




# OceanPredict Science Team (OPST-8) Meeting

6-10 November 2023 Busan, Republic of Korea

Organised by  
 **OceanPredict**  
Advancing the science of ocean prediction

 **Korea Hydrographic and Oceanographic Agency**

 **SEOUL NATIONAL UNIVERSITY**  
Research Institute of Oceanography

Hosted by  
 **KIOST**



# OPAS meeting



- 1. Introduction (OPAS role & composition, change of co-chair) 10'**
- 2. OceanPredict state of play (incl. OPST-8) (by the co-chairs) 15'**
- 3. Updates on OceanPredict programme office (past & future activities, reorganization with the two offices) 10'**
- 4. OceanPredict funding status 10'**
- 5. OceanPredict Symposium : 1/ objectives, structure and themes, 2/ Sponsors and funding issues (20')**
- 6. Links OceanPredict / Foresea & DCC OceanPrediction and implications on the OceanPredict programme office activities (synthesis of discussion that will take place the first day of OPST-8) (15')**
- 7. AOB (10')**



# 1. Introduction



## OPAS role & composition

- Provides **strategic advice** to the Executive Committee (**OPEC**) and the Science Team (**OPST**) on OceanPredict **long-term goals, resources, international collaboration, funding priorities, interaction with UN Decade** bodies and programmes, and **advocacy for the ocean observing system**. OPAS members shall ensure that they have or can obtain the necessary delegated authority to act on their institution's behalf.
- The OPAS delegates management of OceanPredict to the OPEC responsible for overseeing the execution of OceanPredict activities by the OPST & TT.
- The OPAS chooses one (or more) of its members as the "**chairperson(s)**", who will act as the **main communicator(s) with the OPEC**.
- The OPAS shall propose the **annual budget and the membership contributions** at its annual meeting and prepare annual accounts with the PO.
- OPAS **membership changes are discussed/enacted at annual OPAS meetings**. The OPAS chairperson(s) is expected to fulfil their role for **three years** (with the possibility of renewal) before a new chair is identified, nominated and endorsed by a qualified majority (two-thirds) of OPAS members.



# 1. Introduction



## OPAS role & composition, change of co-chair

|                   |                    |                  |                              |                   |                             |
|-------------------|--------------------|------------------|------------------------------|-------------------|-----------------------------|
|                   | Pierre             | Bahurel          | Mercator Ocean International | France            |                             |
| Incoming Co-chair | Eric               | Bayler           | NOAA                         | USA               |                             |
|                   | Yang-Ki            | Cho              | University of Seoul          | Republic of Korea | Member since Jan 2021       |
|                   | Giovanni           | Coppini          | CMCC                         | Italy             | New member (April 2023)     |
|                   | Gerald             | Dibarboure       | CNES                         | France            |                             |
| Outgoing Co-chair | <b>Paul</b>        | <b>DiGiacomo</b> | NOAA                         | USA               | MEAP-TT champion            |
|                   | Craig              | Donlon           | ESA                          | Europe            | OS-Eval TT champion         |
|                   | Mark               | Drinkwater       | ESA                          | Europe            |                             |
|                   | Mikhail            | Entel            | Bureau of Meteorology        | Australia         |                             |
|                   | Isabelle           | Gaboury          | Fisheries and Oceans Canada  | Canada            |                             |
|                   | Johnny             | Johannessen      | NERSC                        | Norway            | DA-TT Champion              |
|                   | <b>Pierre-Yves</b> | <b>Le Traon</b>  | Mercator Ocean International | France            | COSS-TT champion            |
|                   | Matthew            | Martin           | Met Office                   | UK                | Member since Feb 2021       |
|                   | Estelle            | Obligis          | EUMETSAT                     | Europe            | Member since May 2021       |
|                   | Sudheer            | Joseph           | INCOIS                       | India             | Member since September 2022 |
|                   | Hendrik            | Tolman           | NOAA                         | USA               | CP-TT champion              |
|                   | Xueming            | Zhu              | NMEFC                        | China             | Xueming to replace Hui Wang |





## 2. OP state of play



### Co-chairs activities

Fraser Davidson and Marie Drevillon involved in The Economist impact webinar : “an industry perspective on the impact of ocean observations and prediction on climate mitigation”

Marie Drevillon and Fraser Davidson involved in the Oceanprediction-DCC architecture co-design team:

- OP-DCC co-design team workshop in Sep 2023 in Toulouse
- OP-DCC regional team meeting for western Pacific and South East Asian seas, Oct 2023 San Sebastian

Marie Drevillon co-organizer of the Ocean Reanalysis workshop of the Copernicus Marine Service, Toulouse, Oct 2023. Launch of a new international ORA intercomparison exercise -> official link with IV-TT & OSEVAL-TT to be established

Vinayachandran Co-chairs ForeSea along with Eric Chassignet



## 2. OP state of play



### Summary of ongoing discussions on UNDOS activities from OPST meeting

One can look at the various groups/programs (OP, GEO BP, GOOS, CoastPredict, OP-DCC) in relation to the OO value chain ensuring via collaboration strengthening of links in chain

- SynObs strengthens link obs-prediction systems as those collaboration with OBScode design
- ForeSea show cases, highlights , ocean forecasting (research, systems) and how it fits in OO value chain
- DCC provides framework, structure and infrastructure for whole value chain an important function for OP, ForeSea, SynObs....
- GEO Blue Planet and Obs. Sys. Co-design wishes to have discussion on specific tasks for collaboration with OP
- Connecting the value chain identified as a common task across decade partners
- ETOOFS provides accreditation of prediction systems
- OP- task teams advance research but also engage in Decade Programs covering the full value chain (CoastPredict)
- OP-OS WG capturing health and progress of forecasting systems , solving issues faced by forecasting systems



## 2. OP state of play



### Summary of task team activities from OPST meeting

All task team co-chairs agree that interaction is necessary, all agreed to attend a one hour meeting once per quarter. In person meetings are planned this year (possibly in the framework of OP24) or the next.

**OSEVAL-TT:** activities are organized along the Synobs project, with clear objectives, and efforts to build links with all relevant UNDOS programmes and other OP task teams

**DA-TT:** New co-chair Ann Kristin Sperrevik. Issue around raising “intellectual capacities”, attracting young people in the field of data assimilation for operational oceanography systems (a degree/formal training online for DA was suggested). A lot of activities around online seminars and training.

**MEAP-TT :** New co-chair Liuqian Yu. Discussions are taking place to collaborate around existing projects objectives, develop common platforms and tools, explore the feasibility to forecast higher trophic levels and ecosystems. Regular online seminars are organized.



## 2. OP state of play



### