



Optimisation of digital catch monitoring and reporting in European Fisheries

D5.1: Workshop methodology Protocol for case study leaders running MALs

Responsible Author: Rachel Tiller, SINTEF Ocean



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No.	Participant organization name	Short name	Country
1	EIGEN VERMOGEN VAN HET INSTITUUT VOOR LANDBOUW- EN VISSERIJONDERZOEK	EV ILVO	BE
2	FUNDACION AZTI - AZTI FUNDAZIOA	AZTI	ES
3	BENCO BALTIC DOO ZA SAVJETOVANJE IUSLUGE	BENCO	HR
4	DANMARKS TEKNISKE UNIVERSITET	DTU	DK
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6	SCIO IKE	SCiO	EL
7	STICHTING WAGENINGEN RESEARCH	WR	NL
8	UNIVERSITY OF CUKUROVA	UC	TR
9	FISKERIDIREKTORATET	NDF	NO
10	SINTEF OCEAN AS	SO	NO
11	ELECTRONIC FISH INFORMATION CENTRE EUROPE B.V	EFICE	NL
12	Justervesenet	JV	NO
13	VCU ROBOTICS B.V.	VCUR	NL
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18	DANMARKS FISKERIFORENING PRODUCENTORGANISATION	DFPO	DK

Executive Summary

One of the aims of OptiFish is to actively engage stakeholders to co-produce knowledge and best practice scenarios, to ensure higher likelihood of industry uptake of proposed solutions, and in turn effective implementation in the sector. This is in line with one of the key objectives of the project, which is to *“Increase stakeholders’ understanding and acceptance of a digital fisheries monitoring and control system.”* It is also in relation to the work programme topic: *“Overcome possible resistance, by all stakeholders, to implement the innovative solutions”* as well as *“To enhance EU ability to collect, exchange, analyse and report data”*.

We will therefore arrange a series of **participatory workshops** using a stakeholder framework for gathering expert knowledge and perception for policy action advice and future scenario development. In doing so, we will be enabled to better assess how different affected sectors perceive different aspects of automatic catch registration sensors. These workshops will be iterative, and held first in the pilot areas, and will be held twice during the project period. They will be held in collaboration with all project participants as these provide results that are integral for the science-policy-industry interface and for communication and exploitation purposes.

To do this, however, we need to have properly identified those that both have the interest in the topic and the power to ensure its effectiveness post-implementation. We will also need to use the same methodology and associated programs in all case areas to ensure cross-comparability of results and develop a transferable toolkit that can also be applied elsewhere. Because of this, we need to have a comprehensive protocol for methodological consistency across case areas, and training of non-social scientists in qualitative methodologies. This deliverable is a step-by-step instruction manual for facilitators of participatory stakeholder workshops within the context of the OptiFish project, from stakeholder mapping to iterative workshops.

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List of abbreviations

MAL	Multi Actor Labs	CFP	Common Fisheries Policy
EU	European Union	AI	Artificial Intelligence
FCM	Fuzzy Cognitive Mapping		

1. Introduction

Multi-Actor Labs (MALs) are facilitated participatory stakeholder workshops that bring together multiple stakeholders to a given issue area, such as fisheries, to discuss important topics around this issue. In this case, the participatory approach is used to identify industrial, technical, and societal barriers and opportunities associated with the development and implementation of automatic catch registration sensors onboard European fishing vessels.

MALs are facilitated and run using a stepwise problem-solving approach, allowing researchers to understand challenges and opportunities by eliciting this information interactively from stakeholders who live and work in the given system, such as the fishing sector. The approach allows us to explore real world problems and discuss solutions and obstacles to these. This process takes the form of group identification of components and processes.

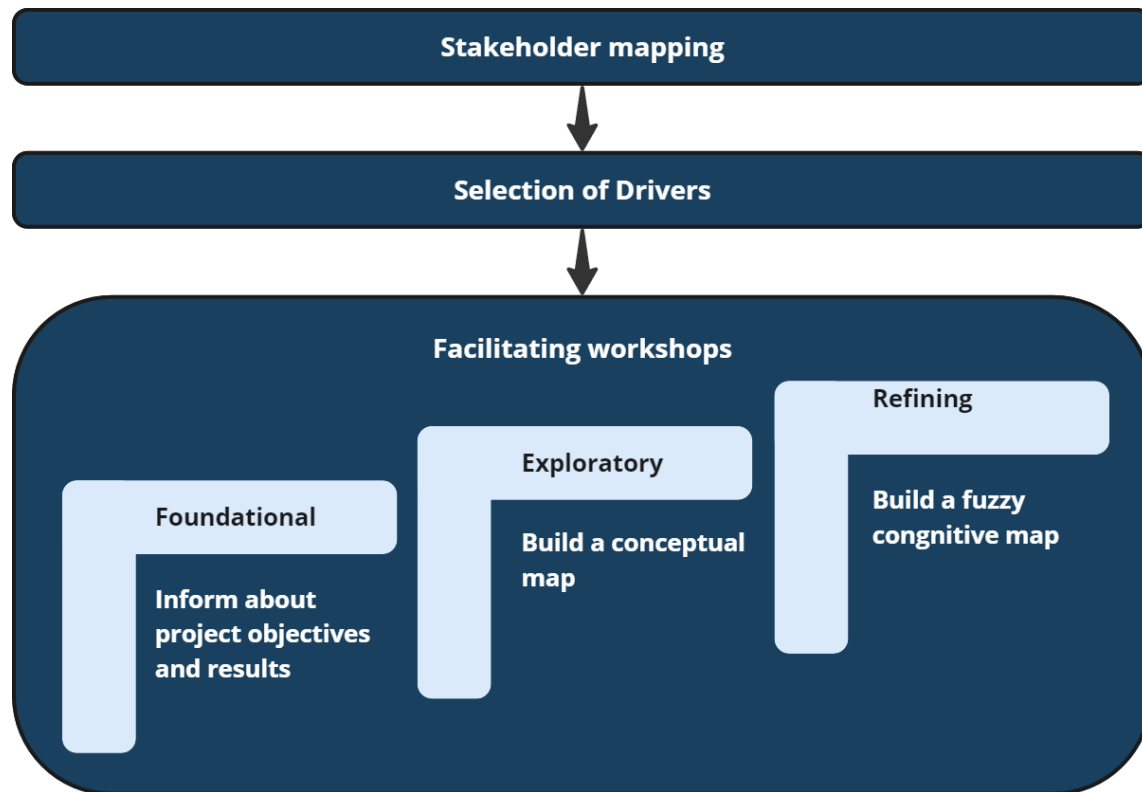


Figure 1: MAL stepwise methodology

In this study, the conceptual model consists of variables with key relationships between them. The purpose of a conceptual model, in this case, is to explore possible actions, whether at local, regional or global levels of governance within the context of the research aim of OptiFish. To ensure that we develop solutions that are cross applicable and comparable, researchers use the same methodological approach and participated in train-the-trainer sessions for how to facilitate participatory workshops.

2. Train-the-trainer

Each of the six OPTIFISH case areas held separate train-the-trainer sessions (table 1) in accordance with task 5.1, subtask 5.1.1 except for Belgium and Netherlands, which held a joint workshop.

Table 1: Overview of case area train-the-trainer workshops

Case-area	Location	Date	Number of participants
Turkey	Cukurova, TR	June 4 th 2024	4
Belgium/Netherlands	Ijmuiden, NL	July 1 st 2024	8
Denmark	Hirtshals, DK	July 5 th 2024	4
Spain	Bilbao, ES	Sept.10 th 2024	6
Norway	Bergen, NO	October 4 th 2024	9

This is in accordance with the task description:

*T5.1 Multi-Actor Co-creation Labs (MALs) (M1–M48), Sub-task T5.1.1: Train-the-trainer (M1-6): SINTEF Ocean will develop the methodology **and teach the local case area leaders how to facilitate and co-create knowledge together with stakeholders during the MALs in a consistent manner to enable cross-case compatibility.** The partners will first engage in a stakeholder mapping session, including arenas for best avoidance of stakeholder fatigue (such as ICES working groups both social and technical), inviting stakeholders, facilitating the workshops (T5.1.2) and will work with SO afterwards to interpret the results.*

2.1 Program for the train-the-trainer workshop

1. Introductions and round around the table – 30 min
 - a. Workshops in WP5 – 5.5.1 Train-the-trainer presentation and plan for the day
2. Stakeholder mapping – 1 hour
 - a. Miro – power vs. interest
 - b. Specific choices of stakeholders
3. Short break
4. Vensim – Conceptual mapping with the scientist – 1 hour
5. **Break**
6. Fuzzy Cognitive Mapping – for policy action tool – 1 hour
7. Wrap up

3. Programs

The aim of the MALs is to develop conceptual models of what the given stakeholder group considers important for their situation, within the context of the OPTIFISH objectives. To achieve this aim, we have chosen to use the freeware Vensim for the first stage of the workshops and Mental Modeler for the refining stage (figure 1). For the mapping segment, we used the online whiteboard tool Miro.com in either a workshop live setting or using TEAMS and sharing the screen.

3.1 Miro.com

Miro is a visual workspace where teams of any size can work together, using built in templates or developing designs for different purposes. We used an annual Business plan of <http://www.Miro.com> with 1 license.

3.2 Vensim

Vensim was chosen because of the user-friendliness, and the free license provided.

- A freeware version of Vensim® is available online (<https://vensim.com/free-download/>).
- One person should be facilitating the meeting and the other should be running Vensim in the background, building the mental model digitally.

3.3 Mental Modeler

Mental Modeler is a free modeling software where researchers can visualize the stakeholders' knowledge in a standardized format that can later be used for scenario analysis to develop policy action plans or decision support tools. You have to register at www.mentalmodeler.com to receive the login for this freeware. Once you have developed a model, save it in a folder of your choice. To see it again later you have to click "load" and find it in your folder. It will not work to double click it inside the folder itself – you have to be online to open it.

4. Stakeholder mapping

Prior to starting work on the workshop methodology itself and training the facilitators of the different case areas in how to use the different programs, we held stakeholder mapping sessions in each case area.

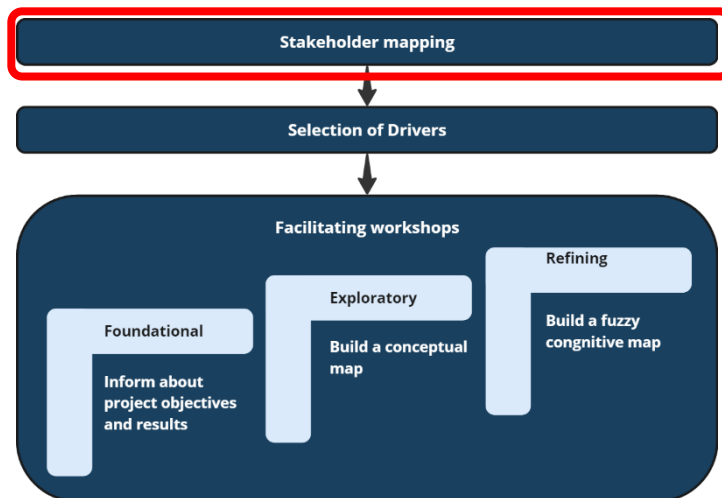


Figure 2: Stakeholder mapping

Stakeholder mapping as a concept refers to several methods of stakeholder analysis, whereby the stakeholders of a given project are visually diagrammed in a systematic way that represents the relationships of the stakeholders to the project. Stakeholder maps are used to identify stakeholders and understand their relevance to research project results or specific issue areas.

An effective stakeholder identification process increases the saliency of a research project while the transparency of this process increases credibility and legitimacy of

a project. Stakeholder mapping is often undertaken at the beginning of a project during the planning phase though repeating and updating the process throughout the project can have benefits, and should help the project managers to identify:

- People and organizations that should be informed about the project
- Potential sources of conflict that may require attention and mitigation
- Potential opportunities for collaboration and synergy
- Actions to be taken or avoided to enhance stakeholder participation or satisfaction

Stakeholder mapping methodologies make use of spatial dimensions to encode stakeholder relationship information. Several methods have been developed which place the stakeholders along different axis, dimensions, or pathways according to their relationship to the project. Stakeholder maps can be helpfully classified into categories whether their purpose is identification, evaluation, or management for example. Additionally, mapping techniques should allow the researcher to compress and visualize stakeholder information and conceptualize and communicate a significant portion of the complexity of stakeholder relationships at a glance.

Mapping strategies for identification involve visualizing the connection-space of the project and visualizing the connections that stakeholders have to the topic or issue area or project itself, and it is important to record as many relevant stakeholder groups and individual stakeholders as possible. The goal of the stakeholder mapping process as such is to understand who the actors are in each issue area, and whether they are in a position to impact the issue area or be impacted by it. The intention is to come into dialogue with those stakeholders who have the most relevance to the project, which in this case is the stakeholder that has the highest power and the highest interest in the results of the project.

The mapping session for the OPTIFISH project uses a four-step approach, starting with a power-interest matrix, followed by the identification of the stakeholders themselves, organization of selected ones to be invited and the invitation itself.

5.1 Miro.com

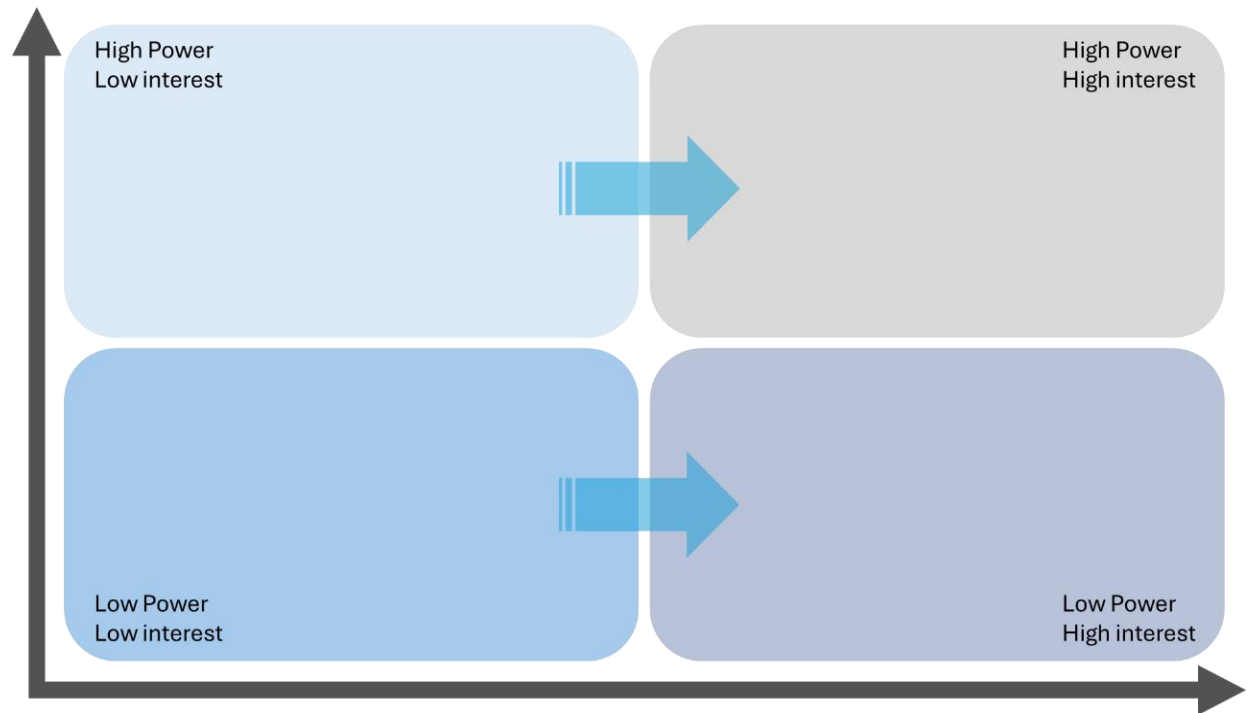
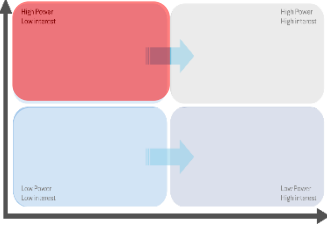

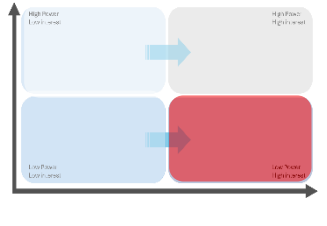
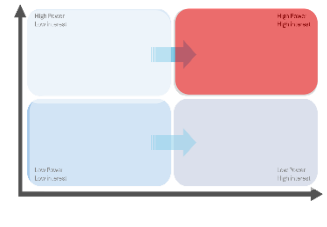


Figure 3: graphic of the Power-Interest matrix used in the stakeholder mapping session

The first part of the stakeholder mapping session is the Power-Interest matrix. This is a quadrant-based diagram, where the x-axis shows level of interest and y-axis level of power of the given stakeholder group. Placing the stakeholders that are associated with your issue area, in this case the development and deployment of fisheries technologies and sensors for use for automatic catch identification in fisheries, will allow you to see your stakeholders at a glance and identify and set priorities for managing and engaging with those that are stakeholders.

This session is done using Miro.com, where the participants identify where in the matrix specific stakeholder groups are located. At this stage, we are not interested in individual stakeholders, or even specific companies or entities, unless these are specific ones of which there only is one. What we primarily look for here is categories of stakeholders, such as “commercial fishers” or “scientists” or “national government” or similar. The following four bullet points give examples different characteristics of stakeholders that determines where they are situated on the matrix.

