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The role of Producer Organisations (POs) in the allocation and consumption of fishing quotas: case study on Bay of Biscay sole

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The role of Producer Organisations (POs) in the allocation and consumption of fishing quotas:

case study on Bay of Biscay sole

October 2023 - Copenhagen

Advantages and disadvantages of strong user rights in fisheries

Conference



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Context

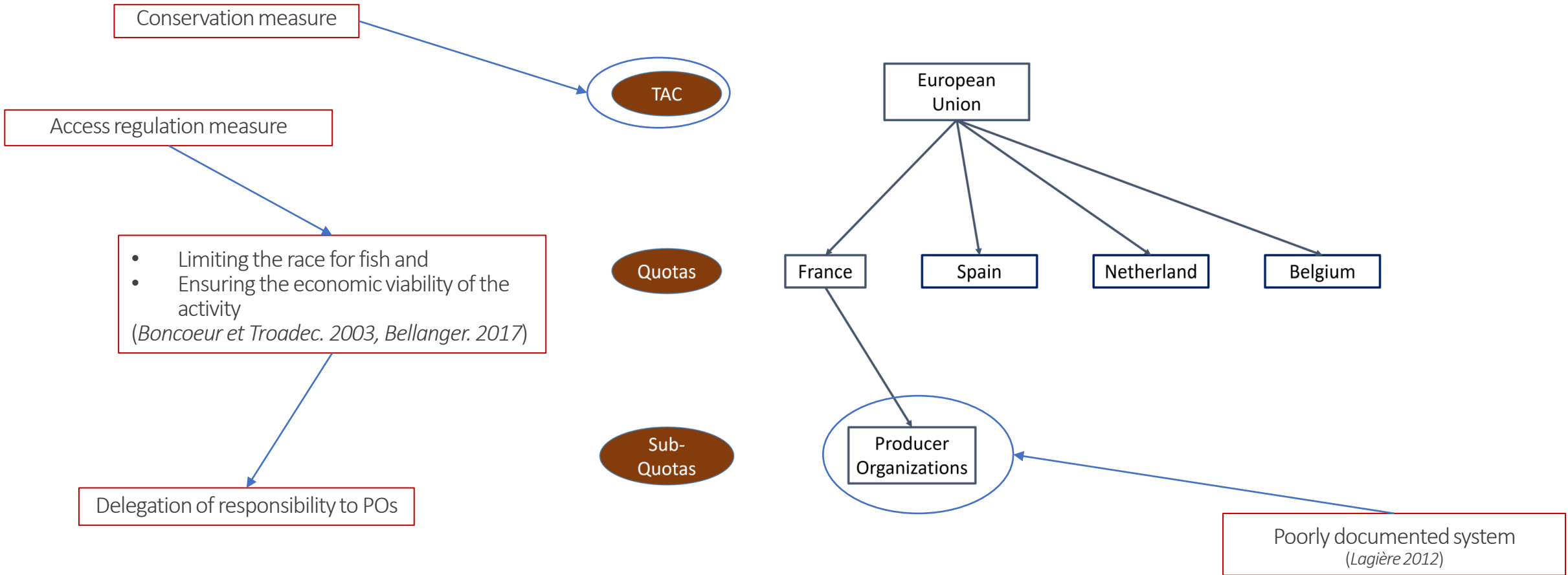
This work was carried out as part of a six-month end-of-study internship for the Master's degree in Marine and Coastal Sciences, specialising in Economics Applied to Agriculture, the Sea and the Environment.

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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Why this study ?



The question

What are the mechanisms used by the POs to allocate sole fishing opportunities among the actors in the fishery and their reallocation during the year, and how are they determined ?



