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**The role of producer organisations (POS) in the allocation and consumption of fishing quotas:
Case study on Bay of Biscay
common sole**

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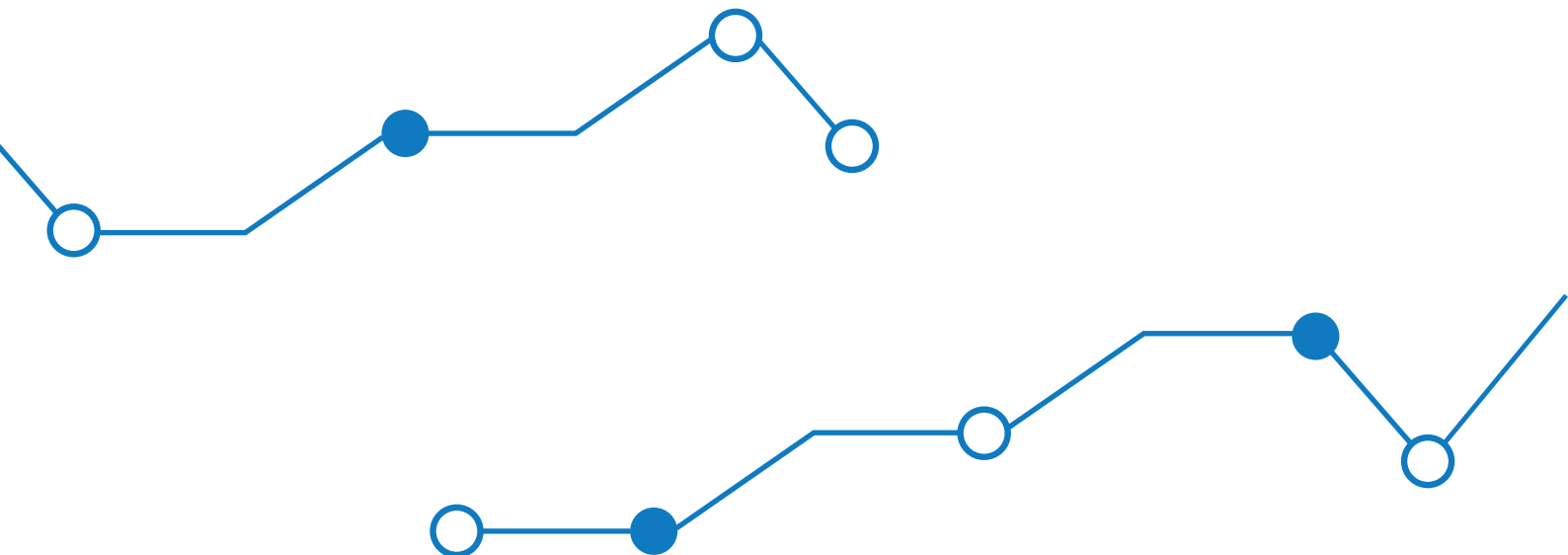
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THE ROLE OF PRODUCER ORGANISATIONS (POS) IN THE ALLOCATION AND CONSUMPTION OF FISHING QUOTAS:

CASE STUDY ON BAY OF BISCAY COMMON SOLE

JULY 2023



DUDOUET Benjamin, MACHER Claire et THEBAUD Olivier

CONTEXT

THIS WORK WAS CARRIED OUT AS PART OF A SIX-MONTH END-OF-STUDY INTERNSHIP FOR THE MASTER'S DEGREE IN MARINE AND COASTAL SCIENCES, SPECIALISING IN ECONOMICS APPLIED TO AGRICULTURE, THE SEA AND THE ENVIRONMENT.

THE MASTER IS CO-ACCREDITED BY THE INSTITUT UNIVERSITAIRE EUROPÉEN DE LA MER AND THE INSTITUT-AGRO RENNES-ANGERS. THE INTERNSHIP WAS CARRIED OUT AT IFREMER IN THE JOINT RESEARCH UNIT AMURE (6308)

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We would like to thank the managers and representatives of the six producer organisations in the Bay of Biscay for the time they gave us and the information they provided, without whom this work would not have been possible.

We would also like to thank all those who took the time to provide us with valuable information on how the French system for managing fishing quotas works and how the sole fishery operates.

GLOSSARY

Producer organisations (OP): Recognised at European and French level, they bring together a group of fishermen with two main missions - the management of fishing rights and the organisation of the market. Shipowners join on a voluntary basis by paying a membership fee.

Total Allowable Catch (TAC): Total annual catch tonnage set by the European Union for a given fish stock under the Common Fisheries Policy.

Quota: The quota corresponds to the share of the TAC allocated to a nation.

Sub-quota: The sub-quota corresponds to the part of the French quota whose management is delegated to a Producer Organisation.

Catch limits: Allocations of fishing opportunities expressed as maximum authorised tonnage per stock when fishing of the stock is subject to quotas and allocated by POs to their member vessels or by the State to vessels not affiliated to a PO.

