**Institute of Agricultural Economics and Information and Ministry of Agriculture of the Czech Republic**

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

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

Commission Implementing Decision (EU) 2019/909 of 18 February 2019 establishing the list of mandatory research surveys and thresholds for the purposes of the multiannual Union programme for the collection and management of data in the fisheries and aquaculture sectors

Commission Delegated Decision (EU) 2019/910 of 13 March 2019 establishing the multiannual Union programme for the collection and management of biological, environmental, technical and socioeconomic data in the fisheries and aquaculture sectors

Commission Implementing Decision (EU) 2016/1701 of 19 August 2016laying down rules on the format for the submission of work plans for data collection in the fisheries and aquaculture sectors.

Commission Implementing Decision (EU) 2018/1283 of 24 August 2018 laying down rules on the format and timetables for the submission of annual data collection reports in the fisheries and aquaculture sectors.

**Czech Republic Annual Report for data collection in the fisheries and aquaculture sectors**

2021

Version [1]

Prague, 31.5.2022

**CONTENTS**

Commission Implementing Decision (EU) 2018/1283 of 24 August 2018 laying down rules on the format and timetables for the submission of annual data collection reports in the fisheries and aquaculture sectors. 1

Section 1: Biological Data 4

**Text Box 1C: Sampling intensity for biological variables** 4

Section 1: Biological Data 5

**Text Box 1D - Recreational fisheries** 5

Section 1: Biological Data 6

Pilot Study 1: Relative share of catches of recreational fisheries compared to commercial fisheries 6

Section 1: Biological Data 7

Text Box 1E: Anadromous and catadromous species data collection in fresh water 7

Section 1: Biological Data 9

**Text box 1F: Incidental by-catch of birds, mammals, reptiles and fish** 9

Section 1: Biological Data 10

Pilot Study 2: Level of fishing and impact of fisheries on biological resources and marine ecosystem 10

Section 1: Biological Data 11

Text Box 1G: List of research surveys at sea 11

Section 2: Fishing Activity Data 12

Text Box 2A: Fishing activity variables data collection strategy 12

Section 3: Economic and Social Data 14

Text Box 3A: Population segments for collection of economic and social data for fisheries 14

Section 3: Economic and Social Data 16

Pilot Study 3: Data on employment by education level and nationality 16

Section 3: Economic and Social Data 17

Text Box 3B: Population segments for collection of economic and social data for aquaculture 17

Section 3: Economic and Social Data 21

Pilot Study 4: Environmental data on aquaculture 21

Section 3: Economic and Social Data 23

Text Box 3C: Population segments for collection of economic and social data for the processing industry 23

Section 4: Sampling Strategy for Biological Data from Commercial Fisheries 25

Text Box 4A: Sampling plan description for biological data 25

Section 5: data quality 26

Section 5: data quality 27

 Text Box 5B: Quality assurance framework for socioeconomic data ……….…………………23

Section 1: Biological Data

**Text Box 1C: Sampling intensity for biological variables**

|  |
| --- |
| General comment: This box fulfils paragraph 2 point (a)(i)(ii)(iii) of Chapter III, of the Annex of the Delegated Decision (EU) 2019/910 and Chapter I of the Implementing Decision (EU) 2019/909 on the multiannual Union programme; and Article 2, Article 4 paragraph 1 and Article 8 of the Implementing Decision (EU) 2016/1701 on the format of the WP. This box is applicable to the Annual Report. |
| **It is not relevant for the Czech Republic as a landlocked country.**Member State should provide by Region/RFMO/RFO/IO:1. Evidence of data quality assurance

Quality evaluation can only be carried out if the information coming from Table 5A in the Work Plan is available. If this is not the case, Member State shall provide an overview by giving information on the methodology used to assure the quality of the data collected.e.g.:The sampling design and protocols follow the outcomes of sampling expert groups.Use of common standard criteria agreed with other countries/groups. Use of special packages or tools (e.g. COST …) for calculations.Use of sampling protocol for storage of data.Use of sampling protocol for processing of data.Use appropriate exploratory statistical techniques to detect outliers and anomalous registers.1. Deviations from the Work Plan

MS to list the deviations (if any) in the achieved data collection compared to what was planned in the Work Plan and explain the reasons for the deviations. The threshold for deviation follow those set in the former AR: <90 % and >150 %. Explain any deviation from the proposed:* sampling intensity,
* methods used for collecting data.
* methods used for estimating the parameters.

