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[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 D3.5

Draft 2
General Guidelines for making MRs

15/12/2019

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Executive Summary

More than 20% of the European fishing fleets catches are taken from non-European waters. Access to these waters is often based on agreements with coastal states that allow the EU fleet to fish from surplus stocks in return for financial support. These agreements have been subjected to criticism, as these fisheries are sometimes poorly regulated and management decisions are often based on limited knowledge, compliance, and enforcement capabilities. It is also too often the case that trust between stakeholders is lacking. The aim of the FarFish project is to overcome these hurdles. The FarFish project is designed around six case study areas in which the European fleet is actively engaged in fishing activities, including Cape Verde, Mauritania, Senegal and Seychelles, as well as the international high-seas areas in the southeast and southwest Atlantic.

This document contains the 2nd draft of general guidelines for making management recommendations (MRs) tailored for the EU fleet operating outside European waters; in accordance with the responsive fisheries management system (RFMS). The RFMS is a management approach founded on the concept of results-based management (RBM), where responsibility for fisheries management is to a point transferred to resource users, provided that they meet with necessary requirements set forth by the competent authorities and document that they can achieve specified management objectives.

These 2nd draft guidelines follow up on the 1st version, which were developed within FarFish in early stages of the project. Stakeholders representing the relevant authorities and the EU fleet, as well as any other stakeholders with vested interests in the specific fisheries have followed the 1st draft version of these guidelines in order to develop 1st version MRs for their fisheries. These MRs have now been reviewed and audited; and the feedback used to improve the guidelines. This process will now be repeated within the project, as these 2nd draft general guidelines will be tested/validated within the FarFish case studies. The third and final version of the guidelines will then be published as a voluntary European standard (CEN Workshop Agreement) at the end of the project.

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Abbreviations

CFP	Common Fisheries Policy
CS	Case study
F	Fishing mortality
FP7	7th Framework Programme, EU research and development funding programme
MCS	Monitoring, Control and Surveillance
MPs	Management Plan(s)
MRs	Management Recommendation(s)
MEY	Maximum Economic Yield
MSY	Maximum Sustainable Yield
OT	Outcome Target
RBM	Results Based Management
RFMS	Responsive Fisheries Management System
SFPA	Sustainable Fisheries Partnership Agreement
SSB	Spawning Stock Biomass
TAC	Total Allowable Catch

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Key concepts and definitions

Auditor(s)	The auditor is an organization with a competence in evaluating the extent to which specific and measurable policy objectives, as pursued within management plans developed and implemented by operators, are met.
Authority	Organizational entity enacting authority in pursuit of the management objectives decided for a fishery e.g. a coastal state or the European Commission.
Indicator	A variable, pointer or index related to a criterion. Indicators are selected such that their variations reflect variations in key elements of the fishery resource, the social and economic well-being of the sector and the sustainability of the ecosystem. The position and trend of an indicator in relation to reference points or values indicate the present state and dynamics of the system. Indicators provide a bridge between objectives and actions
Management authority	The legal entity which has been assigned by a State or States with a mandate to perform certain specified management functions in relation to a fishery, or an area (e.g. a coastal zone). Generally used to refer to a state authority, the term may also refer to an international management organization.
Management goals	The higher-order objective to which a management intervention is intended to contribute. A management goal is derived from a management principle (constitutional-order) and is specified into a set of more operational management objectives (collective-order).
Management measure	Specific controls applied in the fishery to contribute to achieving the objectives, including some or all of technical measures (gear regulations, closed areas and time closures), input controls, output controls and user rights.
Management objectives	Fisheries management objectives are typically framed within the overall concept of sustainable development and may reflect one or more of the various dimensions and criteria that relate to it. Operators through setting and implementing management measures control OTs.
Management Recommendation (MR)	The management recommendation (MR) is a formal arrangement between a management authority and operators that specifies the partners in the fishery and their respective roles, the agreed objectives for the fishery, the management rules and regulations that apply, and provides other relevant details about the fishery.
Operator	Organizational unit with delegated authority to develop management plans and oversee or conduct fishing operations within the standards decided by a management authority
Outcome Target (OT)	A textual or mathematical statement that can be evaluated as ''true'' or ''false'', where ''true'' is the target value. Textual OT: A natural language statement that can be evaluated as ''true'' or ''false'', e.g. ''stock assessment exists'', ''CAP has been developed'' or ''stakeholders have been consulted''. Mathematical OT: Normally an inequality, where one of the terms is an indicator and the other one is a reference point or value. E.g. Catch <= MSY, catch <=MEY or emissions <= limit (political reference point). The actual ''true'' or ''false'' value of the OT in question needs to be evaluated at specific times (e.g. once a year), e.g. based on the indicator and reference point value at that specific time.
RFMS	RFMS is a fisheries management approach developed within the EcoFishMan project. The RFMS is an adaptive management system that is results-based and ecosystem-based. The RFMS attempts to reduce micromanagement by involving stakeholders and increase the degree of co-management.

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1 Introduction

The overall objective of the FarFish project is to provide knowledge, tools and methods to support responsible, sustainable and profitable EU fisheries outside European waters, both within the jurisdiction of non-EU nations as well as international waters. To achieve this, FarFish aims to develop practical, achievable and cost-effective fisheries management tools and advice which can be applied immediately. One of those tools are practical, applicable and user-friendly guidelines on how to create management recommendations (MRs) within these fisheries, based on the responsive fisheries management system (RFMS). The RFMS is an approach developed in the FP7 project EcoFishMan[4], which builds on the concepts of results-based management (RBM), where responsibility for fisheries management is to a point transferred to resource users, provided that they meet with necessary requirements set forth by the competent authorities and document that they can achieve specified management objectives.

This document contains the 2nd draft of general guidelines for making MRs tailored for the EU fleet operating outside European waters in accordance with the RFMS. These 2nd draft guidelines follow up on the 1st version, which were developed within FarFish in early stages of the project. Stakeholders representing the relevant authorities and the EU fleet, as well as any other stakeholders with vested interests in the specific fisheries have followed the 1st draft version of these guidelines in order to develop 1st version MRs for their fisheries. These MRs have now been reviewed and audited; and the feedback used to improve the guidelines. This process will now be repeated within the project, as these 2nd draft general guidelines will be tested/validated within the FarFish case studies. The third and final version of the guidelines will then be published as a voluntary European standard (CEN Workshop Agreement) at the end of the project.

The RFMS is designed according to the specifications given by UNDP (2000) which states that good results-based management system should be:

- Valid; with respect to the criteria it was designed for, especially the outcome targets (OTs).
- Practical; it should be possible to implement in the world as it is.
- Flexible enough to account for real-world situations.
- Configurable to particular applications.
- Simple and unambiguous; understood by the stakeholders.
- Transparent; both to the users and to all other stakeholders.
- Clearly tied to the indicators; what does a change in a value of an indicator mean?

Before going into the guidelines themselves, this document will describe the RFMS concept and process, including the roles and responsibilities for all main actors, specifically in the context of Sustainable Partnership Agreement (SFPA) and high-seas fisheries of the EU fleet. The guidelines will then be specifically set up for each of the three main actors (authorities, operators, auditors), including detailed checklists.

[4] www.ecofishman.eu FP7 Project under grant agreement no. 265401

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1.1 Process for General Guidelines development

Following the approach taken in the EcoFishMan project, the development, evaluation and adaptation of the RFMS General Guidelines for making MRs in FarFish takes place in an iterative process to ensure that the guidelines will be suitable for different types of fisheries, fisheries governance frameworks, stakeholders and ecosystems. The development of the guidelines concept is organized in accordance with the spiral model for Software Development and Enhancement, which was defined by Barry Boehm (1986). Intended for large, expensive and complicated projects, the spiral model supports a development process that combines elements of both design and prototyping-in-stages in an effort to combine advantages of top-down and bottom-up concepts.

