Deliverable No. 2.2

Project acronym:
FarFish

Project title:
Responsive Results-Based Management and capacity building for EU Sustainable Fisheries Partnership Agreement- and international waters

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[1] Document will be a draft until it was approved by the coordinator
[2] PU: Public, PP: Restricted to other programme participants (including the Commission Services), RE: Restricted to a group specified by the consortium (including the Commission Services), CO: Confidential, only for members of the consortium (including the Commission Services)
[3] The initials of the revising individual in capital letters

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Deliverable D2.2

Data Management Plan under the H2020 Open Research Data Pilot

08/11/2017

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Executive Summary

The overall goal of WP2 in FarFish is to "*advance knowledge and collate data related to biological characteristics of the main fish stocks in the selected fisheries, and to evaluate the appropriateness, relevance and applicability of stock assessment models currently in use for these fisheries*", as per the DoA.

Task 2.2 and deliverable 2.2 contributes towards these goals by creating a "*Data Management Plan*", as per the Horizon 2020 Open Research Data Pilot. The deliverable contains 14 forms detailing the content of all datasets used within FarFish, how it will be preserved, and steps taken to make data publically available after the project end.

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1 Revision history

Version	Date	Revised by	Comment
V0.1	08/11/2017	PBS	Draft deliverable

2 Introduction

Over the course of a research project, considerable amounts of data are gathered. Often, these data are not preserved or made available for reuse later on, causing time and effort to be spent in other projects gathering similar data. The goal of the Horizon 2020 Open Research Data Pilot is remedy this issue, by ensuring that research data generated through a project is made available for reuse after a projects end. The H2020 Open Research Data Pilot is based on the principle of making data **FAIR**:

- **Findable**
- **Accessible**
- **Interoperable**
- **Reusable**

As a way of managing the data used during a project lifetime, a Data Management Plan (DMP) must be created. The DMP-forms includes details on:

- the handling of research data during and after the end of the project
- what data will be collected, processed and/or generated
- which methodology and standards will be applied
- whether data will be shared/made open access
- how data will be curated and preserved (including after the end of the project)
- ethical issues related to the data
- estimated costs associated with data archiving/sharing

The creation of the DMP is the responsibility of task 2.2/deliverable 2.2. As per the DoA, task 2.2 will fulfill three requirements as a participant in the H2020 Open Research Data Pilot: "*Firstly, the collected research data should be deposited in data repository (…). Secondly, the project will have to take measures to enable third parties to access, mine, exploit, reproduce and disseminate this research data. Finally, a Data Management Plan (DMP) has to be developed detailing what kind of data the project is expected to generate, whether and how it will be exploited or made accessible for verification and reuse, and how it will be curated and preserved*".

During the later stages of the project, relevant datasets will be uploaded to the FarFish Database (FFDB). The FFDB will be created as part of task 6.1 in Work Package 6 "Development of management tools" as a means of storing research data, and will be accessible from the FarFish webpage. At- or near the project end, datasets will be uploaded from the FFDB to OpenAire.

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3 Method

In order to collect information from the project participants, a form and an explanation describing the desired content of each DMP-component was sent out to all partners by email (both are attached in "*Appendix 2 – Templates*". Detailed instructions on how to fill out the form was included in the accompanying e-mail. Both the form and the explanation were based on the proposed DMP-structure in "*Guidelines on FAIR Data Management in Horizon 2020*" (2016). Along with the two forms, an example from a previous project was distributed in the same email.

In order to harmonize the forms, the formatting of certain forms have been edited where needed. No changes have ben made to the content.

4 Conclusion

The deliverable contains 14 forms, detailing the content of the different datasets, the ways in which data will be stored and how/if it will be made available at the project end. The forms are grouped according to case study. Datasets not pertaining to one individual case study are grouped in a separate category: "*Non-case study specific*". Due to the project being at an early stage, and because different work packages are at a different time schedule, not all forms share the same level of detail.

The DMP is intended to be a "living" document, however, and will evolve as the project progresses. Periodic revisions of the DMP are planned once within each 18-month periodic reporting period. Ahead of each periodic review, an email will be sent out to all project participants, asking them to update the DMP-forms pertaining to their datasets by either editing existing information or by adding new forms if necessary.

Extra revisions might be scheduled should it be needed. The table in chapter 1 "Revision history" provides a summary of revisions carried out over the lifetime of this Data Management Plan. It provides a version number, the date of the latest revision, the initials of the editor, and a comment describing the change made.