(Source : Ifremer)

Bay of Biscay common sole (Soléa Soléa)

- Recruitment variability
- Forerunner in management measures
 - Subject to a TAC since 1984
 - Introduction of individual quotas in 2006
- 3rd most valuable species in France in 2020 (*FranceAgriMer*)
 - 39 million euros (*Ifremer/SIH*)



Anne Steillein – Flickr.com



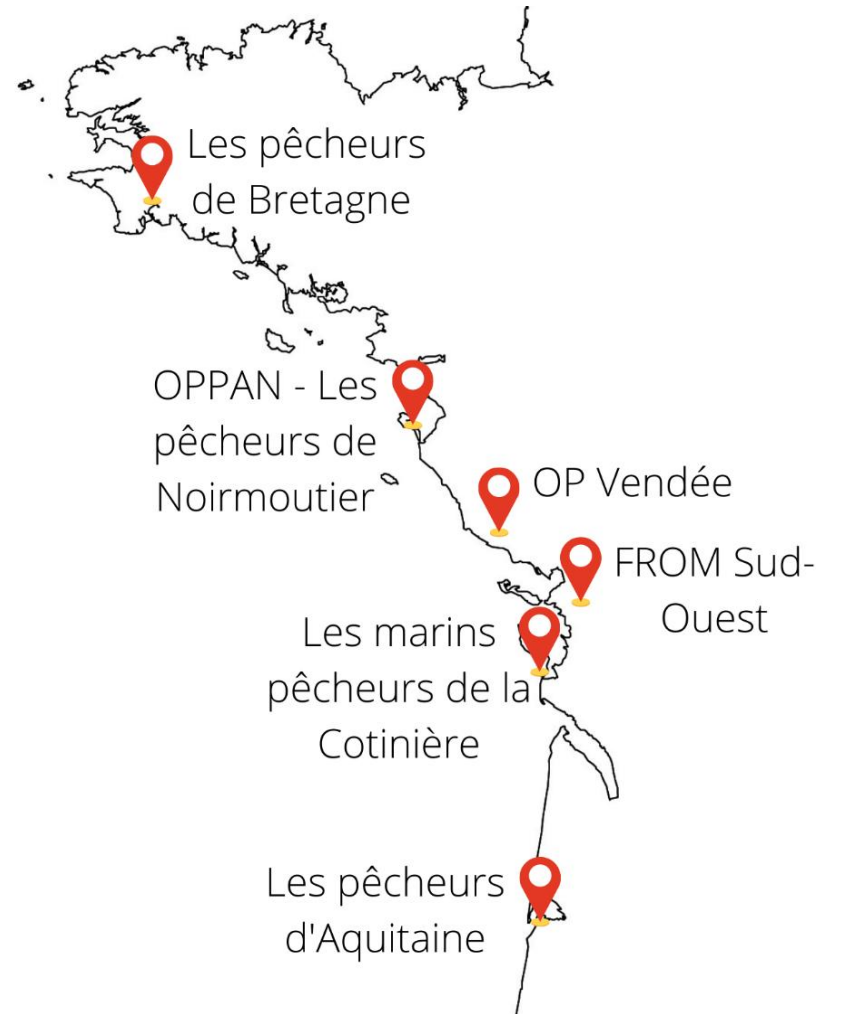
329 vessels > 1 ton / year



1,068 crew members

Methods

- literature review of the work carried out on the sole fishery.
- A series of qualitative surveys of the main actors in the sole fishery.
 - With PO representatives (6 interviews)
 - With fisheries stakeholders (7 interviews)
- A characterisation of the Bay of Biscay sole fishery fleet
 - Fisheries Information System data from Ifremer
 - PO data (LPDB, OPPAN, PDA)



