports and in DCF workshops is available in DCF website, document “Methodologies for the socio-economic data described in EU MAP” Ref. Ares(2016)2440332 - 26/05/2016. (by Evelina Sabatella).

- Capital value and consumption of fixed capital for Lithuanian fleet is estimated by PIM method proposed in the study [FISH/2005/03: 'Irepa Onlus Coordinator, 2006'](#).

- Imputed value of unpaid labour is estimated using methodology suggested in “Methodologies for the socio-economic data described in EU MAP” Ref. Ares(2016)2440332 - 26/05/2016 (by Evelina Sabatella).

Value of unpaid labour can be estimated through the following methodology:

A. FTE method (WS, Naples, 2009), that includes the following steps:

- estimation of paid and unpaid FTE;
- definition of an average remuneration per paid FTE (e.g. average wage by fleet segment/company, national average wage, minimum national wage, etc...);
- calculation of imputed value of unpaid labour =: unpaid FTE * (average remuneration per paid FTE).

Applied methodologies are publically available.

10.2. Accuracy and reliability

Response rate and Achieved sample rate are provided in Table 3A.

Raw data inputs are controlled by validation tools in Interactive Data Input System (IDIS). Accuracy and reliability of primary data is ensured by data collectors, which carries out manual data revision in terms of completeness, integrity and deviations based on expert knowledge. Then AIRBC data inspection unit personnel based on risk assessment analysis carries out data checks and comparison of provided data with accountancy documents by visiting fishing enterprises. Identified errors and deviations of reported questionnaires in comparison to accountancy documents are included in the inspection act and non-compliance form (can be found by web [link 10.3.1.](#)). Risk assessment analysis of reported data is based on the non-compliance records and size of enterprise as well as value of production in total production structure. Methodology of Risk assessment analysis can be found by web [link 10.3.4.](#))

10.3. Accessibility and Clarity

Indicate with Yes or No

Are methodological documents publicly available? - Yes

Are data stored in databases? – Yes (https://is.vic.lt/pls/vris/ris_start.wwwindex)

Where can methodological and other documentation be found? Web links for methodology and other documentation

- 10.3.1. Legal act for data collection and methodology:

<https://www.e-tar.lt/portal/lt/legalAct/be557330e0ab11e7b3f0a470b0373cb2>

- 10.3.2. Methodology for calculation of Imputed value of unpaid labour:

<https://datacollection.jrc.ec.europa.eu/documents/10213/3f2194f5-b1a3-4f1f-96aa-02f3740cba6a> (Table 1
Economic variables for the fleet)

- 10.3.3. Methodology for calculation of capital value and consumption of fixed capital:

<http://www.vic.lt/zumpris/wp-content/uploads/sites/4/2018/05/KAPITALO-VERTES-SKAIC%C2%8CIAVIMO-metodikos-APRASAS.pdf>

- 10.3.4. Methodology of Risk assessment analysis for control of data reliability and accuracy can be found by web link:

<http://www.vic.lt/zumpris/wp-content/uploads/sites/4/2018/04/Oficialiosios-statistinis-informacijos-rengimo-proces%C5%B3-rizikos-vertinimo-metodika.pdf>

SECTION 3: ECONOMIC AND SOCIAL DATA

Pilot Study 3: Data on employment by education level and nationality

General comment: This box fulfills paragraph 5 point (b) and paragraph 6 point (b) of Chapter III of the multiannual Union programme and Article 2 and Article 3 paragraph (3) point (c) of the Decision (EU) 2016/1701. It is intended to specify data to be collected under Table 6 of the multiannual Union programme.
General comment: This box is applicable to the Annual Report. This box is intended to provide information on the results obtained from the implementation of the pilot study (including deviations from planned and justifications as to why if this was not the case).
1. Aim of pilot study 2. Duration of pilot study 3. Methodology and expected outcomes of pilot study (max 900 words)
4. Achievement of the original expected outcomes of pilot study and justification if this was not the case. Pilot study on employment by education level and nationality was launched in 2018 and is not relevant for 2017 Annual Report. 5. Incorporation of results from pilot study into regular sampling by the Member State. NA

SECTION 3: ECONOMIC AND SOCIAL DATA

Text Box 3B: Population segments for collection of economic and social data for aquaculture