5 Acknowledgements

We wish to acknowledge the contribution of all project participants who contributed to the completion of this deliverable.

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6 References

- "*Guidelines on FAIR Data Management in Horizon 2020*" – EC Directorate-General for Research and Innovation, version 3.0, July 26th 2016
- "*Guidelines on Open Access to Scientific Publications and Research Data in Horizon 2020*" – EC Directorate-General for Research and Innovation, version 3.1, August 25th 2016
- "*OpenAire: What is the Open Research Data Pilot*" – Accessed 31.10.2017: https://www.openaire.eu/what-is-the-open-research-data-pilot.

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7 Appendix

7.1 Appendix 1: Data management plans

7.1.1 Seychelles

Data set reference and name	*IndustrialPS_Processed_0016: Purse Seine Fishery – Seychelles – Fishing vessels, Catch, effort, Length frequency, 2000-2016* SFA
Data set summary	• The purse seine fishery datasets contain information on all purse seiners (including EU vessels) licensed to operate within the Seychelles EEZ. Data are collected on vessels, catch by species, effort, geographical fishing area, length frequency, landing and transhipment. • The data is gathered for scientific analysis, management and policy decision making purposes, for access payment and to meet obligations to international bodies (e.g IOTC, FAO etc) • Data is collected from Fishing vessels (logbook), vessel agents (landing/ transhipment), SFA technicians (length frequency) and is captured, processed and managed by the Seychelles Fishing Authority.
Making data findable, including provisions for metadata	• The described sources uses standard nomenclature for statistical data as per SWIOFP Statbase metadata format. • Data can be extracted from MS Access database into Excel files and CSV files • A PDF report based on the data is available for download at http://www.sfa.sc/publication.jsp
Making data openly accessible	• Project- generated data will be shared in designated publication at the Flag level but not at individual vessel level for confidentiality reasons. • Data are also available in public domain on IOTC website www.iotc.org • Data not publicly available may be provided upon an official request. • Data can be extracted from Ms Access and provided in requested format. • Metadata is available in Ms Excel format
Making data interoperable	Data are interoperable. Metadata vocabularies are as per SWIOFP Statbase project.
Increase data re-use (through clarifying licences)	Published data will be re-usable. Confidential data will be assessed on a case by case basis upon official request.
Allocation of resources	
Data security	Data reside on a secure server and is backed-up on a regularly basis.
Ethical aspects	
Other	SFA works in collaboration with our partners Institut de Recherce pour le Development (IRD)- France and Instituto Español de Oceanografía (IEO) for data management.

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Data set reference and name	*IndustrialSV_Data_0016: Supply Vessel – Seychelles – Fishing vessels and effort 2005-2016* SFA
Data set summary	• The Supply vessel dataset contain information on all supply vessel in the purse seine fishery (including EU vessels) licensed to operate within the Seychelles EEZ. Data are collected on vessels, effort and geographical operation area. • The data is gathered for management and policy decision making purposes, for scientific analysis and to meet obligations to international bodies (e.g IOTC, FAO etc) • Data is collected from Fishing vessels (logbook) and is captured, processed and managed by the Seychelles Fishing Authority.
Making data findable, including provisions for metadata	• The described sources use standard nomenclature for statistical data as per SWIOFP Statbase metadata format. • Data can be extracted from MS Access database into Excel files and CSV files • A PDF report based on the data is available for download at http://www.sfa.sc/publication.jsp
Making data openly accessible	• Project- generated data will be shared in designated publication at the Flag level but not at individual vessel level for confidentiality reasons. • Data are also available in public domain on IOTC website www.iotc.org • Data not publicly available may be provided upon an official request. • Data can be extracted from Ms Access and provided in requested format. • Metadata is available in Ms Excel format
Making data interoperable	Data are interoperable Metadata vocabularies are as per SWIOFP Statbase project
Increase data re-use (through clarifying licences)	Published data will be re-usable Confidential data will be assessed on a case by case basis upon official request.
Allocation of resources	
Data security	Data reside on a secure server and is backed-up on a regularly basis
Ethical aspects	
Other	SFA works in collaboration with our partners Institut de Recherce pour le Development (IRD)- France and Instituto Español de Oceanografía (IEO) for data management.

