



# SmartFish Working Papers

No 018

## Course on Monitoring Control & Surveillance



Prepared by  
Pierre Malan



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## **Introduction**

The *Course on Monitoring Control & Surveillance* has been designed to form one of a set of one-week courses aimed at increasing effective fisheries prosecutions in the Eastern and Southern African and Indian Ocean (ESA-IO) Region. The course is intended to have a wide and general application across the varied conditions and capacities in the region. To facilitate this, a system of course development based on competency based training has been utilised. This works through blocks of learning called '*learning outcomes*' that are then broken down into '*learning tasks*'.

The approach taken, while stating clearly what the content of the course will be and what a level of which the students should understand, also leaving flexibility the instructor to adapt the learning tasks appropriate to the local situations.

For each learning task a proposed *teaching method* is suggested, this includes lecture with questions and discussion, group exercise, individual exercise, practical exercise and role play. The practical exercise and role play take place at the end of the course and involve a range of aspects from different learning outcomes

For each learning task there is an indication of how this can be assessed by either a theory based test or a practical based test. A theory test can include multiple choice questions, written tests (such as filling in a logbook), or oral questions, while a practical test can include a demonstration of actions in the field.

## **Learning outcome 1: Introduction to fisheries management and MCS**

### **Purpose:**

To allow participants to understand the basic principles of fisheries management provides the foundation for this course.

<b>No</b>	<b>Learning tasks</b>	<b>Teaching method</b>	<b>Assessment</b>
1.1	Understand the importance of fisheries management and why overexploitation of fish stocks is a global problem	Lecture with questions and discussion	Theory
1.2	Describe the historical prospective to MCS		
1.3	Introduce the elements of monitoring, control and surveillance	Group exercise	
1.4	Understand monitoring and the importance of the data collected to fisheries management	Individual exercise	
1.5	Understand control and surveillance and its importance in relation to IUU fishing		

### **Comment:**

This learning outcome gives a general introduction to principles of fisheries management focusing on a wider setting to incorporate international standards and trends. This learning outcome provides a basic understanding of the concepts of MCS before the course moves into the MCS elements.

## **Learning outcome 2: The legal framework and MCS**

### **Purpose:**

To enable participant's to understand the legal basis behind fisheries management, as well as, the consequences and impacts of the legal framework on the MCS system.

<b>No</b>	<b><i>Learning tasks</i></b>	<b>Teaching method</b>	<b>Assessment</b>
2.1	Understand the basic legal requirements for MSC	Lecture with questions and discussion	Theory
2.2	Discuss national fisheries laws and regulations for MCS	Lecture with questions and discussion / Group exercise	Theory
2.3	Explain the basic principles of international fisheries instruments relevant to MCS	Lecture with questions and discussion	Theory
2.4	Regional fisheries agreements	Lecture with questions and discussion	Theory
2.5	Explain enforcement, deterrence and voluntary compliance - their applications and impacts	Lecture with questions and discussion	Theory

### **Comment:**

This learning outcome introduces a wide approach to the legal principles and frameworks surrounding fisheries. It looks at the links to MCS and how national, international and regional bodies and laws work to support MCS activities. The difference between crime and offence is considered and explored.

### **Learning outcome 3: Understanding MCS strategic planning**

**Purpose:**

To enable participant's to understand the basic principles of MCS strategic planning.

No	<i>Learning tasks</i>	Teaching method	Assessment
3.1	Introduce the key elements of the MCS strategic plan	Lecture with questions and discussion	Theory
3.2	Explain how to design an MCS strategy		
3.3	Explain the importance of information to fisheries management and MCS and the need for effective data management systems	Group exercise	
3.4	Describe how the impact of the MCS strategy can be improved	Role play	

**Comment:**

This learning outcome is a general introduction to principles of MCS and in particular strategic planning. It will also consider the importance of data collection and management.

## **Learning outcome 4: The MCS toolbox**

### **Purpose:**

To enable participant's to understand the different hardware and personnel configurations available for MCS, and the effectiveness of these different tools.

<b>No</b>	<b>Learning tasks</b>	<b>Teaching method</b>	<b>Assessment</b>
4.1	Explain the elements of an MCS toolbox	Lecture with questions and discussion / Individual exercise	Theory
4.2	Understand the cost-effectiveness of the different MCS tools		

### **Comment:**

This module provides participants with a detailed explanation of MCS tools and how these are combined to provide the optimal MCS solution. It includes practical information and discussion on hardware and human and institutional resources and their application in terms of purpose, effectiveness and cost.

## **Learning outcome 5: MCS operational planning**

### **Purpose:**

To enable participant's to understand and apply the principles of operational planning to their work situation.

<b>No</b>	<b>Learning tasks</b>	<b>Teaching method</b>	<b>Assessment</b>
5.1	Explain and demonstrate basic MCS operational planning and implementation, and how it links to the MCS strategy	Lecture with questions and discussion  Role play	Theory  Practical
5.2	Monitoring and feedback		
5.3	Explain basic planning and deployment and understand how it links to MCS performance and economic efficiency		
5.4	Explain how to assess compliance and use this to judge the effectiveness of specific control measures		
5.5	Explain the use of basic risk analysis techniques in MCS operational planning and decision making		

### **Comment:**

This learning outcome aims to provide knowledge and techniques required in MCS operational planning and implementation and to relate these to the practical work situations of the participants. It will introduce and practice techniques relating to stakeholder analysis and link these to planning methods. The module builds on the last learning outcomes' work on MCS tools and how these can be used in the most effective manner to ensure that management measures are complied with. Basic risk analysis techniques are demonstrated and linked to the need for information collection to feedback into the planning process.

