



Paddle

Planning in a liquid world with tropical stakes

NEWSletter #2

PADDLE

Edito

Reminders

What's new in the consortium?

Paddle early-stage researchers

Project progress



EDITO

Dear Colleagues,

The Project's Summer School, a key event, has just been completed. It was an opportunity for many of you to exchange knowledge on the opportunities and limits of marine spatial planning in the tropical Atlantic.

The work carried out during the first year now allows the project to progress smoothly. The first part of this newsletter reminds you of the key elements to know in order to contribute effectively to the successful implementation of the project.

92 secondments were carried out in the first 15 months, contributing to the 4 pillars of the project: capacity building, exchange of interdisciplinary experiences, analysis of tools for decision-makers and strengthening of inter-Atlantic collaborations. The progress made in these different pillars is presented in the second part of this newsletter.

The number of doctoral candidates participating to the project is increasing. They benefit from exchanges of skills with the aim of building a network of experts on this theme. The section on Early-stage Researchers introduces them to you.

And finally, the last part, allows you at a glance to have an overview of the progress of the project in terms of both secondments and deliverables.

Marie Bonnin



◀▶ Pictures of the summer school held in Brest, 3-7 septembre 2018

It is now time to think about the project's publications

Information on every publication will be uploaded on the European portal.

- For them to be recorded, the following sentence must be present on all documents related to the PADDLE project: "This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 734271".
- It is imperative to send the exact references of your publications to paddle@ird.fr. IRD will set up a procedure to reference your publications and upload them to the EU portal, taking into account publishers' embargoes.
- It is also crucial to inform us on the communications made in colloquiums / workshops in relation with the PADDLE project, in order to mention them in the project's scientific reports and website. You can decide whether or not you would like to put the presentation on the project's website. It could be immediately done, or after a defined embargo.
- Tip : To make our publications more visible, we could put « Paddle Project » as a keyword

REMINDE

Secondment check-list

Prior to your secondment

- ✓ check your secondment eligibility (cf. Art. 6.2, Grant Agreement)
- ✓ Send an email to paddle@ird.fr to Exchange with the project coordinator and manager about your planned secondments
- ✓ Complete and sign the risk assessment form
- ✓ Communicate with your WP leader who is going where and when by adding a post on the padlet (see Reminder on communication below)

At the end of your secondment

- ✓ Fill in the attestation of secondment form, detailing the work packages and tasks you have been working on and submit it to the project coordinator and to your WP leader
- ✓ Upload your secondment on the EU portal
- ✓ Send photos to the project team to feed in the project website

Communication

To facilitate communication between secondees of a same WP, we have set **padlets**. When leaving on secondment, please add a few lines on your planned work and fields. These pages are very user-friendly, if you encounter difficulties, please reach out to the project team.

WP2 : https://padlet.com/marie_bonnin/m9l382hmzgr

WP3 : https://padlet.com/marie_bonnin/wflxswtfg4h4

WP4 : https://padlet.com/marie_bonnin/3hqak94qktmf

WP5 : https://padlet.com/marie_bonnin/lcgq13p5r9td

You will also find on the padlets key information (just like the sentence to add on all communications), do not hesitate to refer to these websites regularly !

Scientific monitoring

Netvibes: <https://www.netvibes.com/paddle-ird>

The scientific knowledge platform, hosted by Netvibes, allows us to have a systematic scientific monitoring on publications on Paddle-related issues. This platform is organised per Work-package and case studies.

If you want to add a new systematic monitoring, just ask by sending an email to paddle@ird.fr

what's **NEW?** in the consortium



▲ Pictures of the «MSP challenge» serious game during the tropical MSP summer school

The project is based on four pillars : promoting capacity building, triggering interdisciplinary experiences, providing tools to decision-makers and reinforcing collaborations. This section provides news on these 4 thematics.

