What Will the French oceanographic Fleet Look like in the Future

Maximilien Simon et al.

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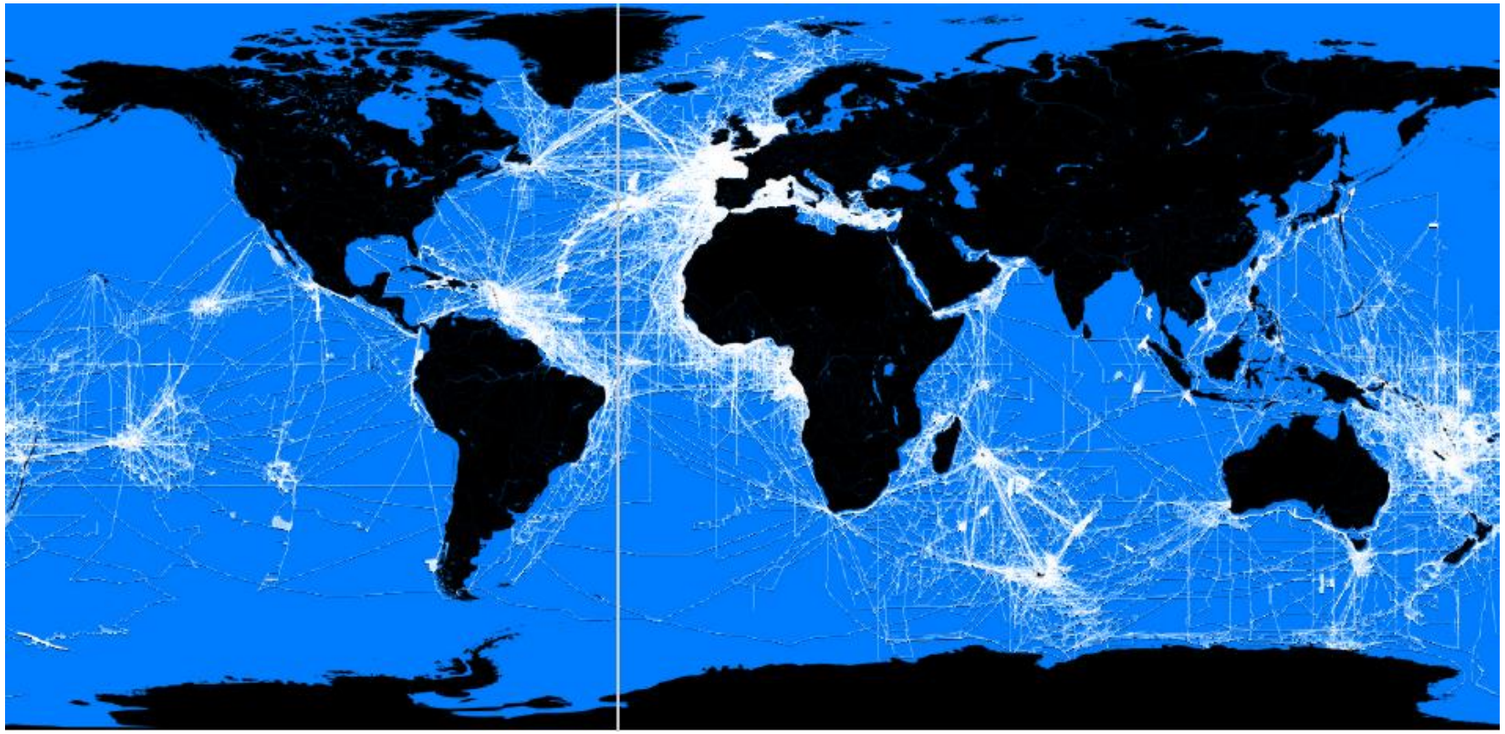
The French oceanographic fleet (FOF)



Map of French oceanographic campaigns around the world since 1920

Deep-sea vessels

Atalante | Marion Dufresne | Thalassa | Pourquoi pas ?

Coastal and regional vessels

Téthys II | Antea | Europe | Haliotis

Thalia | Côtes de la Manche

Underwater vehicles

Idefx | Asterx | Ariane

Ulyx | Nautile | Victor 6000

Local vessels

Sépia III
Neomysis
Albert Lucas
Planula IV
Néréis II
Antédon II
Sagitta III

A global and ambitious foresight exercice

An 18-month collective and participative foresight exercise.