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7.1.2 Cape Verde

7.1.3 Senegal

Data set reference and name	*Black hakes Merluccius senegalensis and M. polli scientific data surveys 2002-2016* COREWAM/ISRA
Data set summary	• The database consists of Senegalese black hakes *Merluccius senegalensis* and *M. polli* information originating from 8 scientific deep demersal surveys off Senegal between 2002 and 2016. • It's the first time for black hakes to be namely specified in such fisheries agreement between Senegal and other countries • Spanish and local fleets activities from the end of 1980's to 2016, bearing in mind that hake fisheries are irregularly performed by these fleets. E.g., due to failing of CPUE, there was a break from 2006 to 2014 • Artisanal canoes activities are anecdotic due to their low level catches
Making data findable, including provisions for metadata	• Scientific surveys and industrial data will be openly available. • Black hakes data will be extracted exclusively for that purpose from scientific surveys. Variables and related explanation will be furnished for a better understanding and appropriation of data.
Making data openly accessible	The data will be exchangeable between researchers. It will be in a suitable excel file sheet.
Making data interoperable	The data will reusable during the duration of the Farfish Project.
Data security	Data exist in CRODT/ISRA and are saved within different supports for a long term conservation.
Ethical aspects	Data are Senegalese property. They can be used under scientific authorisation from CRODT/ISRA in the context of FarFish.
Other	

7.1.4 Mauritania

7.1.5 South-East Atlantic

7.1.6 South-West Atlantic

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7.1.7 Non-case study specific

Data set reference and name	*FAO - Fisheries and aquaculture software. FishStatJ - software for fishery statistical time series 1950 - 2015. In: FAO Fisheries and Aquaculture Department [online].* Syntesa
Data set summary	The FAO Capture, Aquaculture and Global production databases have been updated with an additional year and now include data from 1950 to 2015. • Global Statistical Collections • Regional Capture Statistical Collections • Records Collections • Fact Sheet Collections • Maps Collections
Making data findable, including provisions for metadata	FAO ensures quality assurance by documenting each collection to highlight definitions and to specify the structure, sources, coverage, processes, intended use, etc. This is complemented with the *CWP Handbook of Fishery Statistical Standards* which includes comprehensive definitions of concepts and details of standard classifications. Available at: http://www.fao.org/fishery/cwp/search/en
Making data openly accessible	• Data is available to the public. • Data is available online in a searchable database. No login required. • The website and data sets are available in various languages FAO promotes public access of data at: http://www.fao.org/fishery/statistics/en
Making data interoperable	All data produced for the project will be delivered and circulated among partners and stakeholders according to the project's guidelines.
Increase data re-use (through clarifying licences)	All data collections, also fully-documented, are organized by records, Fact Sheets and maps, thus complementing the overall statistical collections
Allocation of resources	Not yet defined
Data security	Security of original databases is operated by FAO. Collections and data produced for the project will be storage in the data server belonging to Syntesa. The data produced for the project FarFish will be stored for a period of 10 years after project's completion.
Ethical aspects	All copyrights and authorship will be attributed according to academic rigor and integrity
Other	

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Data set reference and name	*Eurostat > Fisheries data* Syntesa
Data set summary	• Fishery statistics are derived from official national sources either directly by Eurostat for the EEA member countries. • The data are collected using internationally agreed concepts and definitions developed by the Coordinating Working Party on Fishery Statistics, comprising Eurostat and several other international organisations with responsibilities in fishery statistics. • The domain "Fisheries" contains data on catches by fishing region, on aquaculture production, on total production, on landings in EEA ports, on trade in fishery products, on the EEA fishing fleet.
Making data findable, including provisions for metadata	• Statistical glossary, data and metadata are available online Metadata is available at: http://ec.europa.eu/eurostat/data/metadata Additional guidelines are available at: http://ec.europa.eu/eurostat/statistics-explained/index.php/Category:Fisheries
Making data openly accessible	• Data is available to the public. • Data is available online in a searchable database. No login required. • The website and data sets are available in various languages Eurostat has a policy of encouraging free re-use of its data, both for non-commercial and commercial purposes. http://ec.europa.eu/eurostat/web/fisheries/data/database
Making data interoperable	All data produced for the project will be delivered and circulated among partners and stakeholders according to the project's guidelines
Increase data re-use (through clarifying licences)	All statistical data, metadata, content of web pages or other dissemination tools, official publications and other documents published on its website, with exceptions, can be reused without any payment or written licence provided that: • the source is indicated as Eurostat; • when re-use involves modifications to the data or text, this must be stated clearly to the end user of the information.
Allocation of resources	Not yet defined
Data security	Security of original databases is operated by EUROSTAT. Collections and data produced for the project will be storage in the data server belonging to Syntesa. The data produced for the project FarFish will be stored for a period of 10 years after project's completion.
Ethical aspects	All copyrights and authorship will be attributed according to academic rigor and integrity. The basis for the copyright and licence policy of Eurostat is the legal notice of the European Commission Europa website, which can be found here: https://ec.europa.eu/info/legal-notice_en
Other	

