MAHOP Managing Authority, Ministry of Agriculture Institute of Agricultural Economics Nonprofit Ltd.

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

Hungary's Annual Report on data collection in the fisheries and aquaculture sectors

2022

Version 2

Budapest, 21.06.2023

CONTENTS

SECTION 1: GENERAL INFORMATION	4
DATA COLLECTION FRAMEWORK AT NATIONAL LEVEL TEXT BOX 1A: TEST STUDIES DESCRIPTION TEXT BOX 1B: OTHER DATA COLLECTION ACTIVITIES	4
SECTION 2: BIOLOGICAL DATA	8
TEXT BOX 2.3: DIADROMOUS SPECIES DATA COLLECTION IN FRESHWATER TEXT BOX 2.4: RECREATIONAL FISHERIES	
SECTION 6: ECONOMIC AND SOCIAL DATA IN AQUACULTURE	10
TEXT BOX 6.1: ECONOMIC AND SOCIAL VARIABLES FOR AQUACULTURE DATA COLLECTION	10
SECTION 7: ECONOMIC AND SOCIAL DATA IN FISH PROCESSING	10
TEXT BOX 7.1: ECONOMIC AND SOCIAL VARIABLES FOR FISH PROCESSING DATA COLLECTION	10
ANNEX 1.2 - QUALITY REPORT FOR SOCIOECONOMIC DATA SAMPLING SCHEME	12
(SAMPLING SCHEME IDENTIFIER: PLEASE INDICATE AND UPDATE THE TABLE OF CONTENT)	12

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 supervised by the Managing Authority of the Hungarian Fisheries Operational Program (MAHOP) of the Ministry of Agriculture, while the Institute of Agricultural Economics Nonprofit Ltd. (formerly Research Institute of Agricultural Economics, hereinafter AKI) is responsible for the planning and conduction of the data collections, the submission of annual reports and data to the COM, and for data provision to other end users. AKI is also responsible for the collection of staistical data on aquaculture according to Regulation (EC) No 762/2008.

Since a land-locked country, Hungary is part only of RCG ECON.

Contacts

MAHOP Managing Authority:

Dr. Vivien MIHALICS

Head of Unit

Fisheries Funds Unit

Managing Authority Department

Deputy State Secretariat for the Implementation of Rural Development Programs

Ministry of Agriculture

H-6000 Kecskemét, Ipoly u. 1/A., III. em. 3.016

Post address: 1860 Budapest, Pf. 1. E-mail: vivien.mihalics@am.gov.hu

DCF National Correspondent:

Ágnes Irma GYÖRGY, PhD

Researcher

Fisheries Information Group

Institute of Agricultural Economics Nonprofit Ltd. (AKI)

H-1093 Budapest, Zsil u. 3-5.

Tel: +36 70 501 1245

E-mail: gyorgy.agnes@aki.gov.hu

https://www.aki.gov.hu

(max. 1000 words)

Text Box 1a: Test studies description

General comment: This text box fulfils Chapter II, section 1.2 of the EU MAP Delegated Decision annex.

No test study is planned.

- 1. Aim of the test study
- 2. Duration of the test study
- 3. Methodology and expected outcomes of the test study

(max 900 words per study)	
No test study was planned.	
(max 900 words per study)	

Text Box 1b: Other data collection activities

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

Producer and consumer fish prices monitoring

1. Aim of the data collection activity

The collection of producer (on-site farms) and consumer fish prices of the main fresh fish and fish products to have a better understanding of trade margin, price policy and economic changes in Hungary.

2. Duration of the data collection activity

01/01/2023 - 31/12/2023

3. Methodology and expected outcomes of the data collection activity

The collection of producer (on-site farms) and consumer fish prices will be done on a regular basis (quarterly and monthly respectively) at major consumer markets and retail chains. Collection will be done in person, by phone or by e-mail, depending on the providers preferences. Data providers are selected based on their economic significance by AKI. Data will be stored in the data base of the AKI and made publicly available aggregated online (https://www.aki.gov.hu/halarak-adatlekerdezo-felulete/; English version is also under development), market and retail chain prices are also provided to EUMOFA. Data are analysed on a yearly basis.

Monitoring of foreign trade of fishery and aquaculture products

1. Aim of the data collection activity

Data on foreign trade of fishery and aquaculture products (quantity and value) will be gathered from databases and summarized at half-yearly intervals to see how the foreign trade develops and how imports and exports balance, and to determine the countries that are Hungary's main markets and its main suppliers.

