



# FarFish MPR Kick-off meeting

## Vigo June 26-27

WP4 – Development of Management Plan Recommendations

Nina Mikkelsen and Kåre Nolde Nielsen- UiT



# What do stakeholders need?

Stakeholders	Generic needs



# What do stakeholders need?

Stakeholders	Generic needs
Authorities	Sustainability, transparency, employment, income








# What do stakeholders need?

Stakeholders	Generic needs	
Authorities	Sustainability, transparency, employment, income	
Operators	Access, fair and workable conditions	







# What do stakeholders need?

Stakeholders	Generic needs	
Authorities	Sustainability, transparency, employment, income	
Operators	Access, fair and workable conditions	
Scientists	Better data and models	







# What do stakeholders need?

Stakeholders	Generic needs	
Authorities	Sustainability, transparency, employment, income	
Operators	Access, fair and workable conditions	
Scientists	Better data and models	
NGOs	Sustainability and transparency	



# What do stakeholders need?

Stakeholders	Generic needs		How?
Authorities	Sustainability, transparency, employment, income		Management Plan Recommendations
Operators	Access, fair and workable conditions		
Scientists	Better data and models		
NGOs	Sustainability and transparency		



# Engaging stakeholders in developing Management Plan Recommendations (MPRs)

Responsive Fisheries Management System (RFMS):

- Co-management
- Results Based Management
- Top down (specific objectives) and bottom up (measures to reach objectives)
- Flexibility within defined and monitored limits
- Incentive based





## Main roles in RFMS

**Authorities** define specific and measurable requirements:  
“Outcome Targets”

FarFish: WP3 (Matis)

**Operators** find ways to achieve requirements and provide documentation: Management Plan Recommendations

FarFish: WP1 (CETMAR) and WP4 (UiT)

**Auditors** check if requirements are met

FarFish: WP5 (Syntesa)



# Outcome Targets

Specific requirements set by authorities to make objectives operational:

- Measurable and auditable
- Possible to achieve by operators

Example from Cabo Verde protocol (2014-2018):