Results

Distribution of the quota to POs

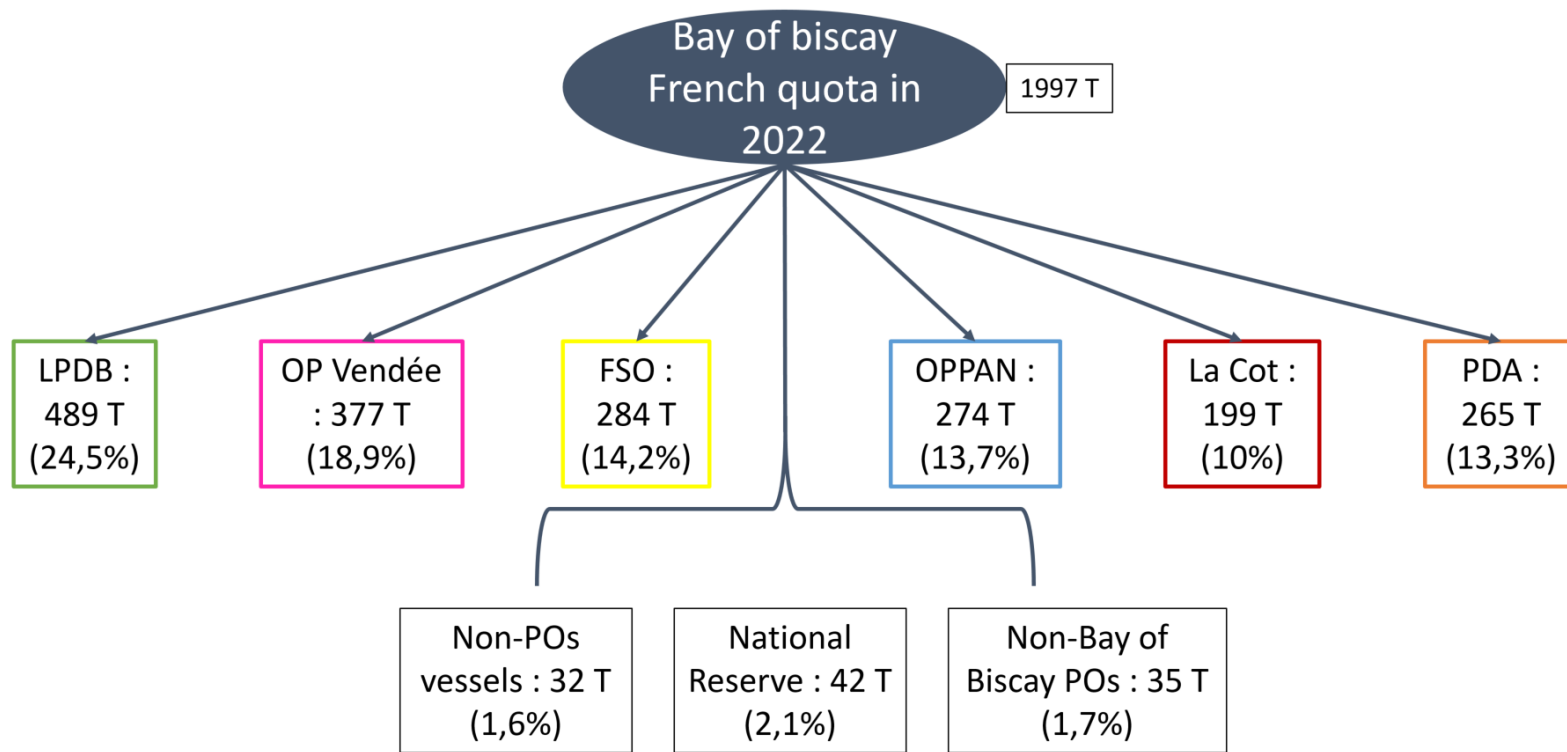