2. Duration of the data collection activity

01/01/2023 - 31/12/2023

3. Methodology and expected outcomes of the data collection activity

Data are queried from the official database of the Hungarian Central Statistical Office on a half-yearly basis. Designation of the range of examined products is based on the classification of the Combined Nomenclature (CN). One group of fishery and aquaculture products, "Fish and crustaceans, molluscs and other aquatic

invertebrates (CN03), is classified in commodity class I.: "Live Animals; Animal Products", while the other group of processed products belongs to "Prepared Foodstuffs" of class IV.

The observed groups are:

- Fish and crustaceans, molluscs and other aquatic invertebrates (CN03) except live ornamental fish (030111) and snails (030760);
- Extracts and juices of meat, fish or crustaceans, molluscs or other aquatic invertebrates (CN160300);
- Prepared or preserved fish; caviar and caviar substitutes prepared from fish eggs (CN1604);
- Crustaceans, molluscs and other aquatic invertebrates, prepared or preserved (CN1605)

Based on the data development of foreign trade and the balance of imports and exports are monitored, and Hungary's main fish market and supplier countries are determined. Data are displayed in diagrams as time series.

Other data collections

Data required to estimate per capita fish consumption in the country, and variables necessary for the calculation of indicators related to the current tasks of MAHOP is also planned to be collected for analysis from available relevant databases.

Additional data collections are foreseen, but it will be specified and designed only after the next Hungarian Operational Program of the fisheries and aquaculture sector is finalized and accepted, and when related data requirements and end user needs are determined.

RCG Secretariat

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 structure 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.
 - O 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.
 - o Retention keeping visitors coming back to the website.
 - o 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 helpdesk in place makes it easier for any newcomer 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.

(max 900 words per activity)

Producer and consumer fish prices monitoring

Brief description of the results (including deviations from the plan and justifications as to why if this was the case).

No deviations from the plans. The collection of producer (on-site farms) fish prices were done on a regular basis (quarterly) at fish farms owning 42 percent of all operated aquaculture pond area in Hungary. The collection of consumer fish prices was done at 13 major consumer markets throughout the country and 2 in the capital, and at 2 main retail chains next to the capital. Data are stored in the data base of the AKI and made publicly available aggregated online (https://www.aki.gov.hu/halarak-adatlekerdezo-felulete/; English version is still under development, but planned to be available before the end of 2023), market and retail chain prices were provided also to EUMOFA.

Achievement of the original expected outcomes of the study and justification if this was not the case.

The collected data were analysed on a quarterly and yearly basis, results are published on the public website of the DCF project (https://www.aki.gov.hu/project/mahop-dcf2/).

Incorporation of study results into regular sampling by the Member State

Collection of fish prices are incorporated to regular sampling.

Monitoring of foreign trade of fishery and aquaculture products

Brief description of the results (including deviations from the plan and justifications as to why if this was the case).

No deviations from the plans. No additional data collection was done, available data from the official database of the Hungarian Central Statistical Office were analysed on a half-yearly basis. Results are available online on the public website of the DCF project (https://www.aki.gov.hu/project/mahop-dcf2/#1645011666383-da95c85f-0fc4) in Hungarian. Analysis and publication of results are done on a regular basis.

RCG Secretariat

During 2022 the activities of the RCGs Secretariat still developed in the context of the SecWeb Project, which was extended to last until the end of February 2023. The RCG experts and the Member States' NCs engaged in several discussions about the long-term stabilization of the Secretariat services, given the value added by the project to the RCGs networks, and agreed on a short term solution for continuity in 2023 which was incorporated with a statement in "Text Box 1b: Other data collection activities" of the Annual Work Plans of the Member States. The longer term perspective will build upon the outcomes from SECWEB and dealt with inter-sessionally and pan regionally by ISSG NCs in 2023 and beyond. Hungary has signed and sent the service offer for "Secretariat Support Services assisting the participation of Hungary in the Regional Coordination Groups of the EU Fisheries Data Collection Framework" to Centro

(max. 900 words per study)

Tecnológico del Mar, Fundanción CETMAR.

SECTION 2: BIOLOGICAL DATA

Text Box 2.3: Diadromous species data collection in freshwater

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

No data collection is planned.

Hungary abolished all commercial fisheries on its natural waters as of 01.01.2016, and therefore, this point is not relevant for Hungary. Also, Hungary has no salmon or sea trout stocks in its freshwaters, and is not a significant habitat of wild freshwater trout stocks either, since their typical habitats, the cold-water watercourses and lakes are scarce in the country due to its topographic characteristics.

Hungary has no eel management units as its territory was deemed not to constitute significant eel habitat and was exempted from the obligation to establish an Eel Management Plan as defined under Council Regulation (EC) No 1100/2007, and thus, Paragraph 2 point (c) of Chapter III cannot be applied to Hungary, either.