Objective: Promote employment of Cabo Verde personnel

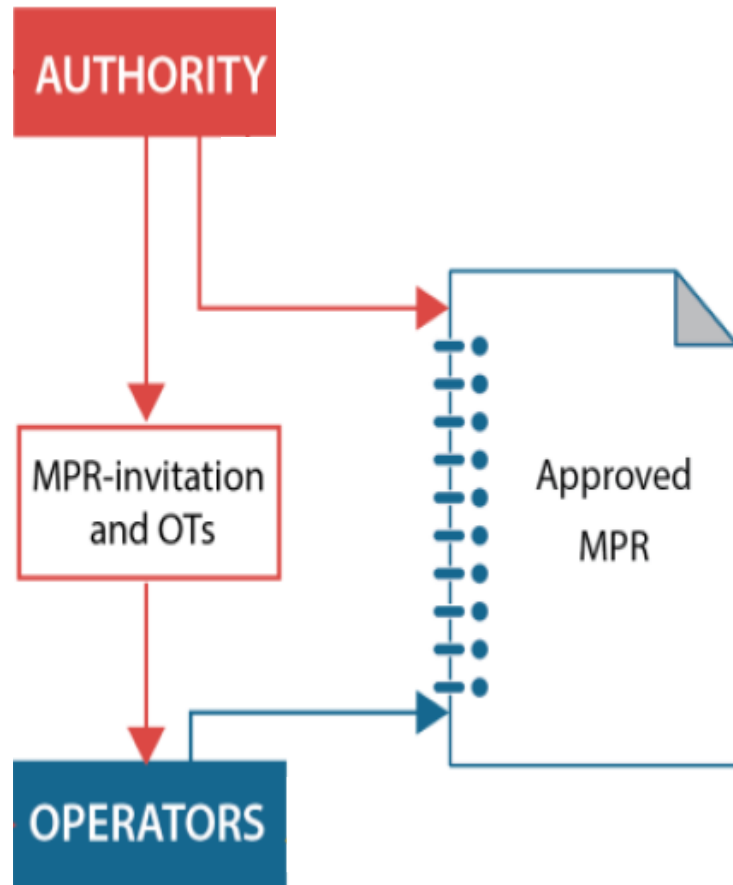
Indicator: # employed

OTs: Tuna fleet: > 6; Pole & line > 2; Surface longliners > 5

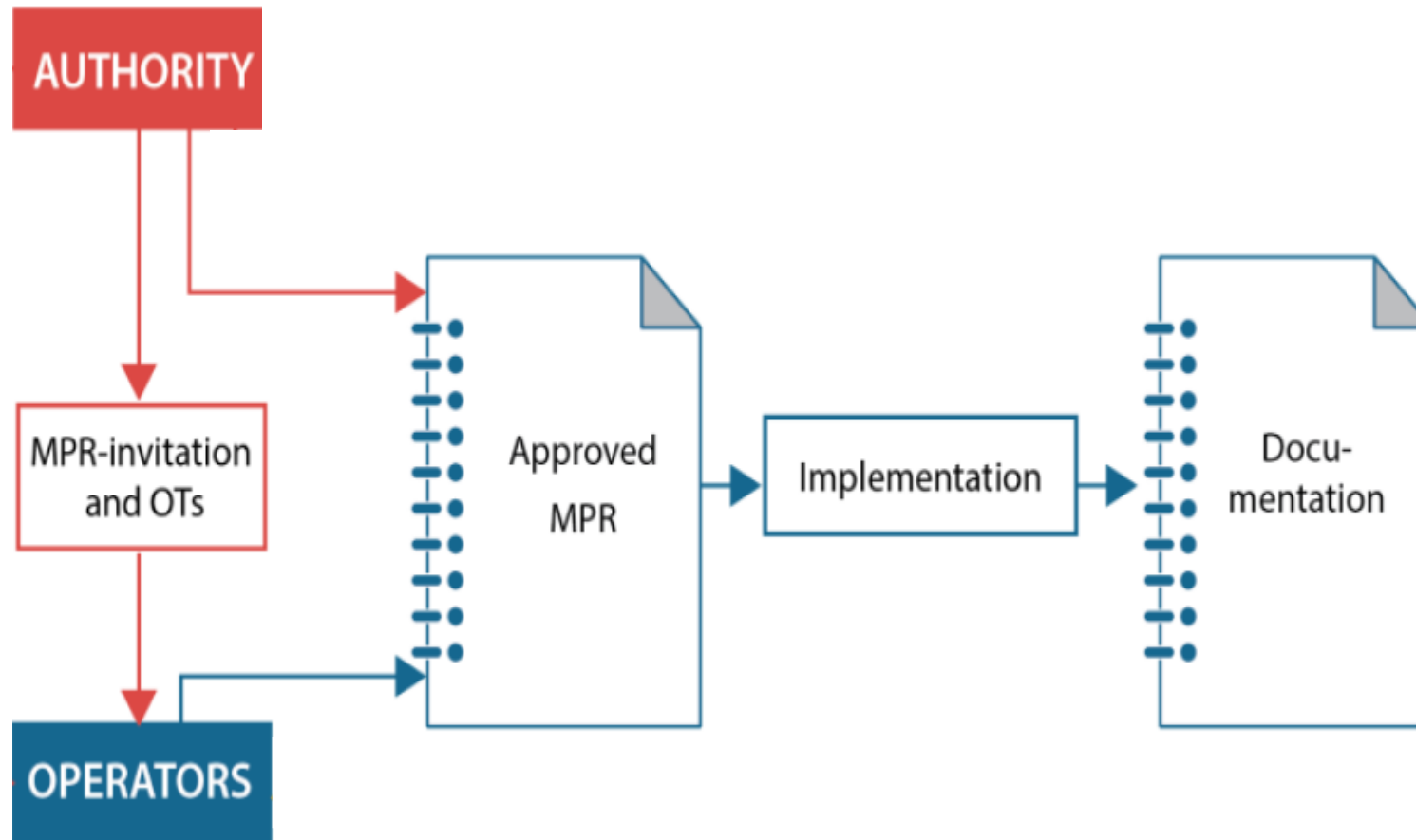