Promoting capacity building

Tropical MSP Summer school

The summer school on Marine Spatial Planning in Tropical areas brought together 72 participants, PhD students, researchers and other participants from Europe and tropical countries for a week of training and capacity building. It aimed to provide young researchers with an extensive toolbox to address some of the challenges facing the world's largest ecosystem through marine spatial planning. This week was rich in ideas, knowledge and exchanges.

Introductory concepts and disciplines offering decision support tools (GIS, acoustics, population modelling, etc.) were presented by international experts. The theoretical framework was first presented from a historical perspective to ocean management and governance issues. All these concepts and knowledge would have been less valuable without the valuable testimonies of Brazil, Senegal and Cape Verde and without all the tools that were presented to navigate between issues, challenges, opportunities and constraints. The two keynote speakers shared their field experience on the implementation of maritime spatial planning during a half-day event open to the public, one by sending warning signals on power mobilization and competition for legitimacy, the other by showing promising prospects. The lessons learned were immediately put to the test as part of the MSP Challenge.

The project wishes to thank the LabexMer for participating to the funding of this summer school.

Trigger interdisciplinary experiences

In order to facilitate interdisciplinary exchanges, work in the different workpackages has been organised to progress in a parallel and complementary way.

The Task 1 related to the state of the art is well advanced in each work package. The secondments realised in the different case studies allowed to bring to light data on :

- Ecosystem dynamics: (Cabo-Verde: V. Paiva, J. Ramos, F. Ceia ; Ines Machado, S. forgeron; Senegal T. Brochier, Y. Thomas ; Brazil : T. Fredou, F. Lucena, H. Hégaret)
- Policy and governance dynamics (Cabo-Verde : E. da Cruz, M. Bonnin, P. Fotso ; Senegal : J. Guerreiro, Daniela Casimiro ; Brazil : P. Fotso, S. Teles da Silva).

- Challenges and solutions (Cabo-Verde : M. Caña, H. Calado, M. Vergilio, F. Lopes, A. Ventura, P. Raposeiro)

The Tasks 2 & 3 : critical thinking and cartography

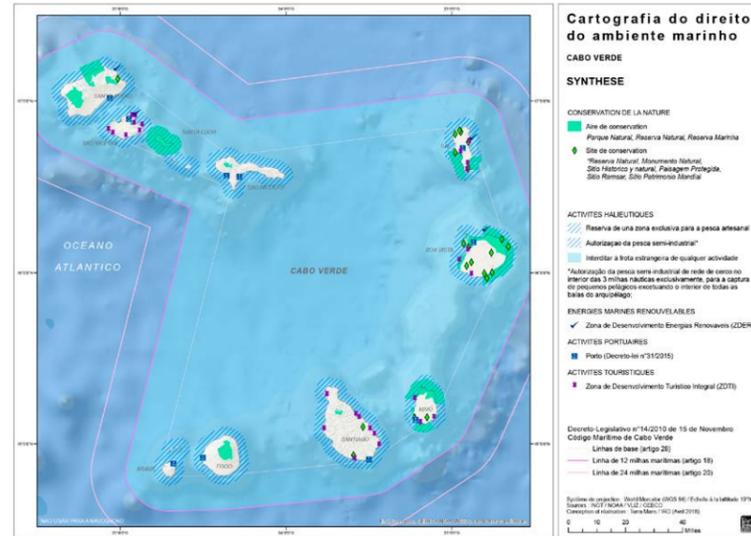
- Ecosystem dynamics: (Au Sénégal, Y. Thomas, au Brésil, C. Barbraud, A. Bertrand et au Cap-Vert : A. Martins).
- Policy and governance dynamics (Senegal: M. Diedhiou, F. Ndiaye, M. LeTixerant)
- Challenges and solutions (Cabo-Verde: O. Silva, F. Lopes).

Few secondments are directly related to the tasks 4 of the different WPs. As this work should be based on the results of the tasks 1, 2 and 3, there is nothing to be worried of.