(max 250 words per species and area)

No data collection was planned.

Were the planned numbers achieved? Yes/ No

If the answer is No, explain why not, and what measures were taken to avoid non-conformity.

(max 250 words per species and area)

Text Box 2.4: Recreational Fisheries

(Region: Please indicate per text box and update the table of contents)

General comment: This text box fulfils Article 5(2)(a), Article 6(3)(a), (b) and (c) of Regulation (EU) 2017/1004 and Chapter II point 2.2 of the EU MAP Delegated Decision annex. Use this text box to give an overview of the methodology used to collect data on marine and freshwater recreational catches. For freshwater diadromous species, use Table and Text Box 2.3.

No additional data collection is planned in the frame of the DCF.

As it was stated in Text Box 2.3, Hungary has no salmon or sea trout stocks in its freshwaters and was deemed not to constitute significant eel habitat.

Furthermore, in accordance with the Act CII. of the year 2013 on Fish Management and the Protection of Fish, in Hungary, all recreational fishers and anglers are obliged to have a licence and a valid ticket to fish, and also to register all their catches in a catch log by species, weight of individuals (except for fish species that are not subject to a number restriction, such as the so called wild fish species, e.g. roach, rudd, other breams and the non-native fish species, where summarized weights are accepted), date and time of catch and name of the water area. The Ministry of Agriculture operates the National Fisheries Management Database where the data of the catch logs are collected in order to monitor and analyse the status, quantitative and qualitative characteristics of fish stocks, processes and trends of fish management and to establish measures necessary for the protection of fish stocks and fish habitats. Data are available upon request.

(max 900 words per region)

No data collection was planned in the frame of the DCF.

Deviations from the work plan

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.

Action to avoid deviations

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 results.

(max 900 words per region)

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 data to be collected under Tables 10 and 11 of the EU MAP Delegated Decision annex.

1. Description of the threshold application

According to the latest data (2020), Hungary's aquaculture fish production accounts for 1,72 % of the EU's total fish production, and for approximately 0,9% of the total value of EU's fish production.

As a land-locked country, Hungary has only freshwater fish production, totalling near 18,000 tonnes a year. The main species is common carp, produced in polyculture ponds, which accounts for nearly 65 % of the total production (near 85 % of pond production) produced by 225 producers. The African catfish (hybrid mainly), produced in intensive systems, is accounting for almost 20 % of fish production but with only 7 producers. The remainder is distributed among several other freshwater species, such as Asian carps, wels, pikeperch, pike etc. Based on the previous experiences, i.e. producers' very low willingness to participate in data collection surveys and since the total aquaculture production of HU is between 1 % and 2,5 % of the total Union aquaculture production by weight and less than 1 % by value, HU may use simplified methodologies to estimate social and economic data on aquaculture in accordance with the provisions of Commission Implementing Decision (EU) 2021/1168 (Point 7(c) of Chapter II of Annex) if it is necessary.

Furthermore, due to the low number of farms producing other fish species and because it is not mandatory for MS to collect social and economic data for species accounting for less than 5 % of the Member State's aquaculture production by both weight and value, Hungary is planning to collect social and economic data only on carp producing pond farms. Further segmentation by "fish farming techniques" is not planned due to the low number of farms that do not produce carp in ponds.

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

No deviations from the variable definitions listed in the 'EU MAP Guidance Document' are foreseen. Data on economic variables may be aggregated for confidentiality.

(max. 900 words)

Deviations from the work plan

No deviations.

Actions to avoid deviations

There are no deviations and no actions to avoid deviations are needed.

(max. 900 words)

SECTION 7: ECONOMIC AND SOCIAL DATA IN FISH PROCESSING

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

General comment: This text box fulfils Article 5(2)(f), Article 6(3)(a), (b) and (c) of Regulation (EU) 2017/1004, and Chapter II point 7 of the EU MAP Delegated Decision annex.

Hungary is planning to collect data on the processing industry on a voluntary basis. The sector is relatively small, consisting of around 40 active fish processing enterprises of which 16 have fish processing as their primary activity, and 8 trading companies are conducting exclusively repacking. Data are to be obtained through questionnaires, supplemented by interviews, phone calls and estimations, where necessary. Since the sector is relatively small, a census will be applied, but the participation of companies will be on a voluntary basis. For further details see the second box in Annex 1.2.

Data collection will be done because no other data collection on the processing industry is done in HU, except for the business statistics, but since most of the enterprises are dealing with other activities (processing of other animals, trade, etc.) too, the separation of data related only to the fish processing activity is not always possible.