# The RFMS process



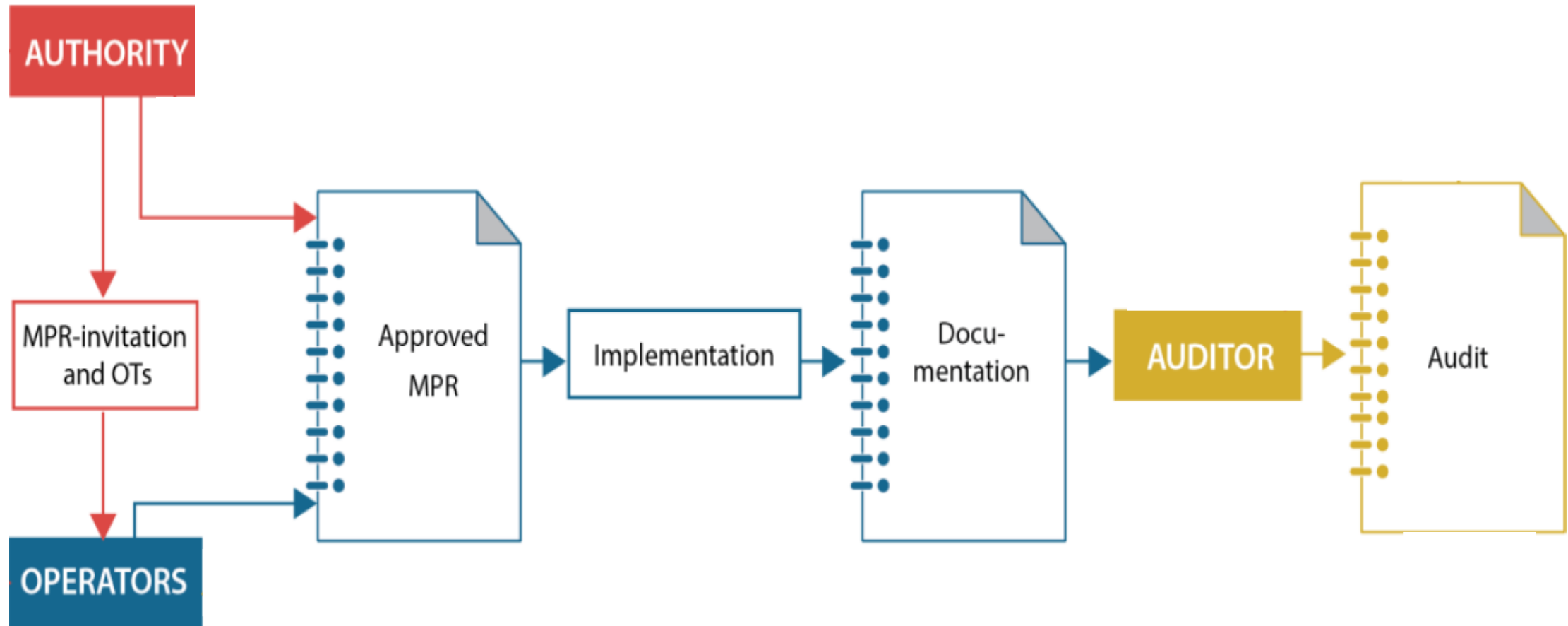
# The RFMS process



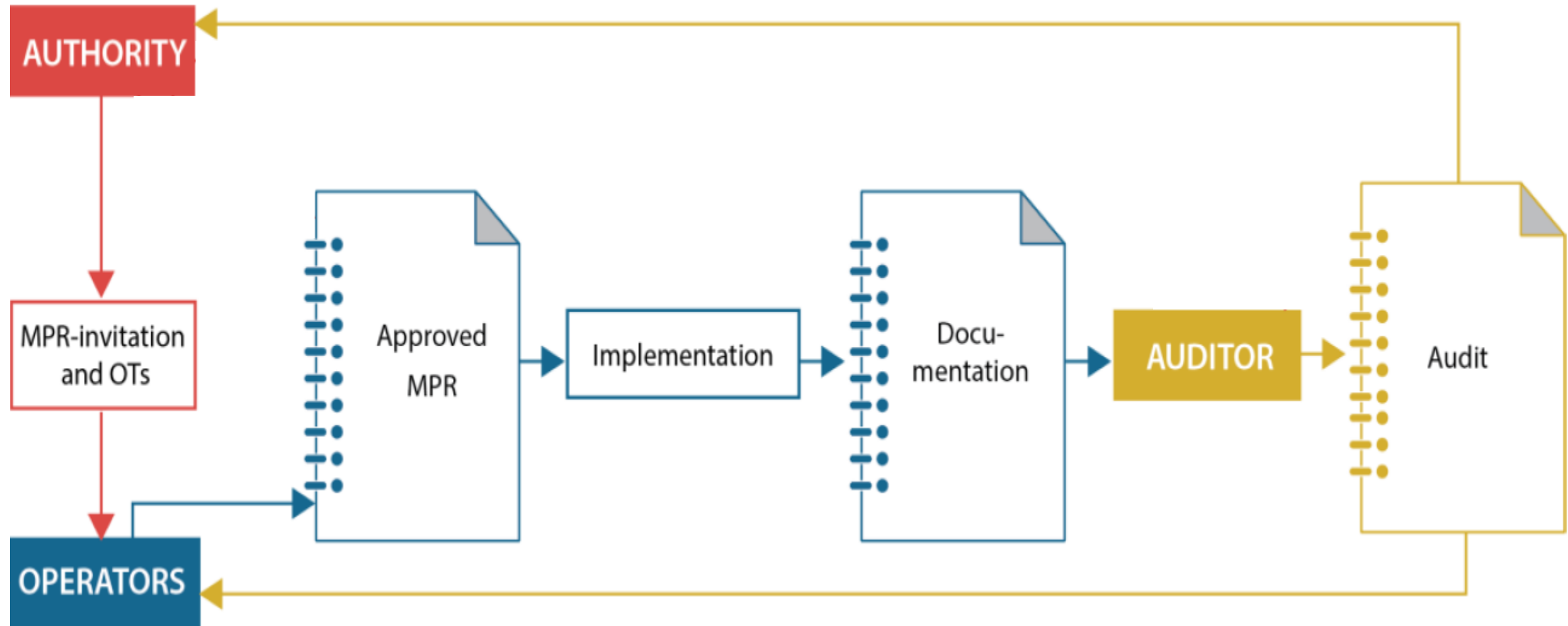
# The RFMS process



# The RFMS process



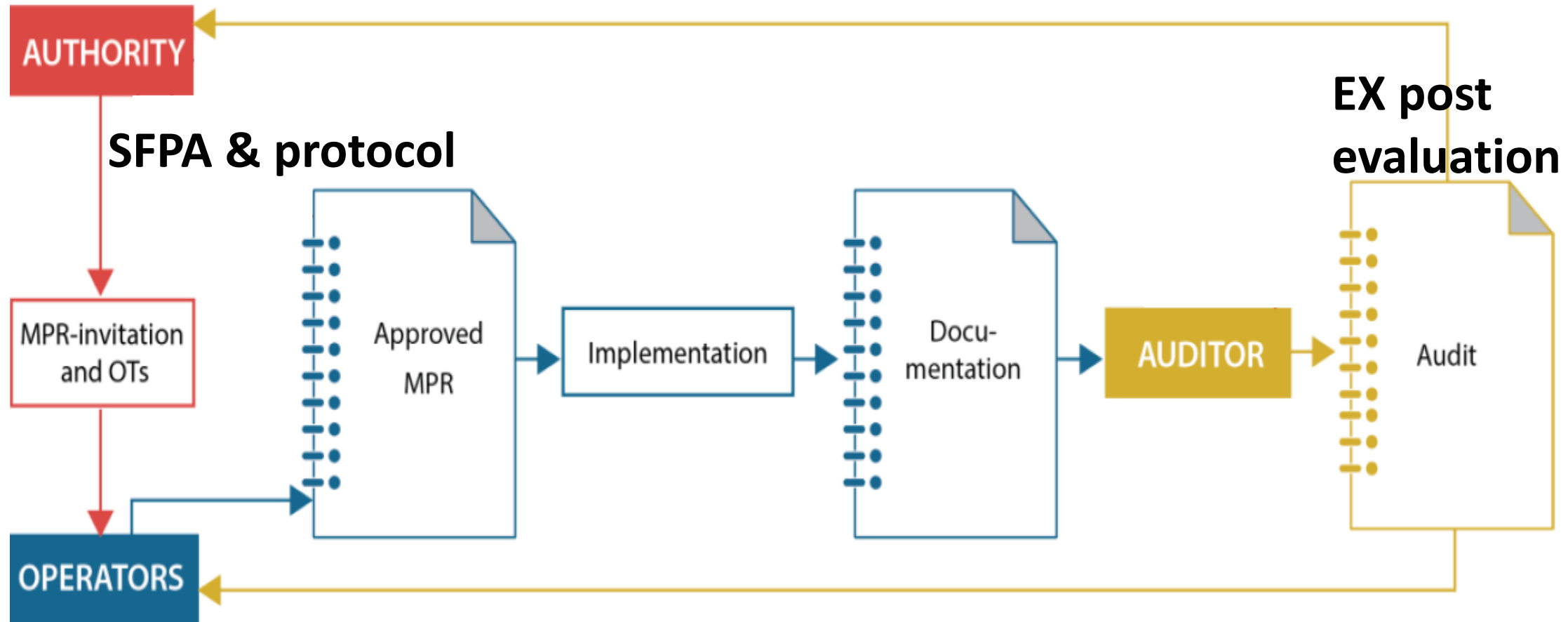
# The RFMS process



# The SFPAs in terms of