General comment: This box fulfills paragraph 6 points (a) and (b) of Chapter III of the multiannual Union programme and Article 2, Article 4 paragraphs (1) and (5) and Article 5 paragraph (2) of the Decision (EU) 2016/1701. It is intended to specify data to be collected under Tables 6 and 7 of the multiannual Union programme.
General comment: This box is applicable to the Annual Report. This box should provide information on the implementation of the socio-economic data collection for aquaculture of Member States.
1. Description of methodologies used to choose the different sources of data 2. Description of methodologies used to choose the different types of data collection 3. Description of methodologies used to choose sampling frame and allocation scheme 4. Description of methodologies used for estimation procedures 5. Description of methodologies used on data quality <i>(max 1000 words)</i>
Lithuanian aquaculture sector consists only from freshwater aquaculture activities, therefore as data collection for this type of aquaculture is optional, it is not foreseen for 2017-2019 Work Plan 6. Deviations from Work Plan methodology for selection of data source NA. Actions to avoid deviations NA. 7. Deviations from Work Plan methodology to choose type of data collection NA. Actions to avoid deviations NA. 8. Deviations from Work Plan methodology regarding sampling frame and allocation scheme NA. Actions to avoid deviations

NA

9. Deviations from Work Plan methodology used for estimation procedures

NA.

Actions to avoid deviations

NA.

10. Quality assurance

10.1 Sound methodology

NA.

10.2. Accuracy and reliability

NA.

10.3. Accessibility and Clarity

NA.

SECTION 3: ECONOMIC AND SOCIAL DATA

Pilot Study 4: Environmental data on aquaculture

General comment: This box fulfills paragraph 6 point (c) of Chapter III of the multiannual Union programme and Article 2 and Article 4 paragraph (3) point (d) of the Decision (EU) 2016/1701. It is intended to specify data to be collected under Table 8 of the multiannual Union programme.
General comment: This box is applicable to the Annual Report. This box is intended to provide information on the results obtained from the implementation of the pilot study (including deviations from planned and justifications as to why if this was not the case).
1. Aim of pilot study 2. Duration of pilot study 3. Methodology and expected outcomes of pilot study (max 900 words)
4. Achievement of the original expected outcomes of pilot study and justification if this was not the case. Data collection for aquaculture sector is not foreseen in 2017-2019 WP. 5. Incorporation of results from pilot study into regular sampling by the Member State. NA

SECTION 3: ECONOMIC AND SOCIAL DATA

Text Box 3C: Population segments for collection of economic and social data for the processing industry

General comment: This box fulfils footnote 6 of paragraph 1.1(d) of Chapter III of the multiannual Union programme, Article 2, Article 4 paragraphs (1) and (5) and Article 5 paragraph (2) of Decision (EU) 2016/1701. It is intended to specify data to be collected under Table 11 of the multiannual Union programme.
General comment: This box is applicable to the Annual Report. This box should provide information on the implementation of the socio-economic data collection for aquaculture of Member States.
1. Description of methodologies used to choose the different sources of data 2. Description of methodologies used to choose the different types of data collection 3. Description of methodologies used to choose sampling frame and allocation scheme 4. Description of methodologies used for estimation procedures 5. Description of methodologies used on data quality
6. Deviations from Work Plan methodology for selection of data source No deviations from Work Plan. Actions to avoid deviations NA. 7. Deviations from Work Plan methodology to choose type of data collection No deviations from Work Plan. Actions to avoid deviations NA. 8. Deviations from Work Plan methodology regarding sampling frame and allocation scheme No deviations from Work Plan. Actions to avoid deviations NA. 9. Deviations from Work Plan methodology used for estimation procedures

No deviations from Work Plan.

Actions to avoid deviations

NA.

10. Quality assurance

10.1 Sound methodology

For data collection, Lithuania use census survey ([ZF-1 form in legal act provided in 10.3.1. subparagraph](#)) and vast majority of economic and social variables are provided from enterprise accountancy. However, variables as imputed value of unpaid labour are estimated using best practice and common methodologies agreed in expert working groups. Compilation of all the methodologies already suggested in previous STECF reports, PGECON reports and in DCF workshops is available in DCF website, document “Methodologies for the socio-economic data described in EU MAP” Ref. Ares(2016)2440332 - 26/05/2016. (by Evelina Sabatella).

- Imputed value of unpaid labour is estimated using methodology suggested in “Methodologies for the socio-economic data described in EU MAP” Ref. Ares(2016)2440332 - 26/05/2016 (by Evelina Sabatella).