(max. 900 words)

Deviations from the work plan

No deviations.

Actions to avoid deviations

There are no deviations and no actions to avoid deviations are needed.

(max. 900 words)

ANNEX 1.2 - QUALITY REPORT FOR SOCIOECONOMIC DATA SAMPLING SCHEME

The quality report fulfils Article 6 (3) (d) of the Regulation (EU) 2017/1004. This document is intended to specify data to be collected under chapter II, points 3, 5, 6, and 7 of the Delegated Decision annex: Socioeconomic data on fisheries, aquaculture and any complementary data collection of fishing activity and fish processing.

Use this document to describe quality aspects of the data collection process (design, sampling implementation, data capture, data storage and data processing etc.). The annex should be filled for each sampling scheme. Where applicable, use the handbook on sampling design (Deliverable 2.1 from MARE/2016/22 SECFISH study), available on the DCF website.

Provide information under each point in all sections. Do not delete any text from the template.

(Sampling scheme identifier: Please indicate and update the table of content)

Survey Specifications

'Sector name' refers to socio economic data on fisheries, aquaculture and any complementary data collection of fishing activity and processing as given in the EU MAP Delegated Decision annex.

'Sampling scheme' refers to survey technique: by census, by sampling, random or non-random, other (with explanation). If sampling, then outline sampling design.

'Variables' refer to Tables 7, 9 and 10 of the EU MAP Delegated Decision annex.

'Supra region' refers to Table 2 of the EU MAP Implementing Decision annex. If the sampling scheme is the same in all supra regions put 'All supra regions'.

Sector name(s): socio economic data on freshwater aquaculture

Sampling scheme: census

Variables: The data collected will cover social variables and economic variables indicated in Table 9 and Table 10 of the EU MAP Delegated Decision annex (except "Unpaid labour" which will be estimated according to the recommendation in the EUMAP Guidance Document for Aquaculture, "Number of enterprises by size category" and "FTEs by gender" which will be determined from national statistics). All data will be collected on company level. "Gross sales per species" and "Weight of sales per species" will be determined only for carp. Further segmentation by "fish farming techniques" is not planned due to the low number of farms that do not produce carp in ponds. Based on previous experiences, the separation of socioeconomic data of hatcheries is also not feasible, since most of the hatcheries operate as part of the farms.

Supra region(s): not applicable

Survey planning

The target population is comprised of all carp producing enterprises registered in Hungary whose primary activity is defined according to European Classification of Economic Activities (NACE) code 03.22, 'freshwater aquaculture'. The participation and data provision of enterprises is on a voluntary basis.

AR comment: No deviations.

Survey design and strategy

Questionnaires will be the primary data source. If needed, data of financial accounts from the business statistics database of the National Tax and Customs Administration of Hungary may be also used for estimations.

Questionnaires will be sent by e-mail and made available through a web link, and if there is a need, enterprises

will be connected also by phone. The participation and data provision of enterprises is on a voluntary basis. Economic data will be collected on an annual basis, social data every three years.

AR comment: No deviations.

Estimation design

Missing data will be complemented by contacting the data provider electronically or by phone. In cases where no data are available, data are to be imputed based on previous years' returns where available or estimated based on average values of similar units. However, since data provision is voluntary, data providers may refuse to provide some of the requested data (particularly financial data), which may not be possible to estimate (e.g. debt).

AR comment: No deviations.

Error checks

Quality assurance and quality control framework follow the commonly used procedures recommended by EUROSTAT, FADN, etc. and in line with the "Quality Guidelines for the DCF" document. Checking, approving and entering of the data will be done by the persons responsible for data collection at AKI. In the frame of data preparation, the completeness of the received forms and of their filling are checked. Checking and correction of errors (including numerical relations within the table) are continued during the data entry. Data provision is assisted by the personal relations between the data provider and the person responsible for data collection. Data entry will be immediately followed by "data cleaning" in order to find errors and outliers occurred during the questionnaire survey and the data entry. Unlikely values are identified by likelihood tests which compare the value of a variable to the expected value.

The questionnaires are evaluated using basic descriptive statistical methods and the following indicators of accuracy are planned to be used:

- Coefficient of variation and confidence interval;
- Standard error:
- Achieved sampling rate;

AR comment: No deviations.

Data storage and documentation

Data will be stored in a database of AKI. www.aki.gov.hu

AR comment: No deviations.

Revision

No revisions are planned.

AR comment: No deviations.