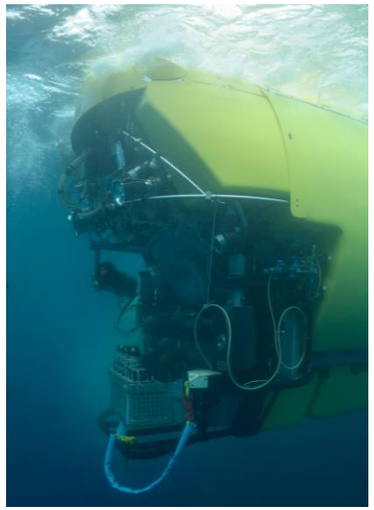
Objective: to define the broad outlines of the next plan for renewing the FOF's resources to meet research needs, including the need to reduce its carbon footprint.

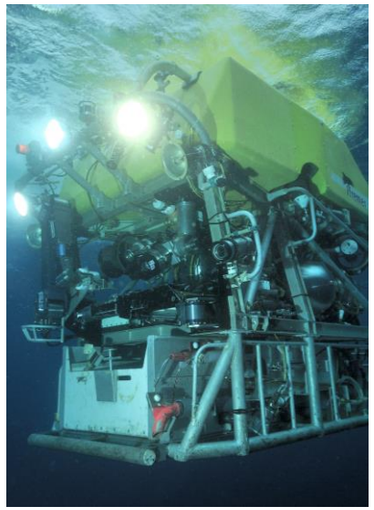
4 areas of work: scientific needs, technologies, partnerships, carbon footprint

20 recommendations and a white paper published on the sidelines of the UNOC

Modernizing the Fleet of ships and submersible vehicules to meet scientific needs *Rec. 1 → 8*

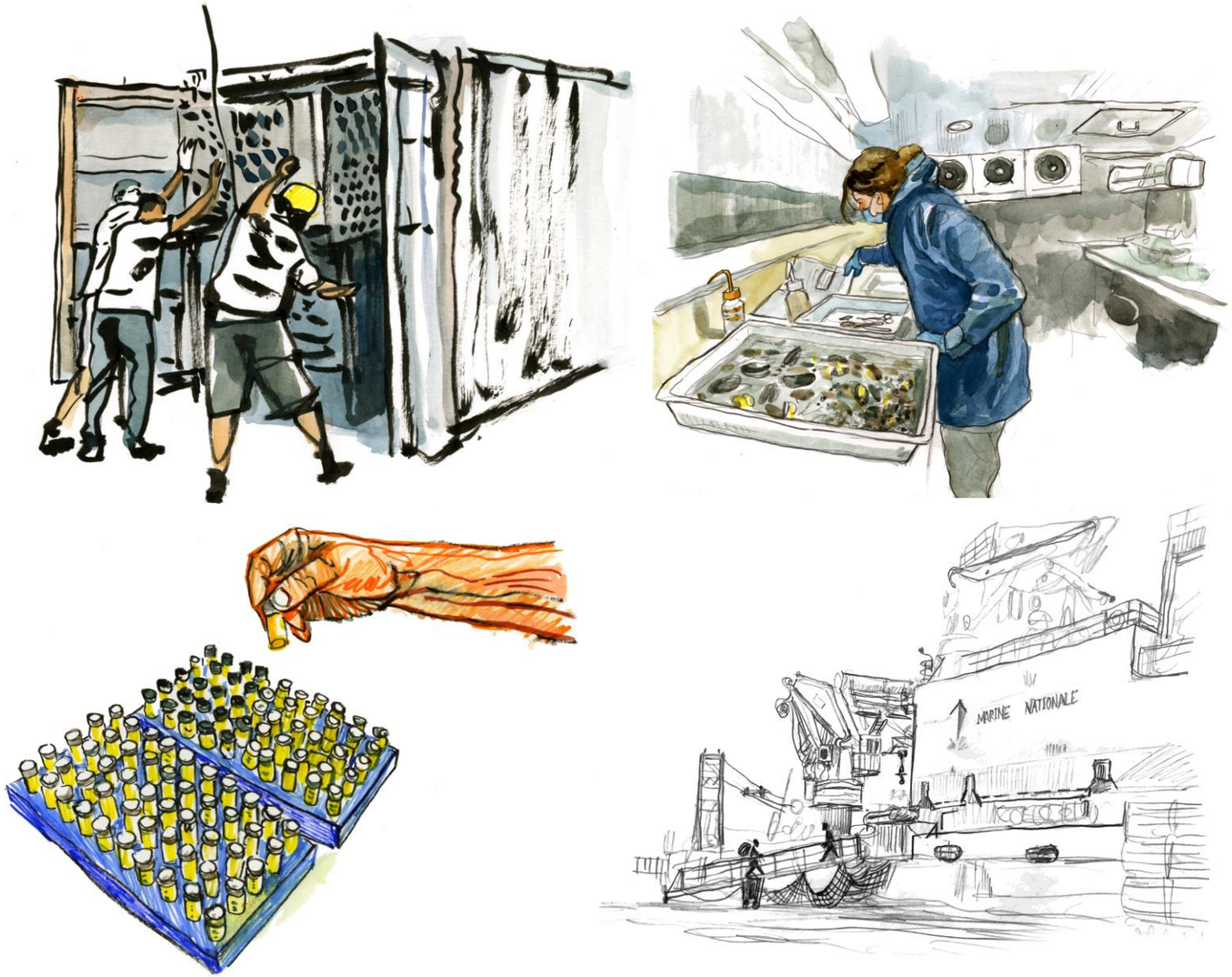
- Coastal and regional vessels
- High-sea vessels
- Submersibles
- USV and remote operations