Table 2: Examples of Power-Interest quadrants

Quadrants	Explanation	Location
<p><u>High power – low interest</u></p>	<p>These are powerful stakeholders that unfortunately still lack interest in the given issue area, in this case automatic catch registration technologies or artificial intelligence (AI) for fisheries catch reporting. These can be for example the media, the public, or some politicians. These are stakeholders you want to be in a workshop, and the goal may be to move these to the top right hand side of the matrix. It is also important to ensure that you meet the needs of these stakeholders.</p>	
<p><u>Low power – low interest</u></p>	<p>These are stakeholders that show little interest in the topic at hand and that have little power to ensure, or stop, its implementation. As such, there is no need for these stakeholders as participants in the workshop but do keep them into account.</p>	
<p><u>Low power – high interest</u></p>	<p>These are stakeholders you also want to be part of the MAL/workshop. Scientists and NGOs are a prime example in this category, and in some cases, within the issue area of fisheries, even the fishers themselves. This is also a stakeholder quadrant where you need to keep the selection informed of the project results.</p>	
<p><u>High power – high interest</u></p>	<p>These are powerful stakeholders that have a high interest in the issue area, which in this case is fisheries technology or AI automatic catch registration. These can for example be specific regulation authorities or enforcement branches. These are groups of stakeholders that need to be closely managed and you want them to participate in the workshop, because they are critical for the implementation and effectiveness thereof of the technologies and innovations developed.</p>	

5.2 Stakeholder identification

After this initial session, which generally takes around 30 minutes, the research group starts narrowing down the more generalized categories of stakeholders identified into more specific groups of stakeholder categories or types and distilling it down to the names of actual concrete stakeholders to invite to the workshop in question. This session too should take no more than 30 minutes. Here too we use Miro.com as a visualization tool with the group we are doing the

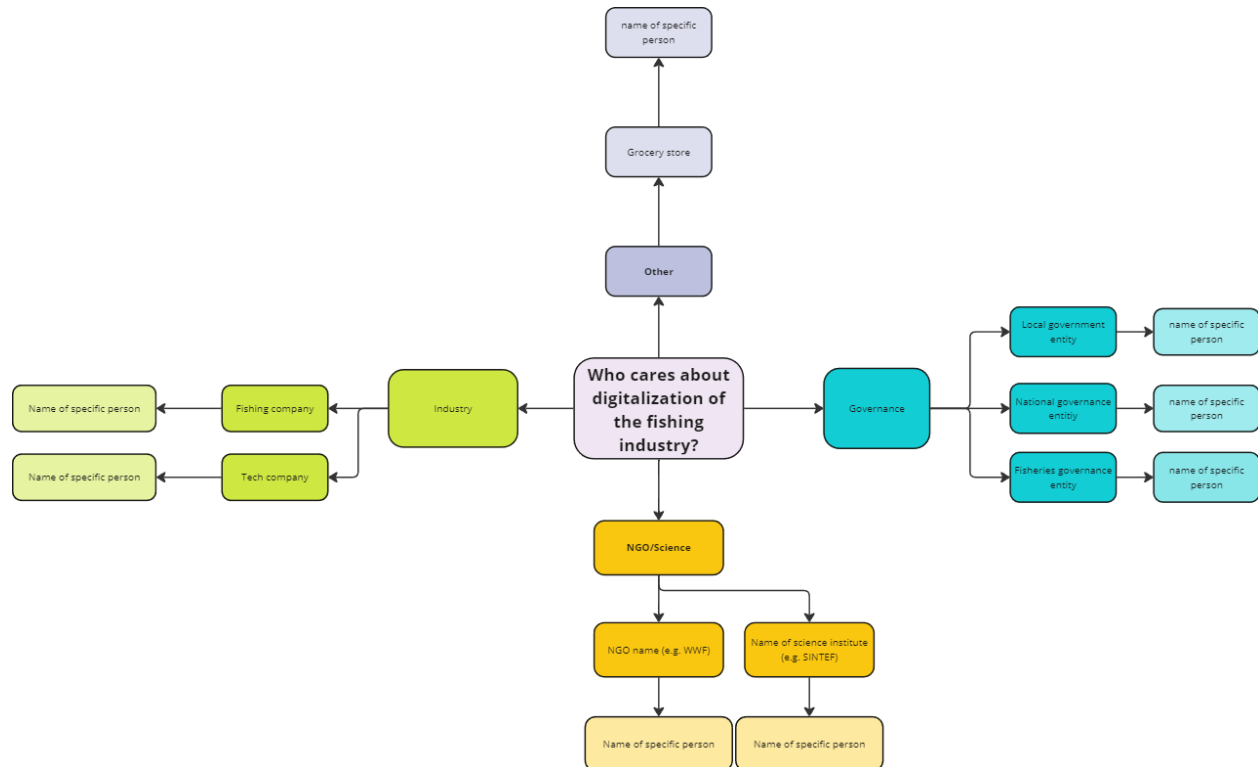


Figure 4: Stakeholder mapping figure

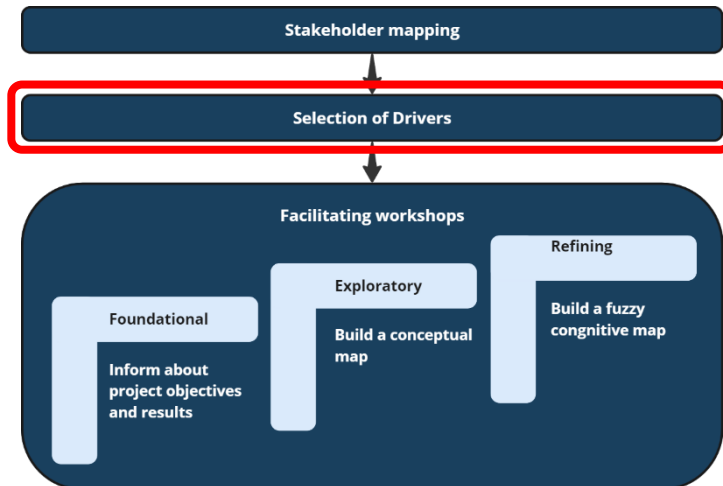
mapping with, facilitated in this case by the work package leader to ensure cross-case comparability of mapping results. The following is an example of a mapping session.

5.3 Stakeholder database

After having populated a full set of stakeholders for at least four different category types and at least one sub-type, you must transfer this information to Excel or similar. This is generally not done during the mapping session because of lack of time, but is left to the Case area leader to delegate responsibility for. The column categories in the following table will ensure that you have a living document that can be updated throughout the project period and will give you're the information you need to report on later.

5. Drivers

The drivers were selected based on workshops on similar topics in other projects and were introduced to project participants in individual meetings. The reason for starting with these drivers was because they were a cross-European collaboration result on what drivers affected stakeholders throughout Europe on issues around automatic catch registration. However, we emphasize that these may not always be ideal for the different case areas.



Facilitators should think of these drivers as including the words “change to/in” when using them in a sentence, like “how would a “change in” technology affect your industry” or “how will a “change in” access to areas affected your region”. Keeping in mind that there are six case areas in the OptiFish project, and each of these have different number of stakeholders, these drivers are relatively generic and inclusive enough to cover many different aspects of automatic catch registration and fisheries and be applicable across socio-political and geographic regions.

Figure 6: Drivers

1. Technology
2. Regulations
3. Access to area
4. Market
5. Quality of life
6. Research
7. Climate Change

These drivers are to be used to guide discussions with the stakeholders, to ensure that researchers gain the knowledge that we need from the workshops, and they are comparable across regions. If you choose to delete one or add another, keep in mind that new drivers should be complementary to the existing ones and not overlap with them. It is also natural that all of these drivers also affect one another. There also needs to be ample documentation of why a driver is changed or deleted.

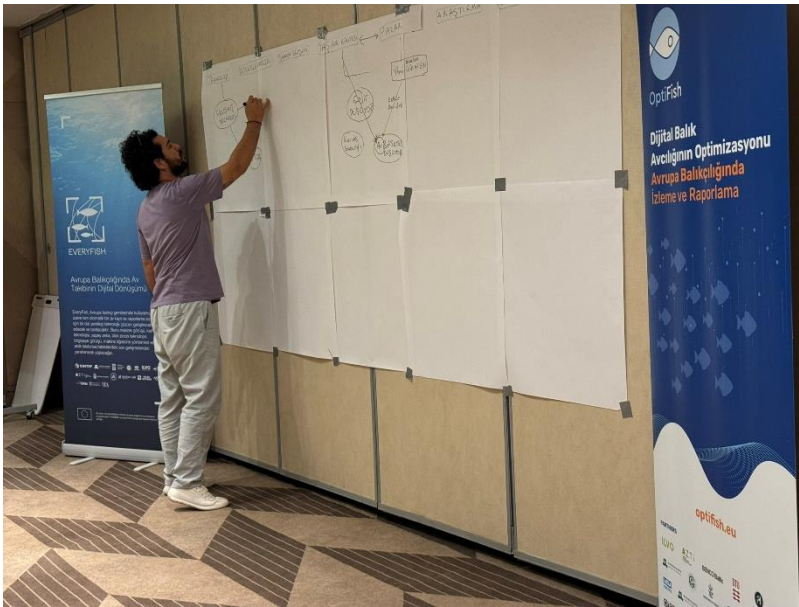


Figure 8: 10 sheets of paper taped up on the wall because there was no whiteboard

If you do not have access to a whiteboard, an alternative is to use 6-8 pieces of A0 paper and tape it up on the wall (figure 6). This gives you ample space and is a good visual for the stakeholders as well. This has in many cases been proven to be a very good option.