Methods of limiting catches: Method used by a PO to allocate fishing opportunities among its members. Limitation methods may include individual or collective limitations.

Collective catch limits: Limit on catches of a stock allocated to a group of vessels. It is expressed in tonnes for a given stock and is valid for a maximum of one calendar year.

Individual catch limits: Limit assigned to a vessel. It is expressed in tonnes for a given stock and is valid for a maximum of one calendar year.

Track records: Catch history over a given period, attached to a vessel and used as a basis for determining the allocation of fishing opportunities at national level. The 2006 decree uses the catch history for the years 2001-2003 as the basis for this allocation.

Limitation criteria: Basis on which a PO sets individual limits on the fishing opportunities of its member vessels, where this method of limitation is used. These criteria include, for example, the characteristics of the vessel, its track record and its dependence on a particular stock.

Management plan: POs managing a sub-quota are required to draw up an annual management plan setting out how they will manage their share of the annual French quota.

Inter-annual flexibility: Carryover of quotas from year n-1 to year n in the event of under-consumption of quota in year n-1, up to a limit of 10% of the quota for year n-1.

LPDB: Les pêcheurs de Bretagne

PDA: Pêcheurs d'Aquitaine

FSO: From Sud-Ouest

OP La Cotinière: Organisation de Producteurs de La Cotinière

OPPAN: Organisation de Producteurs des Pêcheurs Artisans de Noirmoutier

OP Vendée: Organisation de Producteurs de Vendée

INTRODUCTION

Common sole (*Solea solea*) is an important resource for French professional fishermen in the Bay of Biscay: in 2020, 389 vessels caught more than one tonne of sole and 821 vessels more than one kilo of sole in this region (Ifremer 2022). Since 1988, sole fishing has been subject to a Total Allowable Catch (TAC) set at European level as part of the Common Fisheries Policy. Despite this framework for fishing opportunities, estimates of the decline in sole recruitment and abundance in this region have led to a reduction in the TAC in recent years (-37% by 2022). Reductions in the TAC in recent years have therefore restricted fishing opportunities for vessels in the fishery, with potential socio-economic consequences.

An analysis of the arrangements for allocating fishing quotas for this stock, carried out in 2011 (Lagière et al. 2012), showed the key role played by Producer Organisations (POs) in allocating sole fishing opportunities between vessels in the fishery. In particular, some POs had adopted a system of individual fishing limits in response to the growing constraints on quota availability.

The purpose of the study presented here was to analyse how the management of fishing opportunities has evolved since that time. The document presents the main current features of this management, and the nature of the questions that this management makes it possible to answer.

The study addressed the following questions :

What role do POs play in the allocation and consumption of fishing quotas in France ?

What mechanisms are currently used by the POs to allocate sole fishing opportunities to the various stakeholders in the fishery and to reallocate them during the year, and how are they determined ?

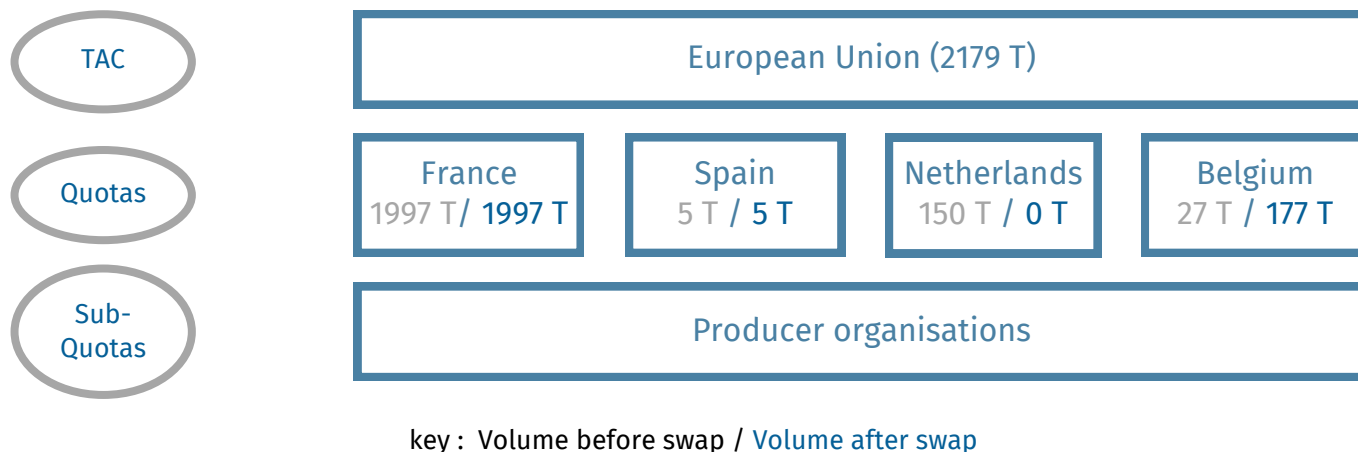
METHODS

The study was based on two sources of information :