In FarFish, each iteration of the prototype development work is based on a five-step-process, as shown in Figure 1:

1. Collection and collation of biological and socioeconomic data from all case studies;
2. **Development of FarFish guidelines for making MRs;**
3. Development of FarFish toolbox;
4. Development of MRs for each case study, based on the FarFish guidelines;
5. Audit and evaluation of the prototypes for guidelines, toolbox and MRs based on functionality, applicability, risks and suggested adaptations and revisions.

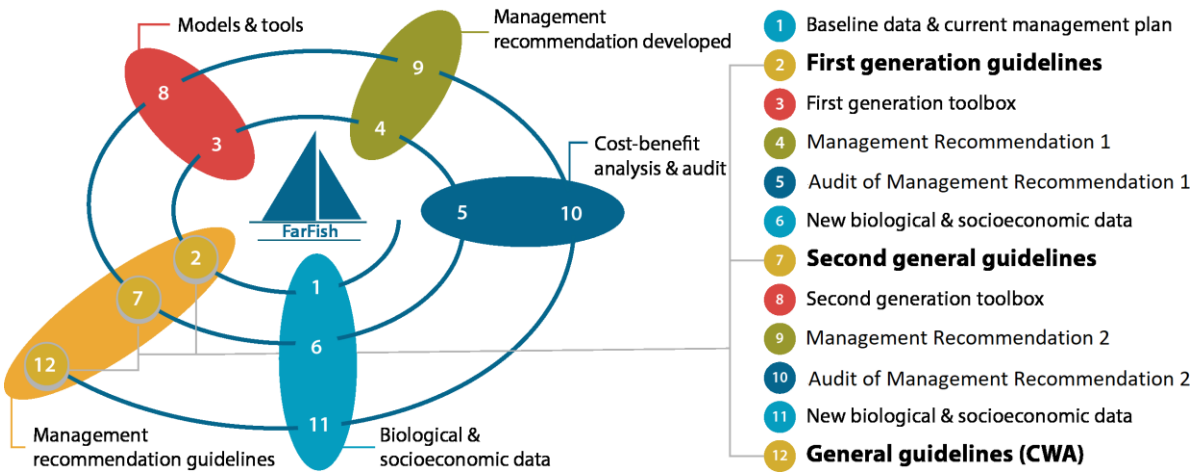

Figure 1: The spiral development model used for implementing Responsive Fisheries Management System in FarFish

One of the first outputs of FarFish is the MP0 (Management Plan zero), which serves as the first stage in the development of a responsive management plan and provides case study specifications relevant for the MRs. MP0 describes the current status of the fisheries in question, provides suggestions for RFMS entities within each case study (i.e. who should serve as authorities and operators), as well as

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contact information for relevant stakeholders. It also serves as background information when defining candidate outcome targets (OTs)[5].

The work within each FarFish case study (CS) follows this iterative process, meaning that the initial draft of the General Guidelines for making MRs is to be revised and published again as 2nd draft version (this document) – and then revised again before being published as a CEN workshop agreement (low - level European standard) before the project end. This allows for organised revision of all aspects of the project outputs, implementation of novel ideas and new data at different stages in the process, as well as quicker response to external and internal opportunities. The second and third iteration loops will therefore reduce the risk of such critical inputs being ignored during the lifetime of the project, making the FarFish spiral working process adaptable and more likely to deliver realistic and applicable guidelines for making MRs which can be successfully applied after the project end.

1.2 The Responsive Fisheries Management System (RFMS)

The responsive fisheries management systems (RFMS) is based on the principles of results-based management (RBM), which is defined as follows in the EcoFishMan project Description of Work:

> *"Defining an acceptable impact and leaving it to resource users to identify the means to meet the requirements and to document the effectiveness of the means, and ultimately achieve the requirements."*

The basic rationales of RBM are captured in the Commission's Green paper from 2009, on the reform of the Common Fisheries Policy, which explicitly links RBM to a shift in the burden of proof (CEC, 2009):

> *The industry can be given more responsibility through self-management. Results-based management could be a move in this direction: instead of establishing rules about how to fish, the rules focus on the outcome and the more detailed implementation decisions would be left to the industry. Public authorities would set the limits within which the industry must operate, such as a maximum catch or maximum by-catch of young fish, and then give industry the authority to develop the best solutions economically and technically.*
>
> *Results-based management would relieve both the industry and policy-makers of part of the burden of detailed management of technical issues. It would have to be linked to a reversal of the burden of proof: it would be up to the industry to demonstrate that it operates responsibly in return for access to fishing*.

[5] See information on RFMS entities and OTs in later chapters of this document.

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RFMS constitutes as an ecosystem-based sustainable management system under a precautionary framework that will define maximum acceptable (negative) impact, collect and expand on fisheries-related data, and maintain economic and social viability. Implementation of the RFMS will involve resource users directly in the management and decision-making processes and give them responsibilities with regards to self-sampling, risk analyses and provision of data on performance indicators.

As a particular type of co-management, RFMS is distinctive in that it entrusts resource users with new management responsibilities. Implementing RFMS in data-poor fisheries, where monitoring, control and surveillance (MCS) is limited has its advantages, as it involves the resource users in the management decision process and gives them a sense of ownership of the MRs. It also places responsibilities on their shoulders to provide documentation on the performance of the MRs, i.e. reversing the burden of proof. Data gathering thus becomes a task for which the resource users are responsible for, allowing for less expensive and higher coverage of data points.

Building on RBM, the RFMS is a process with three main agents: Authorities, Operators and Auditors (Nielsen et al 2018). The ***authority*** is a democratically accountable entity entrusted with the final resource management responsibility. They oversee the RFMS process and issue the "MR invitation", which includes specification of measurable objectives, so called "Outcome targets" (OTs), set in order to operationalize goals of existing policies. The ***operator*** is an organised group of resource users, e.g. an association of fishermen with rights in a given fishery. They develop, propose and implement a MR which they develop based on the OTs set by the authority. The goal of the MR is therefore to achieve the OTs and to document the effectiveness of chosen strategies to reach those OTs. The authority then has the power to accept or reject the MR, based on its performance against the OTs. Finally, the ***auditor*** is an independent agent with capacity to audit the MR performance. He reviews documentation, evaluates the extent to which OTs have been achieved, and submits the audit to the authority and operator(s). The RFMS therefore conceptualizes RBM as a contract between an "authority" and one or more "operators" and, in practice, this contract is the MR. RFMS does not introduce new objectives or rules but stipulates a conditional reallocation of responsibilities and provides a template for a process that empowers recourse users, enhances transparency, and enables the use of locally adapted management measures.

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All of these three agents, authorities, operators and auditors, therefore have specific roles and responsibilities within nine different steps of the RFMS process, as shown in Figure 2:

1. Pre-invitation dialogues;
2. MR invitation;
3. First proposal of MR;
4. MR evaluation and polishing;
5. MR public hearing and approval (issues raced during public hearing may require revisiting previous steps);
6. MR implementation, control and documentation;
7. MR audit;
8. MR adaptation (if needed);
9. RFMS process log.

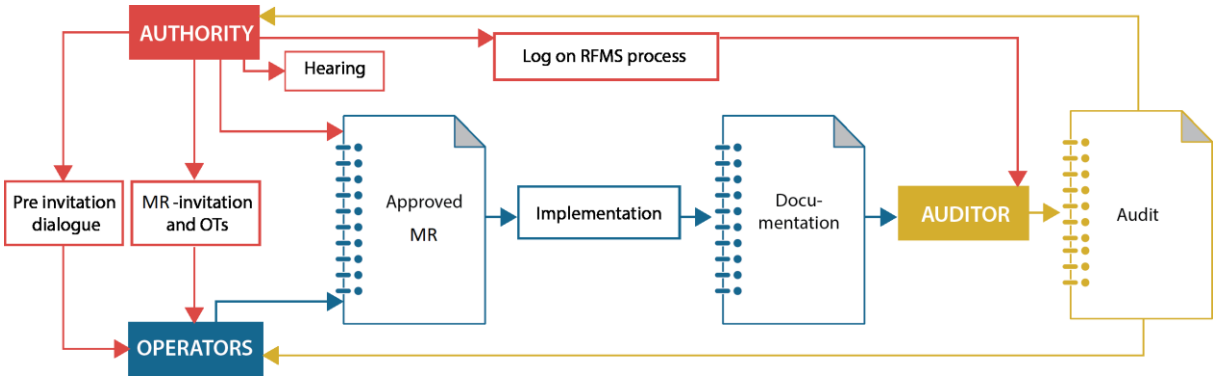

Figure 2: The RFMS process. The responsibilities of each of the three entities are demonstrated with different colours. Authority: red / Operators: blue / Auditors: yellow.

Outcome Targets

Outcome targets (OTs) are specific and measurable requirements set by the authority and presented to the operators in the initial MR invitation, in order to reflect overall policy objectives in terms of biology, environment, economics and society. In European waters, the main biological OTs generally deployed in a CFP context is MSY. Hence, MSY related OTs should be set when designing biological OTs in relation to stock sustainability, when appropriate. However, aiming for MSY as an OT in SFPA and high- seas fisheries might not always be appropriate. This is mainly due to the fact that the operators involved in the RFMS process for these fisheries usually only represent a limited share of the fishery in question and cannot be made responsible for achieving biological OTs set as objectives for the stock as a whole. Biological OTs that don't necessarily apply to the stock as a whole but can be applied to particular part of the fleet include for example minimum reference sizes, marine protected areas, discard considerations and OTs related to improved selectivity.

As the 2013 CFP reform stated that "…the Union shall conduct its external fisheries relations in accordance with its internal obligations and policy objectives", environmental policies that apply and must be implemented in a CFP area (i.e. the Marine Strategy Framework Directive (EC 2008) and the

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Habitat Directive (EC 1992)), should be used for reference when designing environmental OTs in SFPA fisheries. Ideally, the authorities in question should define these OTs in line with CFP environmental policy objectives, when possible. The same applies to economic and social OTs, that is, that they should also strive to ensure that EU fisheries outside Union waters are based on the same principles and standards as EU fisheries within EU waters, when possible.

While being based on CFP policy goals, translating biological, environmental, economic and social policy goals into relevant OTs in SFPA and high-seas fisheries must also take regional and local policies into account, where relevant. The OTs must be defined in terms of variables that the operators are in a position to control, otherwise the responsibility to achieve the policy objectives in question cannot be meaningfully shifted from the authority to operators. It is recommended that the OTs, to the extent possible, are set in a way that they do not need to be updated annually (e.g. it is better to define OTs in terms of SSB or F as compared to in terms of TACs).

Incentives

The concept of the RFMS is based on the prerequisite that operators and authorities mutually benefit from engaging in the process. They should therefore ideally enter RFMS on voluntary basis, as without the appropriate incentives being in place the whole approach cannot work. Incentives on the authorities' side can for example be improved catch documentation schemes and data availability, more selective fishery, reduced cost of MCS, more responsive management, increased considerations for socio-economic impacts etc. Incentive for the operators can include extra quotas, access to fishing grounds, prioritisation when negotiating fishing rights (e.g. next SFPA), increased trust following the reversion of the burden of proof (image), reduced need for on-board observers etc.

The ultimate incentive for all parties involved in the RFMS is increased sustainability of the fishery, avoiding overfishing, which will benefit all in the long run.

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2 RFMS agencies: Roles and responsibilities

There are three principle entities (agencies) that have specific roles and responsibilities within the RFMS process. These are the authorities, operators and auditors. Following are descriptions of the identity of these agencies and clarifications on their roles and responsibilities.

2.1 Authorities

The ***authority*** is an organizational entity enacting authority in pursuit of the management objectives predetermined for the fishery in question. It represents the interests of the public and is ultimately responsible for the management. Regarding who takes on the role of authority during the MR development under RFMS is often straight forward, as this responsibility lies with the fisheries management authority in each case. When focusing on a fishery occurring within the coastal waters of the fleet in question, the roles of operators and authorities can easily be allocated. However, this isn't always that simple. In practice, fisheries management authority must in some cases be exercised through a nested system. This will often be the case for fisheries in the CFP area, where responsibility for conservation is placed at a CFP level, while responsibility for implementation and allocation is placed at a member state level. In high-seas fisheries and EU fisheries in non-EU waters under Sustainable Fisheries Partnership Agreements (SFPAs), this might become more complicated. In fisheries under SFPA, the EU makes the agreement (including annual EU fishing opportunities and the number of EU vessels) on behalf of its member states and therefore the responsibility for conservation is placed at the CFP level. However, the EU vessels entering non-EU waters under the SFPA are under the supervision of the flag member states and coastal states, making them accountable for responsible harvesting in line with the agreement. Finally, there is the third country authority, which is responsible for managing its fishery resources. In these cases, the role of authority within the RFMS context will lie with the EU (DG Mare) and the fisheries management authority of the non-EU coastal state. How the responsibilities within the RFMS context should be distributed between these two entities will be clarified through the work within the case studies in FarFish.

In high-seas fisheries, the role of the authority can belong to the RFMO, where one has been established and is operational for the area. In the absence of an RFMO, the application of the RFMS will be a major challenge, as the existence of a competent authority is a prerequisite for the application of RFMS. At this stage, no specific guidelines exist on how to deal with high-seas fisheries of this nature beyond what is stipulated under UNCLOS and UN legislative instruments.

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2.2 Operators

The ***operator*** is an organizational unit entrusted with the responsibility to develop and implement the MR, provided that it fulfils requirements defined by a management ***authority***. Successful development and implementation of MR requires a well-organized and committed operator. In theory, it could be one or more groups of fishermen fishing for the same type of resource and/or could be specified in terms of gear type or fishing areas. Ideally, the operator should represent all resource users in a fishery, as this would offer the operator with the full potential to develop and implement a MR. In contrast, an operator that only represents a share of a fishery will have much less scope for developing an effective MR. Accordingly, an effective RFMS MR in FarFish might require cooperation between several EU fisheries organisations, potentially from different Member States and even using different types of fishing gears. These parties would then need to act as a common operator during the development of MR for each of the species within the SFPA water in question. Another option would be to create separate MR for each gear type used for catching the target species in question. In cases where the SFPA cover mixed fisheries, selecting one or more fisheries to enter the RFMS process might be necessary as a starting point, as initiating multiple processes simultaneously might be inefficient, expensive and simply too complicated for all parties. Whether the fleet of the third nation (or other foreign fleets with access/fishing rights) in which the fishery occurs, is to be included in the MR or not, will differ between cases. This will be based on capacity of the fleet, available data and management capacity of the country.

2.3 Auditor

The ***auditor*** is a research organization or certification body hiring experts capable of analysing and reviewing the documentation provided by the operator during the implementation of a MR. The main purpose of the audit is to evaluate whether, or the extent to which, the OTs have been achieved. The quality of the submitted documentation will also be assessed, as adequate documentation is part of the requirement for access to the resource in a RFMS. Ideally, the auditor(s) should be independent (e.g. an expert group or certification body without strong institutional linkages to authority and operators). One question to be resolved is how the auditor can be funded without undermining its independence from the authority and the operator.

For pragmatic reasons, a relevant but non-independent agency (e.g. a National research institute or Universities) may be used as auditor, provided it is trusted by both parties. Some level of independence is nevertheless necessary in order to increase transparency and external credibility of the audit. A necessary minimum of independence would for instance imply that persons involved in the audit work cannot also be involved in the work of the other RFMS agencies.

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2.4 Roles and duties of the RFMS entities

Viewed as a contract, an approved MR will specify the conditions for the operator's use of the resource. At present, there is no legal definition of RFMS, and it will therefore currently not imply legal changes in the distribution of rights and duties between the contracting partners. The agreements in the MR could potentially be formalized and signed as a formal contract between the two parties (or more parties, as could be the case in SFPA and high-seas fisheries) in order to increase their mutual confidence in the agreement. A contract opens for the possibility of negotiating details between RFMS entities. For instance, authority and operators may agree that certain OTs will not change within a certain time frame, or that they will only change given pre-determined circumstances.