If you are faced with only having the option of a large tv-screen, that is also possible. You would then share your screen and do the conceptual mapping digitally directly on the screen for all to see as you are working on it. This however is only recommended if you have a group of stakeholders from academia, research or other groups that are used to always working digitally. You also have to be very comfortable with your

digital canvas – Vensim – to make sure you are moving swiftly and drawing arrows as they speak.

6.2 The digital canvas

Generally, it is preferable to have one facilitator (like in figure 6) and one person working on the digital canvas at the same time. To make sure you ready your digital canvas, you have to add in your drivers first (see section 4).

- 1) Open Vensim
- 2) Save the document in a folder where you can easily find it again
- 3) Add your drivers – click the boxed “S” on the bar (see the 1 marked on figure 7)
- 4) When you start adding variables, you click the “A” next to the “S” (the difference between the two is that the “S” gives you a box around the drivers so that you can distinguish it from the variables.
- 5) You draw arrows between linked drivers and variables, and between variable and another variable, by clicking the arrow button on the bar (see figure 8, nr 2).
- 6) We recommend that you play with this for a while with some choice examples that are easy for you to come up with new variables. You can also adjust the lines of the arrows by manipulating the dot on the arrow (see 3 figure 8).

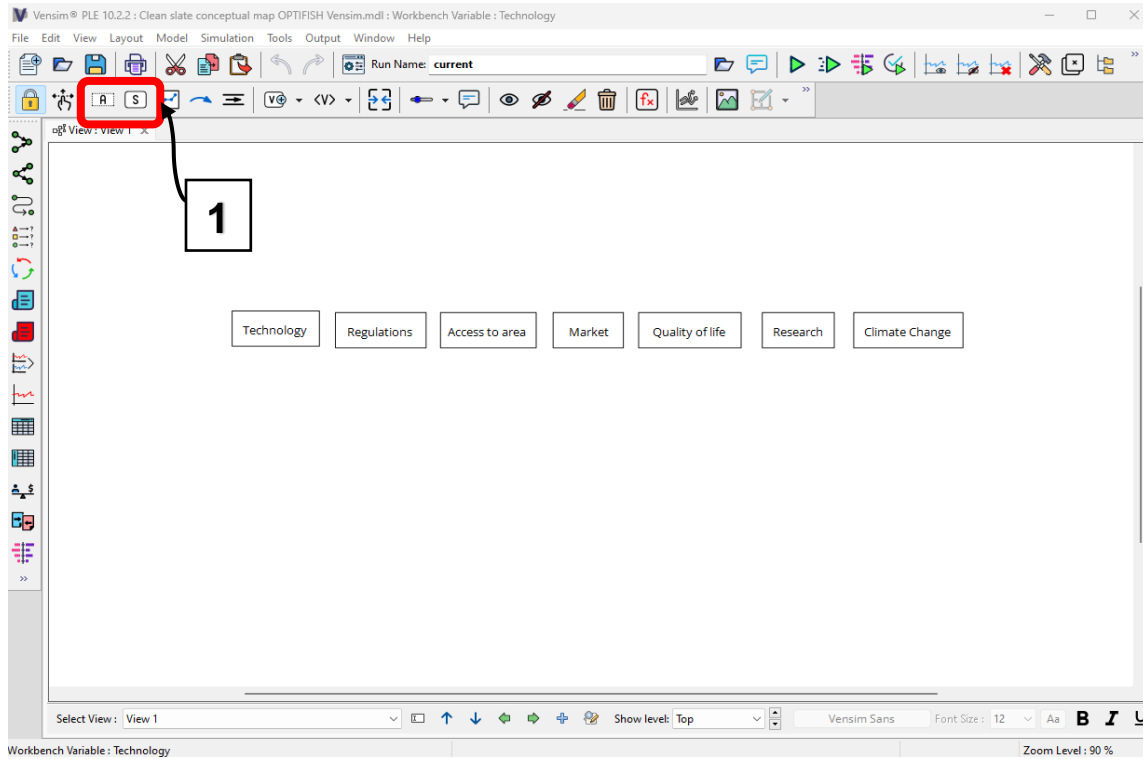


Figure 10: Your digital canvas in Vensim.

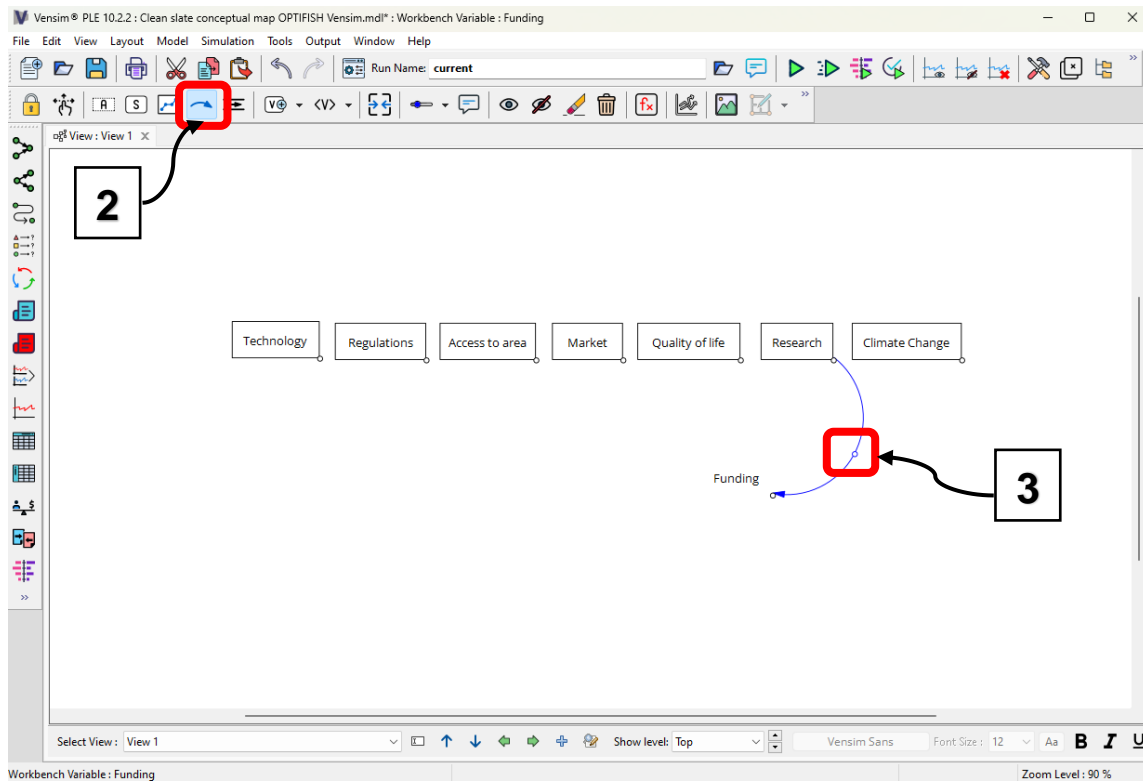


Figure 9: Adding links and manipulating arrows between variables in Vensim

6.3 The context

Your first job as facilitator, however, is not to go straight to the conceptual mapping, but to provide the context for the participants. You will do this stepwise:

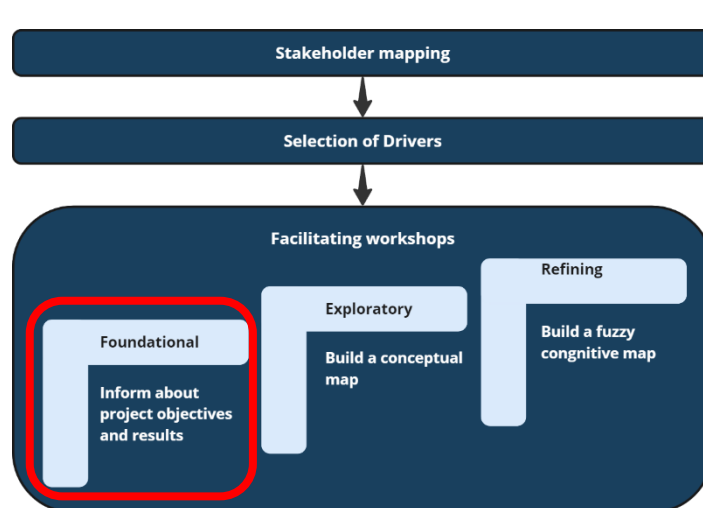


Figure 11: Foundational information

1) Welcome them and let them know their GDPR rights (see appendix invitation letter for details). Let them know they are not obliged to be there and may choose to leave at any time.