- A bibliographical review (see references, p.17) of work carried out on the Bay of Biscay sole fishery :
 - Reports on the biological status of the common sole stock in the Bay of Biscay: ICES annual report (ICES 2021), expert reports (Lecomte, Biseau, and Mehault 2021),
 - Economic research on this fishery (Bellanger, Macher, and Guyader 2016; Le Floc'h et al. 2015; Carpenter and Kleinjans 2015; Larabi et al.2013; Lagièrre, Macher, and Guyader 2012)
 - Regulatory and institutional documents (legal [european \(European Comission\)](#) and [french decrees \(French State\)](#))
 - [Articles of the Code rural et des pêches maritimes.](#)
- A series of semi-directive interviews with the main players in the sole fishery. The initial focus was on the six POs in the Bay of Biscay. At the same time, other stakeholders in the fishery were interviewed, in particular DG AMPA, the Comité National de Pêches et des Élevages Marins and certain regional committees. All these discussions helped us to gain a better understanding of how the French system for allocating fishing opportunities works in general and how it applies to common sole in the Bay of Biscay.

FROM TAC TO SUB-QUOTAS : EUROPEAN SYSTEM

Allocation of Bay of Biscay sole fishing opportunities from the EU to the POs in 2022.
(Sources: Own production based on European fishing quota allocation decrees)



Access to the Bay of Biscay common sole fishery is based on fishing authorisations, to which are added catch limitations that will impact on everyone's fishing opportunities. The owner of a vessel wishing to catch more than two tonnes of sole per year or more than one hundred kilos per trip must hold a National Fishing Authorisation (NFA). The actual tonnages that the vessel may catch each year are then determined by the PO to which it belongs, if it is a member of a PO, or by the DGAMPA if it is not attached to a PO. These tonnages depend on the annual quota allocated to France, which is then divided into sub-quotas between the POs.

At European level, the TAC, which is determined on the basis of scientific advice, is allocated between Member States according to a principle of relative stability (Lagière, Macher, and Guyader 2012; Larabi et al. 2013; Le Floc'h et al. 2015; Hoefnagel, de Vos, and Buisman 2015). In the case of Bay of Biscay sole in 2022, the TAC is divided between France, Spain and Belgium, and then the Netherlands through swaps. Most of the TAC is allocated to France (91.6%). Exchanges between countries enable new allocations to be made.

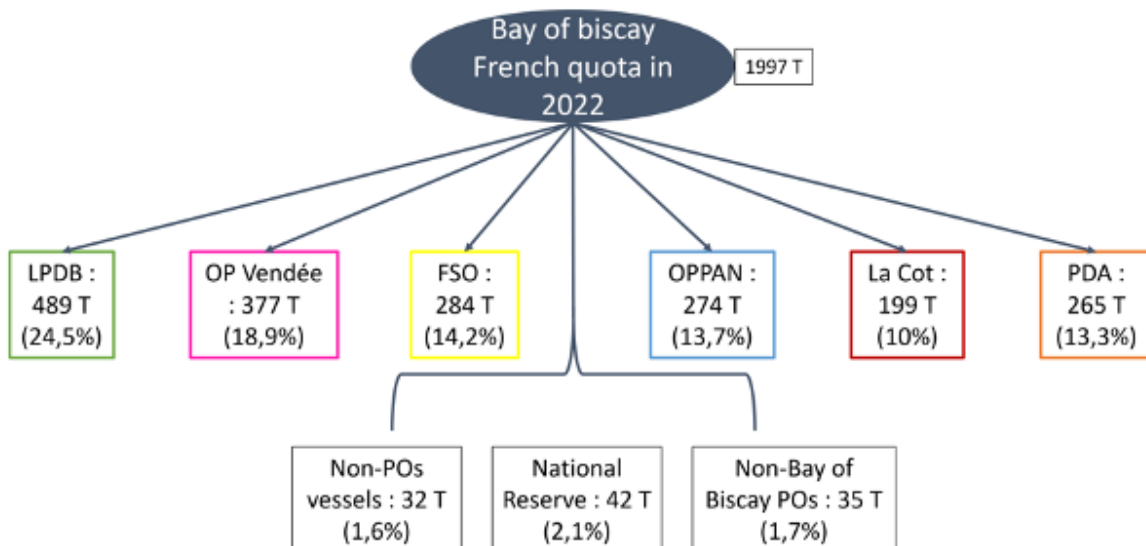
Since 1997, the French government has delegated responsibility for allocating French fishing quotas to the POs. Each year, these organisations inherit a sub-quota, which they must distribute among their members, monitor consumption and ensure that the sub-quota is not exceeded.