RFMS



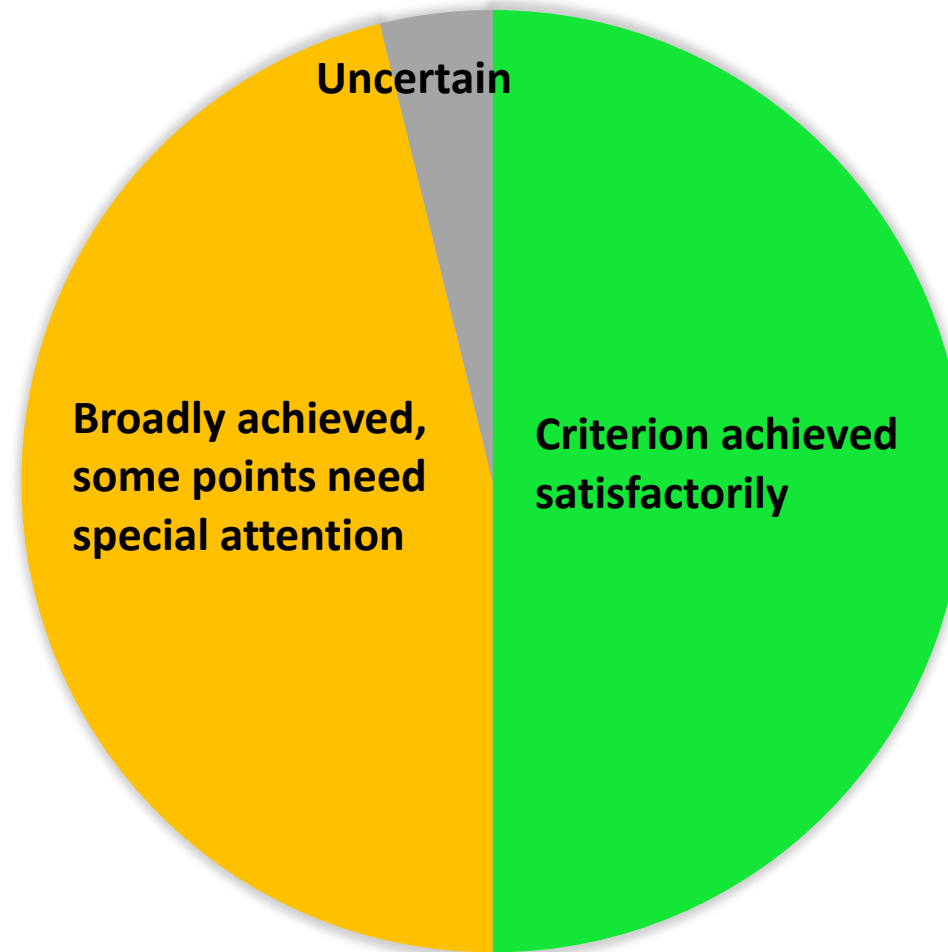
EU (DG MARE) and coastal state



EU fishing vessels



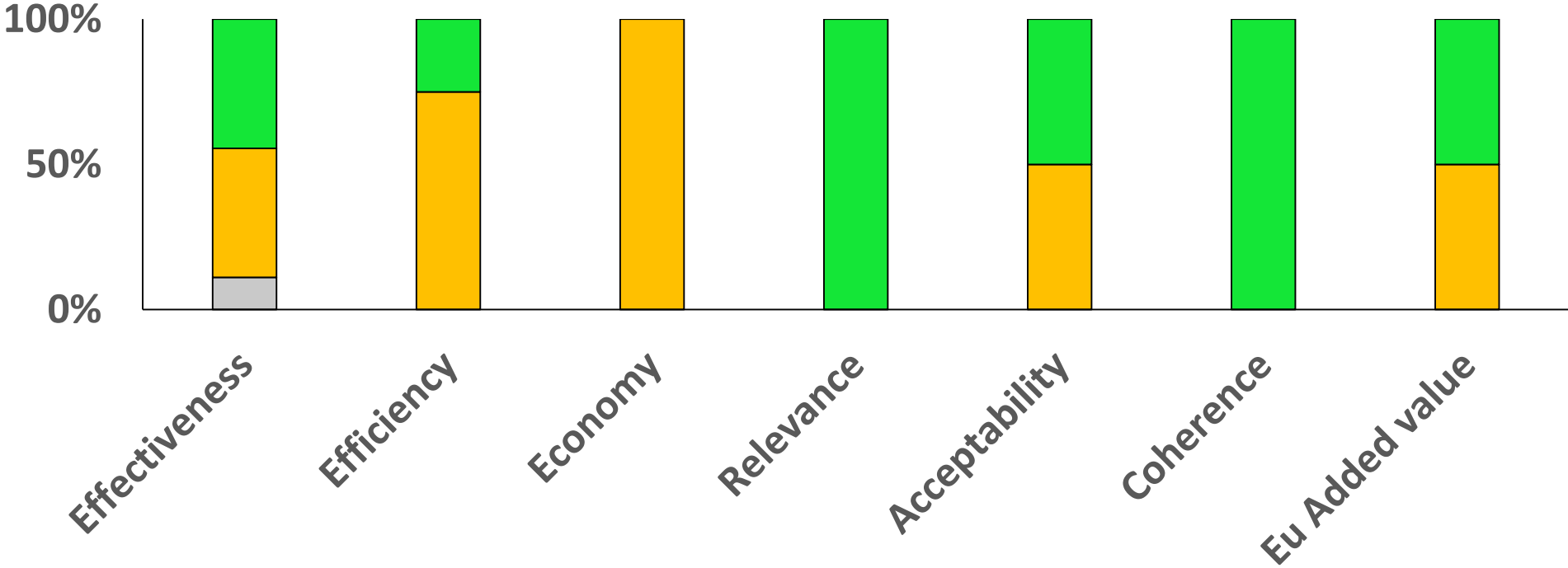
# Audit example: Evaluation of the SFPA agreement between EU and Cape Verde (February 2018)



