Deployment Strategies
Global Approach and Innovation

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We have recurrent global and regional gaps.

... And the Academic Research Fleet Is Shrinking

<table>
<thead>
<tr>
<th>Vessel</th>
<th>2001 (28 Total)</th>
<th>2025 (13 Forecast)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>70 m – 85 m</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>45 m – 70 m</td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>20 m – 44 m</td>
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The activities of the Ship Coordinator will be balanced between:

- Technical coordination for the SOT and GO-SHIP initiative
- General Ship-time service and cruise information management
- Cross-sector JCOMMOPS tasks (cooperation, training, communication)

Submit your needs to Martin: mkramp@jcommops.org, +33 561 394 782

- How many units to be deployed?
- Where?
- When?
- Available funding?

Martin will try to find the best solutions for your needs.
Opportunities, Research Vessels and Charters

A new strategy must be balanced between:

- Synergies within scheduled research cruises
- Recruitment of unexploited opportunity vessels in new organizational frameworks
  - World Ocean Council (maritime industry)
  - Specialized sailing associations (NGOs)
  - Ocean sailing schools and tour operators
  - Nonprofessional ocean rallies
  - Professional ocean races and delivery cruises

→ Only a few contact points giving access to many vessels!

Charter of adequate vessels for substantial deployments
Successful Pilot Projects

Several successful deployment projects with the sailing community have been organized by JCOMMOPS over the last 12 months.

- Lady Amber, the 20m South-African schooner chartered through JCOMMOPS, already deployed more than 100 instruments in the Indian and Atlantic Ocean.

- Lady Amber will be ready for new mission (Indian Ocean ? ) in a few weeks
Several successful deployment projects with the sailing community have been organized by JCOMMOPS over the last 12 months.

- In partnership with the French NGO Voiles Sans Frontières, 12 floats were deployed in the Atlantic Ocean last season and at least 15 are previewed by the end of the year.
Successful Pilot Projects

Several successful deployment projects with the sailing community have been organized by JCOMMOPS over the last 12 months.

• In partnership with the Suisse NGO Multi One Attitude Foundation, 2 floats were deployed in the Atlantic last June by MOD70 trimarans.
• This partnership will be of growing importance through the upcoming World Race of the MOD70s and excellent communication possibilities.
But the global array cannot be maintained only by research vessels (funding issues) and opportunity vessels (limited quantity).

JCOMMOPS worked with a specialized maritime consultancy on a strategy for worldwide substantial and cost-effective deployment.

The oceans were divided into a number of areas of similar complexity. The consultancy delivered a study including political, logistic, density, piracy and meteorological factors. Depending on the regional characteristics, adequate charter vessels were identified to complete the operations of research and opportunity vessels with large scale deployments.

JCOMMOPS is now capable to offer turnkey solutions for substantial deployments anywhere in the world.
Three different vessel types were chosen for the global charter approach, with the payload correctly assured.

- A polar vessel would operate in the northern polar areas. Details TBD.

- An innovative fast multirole vessel would operate in risky areas or requiring huge amounts of floats.

- Several sailing vessels would operate in non-piracy areas.
The OE40 follows the idea of a Fast Research Vessel, designed more than 10 years ago, with additional security equipment for risky areas.

- Multihull design combines efficient performance (high speed at low fuel consumption) with excellent seakeeping.
- At economic cruise speed (12 kn), the vessel can cruise 5,000 nautical miles and deploy 3 floats in two days (3° equatorial grid).
- 4 tons of instruments and equipment could be stored.
- Core crew 6. Up to 11 passengers.
- Prototype to be launched in 2013.

Daily rates drop below 5 k€, if all players act efficiently together!

**Graph:**
- Daily rate OE40
- Number of days chartered / year
- Euros
- High Risk Area: additional cost 4000E/day
- High Southern Latitudes: additional cost 3000E/day
Further professional sailing vessels are ready to sail, following the Lady Amber concept. They could store between 1 and 2 tons of equipment.

- Traditional sailing vessels could operate in less complicated areas, at rather low daily rates – combined with low speed.

**Daily rate Renaissance**

**Daily rate Lady Amber**
Overview Worldwide Deployment Strategy

JCOMMOPS proposes to manage the best possible composition of all described vessels.

- If all players across borders, programs and panels within JCOMM act together, everybody wins!
The implementation of such a strategy requires all relevant data, from both vessel AND float operators, in a central data base, several months before the mission.

- JCOMMOPS is working on the design of such a system.
- All necessary metadata will be gathered here, about the ships, their routes and capacities.
- Operators will be able to add their data through a user-friendly GUI.
- The JCOMMOPS ship coordinator will act proactively to collect missing information and to close gaps.
- Based on requests by operators, JCOMMOPS will cumulate as many synergies and actors as possible to make cost-effective proposals.
- This system is one of the new elements of the new JCOMMOPS Information System. A prototype is previewed for June.
Conclusion and Outlook

Deployment activities must be reorganized at a global scale. Soon.

- It will be more and more difficult to deroute research vessels for float deployments, due to extremely high daily rates and budget cuts.
- Opportunity vessels are far from well-exploited, but more pro-active recruiting activities are necessary – and quantities remain limited.
- For dedicated deployment missions, adequate and cost-effective charter vessels for cooperative cross-program operations must be identified and managed by a “neutral” focal point.
- JCOMMOPS has now all the capacities and contacts to handle the overall management of global and substantial deployment missions.
- And exploit communication potential to promote and “humanize” the GOOS and Argo in particular

→ Ask JCOMMOPS support!