General reasons for deviations from the Work Plan in terms of planned vs. achieved should be summarised in this section, while detailed comments on deviations on particular species/stocks should be included in the AR Comments column in Table 1C.In case of Member State adding new species not included in the WP, this should be clearly explained and justified.1. Actions to avoid deviations.

Member State to describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section is not applicable.(max. 1000 words per Region/RFMO/RFO/IO) |

Section 1: Biological Data

**Text Box 1D - Recreational fisheries**

|  |
| --- |
| General comment: This box fulfills paragraph 2 point (a) (iv) of Chapter III of the Annex of the Delegated Decision (EU) 2019/910 on the multiannual Union programme; and Article 2, Article 3 and Article 4 paragraph 1 of the Implementing Decision (EU) 2016/1701 on the format of the WP. 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. |
| **It is not relevant for the Czech Republic as a landlocked country.**1. Description of the target populationThe target population and the elements of this target population accessibility, need to be defined and described in this section. In the case of Recreational Fisheries, the target population could be whole population of resident anglers, charter boats etc. This will permit to evaluate if all sectors contributing to the total catch, are included in the survey.2. Type of surveyIn Table 1D, the methodology or type of survey used must be included, but any information about the design is missing. Table 5A in the Work Plan allows to identify if the sampling design is documented and where it can be found. Are the surveys identified correctly in Table 5A and information about sampling design provided under this table?If the answer is No: information on the design should be included in this section of the Annual Report (e.g.: stratification, selection of PSU, is sampling probability base etc.).3. Data QualityInformation about non-responses and refusals is found in the Work Plan, Table 5A. Are non-responses and refusals recorded in Table 5A?If the answer is No: information on recordings of non-responses and refusals should be included in this section of the Annual Report.4. Data Analysis and processingInformation about data processing is found in the Work Plan, Table 5A. Are the editing and imputation methods documented and identified?If the answer is No: information on estimation procedures should be included in this section of the Annual Report, following the questions below:Does the estimation procedure follow the survey design?Has the precision of the estimates been calculated and documented?(max. 900 words per survey) |

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 II of the Annex of the Implementing Decision (EU) 2019/909 on the multiannual Union programme and Article 2 and Article 4 paragraph (3) point (a) of the Implementing Decision (EU) 2016/1701 on the format of the WP. |
| 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. |
| **It is not relevant for the Czech Republic as a landlocked country.** |
| 1. Aim of pilot study
2. Duration of pilot study
3. Methodology and expected outcomes of pilot study

(max 900 words) |
| Brief description of the results obtained (including deviations from planned and justifications as to why if this was not the case).4. Achievement of the original expected outcomes of pilot study and justification if this was not the case.5. Incorporation of results from pilot study into regular sampling by the Member State. (max 900 words) |

Section 1: Biological Data

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

|  |
| --- |
| General comment: This box fulfills paragraph 2 points (b) and (c) of Chapter III of the Annex of the Delegated Decision (EU) 2019/910 on the multiannual Union programme; and Article 2 of the Implementing Decision (EU) 2016/1701 on the format of the WP. |
| General comment: This box is applicable to the Annual Report.  |
| 1. Method selected for collecting data.