Essentially, the MRs are strategies on how to achieve the OTs set by the authority. In the proposed recommendations/plans, the auditor(s) will evaluate whether the operators are being successful in meeting the OTs. They will inform the authority, who can request revision of the MR if progress on the OTs is not satisfactory. The authorities will also look at how the operator will provide information that allow for an audit. The MR will formally be proposed by the operator, although the authority or contracted research services may assist with the MR development. In practice, a draft MR may circulate between the operator(s) and authority until it is found acceptable to both parties, that is, when the strategies set forward in the draft are considered sufficient to achieve the OTs and considered practicable by the operator(s). As long as the operator suggests a realistic strategy towards achieving the OTs (and those fall within the legal framework), the authority will not interfere in the operator's planning of management measures. This is in order to ensure that operators have flexibility to invent, design and implement effective management measures. Table 1 shows an overview of the main roles of the three RFMS entities within different steps of the RFMS process.

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Table 1: Overview of main roles of the three RFMS entities within different steps of the RFMS process, including development, approval, implementation, audit and adaptation of management recommendations (MRs).

	MR Invitation	MR development and approval	MR implementation	MR audit and adaptation
Authority	- Initiates and/or participates in pre-invitation dialogues - Writes MP0 and MR invitation, including OTs	- Oversees RFMS process and process log - Evaluates MR proposal from operators - Requests revisions or clarifications if needed (MR polishing) - Arranges public hearing on MR - Requests revisions/ approves/rejects the MR	- May provide MR services (e.g. research and enforcement) if agreed in the MR	- Revises OTs and requests MR revisions, if needed and requested by auditors
Operator	- Initiates and/or participates in pre-invitation dialogues and meetings with authority	- Develops, revises and submits the initial MR proposal, including strategies for achieving all obligatory OTs	- Implements approved MR - Arranges MR services (control and monitoring, research, enforcement, etc. - Collects data for MR audit	- Adapts MR if requested by authority
Auditor			- Receives and analyses documented data from operators	- Periodically audits MR performance on OTs, based on operator's documentation - Audits the RFMS process through the authority's RFMS process log

As the overall responsibility for resource management remains with authority, it must keep itself informed of recent reports of the auditors and act if OTs are not met. The authority may decide on certain conditions to be met within a certain time limit[6].

[6] Such conditions and time limits could be suggested by the auditor but must be decided upon by the authority.

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3 The RFMS process

The RFMS process includes pre-determined steps that each of the agencies involved are responsible for. This process is explained in this chapter.

3.1 The process – step by step

The RFMS process is broken into nine key steps, as shown in Figure 2. These include iterative feedback loops that are intended to lead to the development of practical and applicable MR that can successfully meet with appropriate OTs. These steps are as follows:

3.1.1 Starting dialogues – "pre-invitation dialogues"

The RFMS process should begin with dialogues between the authority and the operator(s), which preferably should be initiated and facilitated by the authority, but can also be initiated by the operator(s). The purpose of these dialogues is to create mutual understanding of the RFMS process ahead, including discussion on main potential costs and benefits for both parties, main obstacles, as well as the roles and responsibilities of both parties. If the conclusion from this initial dialogue is that creating MR under the RFMS approach is feasible, the process should be taken to the next level.

KEY QUESTIONS TO BE ADDRESSED DURING PRE-INVITATION DIALOGUES

- What is our aim?
- Who is to be included in the process?
- What is our timeframe?
- What will our main challenges be?
- What will the main costs and benefits be?

Responsible entity: Authority and/or operator(s).

3.1.2 The MR invitation

If the parties agree that RFMS should be pursued in the given context, the authority prepares an invitation for MR development. The MR invitation identifies specific and measurable requirements, the OTs, that are to be achieved. The MR invitation does also include MP0 (Management Plan Zero), which is a description of the current status of the fishery.

Responsible entity: Authority

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3.1.3 The MR proposal

Responding to the MR invitation from the authority, the operator proposes a management recommendation (MR), with details on how OTs can be achieved through a suggested set of management measures. The operator may cooperate with relevant scientific bodies or individuals during the development of the MR, such as through modelling of the effect of suggested management strategies and measures. Such input would not only increase the effectiveness of the recommendations/plans, but also help to create a robust and convincing MR, more likely to be approved by the authority. The MR should further establish monitoring and control practices and responsibilities of the fishery/fisheries in question.

Responsible entity: Operator(s)

3.1.4 MR evaluation and polishing

After evaluating the operator's MR proposal, the authority may request revisions or clarifications. Furthermore, a complete MR draft will be "quality checked" by the authority. The focus of this check is two-fold: a) Does the MR present a convincing strategy for achieving the OTs? b) Does the MR include an adequate strategy for collecting information and data that allows for auditing of the MR performance? If needed, the authority may seek expert support for undertaking this quality check from either a relevant science body or the auditor(s) appointed in the MR. This process is likely to include several iterations.

Responsible entity: Authority

3.1.5 MR hearing and approval

Before formally accepting the MR, the authority should ideally arrange a public hearing on the MR proposal, allowing comments to be raised by all relevant stakeholders and interested parties. The purpose of this hearing is to promote transparency, public awareness and public discussions on the MR. How issues raised during the hearing should be reflected in the MR before it can be approved will be up to the authority. This will though have to be done in consultation with the operators and might even require revisiting previous steps in the RFMS process.

Responsible entity: Authority

3.1.6 MR implementation, control and documentation

If an MR is approved by the authority, the operator is to proceed with its implementation. The operator may in some cases seek assistance from the authority on certain aspects of the implementation, for instance, asking the authority to supply enforcement services, etc. The operator is responsible for collecting and documenting the relevant information and data required to access the performance of the MR and whether or not the OTs are being achieved.

Responsible entity: Operator(s)

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3.1.7 MR Audit

The documentation provided by the operator during the implementation of an approved MR is reviewed by an auditor. The auditor assesses whether or not (or the extent to which) the OTs are being achieved and provides updated information on implemented management actions and their apparent consequences and results. This assessment provided by the auditor will serve as a basis for drafting a modified MR, if needed.

Responsible entity: Auditor(s)

3.1.8 MR adaptation

If the audit demonstrates that the OTs have been or are being achieved, the operator may proceed with the implementation of the MR. If the OTs are not being met, the authority may request revisions for the MR, set stricter requirements, or implement other sanctions.

Responsible entity: Authority and operator(s)

3.1.9 The RFMS process log

To enhance transparency and other aspects of good governance, a log of key events in the RFMS process should be provided by the authority; and be made available to interested parties. Such key events include main meetings between the operator and the authority, submission of the MR invitation by the authority, submission of the initial MR by the operator(s), MR hearing, and MR approval. The authority should provide dates and minutes from all such milestones within the process. A good RFMS process log by the authority will not only provide transparency to all involved parties and other interested stakeholders, but can also be used by the auditor(s) as a basis for evaluating the RFMS process (e.g. to assess the timeliness of responses from the authority).

Responsible entity: Authority

3.2 RFMS process in international and SFPA waters

While the RFMS framework developed in the FP7 project EcoFishMan was not designed particularly for fisheries within international waters or SFPA waters, the framework should be applicable for these fisheries as well. While the process and key events remain the same, some elements will need to be modified to be applicable in the context of the high-seas and SFPAs.

For the high-seas fisheries the multiple operating groups need to be accounted for, as a productive fishing grounds in international waters can be targeted by multiple fleets. The responsibility of the authority within the RFMS framework lies with the Regional Fisheries Management Organisation (RFMO), where one is in place. However, when no RFMO is operating within the area, the situation becomes much more complicated, as it has been debated for more than 50 years who should govern the high-seas. There is also an ongoing debate on international ocean governance at the EU and the process of management of biodiversity in areas beyond national jurisdiction (BBNJ). The existence of

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a competent authority is a prerequisite for the RFMS approach to work and at this stage in the FarFish project, no guidelines exist on how to deal with this challenging issue.