DISTRIBUTION BETWEEN PO

The sub-quota allocated to a PO is calculated annually on the basis of the track records held by the vessels belonging to that PO. These track records are calculated on the basis of the vessel's share of total landings from the stock in the reference years 2001, 2002 and 2003.

Each year, to determine the sub-quota for each PO, DG AMPA lists the PO's members as at 1 January and adds up their 2001-2003 track records. The proportion of the PO's track record out of the total French track record corresponds to the fraction of the national quota recovered by the PO. Under this mechanism, in the case of Bay of Biscay sole, the quota is currently mainly allocated between six POs. These are OP Les Pêcheurs de Bretagne (LPDB), OP Vendée, OP des Pêcheurs Artisans de Noirmoutier (OPPAN), OP La Cotinière (La Cot), OP FROM Sud-Ouest (FSO) and OP Pêcheurs d'Aquitaine (PDA). For example, in 2022, the French quota of 1997 tonnes will be distributed as follows :

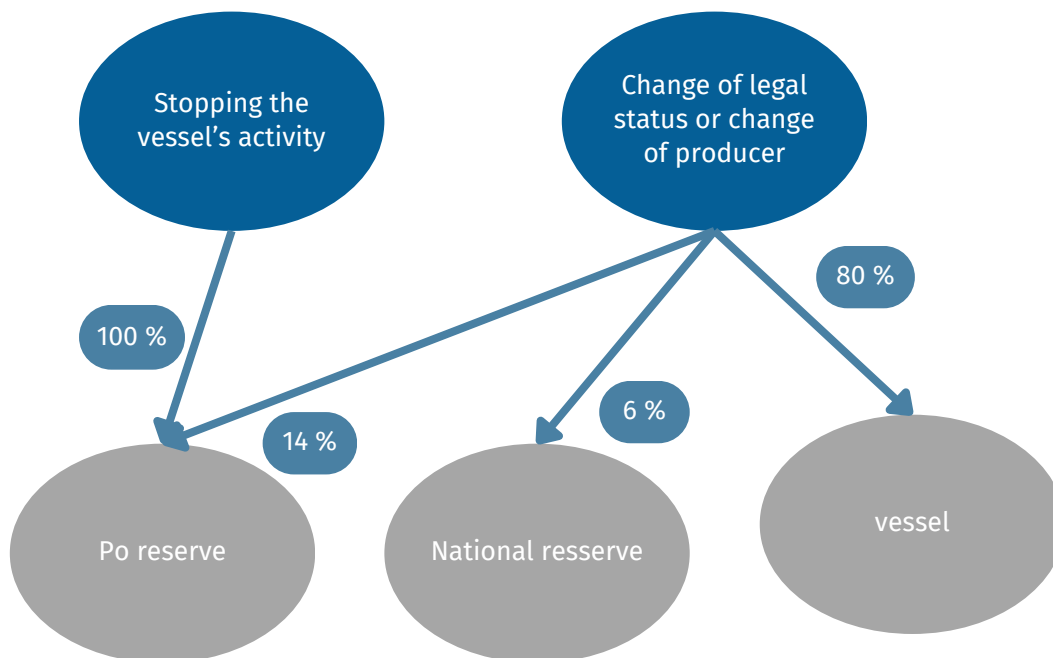
Diagram of the allocation of sub-quotas by POs in 2022 (Source: Own production based on survey results and national decrees on the allocation of fishing sub-quotas)



TRACK RECORDS TRANSFER SYSTEM

All the vessels fishing sole during the period 2001-2003 are no longer active and new vessels have since joined the fishery. There are various mechanisms for transferring track records between vessels and between POs. These transfer mechanisms are decisive in defining the share of the quota for which a PO will be responsible. The allocation of prior rights depends on two different situations

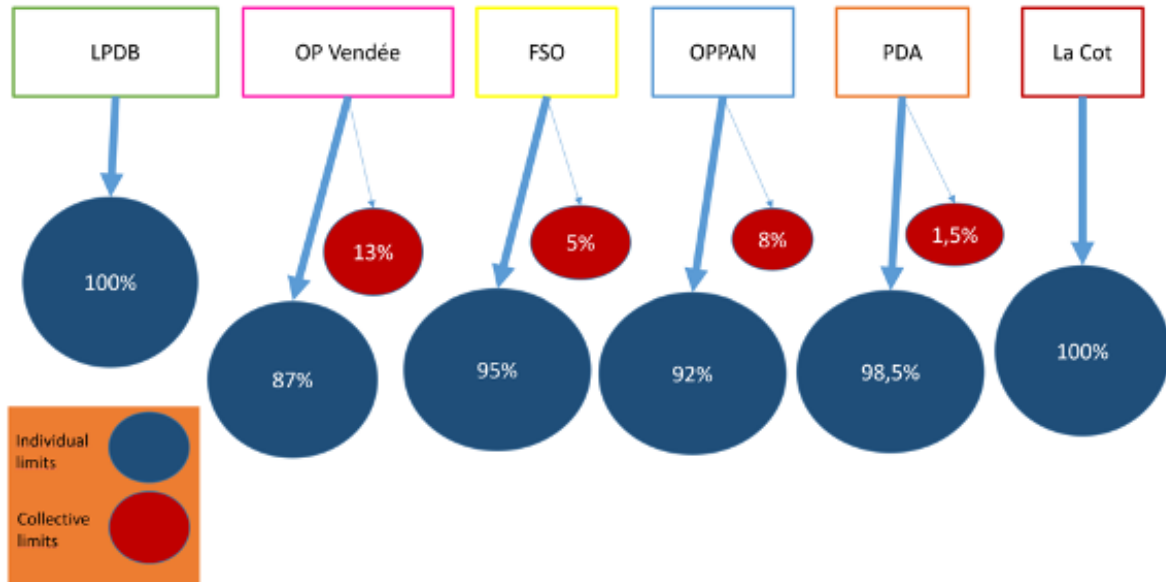
Scheme for transferring prior rights since 2014 (Source: Own production based on Article R921-41 of the Code rural et des pêches maritimes)