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Data set reference and name	*Scientific, Technical and Economic Committee for Fisheries (STECF) > Economic Analysis (fleet, processing, aquaculture)* Syntesa
Data set summary	Reports referring to topics such as the economic reports on the profitability of EU fleets, the fish-processing sector, etc. • EU Aquaculture • Fisheries Dependent Information • Fleet Economic Performance • Fish Processing Industry
Making data findable, including provisions for metadata	All databases are available online. Metadata is available for each selected database.
Making data openly accessible	• Data is available to the public. • Data is available online in a searchable database. No login required. • The website and data sets are available in various languages https://stecf.jrc.ec.europa.eu/reports/economic
Making data interoperable	All data produced for the project will be delivered and circulated among partners and stakeholders according to the project's guidelines
Increase data re-use (through clarifying licences)	Accompanying each data series, are references to the relevant reports of the STECF where the same data are also published (https://stecf.jrc.ec.europa.eu/data-reports). Documentation on the data variables and their definitions together with a publication date are also provided.
Allocation of resources	Not yet defined
Data security	Security of original databases is operated by STECF and the European Commission Collections and data produced for the project will be storage in the data server belonging to Syntesa. The data produced for the project FarFish will be stored for a period of 10 years after project's completion.
Ethical aspects	All copyrights and authorship will be attributed according to academic rigor and integrity. STECF states that the data are made available in the interests of transparency and can be freely used for further analyses provided the source is acknowledged, according to disclaimer available at: https://stecf.jrc.ec.europa.eu/data-dissemination
Other	

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Data set reference and name	*International Commission for the Conservation of Atlantic Tuna - ICCAT statistical databases* Syntesa
Data set summary	ICCAT statistical databases are divided in tasks: • Task I data include nominal annual catch by species, region, gear, flag, and where possible, separated between EEZ and High Seas. Responsibility for reporting catch and landings data rests on flag states. • Task II data includs Catch and fishing effort statistics for each species by small area (1x1 degree squares for most gears, 5x5 degree squares for longlines), gear, flag, and month. Task II data also include actual size frequencies of samples measured for each species by small area, gear, flag and month.
Making data findable, including provisions for metadata	Most databases currently used in the stock assessments and other SCRS work are of public domain and are published on http://www.iccat.int/en/accesingdb.htm. Metadata is not available
Making data openly accessible	• Data is available online in a searchable database. No login required. • The website and data sets are available in English, French and Spanish. http://www.iccat.int/en/accesingdb.htm The dissemination of ICCAT data is according to the Rules and Procedures for the protection, access to, and dissemination of data compiled by ICCAT, adopted by the Commission in 2010. Available at http://www.iccat.int/Data/REP_EN_10-11_I_1_Annex_6_Confidentiality.pdf.
Making data interoperable	All data produced for the project will be delivered and circulated among partners and stakeholders according to the project's guidelines
Increase data re-use (through clarifying licences)	Additional data clarification is available for Task II data at http://www.iccat.int/Data/t2ce-ENG.pdf and http://www.iccat.int/Data/t2ce-ENG.pdf
Allocation of resources	Not yet defined
Data security	Security of original databases is operated by ICAAT Collections and data produced for the project will be storage in the data server belonging to Syntesa. The data produced for the project FarFish will be stored for a period of 10 years after project's completion.
Ethical aspects	All copyrights and authorship will be attributed according to academic rigor and integrity. Most databases currently used in the stock assessments and other SCRS work are of public domain, dissemination rules include procedures for using data classified as confidential. Available at http://www.iccat.int/Data/REP_EN_10-11_I_1_Annex_6_Confidentiality.pdf.
Other	