Improving operations, renewing generations, developing partnerships *Rec. 9 → 18*

- **Enhance operational flexibility**
- **Improving data “FAIRness”**
- **Foster the generation transition**
- **Facilitate collaboration**



Drawings by Damien Roudeau, Momarsat 2022 campaign, project led by Jozée Sarrazin and Marjolaine Matabos

Reduce our carbon footprint while maintaining a high level of service *Rec 19→ 20*

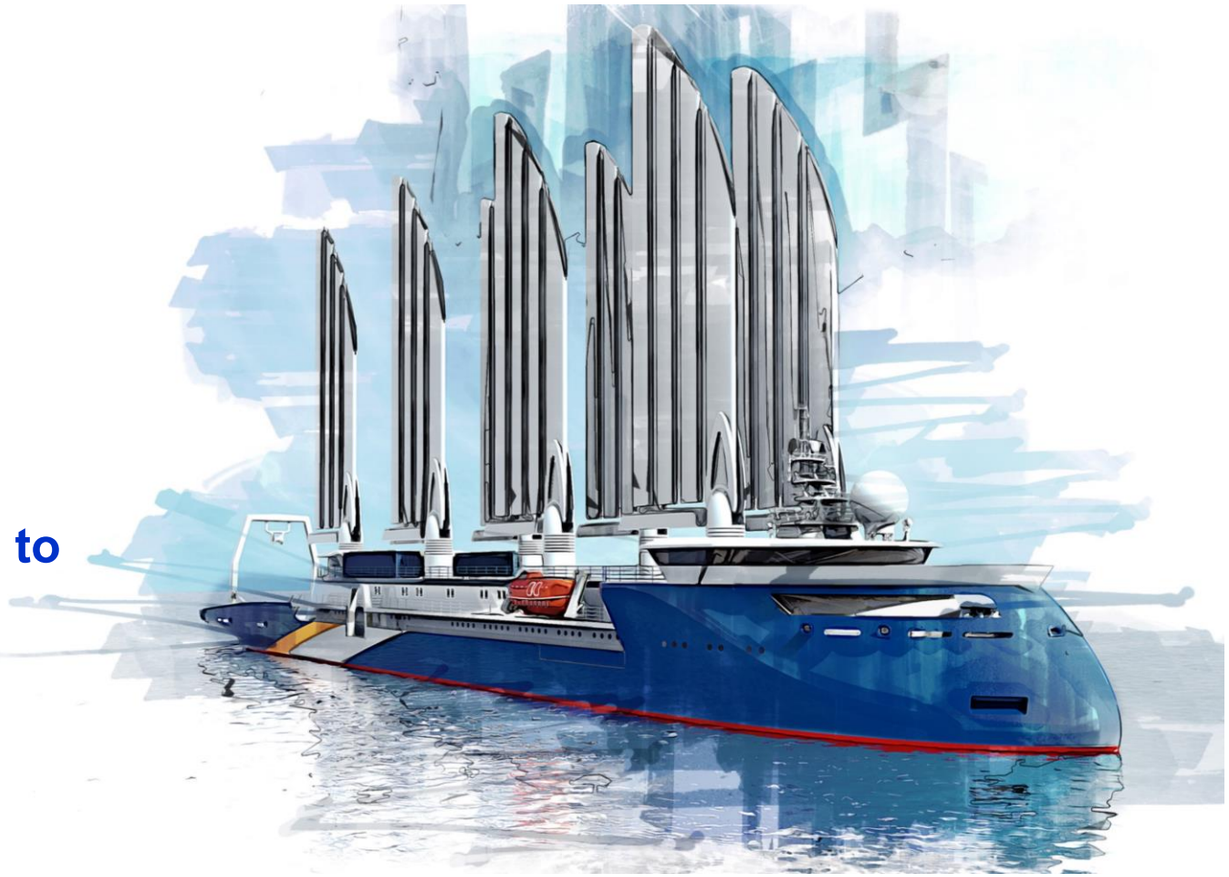
Actions to be initiated as soon as possible

