

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

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

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

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

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

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

Commission Implementing Decision (EU) 2022/39 of 12 January 2022

laying down rules on the format and timetables for the submission of national work plans and annual reports for data collection in the fisheries and aquaculture sectors, and repealing Implementing Decisions (EU) 2016/1701 and (EU) 2018/1283

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

2023-2025

Version 1 – 2022

Vienna 14 October 2022

CONTENTS

- SECTION 1: GENERAL INFORMATION 4
 - DATA COLLECTION FRAMEWORK AT NATIONAL LEVEL 4
 - TEXT BOX 1B: OTHER DATA COLLECTION ACTIVITIES 4
 - ACTIVITY A: SURVEY AND ASSESSMENT OF FISH AND CRAYFISH STOCKS IN SELECTED SMALL NATURAL AUSTRIAN LAKES..... 4
 - ACTIVITY B: FISH-ECOLOGICAL SURVEY AND BIOMASS ESTIMATION OF COREGONUS SP IN LAKE ZELL (“ZELLER SEE”).....6
 - ACTIVITY C: ORGANIC AQUACULTURE PRODUCTION.....8
 - ACTIVITY D: SUPPORTING THE SECWEB-PROJECT.....9
- SECTION 6: ECONOMIC AND SOCIAL DATA IN AQUACULTURE..... 10
 - TEXT BOX 6.1: ECONOMIC AND SOCIAL VARIABLES FOR AQUACULTURE DATA COLLECTION 10

SECTION 1: GENERAL INFORMATION

Data collection framework at national level

General comment: Use this text box to describe how data collection is organised in your Member State (institutions involved, contact information) and in which regional coordination groups (RCG) your Member State participates.

The data collection framework is under the responsibility of the Federal Ministry of Agriculture, Forestry, Regions and Water Management. The national correspondent is:

Margareta Stubenrauch, Stubenring 12, 1010 Vienna

Data about aquaculture production according to regulation (EC) 762/2008 on the submission by Member States of statistics on aquaculture are collected by “Statistik Austria”.

According to <https://ec.europa.eu/eurostat/databrowser/view/tag00075/default/table?lang=en> the EU’s aquaculture production in 2020 was 1.070.165, 0277 tonnes, while Austria’s production in the same year amounted to 4.526, 915 tonnes, which represents 0,42 % of the EU’s production. According to Chapter II Para 7 of the Commission’s Implementing Decision (EU) 2021/1168, there is no obligation for Member States to collect socio-economic data on a regular basis if their aquaculture production is below 1 % of the EU’s production.

Under previous MAPs we did two pilot studies to develop methodologies for social-economic data collection in order to be prepared in case it becomes an obligation. However, as this does not seem to be the case in the immediate future, we will not pursue these activities right now and focus on data collection activities fulfilling objectives under other EMFAF priorities. This is also due to the very limited EMFAF resources. Austria’s share is 0,13 (!) % of the overall EMFAF-budget.

Text Box 1b: Other data collection activities

Activity A: Survey and Assessment of Fish and Crayfish Stocks in Selected Small Natural Austrian Lakes

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

1. Aim of the data collection activity

During the implementation of the EU Water Framework Directive, all large lakes (>50 hectares) in Austria have regularly undergone standardised surveying and evaluation according to the stipulations of this

directive. In contrast, the knowledge about the limnology and biology of small lakes (<50 hectares), which frequently come under heavy use for angling and tourism, is sketchy due to the absence of studies on fishing activity and fish ecology of these lakes.

There are three native freshwater crayfish species listed in the Habitats Directive in Annex II respectively V, which obligates Austria to protect and conserve them. Due to the lack of a standardised sampling approach, no comparative data of populations are available, which would be of highest importance concerning the conservation of endangered native freshwater crayfish.

The objective of the data collection activity is to close the current knowledge gaps regarding the fish and crayfish species and to ensure their sustainable availability through proposals for management measures to be developed during the project.