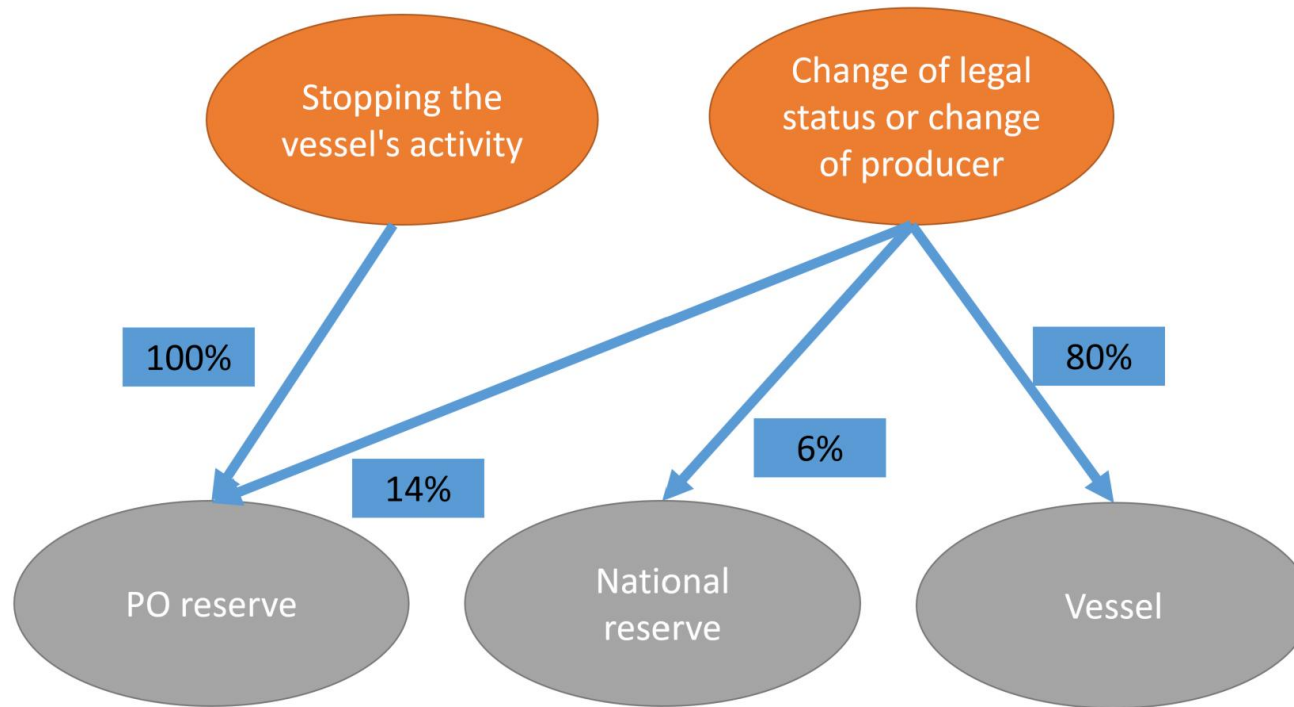