Value of unpaid labour can be estimated through the following methodology:

A. FTE method (WS, Naples, 2009), that includes the following steps:

- estimation of paid and unpaid FTE;
- definition of an average remuneration per paid FTE (e.g. average wage by fleet segment/company, national average wage, minimum national wage, etc...);
- calculation of imputed value of unpaid labour =: unpaid FTE * (average remuneration per paid FTE).

Applied methodologies are publically available.

10.2. Accuracy and reliability

Response rate and Achieved sample rate are provided in Table 3C.

Raw data inputs are controlled by validation tools in Interactive Data Input System (IDIS). Accuracy and reliability of primary data is ensured by data collectors, which carries out manual data revision in terms of completeness, integrity and deviations based on expert knowledge. Then AIRBC data inspection unit personnel based on risk assessment analysis carries out data checks and comparison of provided data with accountancy documents by visiting fish processing enterprises. Identified errors and deviations of reported questionnaires in comparison to accountancy documents are included in the inspection act and non-compliance form (can be found by web [link 10.3.1.](#)). Risk assessment analysis of reported data is based on the non-compliance records and size of enterprise as well as value of production in total production structure. Methodology of Risk assessment analysis can be found by web [link 10.3.3.](#))

10.3. Accessibility and Clarity

Indicate with Yes or No

Are methodological documents publicly available? - Yes

Are data stored in databases? – Yes (https://is.vic.lt/pls/vris/ris_start.wwwindex)

Where can methodological and other documentation be found? Web links for methodology and other documentation

- 10.3.1. Legal act for data collection and methodology:

<https://www.e-tar.lt/portal/lt/legalAct/be557330e0ab11e7b3f0a470b0373cb2>

- 10.3.2. Methodology for calculation of Imputed value of unpaid labour:

<https://datacollection.jrc.ec.europa.eu/documents/10213/3f2194f5-b1a3-4f1f-96aa-02f3740cba6a> (Table 3
Economic variables for the fleet)

- 10.3.3. Methodology of Risk assessment analysis for control of data reliability and accuracy can be found by web link:

<http://www.vic.lt/zumpris/wp-content/uploads/sites/4/2018/04/Oficialiosios-statistinis-informacijos-rengimo-proces%C5%B3-rizikos-vertinimo-metodika.pdf>

SECTION 4: SAMPLING STRATEGY FOR BIOLOGICAL DATA FROM COMMERCIAL FISHERIES

Text Box 4A- Sampling plan description for biological data

This text box is applicable to the AR. MS should transfer the information from their accepted WP, before filling in the additional section highlighted in grey.

General comment: This box fulfills Article 3, Article 4 paragraph (4) and Article 8 of the Decision (EU) 2016/1701 and forms the basis for the fulfilment of paragraph 2 point (a)(i) of Chapter III of the multiannual Union programme. This Table refers to data to be collected under Tables 1(A), 1(B) and 1(C) of the multiannual Union programme.

General comment: This box is applicable to the Annual Report. This box should provide information on the deviations from the planned sampling of Member States.

Baltic Sea

Sampling on landing sites. Primal sampling unit (PSU) is day at port or any other landing place (in case of coastal fishery). 1 trip per month is planned to visit all landing places. During the trip randomly selected samples are intended to be collected by metier. If there no landings are present or not all samples were collected at the day of trip, next nearest day will be planned to visit landing places.

Sampling at sea. According to methodology of SGPIDS (see ICES, 2011a. Report of the Study Group on Practical Implementation of Discard Sampling Plans (SGPIDS), 27 June -1 July 2011, ICES Headquarters, Denmark. ICES CM 2011/ACOM: 50. 116 pp.) 14 PSUs (i. e. trips) per quarter and subdivision are planned to reach 95% confidence interval on the mean of population. During the trips all data indicated in Tables 1B, 1C, 1F, 4A will be collected.

North Sea and Eastern Arctic

2 vessels (1 vessel per stock) are operating in this region. Observers will be hired to collect all data indicated in Tables 1B, 1C, 1F, 4A during 3 trips

North Atlantic

2 vessels (1 vessel per stock) are operating in this region. Observers will be hired to collect all data indicated in Tables 1B, 1C, 1F, 4A during 4 trips

Other regions

Multilateral agreement for CECAF will be prolonged (Poland, Lithuania, Germany, Latvia and Netherlands), to ensure streamlined data collection. Agreement will be run by Netherlands

Multilateral agreement for SPRFMO was prepared (Poland, Lithuania, Germany, and Netherlands), to ensure streamlined data collection. Agreement will be run by Poland.