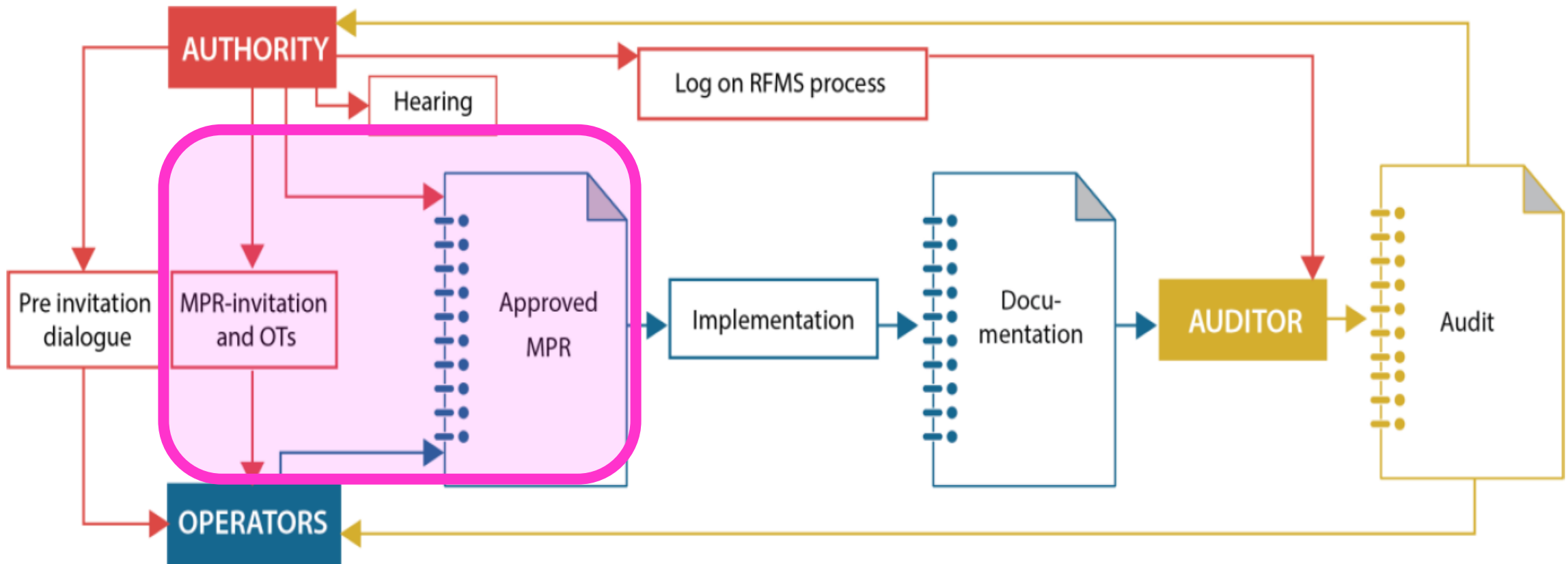
# Audit example SFPA, evaluations by categories



- Criterion achieved satisfactorily
- Broadly achieved, some points need special attention
- Uncertain



# Where are we now?





## Example 1. Stakeholder needs (Cabo Verde)

### Needs based on SFPA evaluation (Feb.2018)

#### Authorities

EU:

Stock sustainability, transparency, consistency with international law and CFP

Cabo Verde:

Maximize national resource benefits, strengthen governance and control systems

#### Operators

EU fleet

Access to fishing area



## Example 2. Stakeholder needs (Senegal)

### Needs based on Management Plan 0

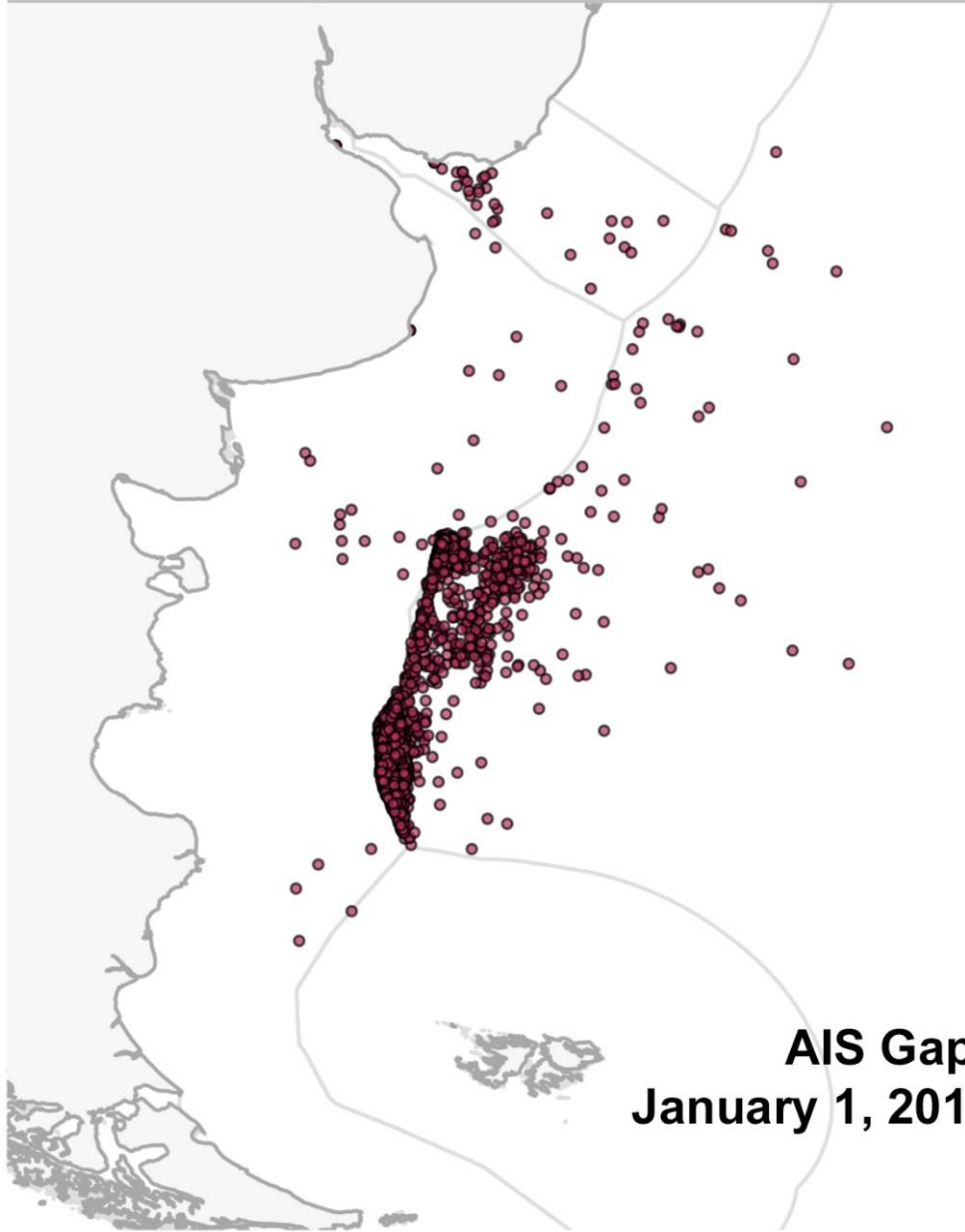
Authorities	Stock identification of the two species of black hake
Operators	Fleet need access to fishing area
Scientists	Data collection, self sampling protocols for stock identification, separate assessment for the two black hake species



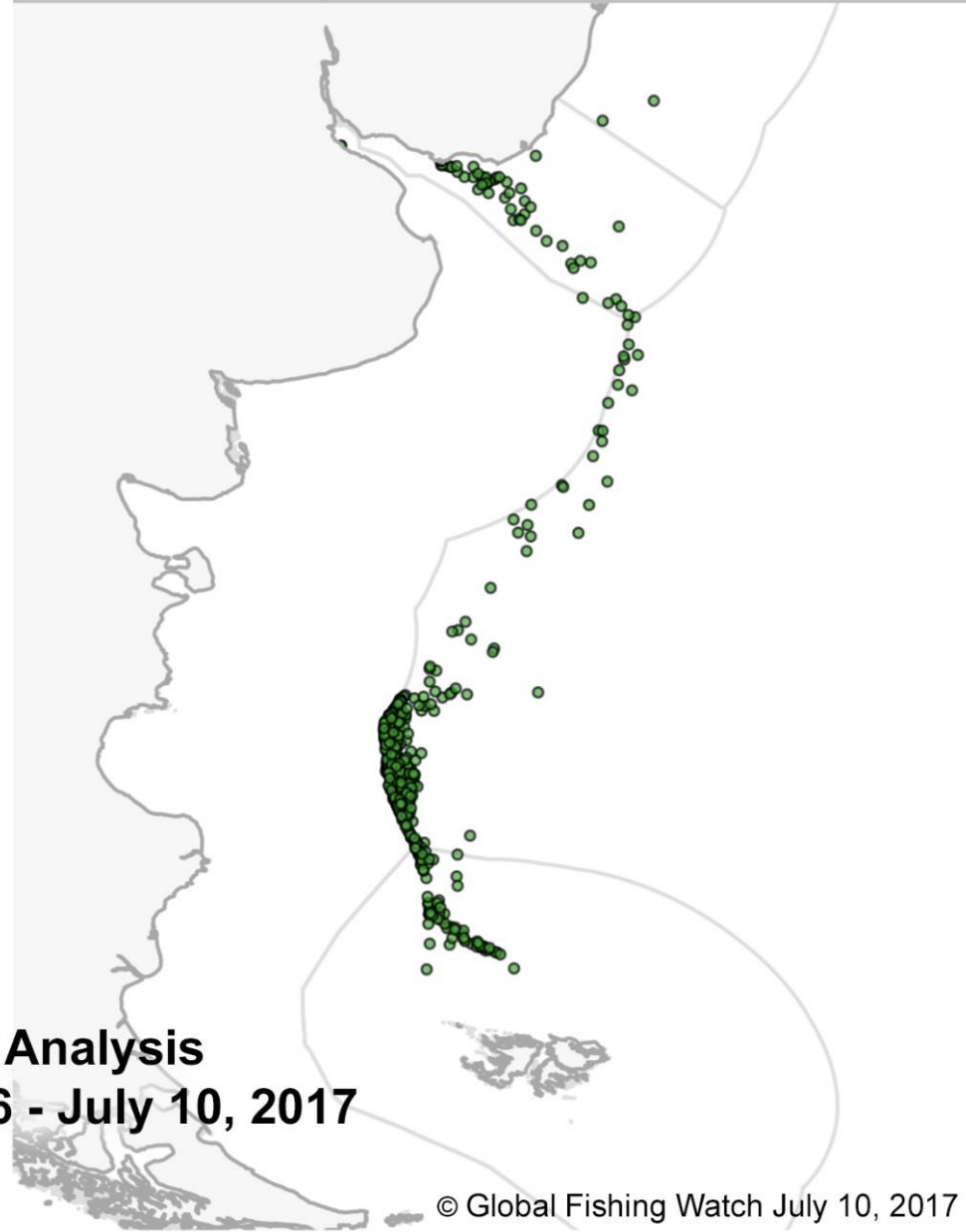
# How to achieve the OTs and thereby ensure sustainability?