The current method used in Austria for the examination of fish ecology and evaluation of bodies of standing water >50 ha according to the EU Water Framework Directive will be adapted for its application in small lakes. In addition, the capture-mark-recapture technique will be used to verify adaptations of the methodology and further data as regards individual growth and preferences regarding habitat selection.

It is envisaged investigating the fish ecology of representative alpine lakes between 10 and 50 ha in size and evaluating them in terms of their ecological state by means of adapted assessment schemes. To verify the methodology, two lakes between 50 and 60 ha in size will also be examined using the methodology described. There is comparative data for these lakes so that the adaptations implemented are checked via the direct comparative values and any deviations applied to improve the methodology.

Fish and crayfish species in these lakes will also be examined using e-DNA and compared with the surveyed inventory of fish species to use this non-invasive method alternatively/in addition to the capture methods in future. The analyses will likewise consider whether this method is also suitable for estimating the potential risk to fish and crayfish from disease.

The aim of a nationwide standardised sampling approach is to develop a tool for stagnant waterbodies that enables the creation of comparative data by assessing the conservation status and the state of risk for all freshwater crayfish species native to Austria.

2. Duration of the data collection activity

Start: First quarter 2023; End: Final quarter 2025

3. Methodology and expected outcomes of the data collection activity

Standard methodology for surveying fish stocks

The standardised methodology and assessment scheme according to the guidelines of the Federal Ministry of Agriculture, Forestry, Regions and Water Management will be adapted for its specific application to small lakes.

The adapted survey method will be used to examine lakes in terms of fish ecology and to evaluate them according to the stipulations of the EU Water Framework Directive. Gillnets, electro-fishing, and echo counting will be used for this standardised fishing procedure.

The standardised net fishing method is based on stratified random sampling in different depth ranges. The level of effort required for capture will depend on the surface and depth of the lake.

Marking and recapture method

In view of the shallow water areas of particular relevance to small lakes, a very dense monitoring network will be set up in addition to the existing method, use of weirs and electro-fishing. The fish captured via weir

and electro-fishing can be individually marked with PIT tags. Where these fish are captured using multi-mesh gillnets or by angling, the recapture rate allows a meaningful conclusion to be drawn regarding the total fish population. This makes it possible to control the adaptations of the sampling setup required for small lakes while also getting information on the territorial behaviour and individual increases in weight/length.

With the data collected, the guidelines used for evaluating fish ecology of lakes >50 ha can be adapted for small lakes.

Sampling and assessing the conservation status and state of risk of freshwater crayfish.

Based on results of an evaluation of sampling methods, the following monitoring methods will be applied:

- Hand capture by day
- Hand capture by night
- Trapping and artificial hides
- Diving
- eDNA

Sampling design for e-DNA water samples

The populations of fish species in the small lakes selected will be surveyed applying traditional standardised methods. Water samples, to be used for e-DNA analysis investigating fish and crayfish species and for comparison with the capture data, will be taken in parallel.

Outcomes of the test study

- List of fish species for the lakes selected
- Basic parameters for fish ecology (growth, maturity, age structure, ...) of the commercial fish species in these small lakes
- Assessment of populations and state of risk of freshwater crayfish
- Design for e-DNA sampling
- Gain in expertise for the use of e-DNA to survey fish and crayfish communities in lakes
- Evaluation of fish ecology
- Recommendations for management
- Adapted guidelines for the examination of small lakes and evaluation of their fish ecology
- Guidelines for sampling and assessing native crayfish populations

Text Box 1b: Other data collection activities

Activity B: Fish-Ecological Survey and Biomass Estimation of *Coregonus sp* in Lake Zell ("Zeller See")

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

1. Aim of the data collection activity

An investigation in 2020 showed changes in spawning maturity of whitefish (*Coregonus sp*) compared to 2006 in lake Zell („Zellersee“). In addition, a relatively high biomass was found. In general, an earlier spawning maturity in Alpine lakes has been discovered in recent years - previously in 4+/3+ year classes, currently often in 2+ or even 1+. Climate change could be one of the explanations.