European Eel (*Anguilla anguilla*) – the Czech Republic plans to ensure the requirements following from regulation no. 1100/2007/EC:- revision of the Czech eel management plan based on current scientific knowledge,- information about downstream eel migration (especially monitoring of migration, mortality, the survival of stocked eel).Salmon (*Salmo salar) –* The Czech Republic does not plan the data collection in the case of salmon. Sea trout (*Salmo trutta trutta*) – there is no proven presence of this species in the Czech Republic.The Czech Anglers Union, in cooperation with the Moravian Anglers Union, is preparing an information system, the AIS (Angling Information System), which will include a platform collection of data about eel, socioeconomic data on aquaculture, and environmental data in aquaculture, including data about non-commercial recreational fisheries. Data about non-commercial recreational fisheries provide information about eel (f. e. the better information about stocking, catches and so about catch per unit effort.) and about other fish species occurring in rivers (f. e. carp, trout family, bighead carp, rheophilic fish, etc). These data provide important information especially for the needs of the Ministry of Agriculture, but some data will be reported to the European Commission within the EU MAP. For example, data about non-commercial recreational fisheries provide information about fish migration, activities of fishing inspections to anglers fishing the eel and other fish species. Information about non-commercial recreational fisheries will serve for better management in fishing grounds and better national scientific advice. The Czech Republic reduced research on adult eels in the year 2021 only to those activities, which wants to realize next year, based on facts with data collection from previous years. The remaining activities will be the subject of projects in the coming years. In terms of demanding administration and human resources, the Czech Republic does not have the opportunity to realize all of the projects, that have been included in the „Work plan“ last year.We further state that the Czech Republic realize research on eel just not only from sources of „Operational Programme for Fisheries“, but also from sources from national funds. The Czech Republic subsequently wants to use the results of these surveys to update the „Eel Management Plan“.(max 250 words per Area) |
| 2. Were the planned number achieved? Yes/ **No**If the answer is No, Member State shall explain why not, and what measures were taken to avoid non-conformity.CZE: No. The Czech Republic did not carry out any practical research of anadromous and catadromous fish species (salmon and eel) according to the work plan 2021. In the year 2021, the Czech Republic competed the public procurement concerning the Revision of the Eel management plan. The results of this study will be able in October 2022. The aim is to produce a revised document based on the latest scientific knowledge and recommendations in order to meet the requirements of Regulation (EU) 1100/2007/EC.The Czech Republic started in the year 2021 extensive pre-procurement administrative work on the 'Monitoring of river eel migration (Anguilla anguilla) on the territory of the Czech Republic" to gather the necessary data in line with the work plan.The administrative complexity and the selection of a suitable processor meant that the subject procurement could not be implemented in 2021, so all work was moved to 2022. In May 2022, the contract with the contractor for the subject procurement was signed. Expected results of the public procurement are: monitoring methodology for river eel migration; monitoring reports (two times – in autumn 2022 and in autumn 2023); results of monitoring of river eel mortality factors caused by activities other than fishing (turbine mortality, mortality caused by piscivorous predators, mortality caused by dangerous diseases).The purpose of the public procurement is to meet the requirements of Council Regulation (EC) No 1100/2007 and Regulation (EU) 2017/1004 of the European Parliament and of the Council.The complete results of the public procurement 'Monitoring of river eel migration (Anguilla anguilla) on the territory of the Czech Republic", will be available in July 2024.(max 500 words per Area) |

Section 1: Biological Data

**Text box 1F: Incidental by-catch of birds, mammals, reptiles and fish**

|  |
| --- |
| General Comment: This box fulfils paragraph 3 point (a) of Chapter III of the Annex of the Delegated Decision (EU) 2019/910, on the multiannual Union programme; and Article 2 of the Implementing Decision (EU) 2016/1701 on the format of the WP. 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. |
| **It is not relevant for the Czech Republic.**1. ResultsMember States shall fill in Table 1F and provide additional information, if available, in this text box. For example, species (or family) identification, number of samples, and the state of the animals incidentally by-caught (i.e. were they released alive, dead, or collected for sampling).2. Deviations from Work PlanMember States shall list the deviations (if any) in the achieved data collection compared to what was planned in the WP and explain the reasons for the deviations.Explain any deviations from the proposed:- sampling intensity- methods used for collecting data3. Data qualityMember 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?- 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”?-Does the onboard observer protocol instruct to report on the use of mitigation (i.e. Escape Devices or Acoustic Deterrent Devices)?- 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.- Are data quality issues taken into account?- How are data (and samples) stored (max 900 words) |

Section 1: Biological Data

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

|  |
| --- |
| General comment: This Box fulfills paragraph 3 point (c) of Chapter III of the Annex of the Delegated Decision (EU) 2019/910 on the multiannual Union programme; and Article 2 and Article 4 paragraph (3) point (b) of the Implementing Decision (EU) 2016/1701 on the format of the WP. |
| 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. |
| **It is not relevant for the Czech Republic as a landlocked country.**1. Aim of pilot study2. Duration of pilot study3. Methodology and expected outcomes of pilot study*(max 900 words)* |
| Brief description of the results obtained (including deviations from planned and justifications as to why if this was not the case).4. Achievement of the original expected outcomes of pilot study and justification if this was not the case5. Incorporation of results from pilot study into regular sampling by the MS (max 900 words) |