Outcome target	How to include in MPR?
Transmission of VMS/AIS signals by all EU vessels operating in the area	Development of tool by WP6

China



Spain



**AIS Gap Analysis**  
**January 1, 2016 - July 10, 2017**

© Global Fishing Watch July 10, 2017

<http://globalfishingwatch.org/data/what-can-we-see-when-ais-signals-disappear/>



# How to achieve the OTs and thereby ensure sustainability?

Outcome target	How to include in MPR?
Transmission of VMS/AIS signals by all EU vessels operating in the area	Development of tool by WP6
On-board self-sampling for black hake in Senegalese EEZ	Establish self-sampling protocols, training of observers

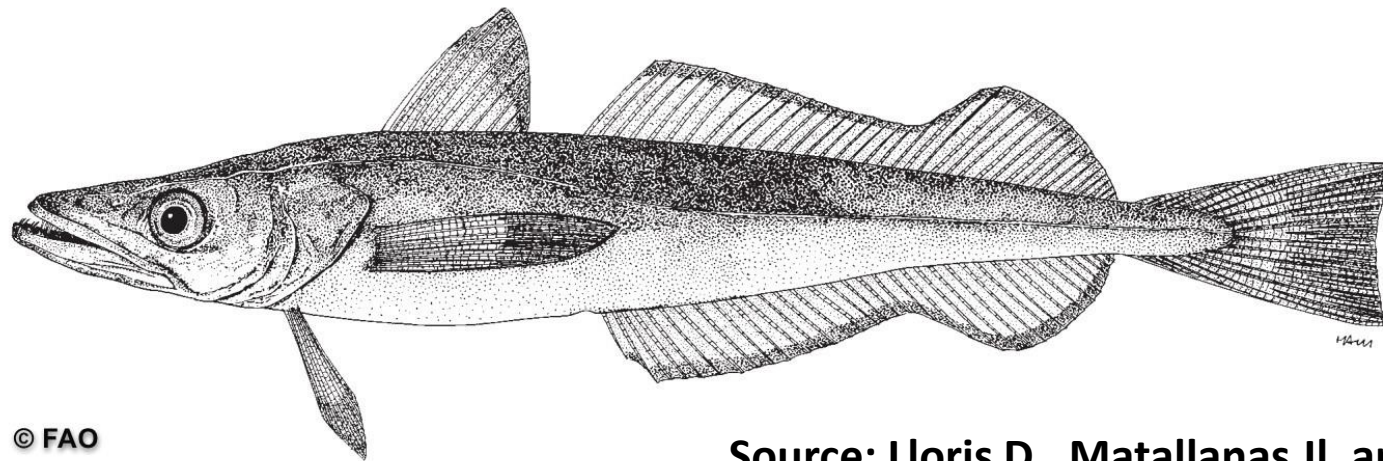
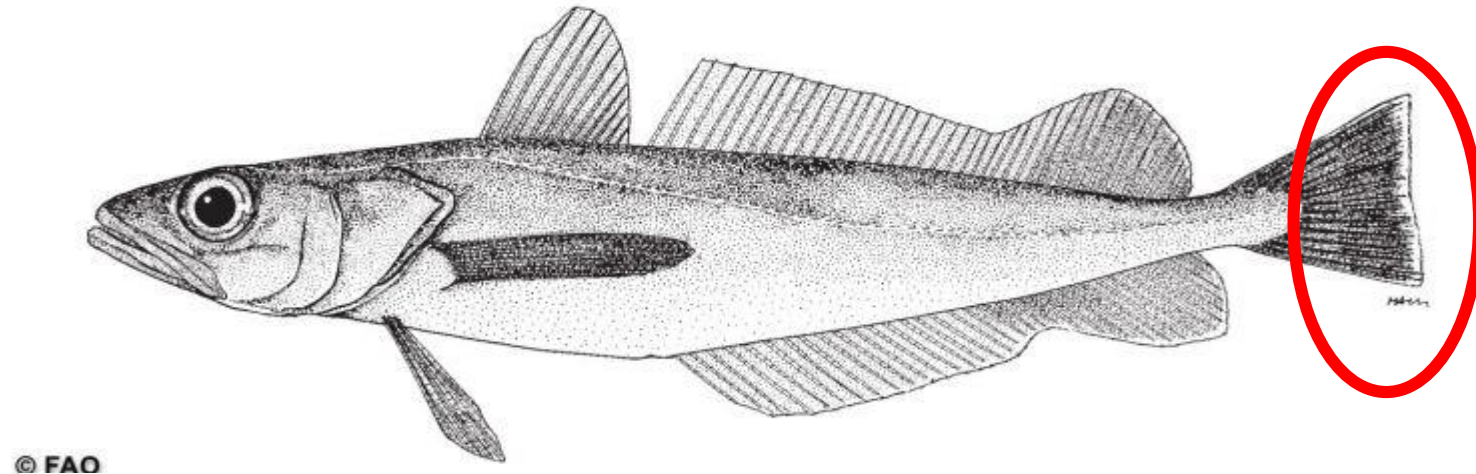