Deviation from the sampling plan according to Article 5 paragraph (3) of the Decision (EU) 2016/1701:

Deviations from the Work Plan

Stratum ID: BS1;BS2;BS4;BS5;NA1;NA3 were undersampled or not sampled at all. Explanations of the reasons are listed in the Column of AR Comments of Table 4A.

Action to avoid deviations

Due to reduced number of employees it's difficult to organize properly good coverage of PSU's. Also, internal labour law do not allow to work extra working hours. This hopefully will be changed after optimisation reform of implementing bodies, which are involved into data collection programm. It is expected that some actions to avoid deviations will be taken by the end of 2018.

SECTION 5: DATA QUALITY

Text Box 5A: Quality assurance framework for biological data

This text box is applicable to the AR.

General comment: This box is applicable to the Annual Report. This box fulfills Article 5 paragraph (2) point (a) of the Decision (EU) 2016/1701. This box is intended to specify data to be collected under Tables 1(A), 1(B) and 1(C) of the multiannual Union programme. Use this box to provide additional information on Table 5A.

Evidence of data quality assurance

All sampling schemes except of some cases in anadromous and catadromous species sampling schemes

Sampling design

Not relevant.

Sampling implementation

Not relevant.

Data capture

Data are recorded in special logbooks (in case of surveys or trips) and special forms. All of them are stored on paper, not on electronic format. This is a primal data record. Data from paper format are manually entered to digital version of database, which has different structure. Electronic format of the data are stored in excel spreadsheets and national database. Data that must be submitted to the international databases (like RDB or DATRAS) after processing are uploaded to it.

Data Storage

Not relevant.

Data processing

For data processing as well as sampling planning, the number of relevant methods have been used. For estimation of optimal sample size Monte Carlo simulation method is applied (Sampson et al., 1998). Number of samples are generated by bootstrapping. For estimation of required number of otoliths Bayesian model is applied (Walther & Moore, 2005). Raising procedure for discards is described in WKDRP (ICES, 2007), while estimation of discard volumes is performed according to J. Vigneau (2006). Method of calculation of CV for accuracy of raising procedure is described in WKSCMFD (ICES, 2004). All these data processing procedures are performed in R package, using dplyr library as well as COSTsim library and there are no documentations or any links describing such processing of data.

Referencies:

ICES (2004). WKSCMFD. Workshop on Sampling Calculation and Methodology for Fisheries Data, 26-30 February 2004, Nantes, France. ICES CM 2004/ACFM:12

ICES, 2007. Report of the Workshop on Discard Raising Procedures (WKDRP), 6–9 February 2007, San Sebastian, Spain. ICES CM 2007/ACFM:06, 57 pp.

Sampson, D.B. and Yin, Y. 1998. A Monte Carlo evaluation of the Stock Synthesis assessment program. In: Funk, F. et al. (eds) Fishery Stock Assessment Models. Alaska Sea Grant College Program Rep. AK-SG-98-01, University of Alaska Fairbanks, p.315-338

Vigneau J. (2006). Raising procedures for discards: Sampling theory. ICES CM 2006/K:16. 9 pp.

Walther, B. A. and Moore, J. L. 2005. The concepts of bias, precision and accuracy, and their use in testing the performance of species richness estimators, with a literature review of estimator performance / *Ecography* 28: 815_/829.

SECTION 5: DATA QUALITY

Text Box 5B: Quality assurance framework for socioeconomic data

General comment: This box fulfills Article 5 paragraph (2) point (b) of the Decision (EU) 2016/1701. This box is intended to specify data to be collected under Tables 5(A), 6 and 7 of the multiannual Union programme. Use this box to provide additional information on Table 5B.

1. Evidence of data quality assurance

Within this section MS shall provide information on the methodology used to assure the quality of the data collected, highlighting those aspects where changes have been made during the sampling year. Information shall be provided by each sector (Fishing fleet, Aquaculture, Fish processing) for which data was collected and by each data collection scheme. In the case where the same quality assurance framework is applied to all sectors or/and all data collection schemes, information can be provided at general level with the indication “all sectors” or “all data collection schemes”.