Concerning WP5: the Task 1 didn't imply any secondment, but is completed. The scientific knowledge platform is accessible online: <https://www.netvibes.com/paddle-ird>. The work of the tasks 2 & 3 have been engaged, mostly in Brazil (L. Gillis, V. Helfer, M. Zimmer, S. Bertrand, S. Thorin, G. Domalain and B. Padovani).

Provide decision-makers support tools

One of Paddle's aims is to advance reflexion on useful decision making tools for MSP. Maps of environmental law is one of the proposed tool. **Matthieu Le Tixerant** (Terra Maris) realised a synthesis map of the rules in Cabo Verde, on the basis of the data collected by the different partners of the project.



There are many early-stage researchers involved in the project. This participates in the construction of a future network of experts on the theme of Marine Spatial Planning in Tropical Atlantic. New PhD students recently joined the team, please find below a quick presentation of their theses. You will also find a list of the PhD students presented in the first newsletter.

Please tell the PADDLE team if you have more Phd Student involved in your team, we will actualize this list in the next Paddle Newsletter.

Renforcement des collaborations

Since the project's start, several research programmes have emerged thanks to the exchange opportunities offered by the project PADDLE: LMI Tapioca, SMCC, ExManCoast. Secondments favor these exchanges' continuation, and other projects are currently written on the project's case studies and/ or themes of research.

SAVE THE DATE

From Feb. 4 to 6th, 2019, the project PADDLE will be organising a workshop in Recife on the comparison of MSP processes in Europe and Southern Atlantic. More information to come...



José Manuel López Torres

PDI adscrito al Departamento de Geografía Humana (USE)

WP4

Maritime Spatial Planning and Territorial Planning in Spain.

The Maritime Policy and the Maritime Territory in Spain need an analytical update. Accordingly, the scale of work is a fundamental decision prior to planning. The planning areas in Law 41/2010 and Royal Decree 363/2017 show a new articulation of the maritime-terrestrial territory. The Territorial Approach to Maritime Space Ordination Plans (the TPEA, SIMWEST / SIM-NORAT cases) will help us in the conclusions in the current context.

Guilherme MORAES DE OLIVEIRA ABUCHAHLA

Leibniz Centre for Marine Tropical Research (ZMT), Bremen, Germany Policy Group (ENP)

WP2



Coastal and terrestrial landscapes entrain critical differences in dynamics that have important spatial and temporal repercussions. Coastal landscapes are non-scalar mosaics of wetlands. They can occur at different scales in similar functions (marine, riverine, marshes, lagoons, swamps) and can coexist as a functional macroecosystem sharing species evolving links that create regional links.

Considering the connectivity among adjacent coastal ecosystems a pivotal aspect of MSP, this study will provide hitherto disregarded insights of relevance to how coastal ecosystems are linked with each other and embedded in a dense network

of ecological exchange and interaction.

To address the abovementioned requirement, the present research investigates the biogeochemical connectivity between the common-occurring interface between mangrove stands, salt flats and terrestrial ecosystems. This study is being carried out within the context of the work package #2, whose aims are to identify and collect available knowledge, data and models on key ecosystem dynamics at place in the case study countries (Brazil and Senegal).

Greening African Ports: Environmental Governance Transformations in a Network Society

Understanding the linkage between mangroves and terrestrial ecosystems in semi-arid areas of both sides of the Atlantic

Harry Barnes-Dabban

Wageningen University, Environmental Policy Group (ENP)

WP3

African ports have historically not paid much attention to environmental issues. However, as the ports undergo institutional and infrastructural reform, with increasing public-private partnership since the year 2000, pockets of innovative responses to environmental risks are beginning to emerge. The thesis investigates the institutional dynamics within which the innovative responses are developing and reforming African ports environmentally through multiple actor - state and non state - interactions across multiple levels of governance - subnational, national, and regional within a global setting. Five West and Central African ports - Abidjan, Douala, Lagos, Monrovia, and Tema - are used as case studies. Several sets of theoretical perspectives - sense making and institutions; ecological modernisation; international bureaucracies, domestic regulatory-politics, and transnational governance; and policy arrangements and convergence, are complemented and used as analytical lenses to adequately understand the connectivity and dynamics for environmental policy and governance transformations and the pathways and paces that advance or inhibit environmental reform of African ports. Findings highlight global actors, concepts and ideas influencing the organisation and institutionalisation of environmental change in African ports, and yet not homogenising them. The embeddedness of the locus and standing of state institutions, with potential for inhibiting the influence, is being circumvented by African port authorities in the emergent shifting of environmental governance of their ports. Nonetheless, state actors remain the linking pin and cannot be escaped.

Souleye NDAO

Université Cheikh Anta Diop de Dakar, Sénégal

The legal framework for shark fishing in West Africa

WP2



Les requins étaient modérément pêchés pour l'huile, d'excellente qualité contenue dans leur foie, pour leur chair et accessoirement pour leur peau, utilisée en maroquinerie sous le nom de Galuchat. Cette situation est aggravée par l'image traditionnelle négative des requins, perçus comme des créatures malveillantes responsables d'attaques contre des êtres humains et de dommages aux prises de pêches.

Le développement des techniques de pêche visant d'autres espèces, le thon en particulier ont multiplié les prises accessoires de requins. Par ailleurs, avec le développement économique des pays asiatiques et l'augmentation du pouvoir d'achat de

ses habitants, la demande en ailerons de requins a explosé au cours de ces dernières décennies. Compte tenu de l'augmentation du prix des ailerons, on est passé progressivement d'une valorisation de prises accessoires à une recherche active des requins ; uniquement pour leurs ailerons, qui ne représentent environ que 2% du poids frais d'un requin. Ceci pourrait avoir des impacts économiques négatifs et d'autres conséquences dommageables pour la sécurité alimentaire ainsi que pour des options commerciales et récréatives.

Pericles SILVA

INDP, Mindelo, Sao Vicente, Cabo Verde

Vertical habitat use and diving behaviour of yellowfin tuna, *Thunnus albacares*, in CABO VERDE

WP3



Habitat quality changes with climate change, affecting water temperature and oxygen contents, and this change in habitat quality could trigger a shift in spatial distributions of the tuna species, i.e. yellowfin (YFT) and bigeye tuna (BET), in Cabo Verde with subsequent effects for the fisheries.

Stramma *et al* (2012) show expanding Oxygen Minimum Zones (OMZs) in the eastern tropical seas. Possible consequences of OMZ expansion to the marine ecosystem include loss of vertical habitat for high oxygen demand tropical big pelagic fishes like tunas and the associated increased risk of overfishing of

these species by surface fishing gear.