In the first case (cessation of the vessel's activity or assisted exit from the fleet), 100% of the prior rights revert to the PO's reserve. In the second case (change of legal status or change of producer), (i) 70% of the 20% deducted from the vessel's track record goes to the PO's track record reserve and (ii) 30% of the 20% deducted from the vessel's track record goes to a national reserve. The remaining 80% remains attached to the vessel.

DISTRIBUTION BETWEEN VESSELS

Methods of limiting Bay of Biscay sole fishing opportunities by PO in 2022.
(Source: Own production based on survey results.)



There are two main ways in which quotas are managed by POs, based on individual or collective catch limits. This involves allocating fishing opportunities to vessels for the current calendar year. Individual limitations currently account for the majority of sole catches in the Bay of Biscay, and represent almost all of the limitations, although POs may reallocate quotas during the year.

A majority of POs also use collective limitations. These are mainly used in cases where sole catches by vessels are considered to be incidental. Trawlers, which catch various species including sole, are most often concerned by collective limitations.

A discrepancy can be observed between individual limits and the actual consumption of quotas by vessels. Although 95.7% of catches managed by POs are subject to individual limits at the beginning of the year, a switch to collective limits may be observed during the year, depending on the rate of consumption of the sub-quota. When the consumption rate is too low, some POs lift the individual limits and only apply collective limits to the consumption of their sub-quota.

LIMITATION CRITERIA

Depending on the PO, different limitation criteria may be adopted. We note that the proportion of fishing opportunities where the limit is strictly based on historical data is still in the minority. 37.9% of the allocated quota follows the 2001-2003 track record as the main criterion.

*Share of PO sole sub-quotas according to limitation criteria in 2022.
(Source: Own production based on survey results)*

groups	Track records 2001-2003 as main limitation criteria			Other main limitation criteria		
	FSO	OPPAN	La Cotinière	PDA	LPDB	OP Vendée
PO						
Share of sole quota by PO	14,2 %	13,7%	10%	13,3%	25%	18,5%
Share of sole quota by group	37,9%			56,8%		

There is therefore a discrepancy between the criteria used in the Rural Code to define the sub-quotas allocated to POs and those mostly used by POs to determine individual limitations. 56.8% of the French quota is limited individually according to criteria different from those used to determine the sub-quota for which POs are responsible.

The role of POs is important in the distribution of fishing opportunities, as is the autonomy they are granted in this area. The objectives of POs are not identical. The different structure of each PO's fleet and their different histories lead to different management choices.

MANAGEMENT METHODS PER PO

The POs have adopted different criteria for allocating fishing opportunities over time, depending on their history (particularly mergers).