Section 1: Biological Data

Text Box 1G: List of research surveys at sea

|  |
| --- |
| General comment: This box fulfills Chapter I of the Annex of the Implementing Decision (EU) 2019/909, on the list of mandatory surveys and thresholds, of the multiannual Union programme; and Article 2 and Article 7 paragraph (3) of the Decision (EU) 2016/1701 on the format of the WP. It is intended to specify which reseach surveys at sea set out in the multiannual Union programme will be carried out. Member States shall specify whether the research survey is included in Chapter I of the Annex of the implementing decision 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.  |
| **It is not relevant for the Czech Republic as a landlocked country.**1. Objectives of the survey
2. Description of the methods used in the survey. For mandatory surveys, link to the manuals. Include a graphical representation (map)
3. For internationally coordinated surveys, describe the participating Member States/ vessels and the relevant international group in charge of planning the survey
4. Where applicable, describe the international task-sharing (physical and/or financial) and the cost-sharing agreement used
5. Explain where thresholds apply

(max. 450 words per survey)  |
| 1. Graphical representation (map) showing the positions (locations) of the realized samples.

Member State shall provide maps presenting the spatial distribution of the main sampling types obtained during the 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 non-international coordinated surveys, Member State shall refer to any status report (e.g. Cruise report).1. 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. 9. Extended comments (Tables 1G and 1H)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 2: Fishing Activity Data

Text Box 2A: Fishing activity variables data collection strategy

|  |
| --- |
| General comment: This box fulfills paragraph 4 of Chapter III of the Annex of the Delegated Decision (EU) 2019/910 on the multiannual Union programme; and Article 2, Article 4 paragraph (2) point (b) and Article 5 paragraph (2) of the Implementing Decision (EU) 2016/1701 on the format of the WP. 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. |
| **It is not relevant for the Czech Republic as a landlocked country.**1. Description of methodologies used to cross-validate the different sources of data2. Description of methodologies used to estimate the value of landings3. Description of methodologies used to estimate the average price (it is recommended to use weighted averages, trip by trip)4. Description of methodologies used to plan collection of the complementary data (sample plan methodology, type of data collected, frequency of collection etc)(max 900 words per Region) |
| 5. Deviations from Work Plan methodology used to cross-validate the different sources of dataList the deviations (if any) and explain the reasons for the deviations. Actions to avoid deviations.Briefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped.6. Deviations from Work Plan methodology used to estimate the value of landings.List the deviations (if any) and explain the reasons for the deviations. Actions to avoid deviationsBriefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped.7. Deviations from Work Plan methodology used to estimate the average price. List the deviations (if any) and explain the reasons for the deviations. Actions to avoid deviations.Briefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped.8. Deviations from Work Plan methodology used to plan collection of the complementary dataList the deviations (if any) and explain the reasons for the deviations. Actions to avoid deviationsBriefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped. (max 900 words per Region) |

# 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 Annex of the Delegated Decision (EU) 2019/910 on the multiannual Union programme; and Article 2, Article 4 paragraphs (1), (2) and (5) and Article 5 paragraph (2) of the Implementing Decision (EU) 2016/1701 on the format of the WP. It is intended to specify data to be collected under Tables 5(A) and 6 of the delegated decision on 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. |
| **It is not relevant for the Czech Republic.**1. Description of methodologies used to choose the different sources of data2. Description of methodologies used to choose the different types of data collection3. Description of methodologies used to choose sampling frame and allocation scheme4. Description of methodologies used for estimation procedures5. Description of methodologies used on data quality (max 900 words per Region) |
| 6. Deviations from Work Plan methodology for selection of data sourceList the deviations (if any) from the methodology used to select data source compared to what was planned in the Work Plan, and explain the reasons for the deviations.Actions to avoid deviationsBriefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped.7. Deviations from Work Plan methodology to choose type of data collectionList the deviations (if any) from the methodologies to choose type of data collecton scheme compared to what was planned in the Work Plan, and explain the reasons for the deviations. Actions to avoid deviationsBriefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped.8. Deviations from Work Plan methodology regarding sampling frame and allocation schemeList the deviations (if any) from the methodologies used regarding sampling frame and allocation scheme compared to what was planned in the Work Plan, and explain the reasons for the deviations. Actions to avoid deviationsBriefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped.9. Deviations from Work Plan methodology used for estimation proceduresList the deviations (if any) from the methodologies used for estimation procedures compared to what was planned in the Work Plan, and explain the reasons for the deviations. Actions to avoid deviationsBriefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped.10. Quality assurance10.1 Sound methodologyBriefly describe if the data collection follow methodologies, guidelines and best practices agreed in expert groups and whether methodologies are documented and are made publicly available. 10.2. Accuracy and reliabilityResponse rate and Achieved sample rate are provided in Table 3A. For additional information, briefly describe how raw data inputs, intermediate results and outputs are regularly assessed and validated and how errors are identified, documented and dealt with.10.3. Accessibility and ClarityIndicate with Yes or NoAre methodological documents publicly available? Are data stored in databases? Where can methodological and other documentation be found? Provide the web link, if documentation is publicly available (max 1000 words) |