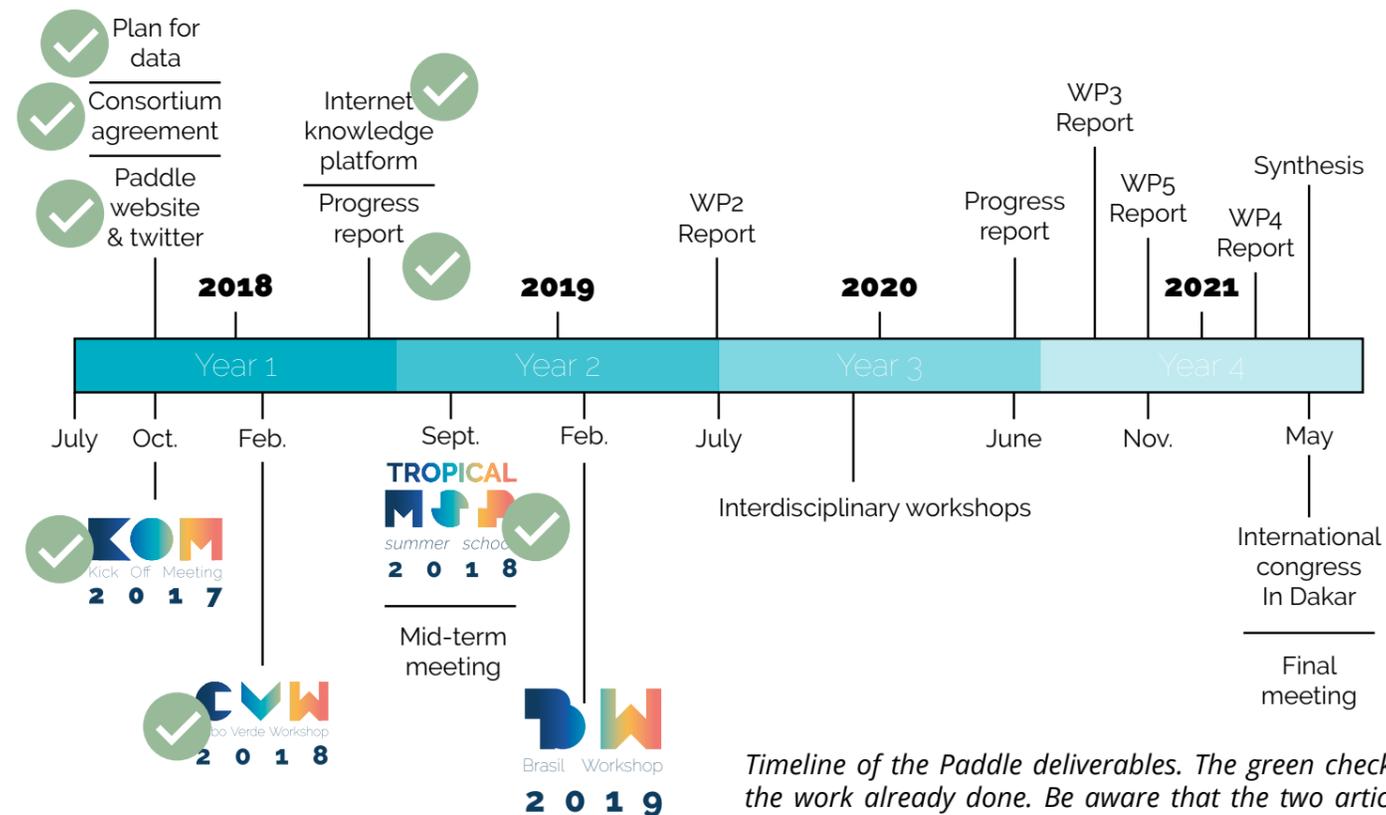
One of the main objectives of this study is to cross this data with dissolved oxygen data from Cabo Verde area in order to try to understand whether the OMZ is affecting the diving behavior of YT tuna and limiting them to shallower environment habitat and exposing them even more to fishing gear.

At the end the main idea is to provide police makers with best advice possible based on the conclusions taken in this study management tools to make the resource sustainable for the future generations.

Project PROGRESS

Baromètre des secondments		
	Nbr de secondments effectués	% des secondments prévus avant le mid-term
Terra Maris	1/1	100%
UCAD	12/14	86%
INDP	8/11	73%
FCUL	11/19	58%
IRD	23/45	51%
UPM	1/2	50%
UaC	11/23	48%
UBO	4/11	36%
UFRPE	2/6	33%
U. Nantes	2/6	33%
Créocean	3/11	27%
UFPE	5/19	26%
WU	1/4	25%
ZMT	5/22	22%
CNRS	2/12	17%
USE	1/8	13%

This table shows the mid-term (month 24) targets in terms of realised secondments. Only the secondments wholly accomplished (30 days) have been taken into account.



Timeline of the Paddle deliverables. The green checkboxes show the work already done. Be aware that the two articles for each workpackage are not shown on the figure.

Practical information

- Download the graphic charter of the project on the project's website
- Download the summary of the project Work Packages and tasks on the website
- The following sentence should be present on all documents referring to PADDLE: "This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement N° 734271", along with the EU flag
- You are ready to publish an article? You need to finance the open access of your publication? Please contact the project management team!
- The Paddle website is regularly updated with news, photos and videos, don't hesitate to visit it from time to time.



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