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Data set reference and name	*Fish_capture production_all countries: FAO, volume and value* Nofima
Data set summary	• This database contains capture production statistics by country or territory, species item, and FAO Major Fishing Area. • Information on capture production is collected annually from relevant national offices concerned with fishery statistics, by means of a system of standardized forms, which list for each country the relative species items and fishing areas breakdown. • In the case of some "aquatic products", data are also obtained from trade associations or other specialized international organizations to which data are also submitted. In this way the statistics are reviewed by subject matter specialists. • Data concerning the nominal catch of certain major groups are generally reviewed in collaboration with the regional agency concerned. For example, for ISSCAAP group 36 (Tunas, bonitos and billfishes) data provided by the national correspondents are often replaced by the "best scientific estimates" produced by regional bodies collecting tuna catch statistics (i.e. ICCAT, IOTC, SPC and IATTC.)
Making data findable, including provisions for metadata	Metadata are available at http://www.fao.org/fishery/statistics/global-capture-production/3/en. At present the database shows annual figures for the period from 1950 organized by: - about 240 countries, territories or land areas; - 26 major fishing areas; - approximately 1600 species items (freshwater, brackishwater and marine species of fish, crustaceans, molluscs and other aquatic animals and plants) classified into the FAO International Standard Statistical Classification of Aquatic Animals and Plants (ISSCAAP) Data Periodicity: Data are reported yearly and the period used is the calendar year (1 January - 31 December.) Some countries or areas use a split-year in their reporting (e.g. year ending 30 June.)
Making data openly accessible	The capture production datasets can be downloaded at the FAO domain, and filtered and viewed by installing the FishStat software: http://www.fao.org/fishery/statistics/software/fishstatj/en
Making data interoperable	Data are interoperable. More info on standardization and aggregation here: http://www.fao.org/fishery/statistics/global-capture-production/3/en
Increase data re-use (through clarifying licences)	Data are public. No login required. See FAO guidelines on data reuse.
Allocation of resources	No additional costs required.
Data security	Data are hosted online by FAO, and follows FAO guidelines for data security.
Ethical aspects	No known ethical aspects.
Other	

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Data set reference and name	*Fish_Trade_EU: Trade – All Member States – import and export, volumes and values, fish products, 2008 – 2018* Nofima
Data set summary	• Import to and export from EU Member state per HS code (product ID), reporting and partner country. Both Intra-EU and Extra-EU are relevant. • Intra-EU trade statistics record the movement of goods between Member States. Extra-EU trade statistics record goods imported and exported by the EU from and to non-EU countries. • Intra-EU data is collected from traders, and is closely interlinked with the VAT system. • Extra-EU data on trade in goods with non-EU countries are collected by customs authorities and are based on the records of trade transactions in customs declarations. Extra-EU trade statistics do not cover goods declared orally to customs authorities which are non-commercial, or which are of a commercial nature but have a value not exceeding the statistical threshold of EUR 1 000 and 1 000 kg.
Making data findable, including provisions for metadata	• International trade in goods statistics are available in a number of formats (csv, excel, html, PDF, tsv etc.) from the Bulk Download web page (link) and the Easy Comext domain (link). • Metadata (classifications, data availability, etc.) and methodological notes accompany the datasets. • The Easy Comext domain provides access not only to both recent and historical data of the EU and its individual Member States but also to statistics of a significant number of non-EU countries.
Making data openly accessible	Easy Comext is publicly available at http://epp.eurostat.ec.europa.eu/newxtweb/ or through an internet search for 'Easy Comext'. The Easy Comext User Manual explains step-by-step how to make a data extraction.
Making data interoperable	The data is interoperable. The products are classified through Harmonized System Codes - HS (2,4 & 6) and the Combined Nomenclature CN8-codes.
Increase data re-use (through clarifying licences)	The data is publicly available for all. No login required. Provisions regarding data reuse is specified through Eurostat guidelines (http://ec.europa.eu/eurostat/about/policies/copyright).
Allocation of resources	No additional costs required.
Data security	Data are hosted by Eurostat and follows Eurostat guidelines for data security.
Ethical aspects	No known ethical aspects. See Commissions regulations for data confidentiality http://ec.europa.eu/eurostat/web/research-methodology/statistical-confidentiality.
Other	