In fisheries under SFPAs, there should ideally be two main authorities with shared responsibilities within the RFMS process: the EU authorities as well as authorities from the non-EU nation (coastal state) which has signed an SFPA with the EU. Relevant RFMOs can also play an important role in assisting the non-EU coastal states. In terms of participating operators, the ideal scenario would be to have all fleets fishing in the area involved, as this will deliver the most effective and robust MR. It is however recognised that under current regime it is unlikely that foreign fleets other than the EU fleet will take part in such an initiative. Figure 3 shows an ideal scenario for MR development according to the RFMS framework where all relevant authorities and operators are involved in the process; and alternative scenarios where only part of the relevant agencies take part.

IDEAL SCENARIO **Participation in the RFMS framework within SFPA fisheries**		
Authorities		
DG Mare	Coastal state authorities	
Operators		
EU distant water fleet	Other foreign fleet(s)	Coastal state national fleet

ALTERNATIVE SCENARIO 1 **Participation in the RFMS framework within SFPA fisheries**	
Authorities	
DG Mare	Coastal state authorities
Operators	
EU distant water fleet	Coastal state national fleet

ALTERNATIVE SCENARIO 2 **Participation in the RFMS framework within SFPA fisheries**	
Authority	
DG Mare	Coastal state authorities
Operators	
EU distant water fleet	

ALTERNATIVE SCENARIO 3 **Participation in the RFMS framework within SFPA fisheries**
Authority
DG Mare
Operators
EU distant water fleet

Figure 3: Ideal and alternative scenarios for participating parties within FarFish RFMS process for MR development.

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The complexity of RFMS MR development in high-seas and SFPA fisheries will differ significantly between cases, primarily depending on the number of different operating groups, their willingness to cooperate, participation of different authorities and the data availability. For the implementation of the FarFish project in accordance with the Description of Action (DoA), it has been concluded that scenarios 2 and 3 are the only ones realistically feasible for the beta-test of the RFMS.

Authorities – SFPA fisheries

In SFPA fisheries, there are two entities that could serve as authorities in the RFMS framework: the EU authorities (DG Mare) and the authorities of the nation which has signed the SFPA with the EU. Ideally, these two should work together in initiating the MR dialogue and invitation to the operators, however, this is not a requirement. The EU authorities (DG Mare) can proceed with the RFMS process regardless of whether the non-EU authorities are joining or not, as long as they have the EU fleet operating in the SFPA area in question on board in the process. However, although the non-EU authorities can initiate the RFMS process, they cannot proceed unless the EU authorities are willing to cooperate.

Operators – SFPA fisheries

The FarFish MRs will focus on the EU fleet fishing within the waters of non-EU SFPA countries as the operators of the RFMS process. This means that as long as the EU fleet fishing in the area is willing to cooperate and commit to the operator's responsibilities within the RFMS process, the MR development and implementation can go ahead. However, as the EU fleet is not the only fleet operating in these waters, having other foreign fleets and the national fleet included in the RFMS process is of great advantage and will make the MRs considerably more robust and effective. How the operator's RFMS obligations and responsibilities are to be split between the different groups of operators (the EU fleet and the national fleet) should primarily depend on the fleets' share in annual catches as well as their capacity and willingness to contribute to data gathering and documentation. Obligations and responsibilities are however issues to be addressed in the dialogue with the authorities.

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4 General guidelines: MR development, implementation and evaluation

Some of the main steps in the RFMS process is the authority's MR invitation, the operator's development of MR proposal and the authority's 'quality check' of the operator's proposal. If the MR is approved by the authority, it will be implemented by the operator(s). The performance of the recommendations will subsequently be audited periodically by the appointed auditor. Based on the audit, the authority may request a revision of the MR, in order to ensure that it meets the OTs. These following sections will provide guidelines tailored for each entity involved in the process: the authority, the operators and the auditors. Each step within the RFMS process is the responsibility of one of these three entities and these guidelines will elaborate on how these steps are to be initiated, performed and implemented.

4.1 Guidelines and checklist – Authorities

4.1.1 Pre-invitation dialogues

The initial step of the RFMS process is when the authority initiates a dialogue with the operator(s), which, if both parties agree on continuing the process, ends with the authority formally inviting the operator(s) to propose a MR for specific fishery over particular time period.

The authority and the operator(s) make an initial contact and set up a meeting to discuss potentials and limitations of creating MR within the RFMS framework. As this initial meeting should clarify whether pursuing an MR development under the RFMS framework is feasible or not, it should be well prepared in terms of what should be discussed and what needs clarification. What is to be achieved, what the main challenges will be and what each party will gain and loose, are some of the key questions to be answered in this meeting. The meeting would also be an occasion for operators to decide if they prefer to implement RFMS in one go or through a specified transition scenario, during which an increasing part of the fishery (vessels, species, TAC share, area) is included in the RFMS. Successful pre-invitation dialogues can severally reduce the likelihood of unexpected incidents or obstacles arising along the way.

Once this first meeting has taken place, the authority should make a public announcement on the initiation of the dialogue, including who's involved and what the aims are. This step is to offer transparency and ensure participation by interested stakeholders (other than the operators) in the upcoming public hearing of the MR.

This step will not only help clarify whether the process is worth pursuing, but is also likely to promote the operator's participation and inclusion in the planning process from the beginning, foster mutual understanding of main aspects of the process, and initiate a constructive dialogue between authorities and operator(s).

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When the concept of RFMS has been discussed and clarified during the pre-invitation dialogues, the next agenda item should ideally involve the authority presenting the candidate OTs to the operator(s), and inviting the operator(s) to discuss them. As OTs can both be recommended and obligatory, the authority must at this stage also describe the priority level assigned to each OT, thus avoiding any misunderstanding regarding the direction and goals of the RFMS process. This can however be done in a separate meeting. Although the OTs will be set forward by the authority, it is important that the operator(s) get an opportunity to discuss them and put their own perspective and needs forward. It is important at this stage to keep in mind that the OTs can be adjusted during the RFMS process and, in some cases, revised after a certain time period post implementation, if significant changes in conditions are observed.

In the context of RFMS and RBM it should be entirely up to the operators to identify how they can achieve the OTs set by the authorities. In the context of high-seas and SFPA fisheries, it is however clear that operators cannot be made solely responsible for achieving at least some of the OTs, as they might be in the form of e.g. policy recommendations, changes in regulations or requirements set by e.g. EU, Member state, flag state, coastal state or RFMOs; or can be in the form of identification of necessary research and/or knowledge building needs.

Gathering all relevant authorities

Fisheries governance in the CFP involves authorities at different levels, which primarily includes a CFP level (the Council of Ministers, the European Parliament and the Commission) and a member state level (e.g. the national ministry of fisheries). The appropriate level of the authority that will be in contact with the operator(s) depends on the fishery in question. For fisheries occurring in non-EU waters under an SFPA, the authority should be on a European level (e.g. DG Mare), while having the authorities of both the EU Member State(s) fishing in the area, as well as the national authorities of the non-EU country in question is beneficial. Different types of OTs can also sometimes be set by different authorities. For example, the responsibility for setting key biological OTs could be on a European level, while the responsibility for setting socio-economic OTs for the main nations conducting fishery within an SFPA can be set by the EU Member State(s), and socio-economic OTs relevant for the non-EU SFPA country can be set by the national authorities. For a fishery taking place in international waters (high-seas fisheries) the authority should ideally be exercised at regional level where an RFMO is in place. In the absence of an RFMO the application of the RFMS will be a major challenge, as the existence of a competent authority is a prerequisite for the approach to work. At this stage there have not been established guidelines within FarFish on how to deal with this challenging issue.