In those sections of Table 5B where “N” is indicated, Member States shall explain the main constraints and/ or the steps taken to fulfil this obligation. In the cases where a reference documents is requested, Member States shall provide a web link.

In cases where documents are not publicly available, due to institutions internal policy, confidentiality or other reasons, this shall be indicated by the Member State.

Economic variables from EUMAP table 5A (except variable groups “Fleet”, “Effort”, “Production value per species”) and social variables from EUMAP Table 6 as well as fish processing industry is collected by SE Agricultural Information and Business Centre, which has implemented ISO 9001 quality standards for business operations including data collection and management. QAF is applied for taking into account all principles listed in table 5B. Apart from methodological information and legal acts legitimizing data collection which are publicly available, majority of documents on QAF implementation are internal AIRBC documents and due to institution internal policy are not publicly available.

Economic variables from variable groups „Fleet”, “Effort” and “Production value per species” from EUMAP table 5A are collected by Fishery Service under the Ministry of Agriculture of the Republic of Lithuania. Data obtained from IFDIS.

2. Section P3 Impartiality and objectiveness

Explain main constraints and/ or steps taken, if ‘N’ (no) was indicated in Table 5B

NA

3. Section P4 Confidentiality

Explain main constraints and/ or steps taken, if ‘N’ (no) was indicated in Table 5B

Concerning Variable groups „Fleet”, “Effort” and “Production value per species” The most part of data are collecting in the framework of control regulation and treating in accordance with rules on confidentiality established by that regulation. 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.

For the rest of Variable groups - NA

4. Section P5 Sound methodology

Explain main constraints and/ or steps taken, if ‘N’ (no) was indicated in Table 5B

Information on this principle should be briefly explained in Text boxes 3A, 3B and 3C. Description of methodologies used on data quality.

Information in Text boxes 3A, 3B and 3C

5. Section P6 Appropriate statistical procedures

Explain main constraints and/ or steps taken, if 'N' (no) was indicated in Table 5B. Please provide a link if the documented revisions are available and not confidential.

NA

6. Section P7 Non-excessive burden on respondents

Explain main constraints and/ or steps taken, if 'N' (no) was indicated in Table 5B

Concerning Variable groups „Fleet”, “Effort” and “Production value per species” due to confidentiality, the documented revisions are not available publicly.

For the rest of Variable groups - NA

7. Section P8 Cost effectiveness

Explain main constraints and/ or steps taken, if 'N' (no) was indicated in Table 5B

Concerning Variable groups „Fleet”, “Effort” and “Production value per species”, due to regular changing of requested coding in data calls, an automatic techniques for data capture and data coding are always under development and available only partly.

For the rest of Variable groups - NA

8. Section P9 Relevance

Explain main constraints and/ or steps taken, if 'N' (no) was indicated in Table 5B

NA

9. Section P10 Accuracy and reliability

Explain main constraints and/ or steps taken, if 'N' (no) was indicated in Table 5B. Information on this principle should be briefly explained in Text boxes 3A, 3B and 3C. Description of methodologies used on data quality.

Concerning Variable groups „Fleet”, “Effort” and “Production value per species”, use of census approach based on adapted declarative forms to estimate SSF fishing activities (sometimes combined with sales notes data) rejects requirement on sampling errors or non-sampling errors measurement.

For the rest of Variable groups look the information in Text boxes 3A, 3B and 3C

10. Section P11 Timeliness and punctuality

Explain main constraints and/ or steps taken, if 'N' (no) was indicated in Table 5B

NA

11. Section P12 coherence and comparability

Explain main constraints and/ or steps taken, if 'N' (no) was indicated in Table 5B

NA

12. Section P13 Accessibility and Clarity

Explain main constraints and/ or steps taken, if 'N' (no) was indicated in Table 5B. Information and links to documentation on this principle should be briefly explained in Text boxes 3A, 3B and 3C. Description of methodologies used on data quality.

Information in Text boxes 3A, 3B and 3C

IFDIS contains primary data as recorded, reported and transmitted under Regulation (EC) No 1224/2009. 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 are developed in IFDIS. Currently the DCF website is under development. However, information on the methodology used to assure the quality of complimentary data collection publicly is available: <http://zum.lrv.lt/lt/veiklos-sritys/zuvininkyste/duomenu-rinkimo-programa>