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 Annex Delegated Decision (EU) 2019/910 on the multiannual Union programme; and Article 2 and Article 4 paragraph (3) point (c) of the Implementing Decision (EU) 2016/1701 on the format of the WP. It is intended to specify data to be collected under Table 6 of the delegated decision on 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). |
| **Non relevant for the CZE. The CZE collected social data as a part of activity mentioned in Table 3B.**1. Aim of pilot study2. Duration of pilot study3. 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.5. Incorporation of results from pilot study into regular sampling by the Member State. (max 900 words) |

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 Annex of the Delegated Decision (EU) 2019/910 on the multiannual Union programme; and Article 2, Article 4 paragraphs (1) and (5) and Article 5 paragraph (2) of the Implementing Decision (EU) 2016/1701 on the format of the WP. It is intended to specify data to be collected under Tables 6 and 7 of the delegated decision on 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. |
| In the Czech Republic is the total freshwater fish production approximately 20 000 tons per year. The carp is the most frequently farmed fish produced in the amount of 17 500 tons per year. According to Chapter V, paragraph 5 of Regulation (EU) 2016/1251, the Czech Republic has to collect the economic and social data for carp culture. Because the carp is farmed in polyculture with other fish species, the Czech Republic can report only two variables connected with carp mentioned in Table 3B, namely the value of **Gross sales per species** and **Weight of sales per species**. The other social and economic variables mentioned in Table 3B, will be collected on the company level. 1. **Description of methodologies used to choose the different sources of data** The main sources for the direct data collection on the farm level of the economic and social data are financial accounts and company registers. Freshwater fish farmers shall submit the economic and social variables to the Ministry of Agriculture, so this is a second source of the data. The economic variables will be collected every year, the social variables every three years. 2. **Description of methodologies used to choose the different types of data collection**The economic and social variables will be collected by the questionnaire surveys on-line. The questionnaires will be prepared according to tables 6, 7, and 9 of Regulation (EU) 2016/1251 and Regulation (EU) 2017/1004 of the European Parliament and the Council of 17 May 2017.**3. Description of methodologies used to choose the sampling frame and allocation scheme**Economic and social data will be collected from selected fish companies. Data collection in 2021 will be completely organized by the Institute of Agricultural Economics and Information. At the same time, in 2021, is intended to prepare the Angling Information System (AIS), which in the future (in 2025) will also collect socio-economic data from the members of the Czech Anglers Union and Moravian Anglers Union. Both Unions produce about 9% of aquaculture production in the Czech Republic. Simultaneously with the launch of AIS, the data collection organized by the IAEI will continue with the public procurement method, which will include fishing enterprises in the Czech Republic that will not be AIS users. The planned AIS system will also ensure the data collection about eel (see text box 1E) and also environmental data on aquaculture (see pilot study 4), but also about the non-commercial recreational freshwater fishing. The Czech Republic states that AIS will enable both the collection of data, that will be reported to the EK (partial share of the total volume of collected data) and the collection of data that will serve the needs of the Czech state authority (f. e. for the needs of Ministry of Agriculture, it is also information about non-commercial recreational fisheries; major share of the total volume of collected data). The AIS will serve the internal needs of the Czech Anglers Union and Moravian Anglers Union as well. The AIS will be a tool for a more efficient way of collecting both sets of data than at present.The Czech Republic wants to create also the joint fishing web portal as a support instrument in data collection for fish farmers and state authorities. **4. Description of methodologies used for estimation procedures**The results will be generalized by the methodology of extrapolation.**5. Description of methodologies used on data quality** Data quality will be ensured by using appropriate statistical methods during data collection and data control. It will be used method of remote values and other suitable methods. *(max 1000 words)* |
| 6. Deviations from Work Plan methodology for selection of data sourceList the deviations (if any) from the methodology used to select data source compared to what was planned in the Work Plan, and explain the reasons for the deviations.Actions to avoid deviationsBriefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped.CZE: No devitations.7. Deviations from Work Plan methodology to choose type of data collectionList the deviations (if any) from the methodologies to choose type of data collecton scheme compared to what was planned in the Work Plan, and explain the reasons for the deviations. Actions to avoid deviationsBriefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped.CZE: No devitations.8. Deviations from Work Plan methodology regarding sampling frame and allocation schemeList the deviations (if any) from the methodologies used regarding sampling frame and allocation scheme compared to what was planned in the Work Plan, and explain the reasons for the deviations. Actions to avoid deviationsBriefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped.CZE: The Czech Republic planned to collect economic data for 2019 in the Work Plan for 2021. During 2021, at the time of the public procurement process (second half of the year 2021), also socioeconomic data for 2020 of the fish enterprices were already available by the Czech fish enterprices. This circumstance was operatively used and socioenomic data for 2020 were also collected, although they were not planned in the Work plan 2021. The result of this is the harmonization of data collection of the socioeconomic data in aquaculture with other member states EU and the catching-up of historical gaps in data collection.Planed sample rate was 20%. The result of data collection for 2019 and also for 2020 was 10% in both cases (48 questionnaires). Due the fact that were collected data from the largest fishing companies in the Czech Republic (the data were collected from all enterprices with aquaculture production above 500 tonnes), the total aquaculture production was covered at the level of 70-75%. From this point of view, it seems sufficient to plan a sample rate at a level close to annually 10% for further data collection.9. Deviations from Work Plan methodology used for estimation proceduresList the deviations (if any) from the methodologies used for estimation procedures compared to what was planned in the Work Plan, and explain the reasons for the deviations. Actions to avoid deviationsBriefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped.CZE: No devitations.10. Quality assurance10.1 Sound methodologyBriefly describe if the data collection follow methodologies, guidelines and best practices agreed in expert groups and whether methodologies are documented and are made publicly available. CZE: Yes, data collection followed methodologies, guidelines, and best practices agreed in expert groups, especially in the RCG ECON.10.2. Accuracy and reliabilityResponse rate and Achieved sample rate are provided in Table 3B. For additional information, briefly describe how raw data inputs, intermediate results and outputs are regularly assessed and validated and how errors are identified, documented and dealt with.CZE: Automatic checks for data formats and values ​​have been incorporated into the data collection forms to help prevent potential filling errors. Data checks were performed on the basis of professional and practical experience in this area by a selected qualified supplier. 10.3. Accessibility and ClarityIndicate with Yes or NoCZE: Yes.Are methodological documents publicly available? CZE: Yes.Are data stored in databases? CZE: No. Where can methodological and other documentation be found? CZE: It is part of the tender documentation for the selection of the collection contractor and is posted on the publicly accessible procurement portal.Provide the web link, if documentation is publicly availablehttps://zakazky.eagri.cz/contract\_display\_15667.html(max 1000 words)  |