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Data set reference and name	*DG MARE – SFPA Evaluation reports* Nofima
Data set summary	• The ex-post/ex-ante evaluation reports of the SFPA agreements contains a review of the country background, fisheries sector (important fisheries, economic figures, employment, governing bodies), whether the agreements are suited to achieve the goals set, and recommendations for future protocols. • The reports are based on information gathered from various sources (e.g. EU departments and executive agencies, EU-member states administrative bodies, professional association groupings, regional associations, etc).
Making data findable, including provisions for metadata	Reports are in PDF-format and are available in a searchable database: https://ec.europa.eu/fisheries/documentation/studies.
Making data openly accessible	• The reports are openly accessible and available to the public in a searchable database. No login is required, nor are there any regional lockout mechanisms. • The website is available in all EU-partners' languages. • The reports are available in either English or French. For reports in French only, an English summary is presented.
Making data interoperable	All data collected during the course of farFish will be circulated among partners and stakeholders according to FarFish guidelines.
Increase data re-use (through clarifying licences)	Re-use of content is authorised provided the source is acknowledged, and follows the Commissions reuse policy as defined in "*Commission Decision of 12 December 2011 on the reuse of Commission documents*" http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:330:0039:0042:EN:PDF (available in English).
Allocation of resources	No additional costs required.
Data security	Reports are available on an EU-hosted website, and follows EUs guidelines for data security.
Ethical aspects	No known ethical aspects.
Other	

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Data set reference and name	*Model outputs an indicators – Data summary, estimates and projections* CSIC
Data set summary	Data provided by model outputs could be a summary of the data available, reference points, indicators (as the estimated TAC value), biomass estimates or forward projections.
Making data findable, including provisions for metadata	Relevant datasets will be uploaded to the FFDB according to the protocol described in D6.1, with keywords referring to the species, location and type of the data (could be a summary of the data available, reference points, biomass estimates or forward projections).
Making data openly accessible	Data sets, e.g. spreadsheets files, will be published on the website https://www.farfish.eu as part of the data management plan (DMP). Wordpress will be used to ensure these are available for other users and search-able through the website.
Making data interoperable	Project-generated data will be shared in the web https://www.farfish.eu. Original data sources will be regularly updated/altered in light of new data/corrections. The Data base allows transformation into txt. xls and csv files to favour an easy interaction.
Increase data re-use (through clarifying licences)	Data will be deposited on the Farfish website. Data will be stored for an indefinite time.
Allocation of resources	No additional cost required,
Data security	Data security provided by the technical support of Farfish website.
Ethical aspects	No known ethical aspects yet.
Other	

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Data set reference and name	*Historical Fisheries data – Catches/survey time series* CSIC
Data set summary	Historical fisheries data could be catches time series or survey time series. The data could be obtained from international databases and research centers as well as from scientific publications.
Making data findable, including provisions for metadata	Relevant datasets will be uploaded to the FFDB according to the protocol described in D6.1, with keywords referring to the species, location and type of the data (could be mainly catches time series or surveys time series).
Making data openly accessible	Data sets, e.g. spreadsheets files, will be published on the website https://www.farfish.eu as part of the data management. plan (DMP). Wordpress will be used to ensure these are available for other users and search-able through the website. No known restrictions yet.
Making data interoperable	Project-generated data will be shared in the website (if possible) or in designated scientific publications. Original data sources will be regularly updated/altered in light of new data/corrections. The Database allows transformation into txt. xls and csv files to favour an easy interaction.
Increase data re-use (through clarifying licences)	Data will be deposited on the Farfish website (with password provided to Farfish members if the data set has some legal conflict). Data will be stored for an indefinite time.
Allocation of resources	No additional cost required.
Data security	Data security provided by the technical support of Farfish website.
Ethical aspects	No known ethical aspects yet.
Other	

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Data set reference and name	*Biological fisheries data – Maturity, growth, mortality* CSIC
Data set summary	Data regarding biological aspects of the fisheries can include maturity, growth, mortality and life cycle relevant aspects. The data can be obtained from: - International Databases - Marine research institutes - Oceanographic research centers
Making data findable, including provisions for metadata	Relevant datasets will be uploaded to the FFDB according to the protocol described in D6.1, with keywords referring to the species, location and type of the data (could be maturity, growth, mortality and life cycle relevant aspects).
Making data openly accessible	The described sources utilize the standard nomenclature for statistical data. Data sets, e.g. spreadsheets files, will be published on the website https://www.farfish.eu as part of the data management plan (DMP). Wordpress will be used to ensure these are available for other users and search-able through the website. No known restrictions yet.
Making data interoperable	Project-generated data will be shared in the website (if possible) or in designated scientific publications. Original data sources will be regularly updated/altered in light of new data/corrections. The Database allows transformation into txt. xls and csv files to favour an easy interaction.
Increase data re-use (through clarifying licences)	Data will be deposited on the Farfish website (with password provided to Farfish members if the data set has some legal conflict). Data will be stored for an indefinite time.
Allocation of resources	No additional cost required.
Data security	Data security provided by the technical support of Farfish website.
Ethical aspects	No known ethical aspects yet.
Other	