Gathering all relevant operators

An effective RFMS MR in FarFish may require cooperation between several fleets, acting together as operators. For SFPA fisheries, cooperation between several EU fisheries organisations, potentially from different Member States and even using different types of fishing gears, might be necessary. Ideally,

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other non-EU fleets operating in the area, as well as the national fleet of the coastal nation, would be included in the process. Whether or not the coastal fleet will be included in the RFMS process will primarily be based on the capacity of the fleet, their willingness to cooperate, available data and management capacity of the country.

4.1.2 MR invitation

The MR invitation is a formal document, which is submitted by the authority to the operator(s), but should be made public in order to promote transparency. The guidelines for the MR invitation for authorities presented here is general and should be adapted and specified in the given context, resulting in a case specific MR invitation. Reading the guidelines for the operators in section 4.2 should help give authorities context and better understand the needs for this step. The MR invitation should bring forward and communicate positive incentives to encourage the operators to participate in the RFMS framework, rather than remaining within the existing management system.

The MR invitation should include three sections: a) Introduction, b) MP0 and c) Outcome Targets. The structure and content of each section is described below (with check-lists).

Introduction

The MR invitation should start with an introduction that should include the following specifications:

INTRODUCTION OF THE MR INVITATION SHALL INCLUDE

- ☐ **The main focus and purpose of the MR requested.**
- ☐ **The identity and main characteristics of the fishery in question: targets species, location, brief notes on the ecosystem and mixed fisheries context.**
- ☐ **Details on the authority that will be leading the process and be in contact with the operator(s). Provide name(s) of contact person for communication with operators. If participating authorities are more than one, the details on all should be listed.**
- ☐ **The identity and main characteristics of operator(s) qualified to respond (share in the fishery, fleet structure, gear type, origin, organizational requirements).**
- ☐ **The time frame for the MR planning period.**
- ☐ **Identification of incentives for operators to participate in RFMS.**
- ☐ **Present rights and duties of operators and authority within the RFMS process**

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Management Plan Zero (MP0)

The MR invitation should also include the MP0, which should give a good overview of the current state of affair for the fishery in question. The MP0, which could require input from relevant experts, is divided into two sections a) Detailing the current state of affairs and the main challenges and b) potential for improvements using new or existing approaches/tools.

MP0 should include the descriptions of:

- **Geographical and biological boundaries, details on current data collection, assessment approaches, the fishery activity and production in the area.**
- **Relevant current management/governance structures and primary objectives of the RFMS process for the fishery in question.**
- **Relevant authorities, operators (fishing industry and stakeholder organisations), as well as other relevant stakeholders.**
- **Current Monitoring, Control and Surveillance (MCS), as well as identification of needs and solutions for MCS**

Outcome Targets and indicators

RFMS requires that operators develop MR that explains how obligatory OTs will be met. These OTs, as well as their level of priority, should be clearly laid out in the MR invitation. OTs are specific and measurable requirements that are set by authorities to reflect policy objectives in the given management context and are either obligatory or recommended.

An OT is a textual or mathematical statement that can be evaluated as ''true'' or ''false'', where ''true'' is the target value. Textual OT: A natural language statement that can be evaluated as ''true'' or ''false'', e.g. ''stock assessment exists'', ''CAP has been developed'' or ''stakeholders have been consulted''. Mathematical OT: Normally an inequality, where one of the terms is an indicator and the other one is a reference point or value. E.g. Catch <= MSY, catch <=MEY or emissions <= limit (political reference point). The actual ''true'' or ''false'' value of the OT in question needs to be evaluated at specific times (e.g. once a year), e.g. based on the indicator and reference point value at that specific time.

An indicator is a variable, pointer, or an index related to a criterion. Indicators are selected in a way that their variations reflect variations in key elements of the fishery resource, the social and economic well-being of the sector and the sustainability of the ecosystem. The position and trend of an indicator in relation to reference points or values indicate the present state and dynamics of the system. Indicators therefore provide a bridge between the objectives and actions (FAO 1999). Example of a biological indicator could be F (Fishing mortality), economic indicator could be EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) and a social indicator could be number of jobs.

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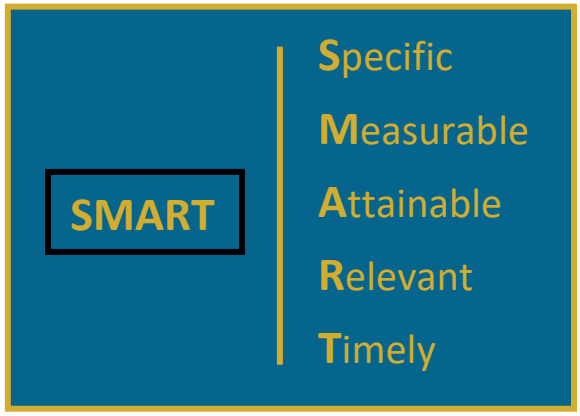
The indicators that relate to OTs should be SMART, i.e. specific, measurable, attainable, relevant and timely. As OTs are an essential element of a successful RFMS process, effort should be made to identify them in a way that the MR can deliver the desirable outcome at the end of the process. If irrelevant and unrealistic OTs are set in the beginning, the MR and the RFMS process is not likely to deliver the desired outcome.



In theory the OTs must be factors that can be controlled by the operators in question through setting and implementing appropriate management measures. OTs that are not within the operators control should ideally not be included in a MR invitation; as the authority cannot delegate responsibility for achieving management goals that underlie such OTs. The reality in high-seas and SFPA fisheries is however that significant part of "desired" OTs cannot be solely delegated to a part of the fleet fishing in a given area e.g. the EU fleet. The theoretical approach of RFMS does therefore have to be adjusted for such fisheries. OTs that cannot realistically be delegated slowly to operators can therefore be identified in the MP invitation, but the operators can then be given the opportunity (in consultation with the authorities) to delegate responsibility to for example research institutions, or identify more appropriate measures to reach/contribute to OTs. These can be in the form of policy recommendations, changes in regulations or requirements set by for example EU, Member state, flag state, coastal state or RFMOs; or can be in the form of identification of necessary research and/or knowledge building needs.

Operators submitting MR for a single fishery can typically not be made solely responsible for achieving the goals of an environmental policy. Therefore, the authority must decide on OTs that enable it to achieve policy goals (through OTs for this and other fisheries and/or through other means). OTs such as those related to MSY will be subjected to uncertainty relating to stock assessment, as well as the efficiency of management measures. In accordance with international conventions this requires that a precautionary approach is taken, such as the one developed within the framework for ICES advice on the exploitation of living marine resources.

The setting of OTs in the MR invitation should reflect biological, environmental, economic and social perspectives of the fishery, but this does not imply that at least one OT should be defined as specific for each perspective. For instance, while a MSY related OT primarily has a biological focus, it will also have implications for the other dimensions. This is also clearly the case if an OT is defined in relation to the concept of Maximum Economic Yield (MEY). While the primary purpose of MEY is to maximize the economic performance of the fishery it would at the same time be associated with lower exploitation rates than MSY and therefore be more conservative in biological terms. Hence, in the case

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that an obligatory OT is defined in relation to MSY for conservation purposes, there is nothing preventing operators to plan for MEY with the additional aim at optimising the economic performance. Indeed, the authority might welcome this as it in the long term would be expected to lead to improved performance of the fishery in both biological and economic terms.

It should be clear which OTs respectively are obligatory and recommended. The inclusion of strategies to achieve recommended OTs will strengthen the MR and make it more likely to be approved by the authority. However, a lack of consideration of recommended OTs should not be a reason for not approving the MR.

Table 2: Examples of OTs of potential relevance in FarFish. The OTs may address different dimensions of the fishery in question, and may be defined at different levels of authority. The authority preparing the MR invitation should assign a clear priority to each OT. The listed OTs and associated levels of authority and assigned priorities are only provided for illustration; these must be established by the authority that prepares a given MR invitation.