2) Have them all consent in writing to being part of the study. You do this by either 1) having already printed out the consent form (see letter) and placing one on each desk (or whatever seating arrangement you have available) or 2) having them bring the signed consent form to you beforehand.

3) Once you have received all the consent forms, you should present your project to give the participants the proper context to the workshop. Do not spend more than 10 minutes on this total.

4) You then provide the context of the workshop. For the purposes of the OptiFish workshop, we chose to involve the participants in a backcasting exercise. This means that we first define a desirable future that we are aiming towards, and then facilitate the stakeholders in working backwards to identify the variables that enabled us to achieve this desirable future. The following is the backcast future of the first round of OptiFish workshops:

We are at a point in the future where there are sensors of some kind on all vessels and all catch data (length, weight, species and perhaps location caught) are recorded in its entirety and shared with policy makers, monitoring, control, research and public.

6.4 Filling in the canvas

We then state the **Research question**: To what degree did the following variables affect the uptake of new technologies for automatic catch registration in the EU (referring to the drivers from section 4).

If the room does not erupt in suggestions, your job as facilitator is to draw the participants into the discussion, often by choosing one, saying for example “What happened to the change in technology to enable that all fishing vessels now have sensors on board”? If someone says “that’s never going to happen” you have to remind them that they are now in a perceived future where it already has happened – and you want to know how that was possible.

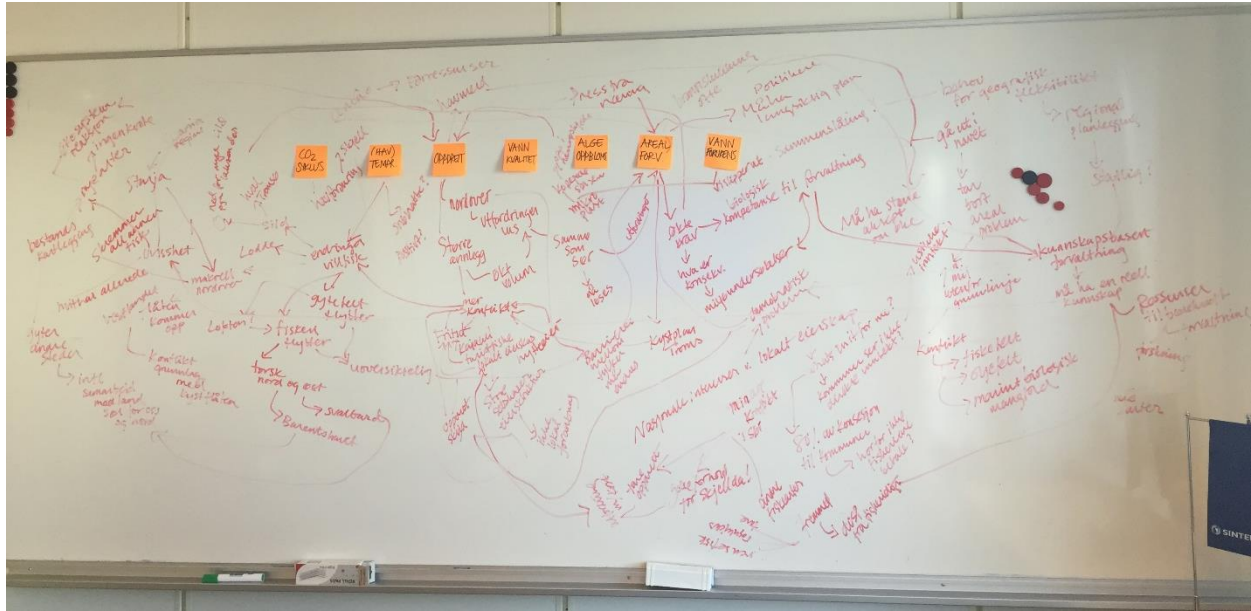
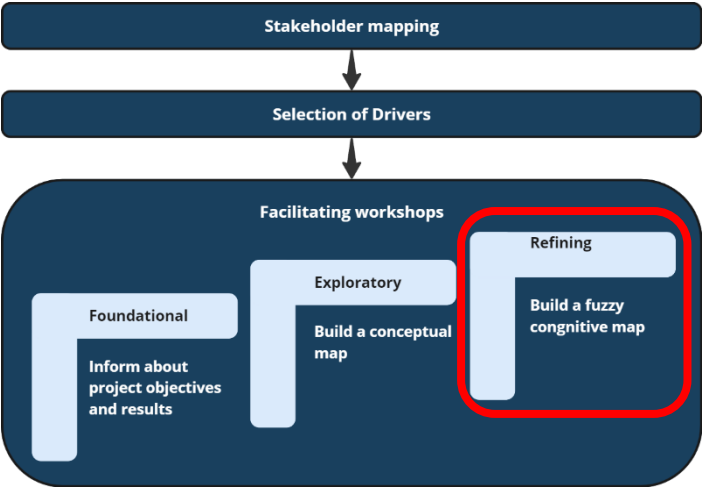


Figure 14: White board completed conceptual mapping, example from different project

6.5 Fuzzy Cognitive Mapping

After the conceptual mapping, which should take no more than an hour, you take a short break – no more than 15 minutes. That will then give you 45 minutes to complete the last part of the workshop – the fuzzy cognitive mapping – which will enable the policy action plan and scenario development to take place between workshop 1 and workshop 2.



Stakeholders generally tend to really enjoy this part of the workshop, after getting at times frustrated by the first session. You may also be tired at this point, but once you start this part, it gets very interactive.

Key for this part however, is that we do not want it to look like figure 13. This model that we are developing should have no more than 12 variables. That means you have to work with the stakeholders to really come up with good variables.

Figure 15: Building a Fuzzy Cognitive Map

Another difference between this model and the former is that you do not have drivers anymore. What you want to ensure now is that you develop a policy action tool and that demands a key variable that is the most important to the stakeholders to achieve within the context of your research project. In this case, the objective is to develop scenarios that can aid achieving a future scenario where there are sensors on all fishing vessels in Europe, contributing towards

accurate and trustworthy data for better management of fisheries. What you as facilitator need to find out within the first few minutes of this session is:

What is most important to the stakeholders to achieve in this context?

This could be for example

- 1) income that is as high as today or higher;
- 2) sensors that are trustworthy;
- 3) tampering-free monitoring capabilities of sensors;
- 4) achieving SDG14.4 or something completely different.

This will depend on what stakeholder group you are facilitating, your case area, if it's a specific fishery in question and other reasons.

The stakeholders may at some point also ask you about a timeline – when this is supposed to be achieved. 2030 is a good short-term horizon to suggest, as is 2050 for a longer term one. Both are possibly within the life spans of the stakeholders and as such, something that could affect them. In the case of OptiFish, we have generally opted for 2050 since many do not think this is achievable before 2030 and it is too unrealistic.

FCMs take the conceptual modeling in step one further, by assigning 'fuzzy' weights to the variables, representing the strengths of the positive (reinforcing) and negative (balancing) direct impacts variables have on one another, ranging between -1 (the minimum increase in a variable) and +1 (the maximum increase). An increase in variable A will then lead to an increase in variable B, and a negative relationship means that an increase in variable A will lead to a decrease in variable B. Notice there is always an increase in variable A (see figure 16 with example).

Important – all variables must be measurable and able to increase, even through a proxy. "Green" for example is not a variable, since it cannot increase. "Happiness" however could be a variable, since there is a world database of happiness (<https://worlddatabaseofhappiness.eur.nl/>). "Anger in society" could also be measured through media as a proxy in some cases.

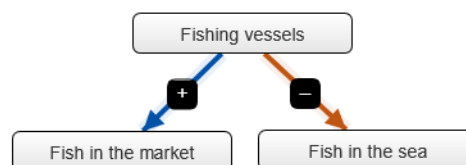


Figure 16: Simple example of positive and negative relationship between variables

Creating your FCM

Let's start by making a simple example based on the OptiFish project and automatic catch registration sensors on fishing vessels.

1. Start by clicking the "+ ADD COMPONENT" button (see figure 17 red dotted line) and write your stakeholders preferred first variable. In this example, we chose "Sensors on vessels.