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 Annex of the Delegated Decision (EU) 2019/910 on the multiannual Union programme; and Article 2 and Article 4 paragraph (3) point (d) of the Implementing Decision (EU) 2016/1701 on the format of the WP. It is intended to specify data to be collected under Table 8 of the delegated decision on 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). |
| The Czech Anglers Union, in cooperation with the Moravian Anglers Union, is preparing an information system, the AIS (Angling Information System), which will include a platform including the collection of environmental data in aquaculture. Environmental data will be collected from members of both unions.1. Aim of pilot studyTo create and test a platform for future collection of Environmental data according to Table 8 Environmental variables in the aquaculture sector of the EU Commission Implementing Decision 2016/1251.2. Duration of pilot studyStart of system development in 2021. The completion of the pilot study is expected in 2025.3. Methodology and expected outcomes of pilot studyThe methodology of environmental data collection will be based on direct data collection from members of the Czech Anglers Union and the Moravian Anglers Union, through AIS. The value ​​of parameters will be collected according to Table 8 Environmental variables in the aquaculture sector of the EU Commission Implementing Decision 2016/1251, Administered medicinal products, Applied treatments, and Fish mortality values.(max 900 words) |
| 4. Achievement of the original expected outcomes of pilot study and justification if this was not the case.At 2021, The Czech Anglers Union has launched a public selection procedure in order to attract provider of AIS (Angling Information System), as a instrument for collection of Environmental data on aquaculture in the Czech Republic. Simultaneously, all fundamental procedures have been started – this includes preparations for process of migration current data of the current used system to the new AIS (expected finish 5/2022), further analysis including General Data Protection Regulation (finished 10/2021), analysis of the level of technical preparedness of 486 local committees of Czech Anglers union as major aquaculture data collectors to AIS with setting the strategy of software and methodic training of all AIS stakeholders (finished 11/2021).  Furthermore, in 10/2021 was established board of advisors, including experts in fishery, supervising the process of programming and testing of AIS in order to provide all demanded environmental data of aquaculture in Czech Republic. In 2021, Czech Anglers Union prepared all necessary underlays for other selection procedures - including provider of data center and provider of mobile application (which will serve for collecting data from terrain as a indivisible part of AIS, that will be available for free for more than 250 thousands of members of Czech Anglers Union). 5. Incorporation of results from pilot study into regular sampling by the Member State. The process of development AIS has been started in 2021 by setting a selection procedure of AIS provider, preparation of all underlays for selecting other suppliers (data center, mobile application) and necessary analysis (GDPR, stakeholder readiness, migration and implementation process). According to schedule, the pilot run is expected late in the year 2023. Provision of sampling protocols is expected at the end of year 2024 (based on partially collected data from year 2024). According to obligatory resolution of XVIII. National Assembly of Czech Anglers union, which was held in autumn 2021, all 486 local committees of Czech Anglers Union are committed to use AIS with full set of functionalities, which should guarantee the relevancy, soundness and reliability of aquaculture data set in Czech Republic.AIS is expected to be fully operational in late 2024 with potential to provide the full set of demanded environmental data of aquaculture in Czech Republic in 2025. This data set will be included to Annual report of Environmental data of Czech Republic and put forward to The European CommissionDuring 2021, the fact came to light that AIS will not be funded from European sources. Nevertheless, the activities described above were carried out in order to comply with the commitment under the Work Plan for 2021.(max 900 words) |