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Data set reference and name	*Decision Support and visualisation tools outputs* CSIC
Data set summary	Could be a summary of the meetings conclusions, surveys results, preference measures given by stakeholders on different options or a summary of model inputs and outputs.
Making data findable, including provisions for metadata	Relevant datasets will be uploaded to the FFDB according to the protocol described in D6.1, with keywords referring to the species, location, type of the data and type of DST used.
Making data openly accessible	Data sets, e.g. spreadsheets files, will be published on the website https://www.farfish.eu as part of the data management plan (DMP). Wordpress will be used to ensure these are available for other users and search-able through the website.
Making data interoperable	Project-generated data will be shared in the web https://www.farfish.eu Original data sources will be regularly updated/altered in light of new data/corrections. The Data base allows transformation into txt. xls and csv files to favour an easy interaction.
Increase data re-use (through clarifying licences)	Data will be deposited on the Farfish website. Data will be stored for an indefinite time.
Allocation of resources	No additional cost required.
Data security	Data security provided by the technical support of Farfish website.
Ethical aspects	No known ethical aspects yet.
Other	

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7.2 Appendix 2: Templates

7.2.1 Data Management Plan – Form

Data set reference and name	
Data set summary	
Making data findable, including provisions for metadata	
Making data openly accessible	
Making data interoperable	
Increase data re-use (through clarifying licences)	
Allocation of resources	
Data security	
Ethical aspects	
Other	

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7.2.2 Data Management Plan - Explanation

Data set reference and name	Identifier for the data set to be produced
Data set summary	What is the purpose of the data collection/generation and its relation to the project objectives? What types and formats of data will the project generate/collect? Will you re-use any existing data and how? What is the origin of the data? What is the expected size of the data? To whom might it be useful ('data utility')?
Making data findable, including provisions for metadata	Are the data used in the project discoverable with metadata and identifiable by means of a standard identification mechanism (e.g. persistent identifiers such as Digital Object Identifiers)? What naming conventions do you follow? Will search keywords be provided that optimize possibilities for re-use? Do you provide clear version numbers? What metadata will be created? In case metadata standards do not exist in your discipline, please outline what type of metadata will be created and how.
Making data openly accessible	Which data used in the project will be made openly available as the default? If certain datasets cannot be shared (or shared only under restrictions), explain why, separating legal and contractual reasons from voluntary restrictions. Where will the data and associated metadata, documentation and code be stored? How will the data be made available? Are any methods or software tools are needed to access the data? Is documentation about the software needed to access the data included? Is it possible to include the relevant software (e.g. in open source code)? Specify how access will be provided in case there are any restrictions.
Making data interoperable	Are the data produced in the project interoperable, i.e. allowing data exchange between researchers, institutions, countries, etc.? What data and metadata vocabularies, standards or methodologies will you follow to facilitate interoperability? Will you be using standard vocabulary to allow inter-disciplinary interoperability? If not, will you provide mapping to more commonly used ontologies?
Increase data re-use (through clarifying licences)	How will the data will be licenced to permit the widest reuse possible? When will the data will be made available for re-use? In case of an embargo, specify why and for what period a data embargo is needed. Are the data used in the project useable by third parties, in particular after the end of the project? If re-use of some data is restricted, explain why. For how long will the data remain re-usable? Describe data quality assurance processes.
Allocation of resources	Are there any costs associated with archiving and sharing of data? If so, describe how you intend to cover these costs. Describe costs and potential value of long-term preservation.
Data security	What provisions are in place for data security (including data recovery as well as secure storage and transfer of sensitive data)? Is the data safely stored in certified repositories for long-term preservation?

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Ethical aspects	Are there any ethical or legal issues that can have an impact on data sharing? If relevant, include references to ethics deliverables and ethics chapter in the DoA. Is informed consent for data sharing and long-term preservation included in questionnaires dealing with personal data? How is personal data (if collected), handled and protected?
Other	Do you make use of other national/funder/sectorial/departmental procedures for data management? If yes, which ones?

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