# How to separate the Black hakes *M. polli* and *M. Senegalensis*



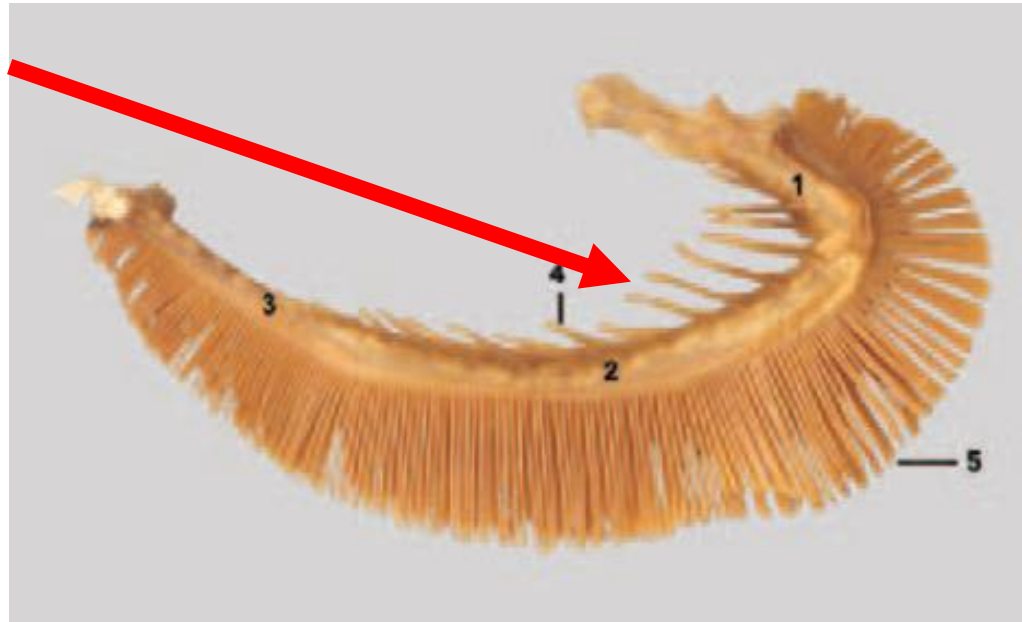
## Characteristics

1. Mouth position
2. White stripe on caudal fin (*M. polli*)
3. Number of gill rakers



Source: Lloris D., Matallanas JI, and P.Oliver (2009) Hakes of the world. FAO

# Gill rakers



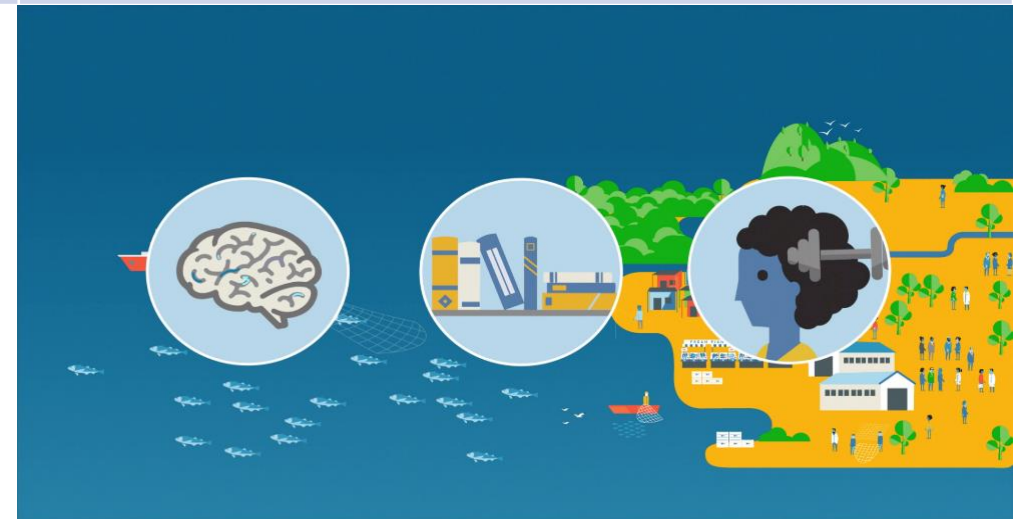
Merluccius brancial arch.  
*M. polli*: 8-12, *M. senegalensis*: 13-18

Source: Lloris D., Matallanas JI, and P.Oliver (2009) Hakes of the world. FAO



# How to achieve the OTs and thereby ensure sustainability?

Outcome target	How to include in MPR?
Foster the use of mandatory e-logbooks	Training personnel in data treatment








# Define and compare alternative management strategies to achieve OTs

OT	Reduce bycatch by 50%
Scenario 1	Status Quo
Scenario 2	Seasonal fishing ban
Scenario 3	Gear restrictions



# Development of MPRs addressing stakeholders needs

Stakeholders	Generic needs		How?
Authorities	Sustainability, transparency, employment, income		Management Plan Recommendations
Operators	Access, fair and workable conditions		
Scientists	Better data and models		
NGOs	Sustainability and transparency	