Diagram of the allocation of sub-quotas by POs in 2022.
(Reference: Own realisation according to the survey results and the national orders for the allocation of fishing sub-quotas)

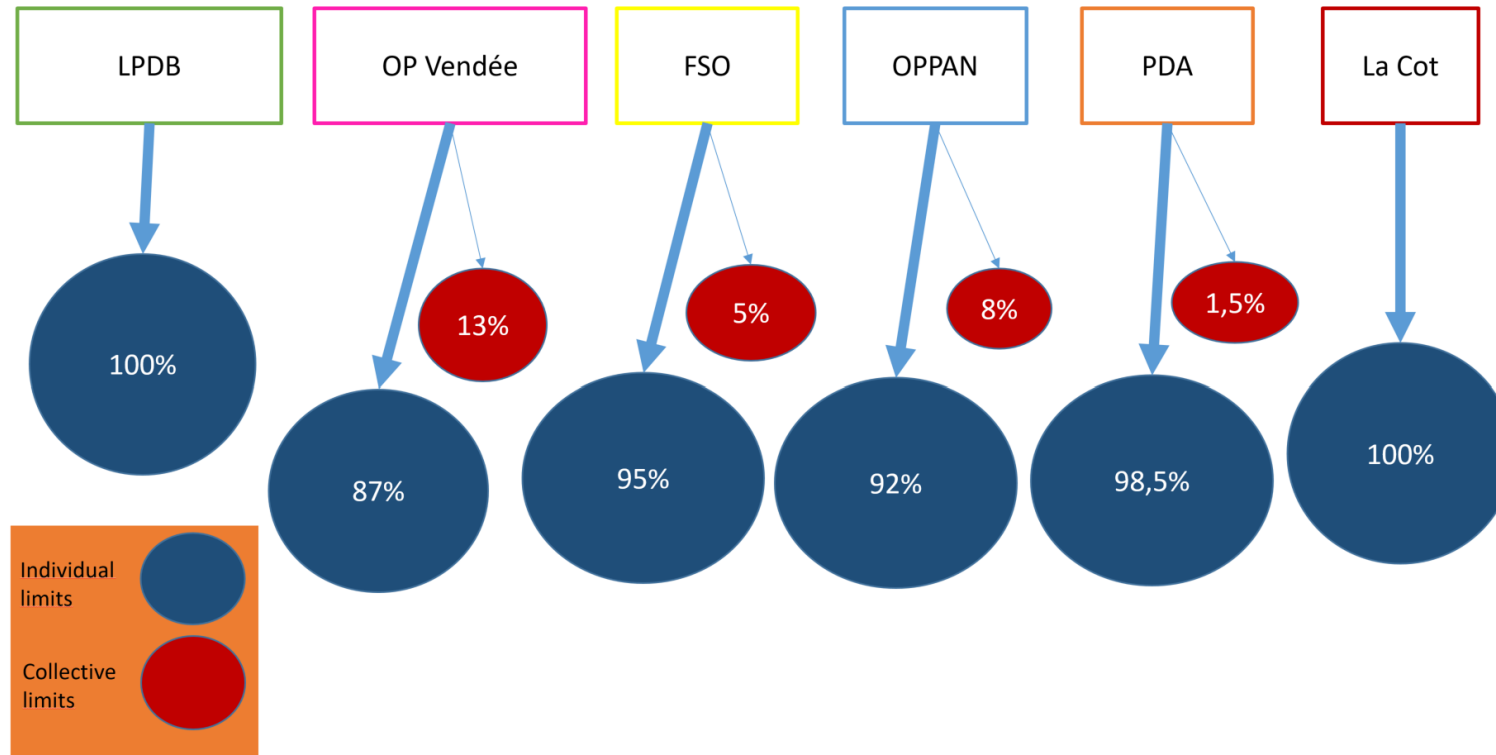
Track records transfer system



-> A growing proportion of prior rights are held by POs

Diagram of the track record transfer system in France.
(Reference: Own realisation according to the French Rural and Maritime Fishing Code)

Management of sole sub-quotas by POs



Allocation of Bay of Biscay sole fishing opportunities by PO in 2022
(reference: Own realisation according to the survey results.)

Management of sole sub-quotas by POs

Distribution of sole sub-quotas according to POs' allocation methods for the year 2022.

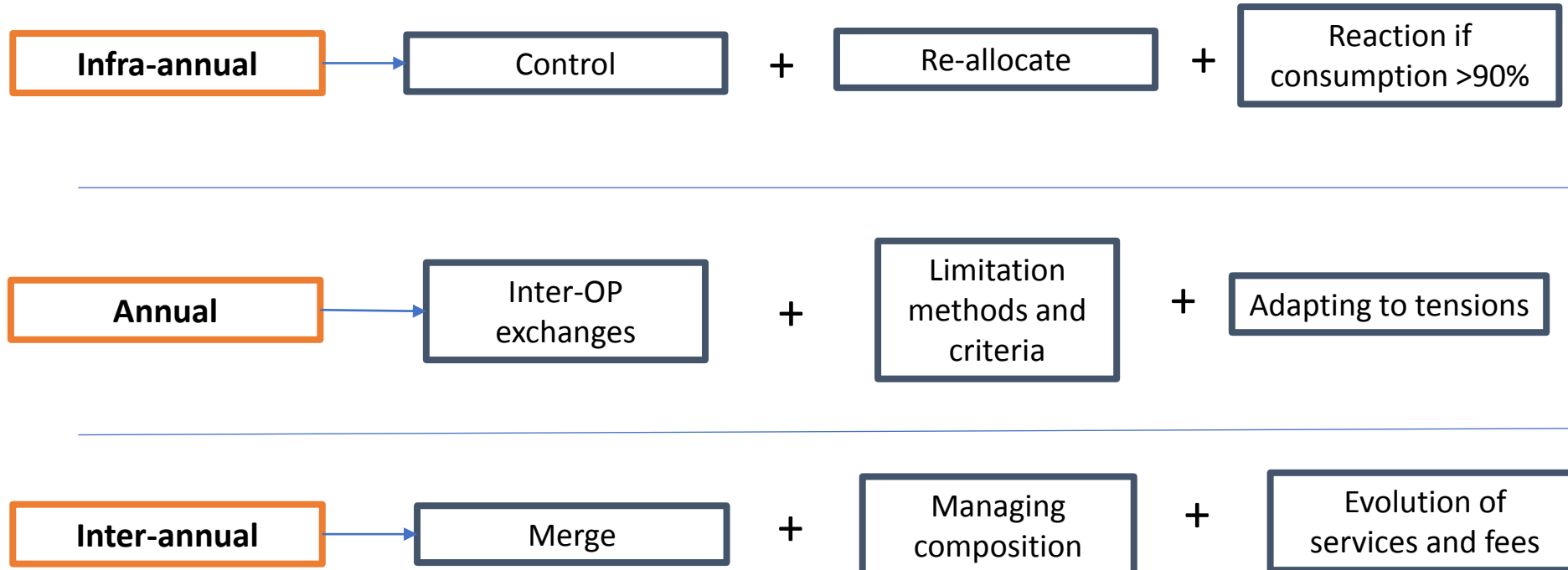
| groups | Track records 2001-2003 as main limitation criteria | | | Other main limitation criteria | | |
|------------------------------|---|-------|--------------|--------------------------------|------|-----------|
| | FSO | OPPAN | La Cotinière | PDA | LPDB | OP Vendée |
| Share of sole quota by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

(Reference: Own realisation according to the survey results)

Management of sole sub-quotas by POs

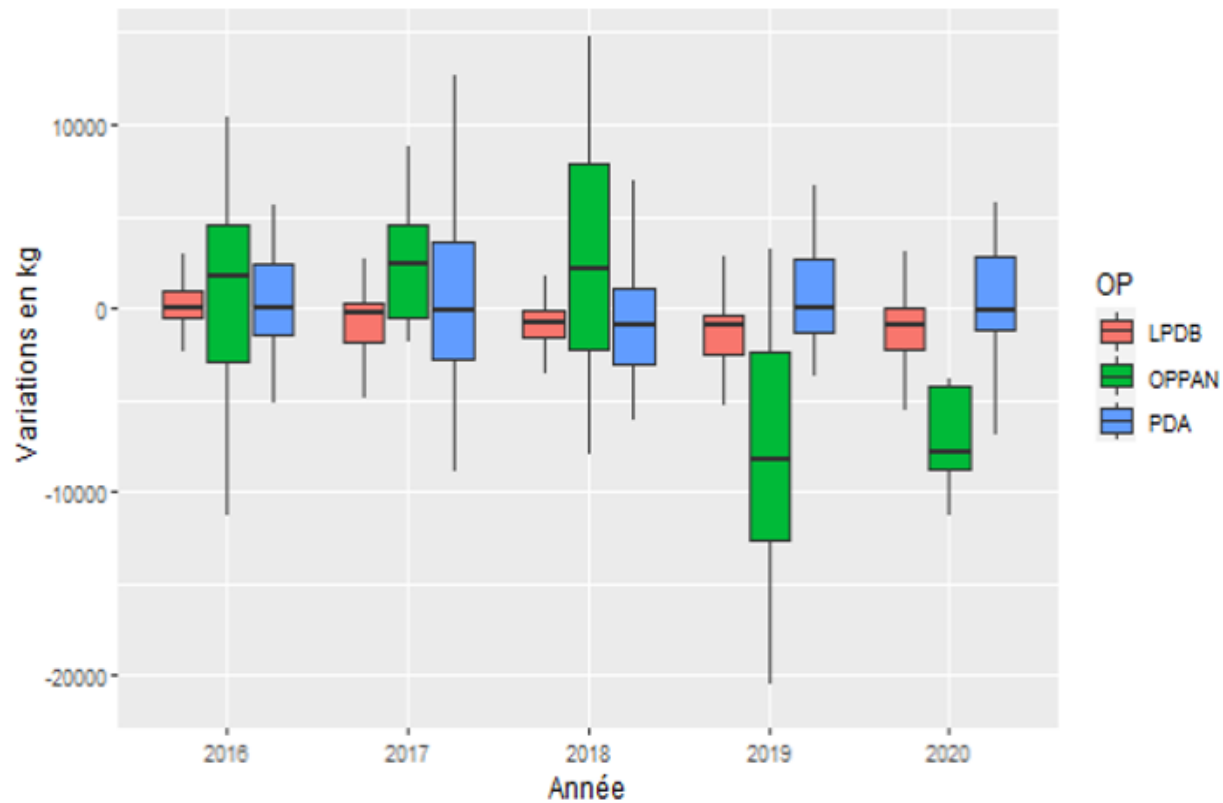
Role and strategies of POs at different time scales