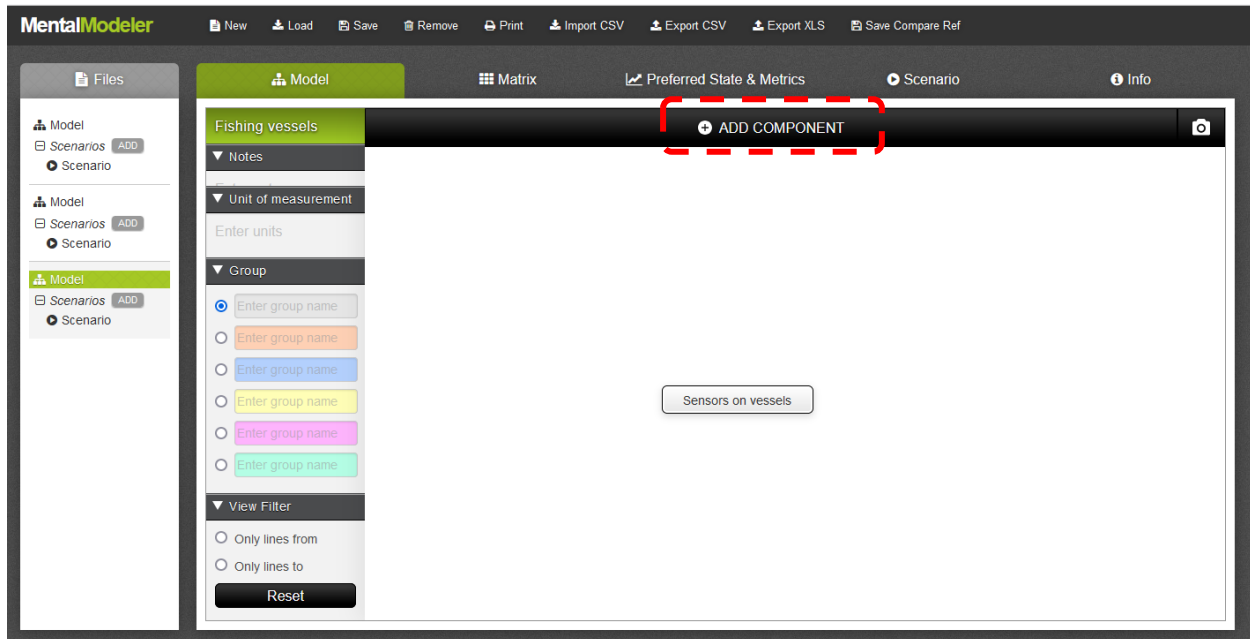


Figure 17: Mental Modeler example of the first variable

2. Add a variable that will be affected by an increase in sensors on vessels, such as for example “cost for fishers”. Let’s assume the stakeholders say that the more sensors there are on their vessels, the higher the cost they have of operations and that this is a 0,5 on a scale of 0-1.
3. After you add the new component/variable, hold your cursor over the first variable and hold down the green arrow and drag it to variable two.

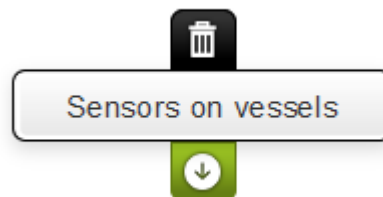


Figure 18: The green arrow on the variable is dragged to the next variable

4. After you drag it to the second variable you will see this scale – drag the dot to the value your stakeholders indicate. A green arrow means it is a positive relationship. In other words, an increase in sensors on vessels will lead to an increase in the cost of operations.



Figure 19: Scale for determining effect of relationship between variables in FCM

5. Then you ask the stakeholders what an increase in cost of operations would lead to and they will likely say a decrease in a new variable, “income”.

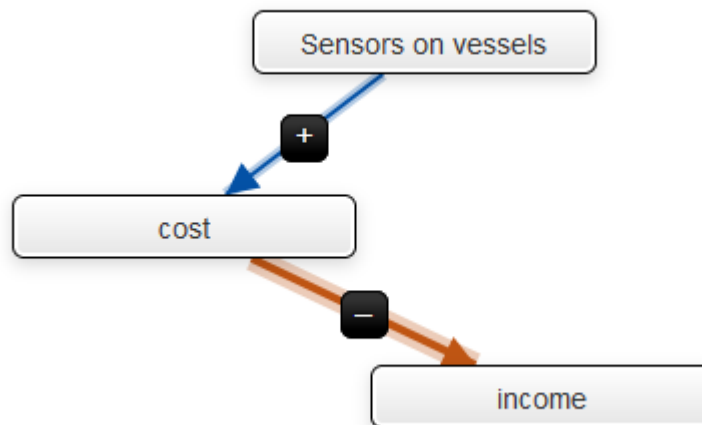


Figure 20: Adding a negative relationship to a FCM

6. Try testing this out yourself with new variables, and always remind yourself that the variables have to increase, and they have to be measurable in some form.

You may notice that some variables have a one-way impact on one or more other variables (see figure 21). This is a variable that drives the system. How these develop over time will therefore define a given policy action scenario. This means that we must predetermine what we would like these transmitters to "do" in a given scenario.

For instance, in figure 21, "Sensors on vessels" is one of the variables considered a transmitter (dotted lines around the transmitters). One scenario could then be to explore the effect an increase from 0-1 (a substantial increase in vessels) would have over 10 years. Another scenario could be to see what 0,5-0 (a decrease in sensors on vessels) would do to the system, relative to the stakeholders' perceptions. These policy action scenarios are as such not "real" numbers, but a series of hypothetical events or potential futures depending on what action one takes, drawing management attention to relationships that exist between actual developments and the possible interventions that can be prepared if a given scenario were to be actualized.

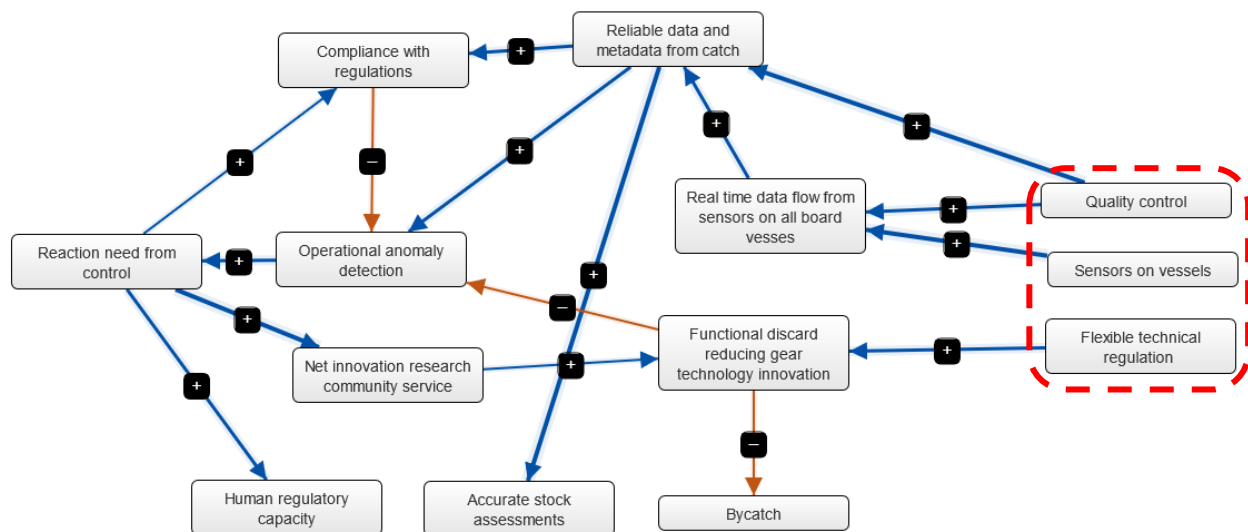


Figure 21: Example of completed FCM in fisheries for scientists in Netherlands and Belgium

7. Conclusion

The aim of this protocol is to be a manual for the facilitators from the different case area of the OptiFish project. All case leaders have undergone training for the workshops in the different case areas with stakeholder, conceptual and fuzzy cognitive mapping. They also have access to all results from these training sessions, including transcribed narratives from the sessions, and the different figures for reference. The material in this protocol is a step by step instruction that will remind them of how the process went when the training took place. It will serve as important toolbox as they prepare for the first round of workshops that is to take place during Q2 of 2025 at months 12-18 of the project period. The work package leaders are also available to be present during the workshops if this is requested, and are always available for input and advice. The second round of workshops are to take place in the last two quarters of 2026, during months 30-36 of the project period. At that time, the results of the first round of workshop and the interim work that is done on developing policy action plans based on the results of the fuzzy cognitive mapping in the individual case areas will be presented to stakeholders for validation or calibration.