## **Learning outcome 6: Practical - Standard Operating Procedures**

### **Purpose:**

To demonstrate the usefulness of standard's operating procedures and to guide participants in developing and revising their own SOPs.

<b>No</b>	<b>Learning tasks</b>	<b>Teaching method</b>	<b>Assessment</b>
6.1	Demonstrate the concept and importance of SOPs	Lecture with questions and discussion	Theory
6.2	Demonstrate the contents of an SOP and how to compile an SOP	Lecture with questions and discussion / Practical exercise	Theory  Practical
6.7	Conduct a mock inspection and compile an SOP based on this	Practical exercise	Practical

### **Comment:**

This learning outcome will focus specifically on SOPs, and in particular their importance in the practical implementation of correct inspection procedures and related activities. This module will be supported by practical exercises and, in total, will have a 1 day practical element included where the participants physically visit a port or landing site to undertake a mock boarding and inspection. The participants will then be required to compile an SOP describing the standardised procedure that should be followed, and any exceptions. The practical will include some of the following: arrest procedures and reporting, inspection procedures and reporting, factory inspection procedures and reporting, species identification, gear identification, measurement and recording, position determination, logbook completion, etc.

## **Learning outcome 7: MCS professionalism**

### **Purpose:**

To enable participants to understand the responsibilities of the players involved in MCS and how to act in a professional manner.

<b>No</b>	<b>Learning tasks</b>	<b>Teaching method</b>	<b>Assessment</b>
7.1	Describe what professionalism is and why it is important for MCS personnel to act in a professional manner	Lecture with questions and discussion / Group exercise	Theory
7.2	Describe a range of actions and behaviours that constitute unprofessional behaviour		
7.3	Describe professional conduct in a conflict situation		

### **Comment:**

This learning outcome gives an overview of responsibilities focusing on the work of the fisheries inspector and law enforcement officer. It covers job ethics and opens up for discussions in relation to professional and unprofessional work practices including corruption.

## Training plan for the Course in Monitoring Control & Surveillance

Lecture No.	Learning Task / Activity	Monday				Tuesday				Wednesday				Thursday				Friday			
	Opening of training course with registration, orientation to course methodology and hand out of documentation																				
1	LO 1: Introduction to fisheries management and MCS																				
2	LO 2: The legal framework and MCS																				
3 & 4	LO 3: Understanding MCS strategic planning																				
5	LO 4: The MCS toolbox																				
6 & 7	LO 5: MCS operational planning																				
8	LO 6: Practical MCS procedures																				
9	LO 7: MCS professionalism																				
	Course assessment and summary																				

La bonne gouvernance et de la gestion des pêches et de l'aquaculture permettent d'améliorer la contribution du secteur à la sécurité alimentaire, au développement social, à la croissance économique et au commerce régional ; ceci en assurant par ailleurs une protection renforcée des ressources halieutiques et de leurs écosystèmes.

La Commission de l'Océan Indien (COI) ainsi que la COMESA (Common Market for Eastern and Southern Africa), l'EAC (East African Community) et l'IGAD (Inter-Governmental Authority on Development) ont développé des stratégies à cette fin et se sont engagés à promouvoir la pêche et l'aquaculture responsable.

SmartFish supporte la mise en œuvre de ces stratégies régionales en mettant l'accent sur le renforcement des capacités et des interventions connexes visant à :

- la mise en œuvre d'un développement et d'une gestion durables des pêcheries ;
- le lancement d'un cadre de gouvernance pour les pêcheries durables dans la région;
- le développement d'un suivi-contrôle-surveillance efficace pour les ressources halieutiques transfrontalières ;
- le développement de stratégies commerciales regionales et la mise en œuvre d'initiatives commerciales;
- l'amélioration de la sécurité alimentaire à travers la réduction des pertes post-capture et la diversification.

SmartFish est financé par l'Union Européenne dans le cadre du 10ème Fond Européen de Développement.

SmartFish est mis en œuvre par la COI en partenariat avec la COMESA, l'EAC et l'IGAD et en collaboration avec la SADC. Une collaboration étroite a également été développée avec les organisations régionales de pêche de la région. L'assistance technique est fournie par la FAO et le consortium Agrotec SpA.

Contact:

Indian Ocean Commission-SmartFish Programme  
Q4 Sir Guy Forget Avenue – P.O. Box 7, Quatres Bornes, Mauritius

Tel: (+230) 427 6502

Fax: (+230) 425 7952

By improving the governance and management of our fisheries and aquaculture development, we can also improve food security, social benefits, regional trade and increase economic growth, while also ensuring that we protect our fisheries resources and their ecosystems.

The Indian Ocean Commission (IOC), the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC) and the Inter-Governmental Authority on Development (IGAD) have developed strategies to that effect and committed to regional approaches to the promotion of responsible fisheries and aquaculture.

SmartFish is supporting the implementation of these regional fisheries strategies, through capacity building and related interventions aimed specifically at:

- implementing sustainable regional fisheries management and development;
- initiating a governance framework for sustainable regional fisheries;
- developing effective monitoring, control and surveillance for trans boundary fisheries resources;
- developing regional trade strategies and implementing regional trade initiatives;
- contributing to food security through the reduction of post-harvest losses and diversification.

SmartFish is financed by the European Union under the 10th European Development Fund.

SmartFish is implemented by the IOC in partnership with the COMESA, EAC, and IGAD and in collaboration with SADC. An effective collaboration with all relevant regional fisheries organisations has also been established. Technical support is provided by Food and Agriculture Organization (FAO) and the Agrotec SpA consortium.