	Dimen-sion	Authority level	Example type	Examples
SFPA fisheries	Biological	European	MSY related reference points; by-catch and discard limits; biodiversity protection; habitat protection	Maintain SSB > 100.000t; discard < 5% individuals of commercial species; bycatch of red-listed species= 0; no fishing in defined area A; VME avoidance and move-on rules; gear restrictions
	Economic	European / Non-EU costal state[7]	Minimum EBIDTA; fleet capacity limits	Maintain average EBIDTA > 0 ; not to exceed certain fleet capacity limits
	Social and cultural	EU member state / Non-EU coastal state	Training / Recruiting young fishermen; equal fishing opportunities for national and foreign fleets;	Ensure on-board training opportunities for > X many newcomers; landing in the area; processing in local factories
High-seas fisheries	Biological	RFMO / coastal states	MSY related reference points; by-catch and discard limits; biodiversity protection; habitat protection	Maintain SSB > 100.000t; discard < 5% individuals of commercial species; bycatch of red-listed species= 0; no fishing in defined area A; VME avoidance and move on rules
	Economic	National / member state	Minimum EBIDTA; fleet capacity limits	Maintain average EBIDTA > 0 ; not to exceed certain fleet capacity limits

[7] Refers to the authority or managing body of the non-EU nation in which EEZ the fishery occurs under an SFPA with the EU.

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The OTs that are laid out in the MR invitation should be

- As few and concise as possible.
- Within the operator's power to control through management measures.
- Relevant: Focused on the primary goals of the RFMS process.
- Measurable and possible to regularly monitor.
- Consistent with and contribute to achieving goals of relevant policies (for fisheries, market, and the marine environment).
- Consistent with relevant international conventions.
- Clearly labelled as either an obligatory OT or a recommended OT.

4.1.3 MR evaluation and polishing

Once the initial MR has been submitted by the operators to the authority(s), the authority must review the MR proposal and see if it meets all requirements. Using the MR development checklist for operators (section 4.2.2) could serve as a starting point. Main focus should be put on evaluating whether the strategies and management measures proposed by the operators are a) likely to result in obligatory OTs being met, b) can realistically be implemented. The authorities should also make sure that the proposed MR includes strategies for information and data collecting that allows for auditing of the MRs performance

If the MR review reveals issues that should be addressed, either in terms of effectiveness of proposed strategies and measures, their applicability in the given setting, or any other issues that arise which cannot be ignored, the authority should request a revision of the proposed MR from the operator(s). When requesting a revision of the MR proposal from the operator(s), the authorities must include an issue log, containing a) details on the issues that need addressing, and b) proposed solutions or alternatives, if relevant. This should be followed by detailed instructions regarding the timeframe for re-submission, as well as details on any proposed meetings or other dialogues between the operators and authorities, proposed by the authorities, during this timeframe (if needed).

4.1.4 MR hearing and approval

To promote public awareness, acceptance and public discussions on the MR suggested by the operators, the authority should arrange a public hearing. This hearing allows all interested stakeholders and the wider public to review the proposed MR, the OTs and other details of the process. All interested parties or individuals will have an opportunity to comment on both the MR and the OTs, either during the hearing or during a defined public review period after the hearing. The public hearing should be facilitated by the authority after the MR has been submitted by the operators to the

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authority, but before the approval of the MR. How issues raised during the hearing should be reflected in the MR before it can be approved will be up to the authority. This will though have to be done in consultation with the operators and might even require revisiting previous steps in the RFMS process.

Following a successful hearing, the MR can be approved and implemented.

4.1.5 MR adaptation

When a MR has been implemented for a predetermined time, the fishery will be subjected to an audit. After having received the audit from the auditor, the authority will evaluate whether adaptation or revision of the MR as a whole, or individual parts of it, is necessary. If the audit demonstrates that the OTs have been or are being achieved, the authorities should inform the operators, who should then proceed with the MR implementation. If the audit concludes that the OTs are not (or only partially) being met, the authority should request a revision of the MR from the operators. The assessment provided by the auditor (the audit) can serve as a basis for drafting a modified, new version of the MR.

If significant changes in conditions have occurred during the implementation phase of the MR, e.g. change in the size of target stock in question or fleet structure, these can significantly influence the progress of achieving the OTs set in the approved MR. This could lead to a negative audit and thus require the authorities to reach out to the operators and revisit both the OTs and the MR, a process ending with a new version of the MR which will then be implemented.

However, if significant changes in conditions have occurred, this could lead to the incentives of initially entering the RFMS process no longer being valid, costs being outweighed by the benefits of the process, or other issues that either result in the RFMS process no longer being desirable or major disagreement between the two entities on critical aspects of the OTs or MR. Such major changes in conditions can therefore result in termination of the MR by both parties.

4.1.6 Log on RFMS process

The authority should make information on the whole RFMS process available in the form of a process log. The process log should include: a) minutes from all meetings, b) details on all key events, such as the public hearing, c) all comments received from stakeholders during the hearing and/or the public review period, and d) all key documents, such as the MR invitation and MR drafts.

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4.1.7 *Checklist – Authorities*

The authority is advised to address the following checklist to promote progress in the RFMS process.

RFMS PROCESS CHECKLIST

Authorities

- ☐ Initiate and facilitate pre-invitation dialogues with operator(s) in order to provide overview of the RFMS processes, to discuss/agree on details and see if pursuing the RFMS process is feasible in the given context.
- ☐ Prepare MR invitation, reflecting outcome of the pre-invitation dialogues.
- ☐ The MR invitation includes both MP0 and OTs.
- ☐ Make sure that the selected OTs are coherent and consistent with other policies.
- ☐ Ensure constructive dialogue with operators and provide feedback on the operator(s) MR drafts.
- ☐ Evaluate the operator(s) MR proposal, including whether strategies and measures are satisfactory in terms of reaching obligatory OTs.
- ☐ If MR submitted by operator(s) is not satisfactory in terms of meeting OTs, authorities must request a revision of the MR proposal, including issue log and timeframe (MR polishing).
- ☐ Arrange a public hearing (if deemed appropriate).
- ☐ Address issues raised at the public hearing in cooperation with operator(s).
- ☐ Approve the MR.
- ☐ Maintain a log of the entire RFMS process, accessible to all interested parties. The log should list the dates of key events in the RFMS process and minutes from meetings.

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4.2 Guidelines and checklists – Operator(s)

4.2.1 Pre-invitation dialogues

The initial step of the RFMS process is when the authority initiates a dialogue with the operator(s), which, if both parties agree on continuing the process, ends with the authority formally inviting the operators to propose MR for specific fishery over particular time period. While this step is usually in the hand of the authorities, the operator(s) also have a big role here and should be well prepared for this initial meeting.

The authority and the operator(s) make an initial contact and set up a meeting to discuss potentials and limitations of creating MR within the RFMS framework. As this initial meeting should clarify whether pursuing MR development under the RFMS framework is feasible or not, it should be well prepared, both by the authorities and the operator(s), in terms of what should be discussed and what needs clarification. What is to be achieved, what the main challenges will be and what each party will gain and loose, are some of the key questions to be answered at this initial meeting. The meeting would also be an occasion for the operators to decide if they prefer to implement RFMS in one go or through a specified transition scenario, during which an increasing part of the fishery (vessels, species, TAC share, area) is included.

Once this first meeting has taken place, the authority will make a public announcement on the initiation of the dialogue, including who's involved and what the aim are. This step is to offer transparency and ensure participation by interested stakeholders (other than the operators) in the upcoming public hearing of the MR.

For further details on the pre-invitation dialogue, see Pre-invitation dialogues (section 4.1.1) in the Guidelines for Authorities.