8. References

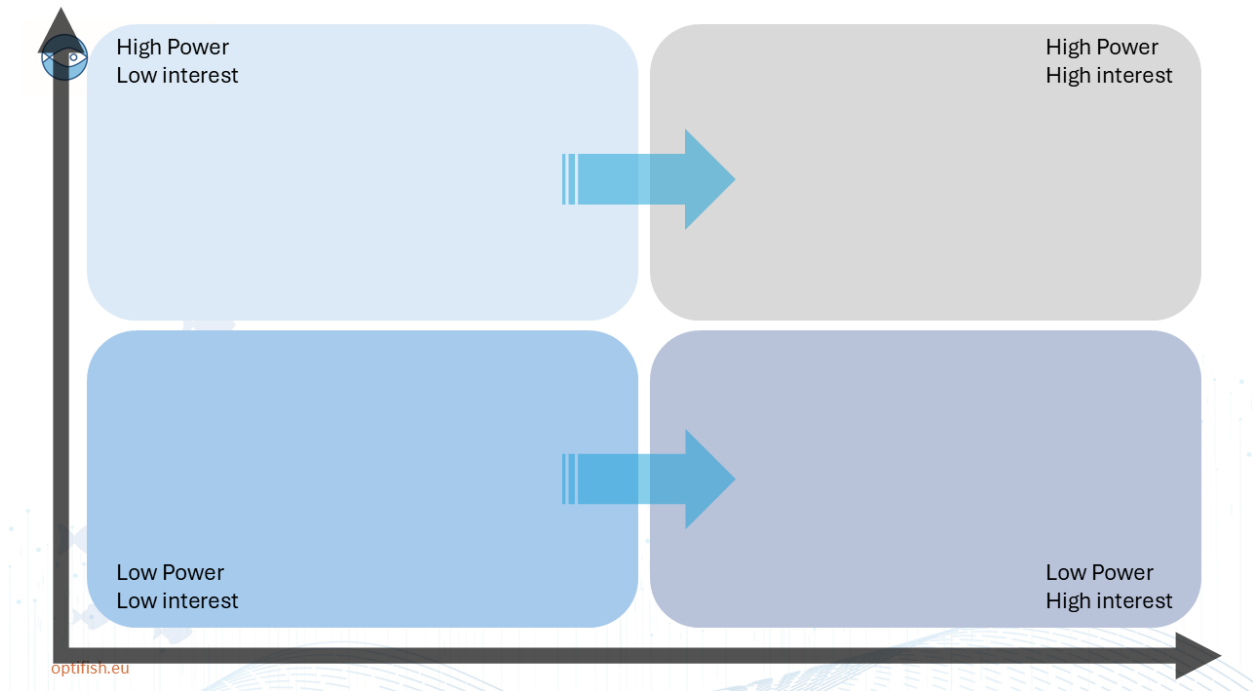
For a detailed reading of the methodologies, please read the following:

Tiller R, De Kok J-L, Vermeiren K, Richards R, Ardelan MV and Bailey J (2016) Stakeholder Perceptions of Links between Environmental Changes to their Socio-Ecological System and their Adaptive Capacity in the Region of Troms, Norway. *Front. Mar. Sci.* 3:267. doi: 10.3389/fmars.2016.00267

Tiller RG, De Kok J-L, Vermeiren K and Thorvaldsen T (2017) Accountability as a Governance Paradox in the Norwegian Salmon Aquaculture Industry. *Front. Mar. Sci.* 4:71. doi: 10.3389/fmars.2017.00071

9. Annexes

9.1 ZPresentation of methodology – Power point slides



Stakeholder mapping: Identification of actors











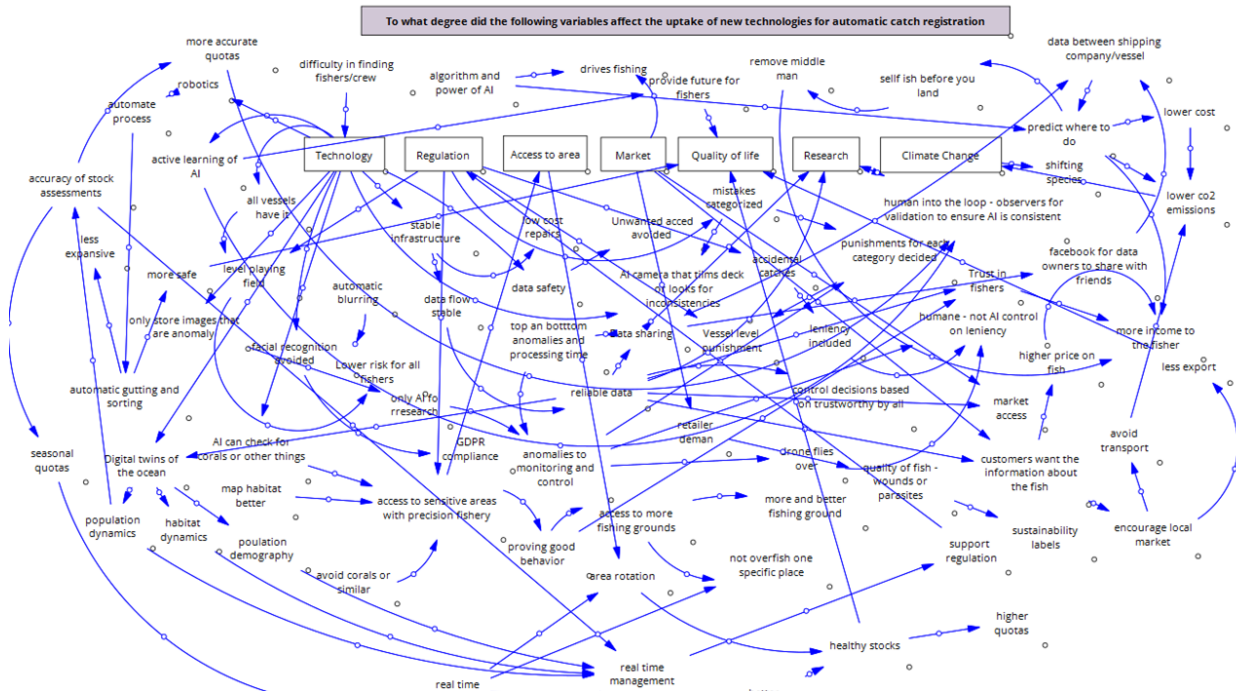
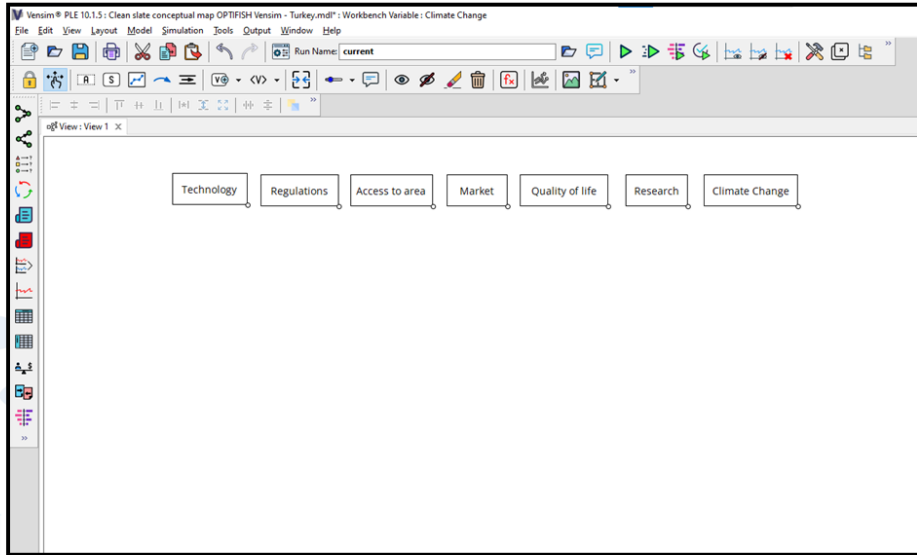
Conceptual modeling

- **Future scenario** – full implementation of sensors on all fishing vessels!
- **Research question:** What factors influenced the uptake and adoption of automatic catch registration in Spain?