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 Annex of the Delegated Decision (EU) 2019/910 on the multiannual Union programme; and Article 2, Article 4 paragraphs (1) and (5) and Article 5 paragraph (2) of the Implementing Decision (EU) 2016/1701 on the format of the WP. It is intended to specify data to be collected under Table 10 of the delegated decision on 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. |
| **It is not relevant for the Czech Republic.**1. Description of methodologies used to choose the different sources of data2. Description of methodologies used to choose the different types of data collection3. Description of methodologies used to choose sampling frame and allocation scheme4. Description of methodologies used for estimation procedures5. Description of methodologies used on data quality (max 1000 words) |
| 6. Deviations from Work Plan methodology for selection of data sourceList the deviations (if any) from the methodology used to select data source compared to what was planned in the Work Plan, and explain the reasons for the deviations.Actions to avoid deviationsBriefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped.7. Deviations from Work Plan methodology to choose type of data collectionList the deviations (if any) from the methodologies to choose type of data collecton scheme compared to what was planned in the Work Plan, and explain the reasons for the deviations. Actions to avoid deviationsBriefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped.8. Deviations from Work Plan methodology regarding sampling frame and allocation schemeList the deviations (if any) from the methodologies used regarding sampling frame and allocation scheme compared to what was planned in the Work Plan, and explain the reasons for the deviations. Actions to avoid deviationsBriefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped.9. Deviations from Work Plan methodology used for estimation proceduresList the deviations (if any) from the methodologies used for estimation procedures compared to what was planned in the Work Plan, and explain the reasons for the deviations. Actions to avoid deviationsBriefly describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section can be skipped.10. Quality assurance10.1 Sound methodologyBriefly describe if the data collection follow methodologies, guidelines and best practices agreed in expert groups and whether methodologies are documented and are made publicly available. 10.2. Accuracy and reliabilityResponse rate and Achieved sample rate are provided in Table 3C. For additional information, briefly describe how raw data inputs, intermediate results and outputs are regularly assessed and validated and how errors are identified, documented and dealt with.10.3. Accessibility and ClarityIndicate with Yes or No:Are methodological documents publicly available? Are data stored in databases? Where can methodological and other documentation be found? Provide the web link, if documentation is publicly available.(max 1000 words) |