4.2.2 MR proposal

The MR that the operator proposes after having received the OTs from the authorities in the MR invitation, will focus on defining strategies on how to achieve these OTs and how (and when) these strategies could be implemented in the given setting. As a lot of relevant information should be included in the MR invitation sent by the authorities (primarily within the MP0 section), this information can be included in the MR proposal. The MR proposal should be structured as follows:

Introduction

Presentation and detailed description the entities involved in this process: the authority (or authorities) in charge of the process, the operator(s) involved and auditors. Main aims of the MR should be explicitly delineated, as well as the identity of the fishery it is valid for, spatial boundaries of the MR and the set time frame.

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Fishery Overview

This section provides a detailed overview of the fishery, including information on recent trends, specific issues and management challenges, such as by-catch and discards. Detailed information on the target species, stock status, fishing patterns, fleet structure, fishing gear should be provided here. This is largely contextual information and may draw from information provided in the MR invitation.

Outcome Targets and indicators

The key management objectives and OTs, set forward by the authorities, are listed here, along with indicators that must be addressed by the MR. In order for the MR to be considered ready for evaluation, it must include a strategy for achieving all obligatory OTs. Strategies for achieving recommended OTs will strengthen the MR and hence make it more likely to be approved by the authority.

Management strategies, management measures and adaptive planning

This section outlines and describes the strategies and key measures by which the operators plan to achieve the OTs. For instance, an OT related to the state of the resource (e.g. MSY related OTs) may be achieved though some combination of catch quotas, gear measures and temporal/spatial restrictions or closures. By working together with relevant experts when necessary, this section will demonstrate how the operators will achieve obligatory OTs through the implementation of strategically chosen management measure(s). When possible, identifying and describing ways for internal monitoring of performance towards achieving OTs is recommended. In cases where sufficient data is available, this could be demonstrated with simulations studies. In data poor situations, this could be demonstrated through simple models and/or be based on adequate expert judgment. In some cases, it may be rather obvious that proposed strategies and measures will achieve a given OT, if implemented. In such cases, modelling and expert work will not be necessary.

The section should also address main risks and uncertainties that may jeopardize the process of achieving obligatory OTs. Where such risks and uncertainties are found to be significant, adaptation and measures to minimize the risks should be identified. In most cases, the main uncertainties to be addressed in the MRs relate to data, implementation of measures and changes in environmental conditions.

In a robust MR the operator(s) show how the MR may be adapted within the planning period to meet changes e.g. in stock size or ecosystem condition. A robust plan is more likely to be approved by the authority. In general, operators and authority are encouraged to maintain a constructive dialogue during the MR development phase, in order to ensure that mutual expectations towards the quality of the MR are satisfactory for both parties, while excessive work is avoided.

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Monitoring, compliance and sanctions

This concerns the extent to which the operator can oversee and ensure that its participants act in accordance to the proposed MR. It also describes how the operator(s) will deal with breaches, when such are detected (e.g. penalties or exclusion). In this section, details on how the responsibility for these functions is to be divided between authority and operator(s) should be outlined, as well as details on how these functions are to be financed and by whom. The section should in particular address:

a) How the operator foresees making members comply with measures agreed in the plan;
b) Ways to monitor compliance to agreed key measures. Monitoring may be carried out by the authority and/or through self-control measures organised by the operator. Obligations for members to report observed non-compliance to agreed measures should be identified.
c) Sanctions systems: In case of breaches, how will operators ensure that damage is prevented or repaired? It is recommended that sanctions (e.g. exclusion of non-complying vessels/personnel) are graduated to reflect the seriousness and the context of the offence.

Documentation

This section concerns how reliable information is collected and made available for an auditor, enabling him (or them) to be confident that the MR is appropriately constructed, and the OTs achieved. The documentation system must enable relevant indicators to be measured at specified points in time so that appropriate management responses can be put in place.

It must be specified in this section which entities will be responsible for collecting and processing data relating to key indicators for OTs (to be submitted to the auditor). The documentation system is described, including data collection sources, methods and timing. It must also be specified how the cost of the documentation system are to be covered.

Auditor

The auditor(s) that will audit the RFMS process and the MR implementation process is identified here. This must be an auditor with a capacity to audit the performance of the MR with regard to the OTs. The operator and the authority should agree on an auditor that they both trust and has agreed to take on the task of auditing the MR. The audit work may be divided between different auditors if their scope and expertise make this necessary.

Planning process

This section reports on the planning and decision-making processes within the operator's organisation(s) with regard to issues addressed in above sections. In general, these processes should reflect good governance ideals. This implies that members of the operator's organisation should be allowed to participate and influence the result (i.e. though a legitimate representation and decision-making processes). Accordingly, roles of representatives and procedures for decision-making within

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the operator organisation should be identified. Rights and duties of members participating in the RFMS process should be described as well as conditions for entering or leaving RFMS. Ways to ensure good communication and transparency should be described. It is recommended that mechanisms are identified for resolving conflicts that can be expected to emerge within and between involved organisations.

The following checklist is intended for the operators when building the MR proposal. It can further be useful for authorities when reviewing the MR proposal from the operators.

MANGEMENT RECOMMENDATION PROPOSAL CHECKLIST

Operators

- ☐ **Does the proposed MR include a strategy and relevant management measures that make it clear how the obligatory OTs will be achieved?**
- ☐ **Does the proposed MR include a strategy for implementation, including timeframe of a) the overall MR implementation, and b) implementation of specific strategies and/or management measures?**
- ☐ **Have risks and uncertainties related to the above-mentioned strategy been identified and analysed?**
- ☐ **Does the proposed MR include a strategy on how to minimize and manage the above-mentioned risks and uncertainties?**
- ☐ **Does the proposed MR include a strategy for monitoring fisheries activities?**
- ☐ **Does the proposed MR include an enforcement and sanctions plan, ensuring that all participants will comply with the measures to be implemented?**
- ☐ **Does the proposed MR include a plan on how information and data will be collected to allow for audit? Does it include details on responsibilities of different participants as well as their time frame?**
- ☐ **Have the operator(s) and authority reached a consensus on who will serve as an auditor and who will cover the costs of an audit?**
- ☐ **Does the proposed MR include a communication procedure between the three entities (operator(s), authorities and auditors)?**
- ☐ **Does the proposed MR include details on how members of the operator's organisation have been informed and involved in the decision-making process of the MR development?**

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4.2.3 MR implementation, control and documentation

Once the MR has been approved by the authorities, following a review process, public hearing, public review period, and revisions (if needed), the next step is the MR implementation. The operators must supply the auditors with detailed documentation of the implementation process, for them to evaluate the progress.

4.2.4 MR adaptation

After the authorities receive the audit from the auditor, which will be primarily based on the documentation provided by the operator(s) on the implementation of the approved MR, the authority may request adaptation or revision of the MR as a whole, or individual parts of it, from the operator(s). However, if the audit demonstrates that the OTs have been, or are being, achieved, the operator may proceed with the implementation of the MR.

In the event of a negative audit and if a request for MR revision has been put forward by the authorities, the operators can use the auditor's assessment as a basis for drafting a modified, new version of the MR. The operator(s) submit the new version to the authorities within a set timeframe, who then provide feedback until all parties agree on appropriate modification.

RFMS PROCESS CHECKLIST

Operators

- ☐ **Participate in the pre-invitation dialogues with authorities in order to provide overview of the RFMS processes, to discuss/agree on details and see if pursuing the RFMS process is feasible in the given context.**
- ☐ **Develop the MR based on the MR invitation from authorities (see "MANGEMENT RECOMMENDATION PROPOSAL CHECKLIST" above).**
- ☐ **If authorities request revision of the MR proposal prior to the public hearing, address issues identified in the issue log (MR polishing) and re-submit the MR.**
- ☐ **Address issues raised at the public hearing and during public review period in cooperation with authorities.**
- ☐ **Once MR has been approved by authorities, initiate the implementation process.**
- ☐ **During implementation: Follow the documentation system established in the MR.**
- ☐ **If authorities request MR modifications after the audit: Draft a modified version of the MR, addressing the main issues identified in the auditor's assessment and highlighted by the authorities.**
- ☐ **Once a modified version of the MR has been approved by authorities, implement modifications.**

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