The management measures in lake Zell should therefore be changed towards increased catches via a reduced minimum conservation reference size and higher catches per licence. In order to monitor the implications of these changes, the most important parameters of the *Coregonus sp* population should be monitored annually in addition to the total biomass towards the end of the project using scientific hydroacoustic methods. Based on the results of these surveys, changes can be responded to while the multiannual data series will contribute to sustainable fisheries in lake Zell.

2. Duration of the data collection activity

June 2023-December 2025

3. Methodology and expected outcomes of the data collection activity

150-200 individual *Coregonus sp* will be caught every year using gillnets with graduated mesh sizes or with Nordic multimesh nets. This should allow to catch all year classes equally well. The fishing trips will be carried out once a year end September/early October. The same effort will be used every year to make the catches comparable. The caught *Coregonus sp* will be measured, weighed and analysed for distinctive features such as injuries or parasites. In addition, scales will be taken for age determination. Sex and maturity will also be analysed. Age determination will be carried out in the laboratory. Six cleaned and dried scales will be put in a double glass frame, projected on the wall and the annual rings will be counted. In order to avoid mistakes, there will always be two persons doing the age determination without previous knowledge of length and weight. The results will be presented as histograms or plots using the average weight and length of the respective year classes. After every fishing trip a brief intermediate report containing the most relevant data of the *Coregonus sp* population will be generated to adapt the management measures accordingly. At the end of the project a final report will be drawn up.

The estimation of the fish biomass will be carried out with a scientific echosounder of the company SIMRAD (EK 60 or EK 80 with a composite split beam transducer) and a working frequency of 120 kHz. The images will be taken along the transects of the 2020 investigation (mentioned at the start) at three different dates in autumn and winter. The recordings will be taken at night. The speed of the boat will be approximately 5-6 km/h. The echosounder will be calibrated with a calibration ball. Data will be saved during the recordings. The analysis will be done with a computer programme, namely SONAR 5-Pro. The results will contain abundance, length distribution and the total biomass. They will be presented in the intermediate and final reports.

The combination of a classic catching method with gillnets and modern echosound technology should be strengthened, to modernise fisheries management in our lakes and to consequently optimise sustainable catches.

Text Box 1b: Other data collection activities

Activity C: Organic Aquaculture Production

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

1. Aim of the data collection activity

The aim of the study is to create a reliable and sound baseline for organic aquaculture production in Austria in order to measure progress towards the objective of the national programme under EMFAF 2021-2027, namely to sustainably increase organic aquaculture production.

2. Duration of the data collection activity

2023-2025

3. Methodology and expected outcomes of the data collection activity

Currently, data about aquaculture production and its value are collected according to regulation (EC) 762/2008 on the submission by Member States of statistics on aquaculture implemented in Austria through “Verordnung des Bundesministers für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft betreffend die Statistik über die Aquakulturproduktion 2012” – see [BGBl 344/2012](#) (available in German only). Neither the EU regulation nor the Austrian implementing ordinance require data collection on organic aquaculture production. Discussions to modify the regulation (EC) 762/2008 have been ongoing for quite some time, but no official proposal by the European Commission has materialised so far.

The European Commission’s Communication “A Farm to Fork Strategy” (COM(2020) 381 final) called for a significant increase in organic aquaculture. This objective has been repeated in the Commission’s Communication on an “Action Plan for the Development of Organic Production” (COM(2021) 141 final) and in the “Strategic Guidelines for a More Sustainable and Competitive Aquaculture for the Period 2021 to 2030” (COM(2021) 236 final).

Austria’s National Programme under EMFAF 2021-2027 also contains the same objective. The amount of organic aquaculture production shall be increased sustainably. A reliable baseline is essential to monitor progress towards this objective. A critical assessment of the current data on organic production showed that there is room for improvement in particular for the organic production of salmonids.