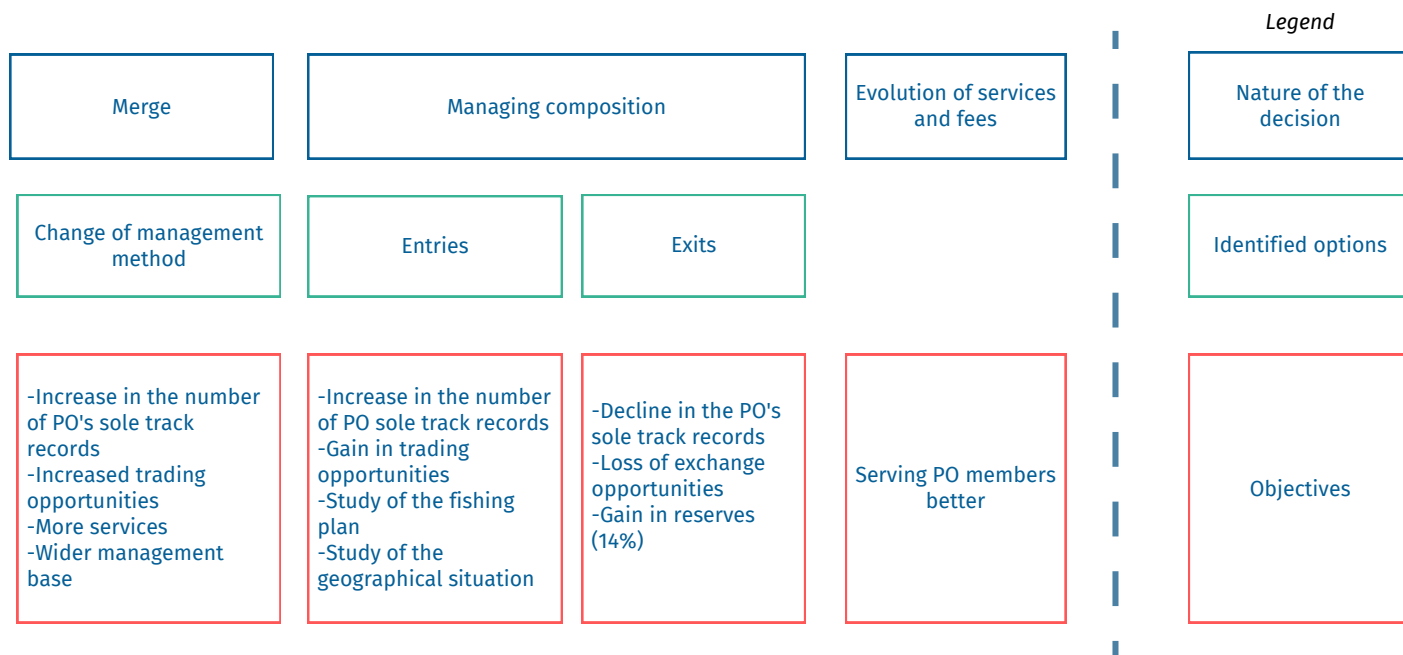
*Methods and criteria for allocating Bay of Biscay sole fishing opportunities in 2022 according to POs.
(Source: Own production based on survey results)*

PO	Method of limiting the sole sub-quota	Groups	Limitation Criteria
LPDB	Individual limits (100%)	Specialist netters	Track records 2001-2003, vessel size, stock dependency
		Diversified netters	Individual limitation homogeneous within the group
		Trawlers (divided into 4 sub-groups)	Individual limitation homogeneous within each subgroup
		Norway lobsters fishers (divided into 5 sub-groups)	Individual limitation homogeneous within each subgroup
		accessory catches	Individual limitation homogeneous within the group
OP Vendée	Individual limits (87%) Collective limits (13%)	Offshore netters	Individual limitation homogeneous within the group
		Coastal netters	Individual limitation homogeneous within the group (except for some small vessels)
		Trawlers	Collective limitation
OPPAN	Individual limits (92%) Collective limits (8%)	Vessel production > 2T	Track records 2001-2003
		Other vessels	Collective limitation
FSO	Individual limits (95%) Collective limits (5%)	Vessel production > 1T	Track records 2001-2003
		Other vessels	Collective limitation
La cotinière	Individual limits (100%)	All members	Track records 2001-2003
PDA	Individual limits (98,5%) Collective limits (1,5%)	Vessel production > 1T	individual limits defined in 2012 when the CAPSUD and ARCACOOP POs merged
		Vessel production < 1T	Collective limitation (4T)

PO DECISIONS : INTERANNUAL

The study highlighted the essential role played by POs and the strategies developed at inter-annual, annual and infra-annual levels to manage the sub-quotas allocated to them and thus guarantee their members optimised fishing opportunities.

Interannual decision diagram. (Source: Own production based on survey results)