DRIVERS – Effects of changes to these

- | | |
|---|---|
|  TECHNOLOGY |  QUALITY OF LIFE |
|  REGULATIONS |  RESEARCH |
|  ACCESS TO AREAS |  CLIMATE CHANGE |
|  MARKET |  CASE SPECIFIC DRIVER? |



ANALYSIS

WITH SINTEF

Scenario analysis and policy action plan



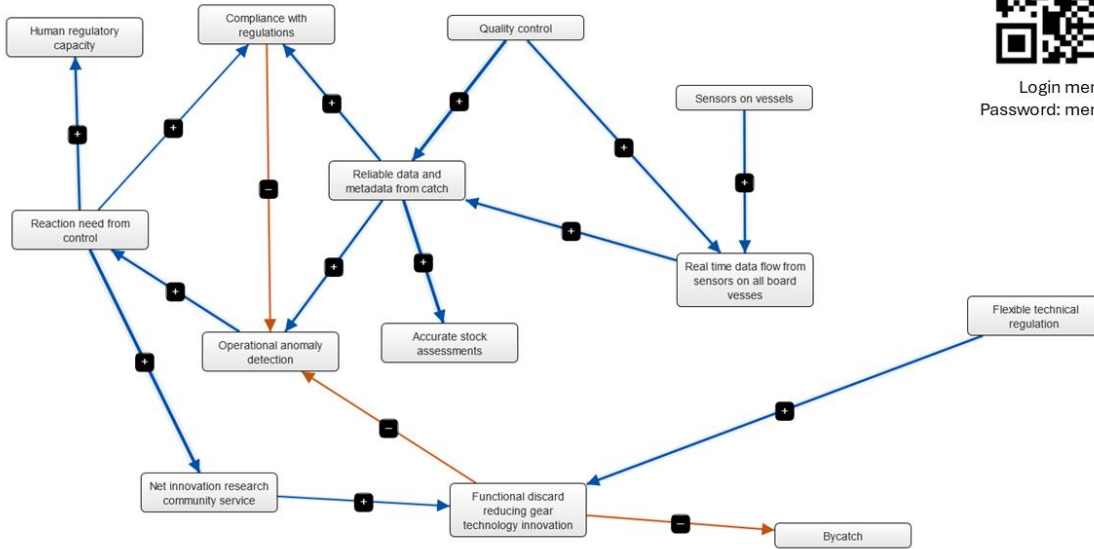
After the workshop, we [the researchers] will summarize discussions based on:

1. The most discussed variables
2. The 'weight' i.e., value given to the different variables
3. The connections between variables, i.e., positive or negative connections

FUZZY COGNITIVE MAPPING



Login mentalmodeler
Password: mentalmodeler



DELIVERABLES

Tasks	2024				2025				2026				2027				28	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	
5.1		5.1.1 Train the trainer M1-6			D10	5.1.2 WS #1 M12-18			5.1.2b WS #2 M30-36									
5.2													5.2 – Capacity building and training				D11	D12
5.3									5.3.1 EU Level management (NDF)									D25
									5.3.2 International Cooperation (SO)									

- D5.1 – D10 – Workshop methodology – protocol for case area leaders – SO – R – Public – M12
- D5.2 – D11 – First capacity building program – FSH – R – Public – M30
- D5.3 – D12 – Control Agreement Template – NDF – R – Public – M46
- D5.4 – D25 – Final capacity building program – FSH – R – Public – M48



WORKSHOP 2

Validation and calibration of scenarios



M30-36 – present results of ANALYSIS work

1. Get feedback on interpretation
2. Calibrate the model with new information from stakeholders
3. Get validation from Stakeholders that they recognize their opinions within the scenarios and the policy action plan.

9.2 Invitation letter to workshop

Invitation to participate in the research project

OptiFish:

Digital transition of catch monitoring in European fisheries

Background and goal

The aim of the OptiFish-project (2024-2028) is to develop, test, and promote a suite of innovative technological solutions for fully automated catch recording and reporting for use on board European fishing vessels, and develop innovative governance strategies that make use of the automatically reported catch data.

For the science-policy outreach part of the project, the main aim is to facilitate an interface between science, policy and industry, in order to gather expert knowledge and insights for policy recommendations and implementation. This will include organizing a series of invitational workshops, with relevant stakeholders such as yourself from the **industry/management/science (pick the one that is valid for the workshop in question)**. Through these workshops, stakeholders such as you become an essential partner in knowledge production, with the acknowledgement that the successful implementation of OptiFish's technical advancements requires the involvement of both scientists, technology developers, policy makers and industry representatives. Ultimately, the workshop series aims to develop best-practice recommendations and guidelines for the implementation of new catch identification and traceability solutions in the industry.

Who is responsible for the project

The OptiFish project is coordinated by the Flanders Research Institute for Agriculture, Fisheries and Food (ILVO) in Belgium. The workshops and follow-up interviews when agreed to, are planned by ILVO together with SINTEF Ocean in Norway, **and partners in the host country of the multi-national workshops (use this for the first round of workshops)**. The project is financed through Horizon Europe.

Why were you asked to participate?

You were selected and asked to be part in this study because of **your background in what sector**. The partners and their contact networks chose a selection of stakeholders that would be best suited for this **workshop/interview** setting in terms of experience and expertise.

What does it mean to participate?

You are a critical part of this project, as your participation in this **group interview** will give legitimacy to the results. Your willingness to share your expertise and experiences as such is of utmost importance for the output of the project and for the further work on implementation later in the project period and beyond it. During this **workshop/interview**, we will inform about the OptiFish project, and ask you to discuss the main challenges and opportunities you foresee with regards to digitalization of the fishing fleet with electronic monitoring on all vessels - from a personal perspective.

The **workshop/interview** will focus on a number of factors that we encourage you to discuss and speculate around in terms how you perceive that each will affect your sector, and what possible solutions may be.

The whole session will usually last 2 hours, and follow up interviews when agreed to are usually around 20 minutes and can be done by TEAMS or similar platforms if preferable. We will record the sound from the session for quality purposes. In some instances, we will ask permission to take photos. In this case, we will ask for specific permission for release of this photo material, which you may refuse at any time. The pictures would in those cases be used for publicity purposes on social media or on the project website.

It is voluntary to participate

It is voluntary to participate in this study. You are not obliged to participate, and you may at any time choose to withdraw your consent to take part in this project.

GDPR and personal data collected in the project

We will collect background information to be able to document if we have a representative selection present at the workshop. We will not relate statements to this background information in a way that makes it possible to link them back to individuals.

Personal information we will collect from you during this workshop will be associated with your voice, and it will only be recorded for quality purposes. The results will be anonymized in publications and reports. The only reference from the **workshop/interview** will be with regards to what country and what sector your group represents. We will invite you to give us your email address so that you can follow the project after the workshop, via e-newsletters or emails. This is voluntary though. You give your consent by adding your email to the sheet that is going around the room during the workshop. This personal information will not be sold or used for any other purposes than information flow during the project period.

In the case of a video interview on digital platforms like Zoom or TEAMS, we will ask for specific permission from the interviewee for recording the session. You may refuse this request, and only agree to being anonymous, in which case we will take detailed notes. The recordings are for quality assurance purposes.

The project participants in the EU project OptiFish will have access to the data we have on you during the project period, though we emphasize that all voice recordings will be deleted directly following the transcription of the recording. At that time, we will have no personal data on you saved (see next section).

What happens to your information when the project ends?

The project will end at the end of January 2028. Any anonymous recordings from the **workshop/interview** will be deleted immediately after the workshop has been transcribed and analyzed by the facilitator of said workshop, or by this date at the latest. Email addresses will also be deleted after the project has ended. Image material to which you have consented will remain online, however.

Your rights

As long as you may be identified through the data material, you have a right to:

- Find out what personal data we have registered about you;
- Have corrected any personal data that are wrong;
- Have deleted any personal data we have on you;
- Have a copy of your personal sent to you (data portability); and
- Send a complaint to the Data Protection Administrator or the GDPR (General Data Protection Regulation) about the use of your personal data in this project.

What gives us the right to use your personal data?

By participating in this **workshop/interview**, you are giving us your consent to use your personal data (your voice recording). By voluntarily giving us your email address, you are similarly giving us your consent to use it for the purposes stated in this letter. If you sign the release form for images/photos and voice recordings, you are giving us your consent to use the material on the OptiFish website, presentations from the results, and social media platforms.

By request from SINTEF Ocean in Norway, Sikt – the Norwegian Agency for Shared Services in Education and Research (comprised of the previous Norwegian Centre for Research Data AS) – has reviewed the project and decided that the treatment of personal data in this project is compatible with the regulations on the protection of personal data.

Where can I find out more?

If you would like to find out more, please contact **FACILITATOR IN COUNTRY** (email of facilitator in country) or by telephone **XXXXXXXX**.

Other points of contact:

- Els Torreele at Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Coordinator of the OptiFish project
 - els.torreele@ilvo.vlaanderen.be
- Rachel Tiller at SINTEF Ocean, leader of the work on stakeholder engagement in OptiFish
 - Email: Rachel.tiller@sintef.no
- Håkon Tranvåg at Sikt, SINTEFs Data Protection Officer
 - Email: hakon.tranvag@sikt.no
- Sikt, the Norwegian Agency for Shared Services in Education and Research
 - Email: personvertjenester@sikt.no
 - Phone: +47 73 98 40 40

If you would like to make a complaint, you can do so to the Norwegian Data Protection Authority. More information can be found at <https://www.datatilsynet.no/en/about-us/contact-us/how-to-complain-to-the-norwegian-dpa/>.

Sincerely,

FACILITATOR
Name of company
31.01.2025

I have received information and understood this correctly about OptiFish, and I have been given the opportunity to ask questions.

I consent to:

- Participate in workshop(s) (whether on TEAMS or similar or in person)
- Recording of the workshop that is later anonymized and deleted after transcription or the end of the project period at the latest.
- Participate in follow-up interview if necessary.
 - Email address for contact: _____
- Images of me where I am recognizable being used on social media, website or presentations about OptiFish.

Signature and date

END OF DOCUMENT