Confidentiality

Are procedures for confidential data handling in place and documented? Yes, the institute has a strict protocol as it is also responsible for several other statistical data collections, and thus it is also regularly audited by responsible authorities.

Are protocols to enforce confidentiality between DCF partners in place and documented? No confidential data are shared with DCF partners or any third parties.

Are protocols to enforce confidentiality with external users in place and documented? No confidential data are shared with external users.

Are there any issues with publication of data due to confidentiality reasons? Provide an explanation. Socio-economic variables may be aggregated for confidentiality reasons, aggregation shall be consistent over time.

AR comment: No deviations.

Survey Specifications

'Sector name' refers to socio economic data on fisheries, aquaculture and any complementary data collection of fishing activity and processing as given in the EU MAP Delegated Decision annex.

'Sampling scheme' refers to survey technique: by census, by sampling, random or non-random, other (with explanation). If sampling, then outline sampling design.

'Variables' refer to Tables 7, 9 and 10 of the EU MAP Delegated Decision annex.

'Supra region' refers to Table 2 of the EU MAP Implementing Decision annex. If the sampling scheme is the same in all supra regions put 'All supra regions'.

Sector name(s):): socio-economic data on fish processing

Sampling scheme: census

Variables: income; total costs and personnel costs, energy costs, raw material costs, other operational costs, capital costs, marketing costs (if costs are not available individually, estimations for percentages will be asked); employment by gender, age and education level; weight and value of raw material by species, by origin (i.e. domestic, other EU, non-EU), by production environment (capture based fishery and aquaculture sector), by type of processed material (fresh, frozen and semi processed materials); Segmentation by size category and/or activity will only be applied if confidentiality issues do not rise originating from the low number of enterprises.

Supra region(s): not applicable

Survey planning

The target population is comprised of all enterprises dealing with fish processing in Hungary. A register has been created by AKI of the potential enterprises based on previous year's surveys, since the official national registers were found incomplete and ambiguous. Enterprises both with fish processing as primary and secondary activity will be involved because the sector is very small (around a total of 40 enterprises). The participation and data provision of enterprises is on a voluntary basis.

AR comment: No deviations. (2 companies have ceased to exist in the \leq 10 employees size category of the target population).

Survey design and strategy

Questionnaires will be the primary data source. If needed, data of financial accounts from the business statistics database of the National Tax and Customs Administration of Hungary may be also used for

estimations.

Questionnaires will be sent by e-mail and made available through a web link, and if there is a need, enterprises will be connected also by phone. The participation and data provision of enterprises is on a voluntary basis. Data will be collected every two years, continuing the data collection of the previous WP, thus collecting data in 2022.

AR comment: No deviations.

Estimation design

Missing data will be complemented by contacting the data provider electronically or by phone. In cases where no data are available, data are to be imputed based on previous years' returns where available or estimated based on average values of similar units. However, since data provision is voluntary, data providers may refuse to provide some of the requested data (particularly financial data), which may not be possible to estimate (e.g. debt).

AR comment: No deviations.

Error checks

Quality assurance and quality control framework follow the commonly used procedures recommended by EUROSTAT, FADN, etc. and in line with the "Quality Guidelines for the DCF" document. Checking, approving and entering of the data will be done by the persons responsible for data collection at AKI. In the frame of data preparation, the completeness of the received forms and of their filling are checked. Checking and correction of errors (including numerical relations within the table) are continued during the data entry. Data provision is assisted by the personal relations between the data provider and the person responsible for data collection. Data entry will be immediately followed by "data cleaning" in order to find errors and outliers occurred during the questionnaire survey and the data entry. Unlikely values are identified by likelihood tests which compare the value of a variable to the expected value.

The questionnaires are evaluated using basic descriptive statistical methods and the following indicators of accuracy are planned to be used:

- Coefficient of variation and confidence interval;
- Standard error;
- Achieved sampling rate;

AR comment: No deviations.

Data storage and documentation

Data will be stored in a database of AKI. www.aki.gov.hu

AR comment: No deviations.

Revision

No revisions are planned.

AR comment: No deviations.

Confidentiality

Are procedures for confidential data handling in place and documented? Yes, the institute has a strict protocol as it is also responsible for several other statistical data collections, and thus it is also regularly audited by responsible authorities.

Are protocols to enforce confidentiality between DCF partners in place and documented? No confidential data are shared with DCF partners or any third parties.

Are protocols to enforce confidentiality with external users in place and documented? No confidential data are shared with external users.

Are there any issues with publication of data due to confidentiality reasons? Provide an explanation. Socio-economic variables may be aggregated for confidentiality reasons, aggregation shall be consistent over time.

AR comment: No deviations.