Interannual scale,

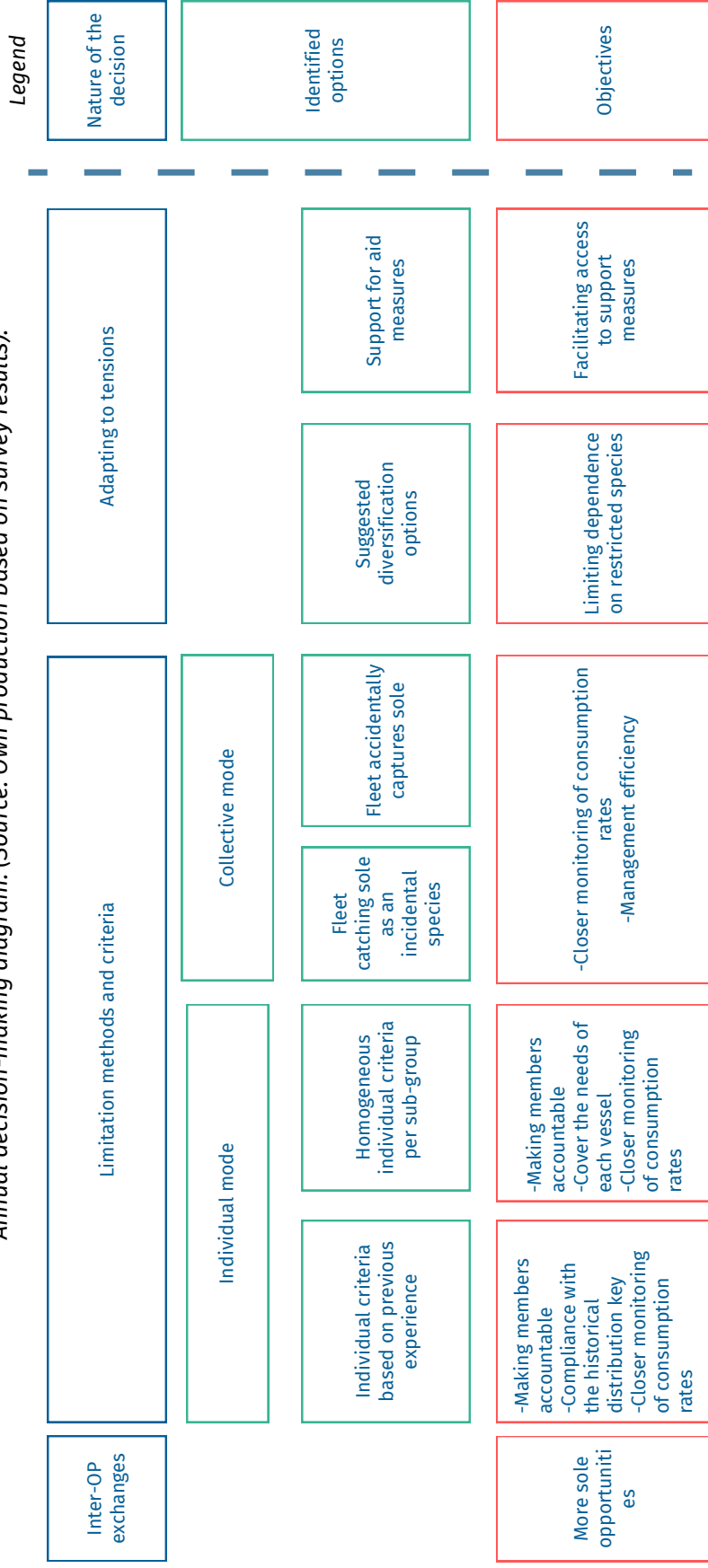
The study has identified the various levers that POs can use to adjust fishing opportunities to the long-term needs of their members (see figure above).

Firstly, POs can develop merger strategies. There are currently 6 POs in the Bay of Biscay, but there were 9 in 2012 (Bellanger et al. 2016). Three mergers have taken place since then.

Secondly, POs may admit new members (and some of their members may leave).

Thirdly, POs may develop the services they offer to their members (which may influence decisions to join or leave). Membership of a PO is based on an ad valorem contribution of around 1% of the turnover of the vessels in all POs. In exchange, POs offer services to ships.

Annual decision-making diagram. (Source: Own production based on survey results).



On an annual scale,

The study made it possible to identify the various levers of action that POs can use on an annual scale to adjust fishing opportunities to the needs of their members (see figure above).

Exchanges of sub-quotas between POs are a way of improving their allocation of Bay of Biscay sole sub-quotas and thus covering the needs of their members as effectively as possible. The entire French Bay of Biscay sole quota is not allocated to Bay of Biscay POs. Exchanges are possible with the other French POs (CMEMMN, COBRENORD, FROM Nord and OPN) which also receive sub-quotas.

The choices regarding the methods and criteria for limiting fishing opportunities discussed above also define the PO's annual strategy.