Therefore – and as a first step - the annual data collection under regulation (EC) 762/2008 will be amended by a request for additional information on organic production in volume of fish for human consumption per fish species. The current questionnaire (online and paper version) will be complemented by a column “organic production”. After a trial period of one year, an evaluation will be carried out to determine if the replies are sufficient and as complete as possible. If necessary an adapted or extended version will be developed.

This project is without a direct link to the EU MAP specific requirements or WP template tables. However it fulfils objectives under other EMFAF priorities, namely Priority 2 “Fostering sustainable aquaculture activities and processing and marketing of fishery and aquaculture products, thus contributing to food

security in the Union”. Furthermore, it is perfectly in line with the Farm-to-Fork-Strategy and the Strategic Guidelines for a More Sustainable and Competitive EU-Aquaculture 2021-20230.

Text Box 1b: Other data collection activities

Activity D: Supporting the SECWEB-Project

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

1. Aim of the data collection activity

Support the operation and functioning of the RCG’s Secretariat for a fluent regional coordination of data collection activities.

2. Duration of the data collection activity

01/01/2023 – 31/12/2025

3. Methodology and expected outcomes of the data collection activity

The Secretariat’s organizational structured has been set up and pilot tested throughout SecWeb project. The key functions of the RCG’s Secretariat have been determined in close collaboration with all RCGs, in particular with RCG and Intersessional Subgroups (ISSGs) chairs. A business model has been developed. In addition, good practices in communication within and among the RCGs have been promoted and installed. The overall capacity to reach out to a wider public and increase the visibility of the work and output of the RCGs has been boosted with the development of a dedicated website and the consolidation of a visual identity.

RCG chairs and the RCG’s network in general have acknowledged the added value of having an RCG’s Secretariat to the overall aim of improving data collection activities.

Based on SecWeb project outputs the proposed data collection activity will connect the whole RCG network and stakeholders to work together on common goals. The Secretariat provides fluent administrative and coordination support for more efficient regional coordination liberating national experts involved in data collection activities from heavy burden administrative tasks.

Overall expected outcomes

- A full-time dedicated Secretariat support service for the RCGs enables a consistent approach to administering RCG activities, facilitates communication, and enhances the intersessional work, supporting also the work of sub-groups.
- A dynamic and permanently updated website will be kept available including as features:
 - Integration – allowing seamless synchronization with third-party information needs and requests
 - Responsive display – to serve content across multiple devices, screens, and browsers

- User experience- maintaining a satisfactory user experience throughout the website sections
- Accessibility – To any interested visitor in a user-friendly way across the website sections
- Retention- keeping visitors coming back to the website
- Links to relevant restricted access sites and virtual environments.
- The Visual identity for the RCGs is increasingly consolidated and visibility and understanding of the work by the RCGs is enhanced for the relevant stakeholder groups.
- A regularly updated Stakeholders’ database improves the communication function among the RCGs’ experts and the stakeholders’ community.
- Internal communication protocols and help-desk in place makes it easier for any new comer to efficiently join, adopt responsibilities, and contribute to the RCGs objectives and work commitments.
- The public description of the secretariat functions, operational working protocols and commitments will build trust and enhance the whole network transparency and accountability.

SECTION 6: ECONOMIC AND SOCIAL DATA IN AQUACULTURE

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

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

1. Description of the threshold application

According to <https://ec.europa.eu/eurostat/databrowser/view/tag00075/default/table?lang=en> the EU’s aquaculture production in 2020 was 1.070.165, 0277 tonnes, while Austria’s production in the same year amounted to 4.526, 915 tonnes, which represents 0,42 % of the EU’s production. According to Chapter II Para 7 of the Commission’s Implementing Decision (EU) 2021/1168, there is no obligation for Member States to collect socio-economic data on a regular basis if there aquaculture production is below 1 % of the EU’s production.

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

Not applicable