- Main objective: guarantee access to resources for members



Exploratory data analysis

Variation between initial allocation and final consumption by PO between 2016 and 2020.



(Reference: Own realisation according to PO's data)

3 main strategies :

- The initial allocation is restricted and reallocations are made during the year
- Over-allocation at the beginning of the year and individual under-allocation.
- very little annual adjustment, but a great deal of variability within the fleet

Conclusion

- Decisive role of POs
 - Reduction of transaction costs
- Generalisation of ship-by-ship allocations (compared to 2012)
 - Importance of PO size (carry-over options)

Discussion

- Obtain all the data for each PO and carry out more detailed quantitative analysis
 - Compare the reduction of transaction costs with an other management system
- How the PO could be a driver for procedural, distributional or intergenerational equity ?

Thank for your attention

References

- Lagièrè Rachel, Claire Macher, et Olivier Guyader. 2012. « Bilan et évolution des mesures de gestion mises en œuvre dans le golfe de Gascogne »
- Innes, James, Olivier Thébaud, Ana Norman-López, et L. Richard Little. 2014. « Does Size Matter? An Assessment of Quota Market Evolution and Performance in the Great Barrier Reef Fin-Fish Fishery ». *Ecology and Society*
- Hamon Katell G, Olivier Thébaud, Stewart Frusher, et L. Richard Little. 2009. « A Retrospective Analysis of the Effects of Adopting Individual Transferable Quotas in the Tasmanian Red Rock Lobster, *Jasus Edwardsii*, Fishery ». *Aquatic Living Resources*
- ICES 2021 et 2022. « Sole (*Solea Solea*) in Divisions 8.a–b (Northern and Central Bay of Biscay) »
- Bellanger, Manuel. 2017. « Modelling Institutional Arrangements and Bio-Economic Impacts of Catch Share Management Systems: Application to the Bay of Biscay Sole Fishery »
- Boncoeur et Troadec. 2003. chapitre 2 (« Le mécanisme de la surexploitation des ressources halieutiques ») et chapitre 9 (« La régulation de l'accès », avec J.P. Troadec) in L. Laubier (Ed.) *Exploitation et surexploitation des ressources marines vivantes*

| 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 | 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 |

Mode de réallocation des possibilités de pêche en cours d'année. (Source : Réalisation propre d'après les résultats d'enquêtes)