# Section 4: Sampling Strategy for Biological Data from Commercial Fisheries

Text Box 4A: Sampling plan description for biological data

|  |
| --- |
| General comment: This box fulfills Article 3, Article 4 paragraph (4) and Article 8 of the Implementing Decision (EU) 2016/1701 on the format of the WP and forms the basis for the fulfilment of paragraph 2 point (a)(i) of Chapter III of the Annex of the Delegated Decision (EU) 2019/910 on the multiannual Union programme. This Table refers to data to be collected under Tables 1(A), 1(B) and 1(C) of the delegated decision on 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. |
| **It is not relevant for the Czech Republic.**1. Description of the sampling plan according to Article 5 paragraph (3) of the Implementing Decision (EU) 2016/1701 on the format of the WP.*(max 900 words per region)* |
| Deviation from the sampling plan according to Article 5 paragraph (3) of the Implementing Decision (EU) 2016/1701:2. Deviations from the Work PlanMember State shall list the deviations (if any) in the achieved data collection, compared to what was planned in the Work Plan and explain the reasons for the deviations.3. Action to avoid deviationsMember State shall describe the actions that will be considered / have been taken to avoid the deviations in the future and when these actions are expected to produce effect. If there are no deviations, then this section is not applicable.(max. 1000 words per region OR fishing ground) |

# Section 5: data quality

**Text Box 5A: Quality assurance framework for biological data**

|  |
| --- |
| General comment: This box is applicable to the Annual Report. This box fulfills Article 5 paragraph (2) point (a) of the Implementing Decision (EU) 2016/1701 on the format of the WP. This box is intended to specify data to be collected under Tables 1(A), 1(B) and 1(C) of the Annex of the Delegated Decision (EU) 2019/910 on the multiannual Union programme. Use this box to provide additional information on Table 5A of the Annual Report.  |
| **It is not relevant for the Czech Republic.**1. Evidence of data quality assuranceWithin this section Member State 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 sampling scheme for which data was collected. In the case where the same quality assurance framework is applied to all data collection schemes, information can be provided at general level with the indication “all sampling schemes”.In those sections of Table 5A where “N” is indicated, Member States shall explain the main constrains 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.2. Sampling designExplain main constraints and/ or steps taken, if ‘N’ (no) was indicated in Table 5A.3. Sampling implementationExplain main constraints and/or steps taken, if ‘N’ (no) was indicated in Table 5A.4. Data captureExplain main constraints and/ or steps taken, if ‘N’ (no) was indicated in Table 5A.5. Data StorageExplain main constraints and/ or steps taken, if ‘N’ (no) was indicated in Table 5A. Please provide a link if the documented revisions are available and not confidential.6. Data processingExplain main constraints and/ or steps taken, if ‘N’ (no) was indicated in Table 5A. (max. 900 words per Region/RFMO/RFO/IO OR sampling scheme) |

#  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 Implementing Decision (EU) 2016/1701 on the format of the WP. This box is intended to specify data to be collected under Tables 5(A), 6 and 7 of the Annex of the Delegated Decision (EU) 2019/910 on the multiannual Union programme. Use this box to provide additional information on Table 5B of the Annual Report. |
| **It is not relevant for the Czech Republic.**1. Evidence of data quality assuranceWithin 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 constrains 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.2. Section P3 Impartiality and objectivenessExplain main constraints and/ or steps taken, if ‘N’ (no) was indicated in Table 5B3. Section P4 ConfidentialityExplain main constraints and/ or steps taken, if ‘N’ (no) was indicated in Table 5B4. Section P5 Sound methodologyExplain main constraints and/ or steps taken, if ‘N’ (no) was indicated in Table 5BInformation on this principle should be briefly explained in Text boxes 3A, 3B and 3C. Description of methodologies used on data quality.5. Section P6 Appropriate statistical proceduresExplain 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.6. Section P7 Non-excessive burden on respondentsExplain main constraints and/ or steps taken, if ‘N’ (no) was indicated in Table 5B7. Section P8 Cost effectivenessExplain main constraints and/ or steps taken, if ‘N’ (no) was indicated in Table 5B8. Section P9 RelevanceExplain main constraints and/ or steps taken, if ‘N’ (no) was indicated in Table 5B9. Section P10 Accuracy and reliabilityExplain 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.10. Section P11 Timeliness and punctualityExplain main constraints and/ or steps taken, if ‘N’ (no) was indicated in Table 5B11. Section P12 coherence and comparabilityExplain main constraints and/ or steps taken, if ‘N’ (no) was indicated in Table 5B12. Section P13 Accessibility and ClarityExplain 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.(max. 900 words per Region/RFMO/RFO/IO/NSB OR sector) |