- Reduce the speed of ships in transit (inter- and intra cruises)
- Positioning ships to reduce transits via international collaboration
- Modify existing ships to switch to shore power

Wind energy for transits can make a major contribution to decarbonization

- Essential to study and build new types of hybrid vessel

Encourage development of new research practices



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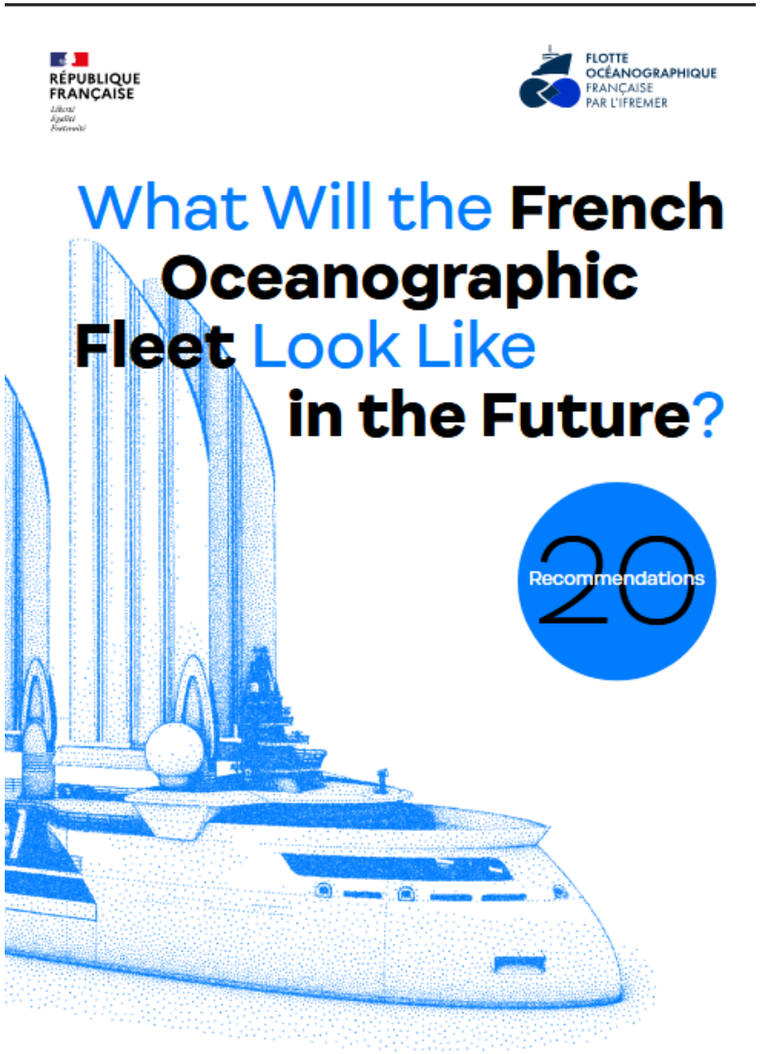
Conclusion and perspectives

- ✓ The work covered all the issues of an oceanographic fleet, from scientific needs to partnerships.
- ✓ 20 recommendations and a white paper published on the sidelines of the UNOC 2025
- ✓ Based on these conclusions, we are working on a new renewal plan until 2040
- ✓ At the same time, we are putting in place a transformation plan, in particular for decarbonisation actions.



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