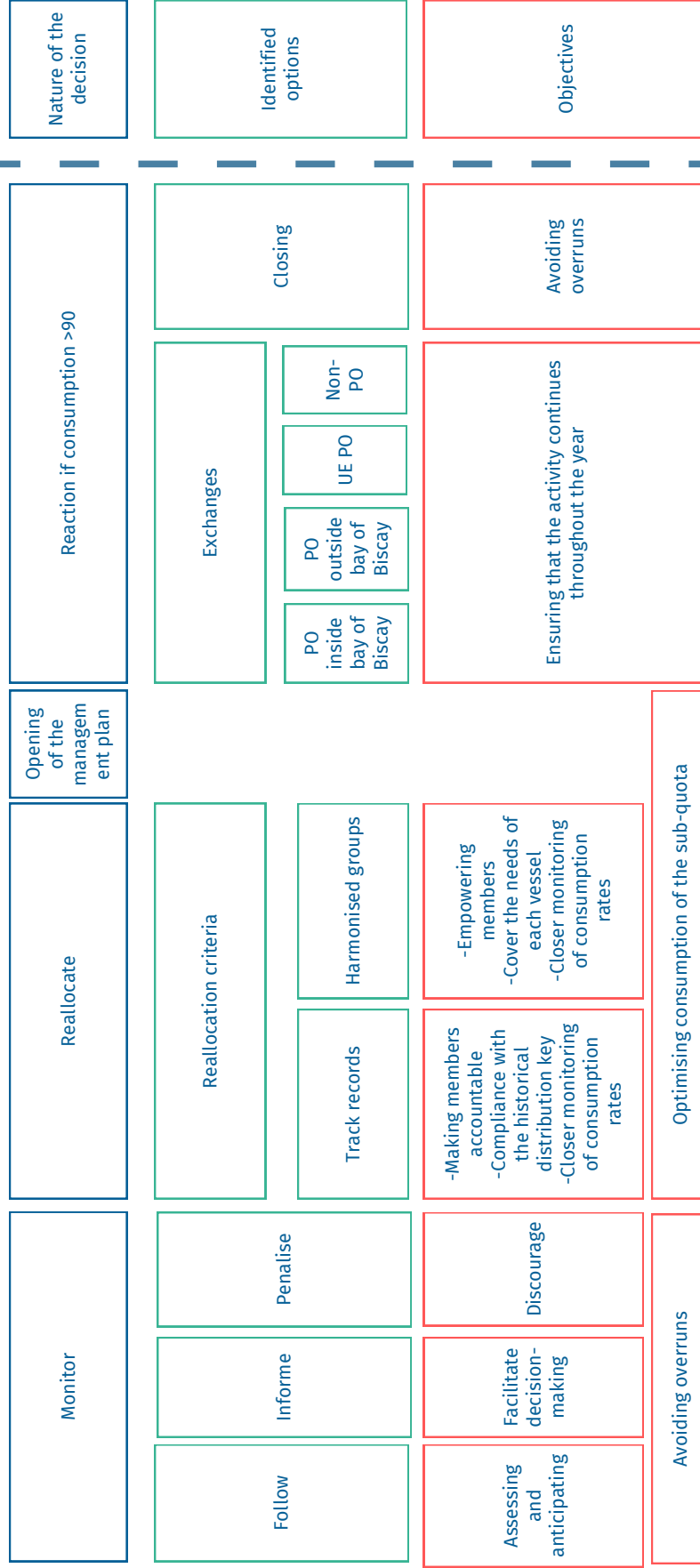
By striving to smooth out inter-annual variations in fishing opportunities, POs help their members to cope with crises, such as variations in TACs. The POs are responsible for adapting individual limits according to the profiles of the vessels in order to best ensure their activity.

The POs also help their members to benefit from the aid measures introduced by the institutions. They inform their members of the aid arrangements and provide administrative support for applications.

PO DECISIONS: INFRA-ANNUAL

Sub-annual decision-making diagram. (Source: Own production based on survey results)

Legend



On an infra-annual scale,

The study identified the various levers that POs can use during the year to adjust fishing opportunities to the needs of their members (see figure above).

To avoid exceeding their sub-quotas, POs need to keep a close eye on their members' consumption. If they do, they may be penalised by DG AMPA. In addition, it alerts its members at various consumption thresholds to their limitation. In the event of individual overruns, the PO can penalise the offending vessels.

As the landing data for PO vessels is regularly monitored by the administration, when the consumption rate of a PO's sub-quota reaches 90%, DG AMPA sends the PO a notice of early closure of the fishery. To avoid this closure, the PO has to justify solutions enabling it to allocate additional fishing opportunities to its members, through exchanges with other POs.

Depending on the level of consumption during the year, in order to allocate fishing opportunities as effectively as possible, both to optimise the consumption of the sub-quota and to cover the needs of each member, POs can make one or more reallocations of fishing opportunities or open up the management plan and thus create a collective limit.

METHODS OF REALLOCATING FISHING OPPORTUNITIES DURING THE YEAR

There are 3 ways of reallocating fishing opportunities during the year. The reallocation can be individual, but homogeneous between all the vessels in the PO or sub-groups of vessels within the PO. This reallocation can also be made on a case-by-case basis according to needs, by asking each member what it intends to catch in relation to its initial limit that it has not yet consumed. In this case, the reallocation is completely dissociated from the prior rights and the initial limit. Lastly, the modification of the initial limit can also take the form of opening up the management plan, meaning that all the vessels in the PO benefit from a collective limit.

Method of reallocating fishing opportunities during the year. (Source: Own production based on survey results)

PO	Reallocation methods		
	Individual reallocation on a case-by-case basis	Homogeneous individual reallocation according to subgroups	Collective consumption
LPDB		X	
OP Vendée		X	
OPPAN	X		
FSO	X		
OP Cot	X		X
PDA	X		X

CONCLUSION

This study documented and illustrated the different ways in which POs manage and allocate sub-quotas to adjust fishing opportunities to the needs of their members.

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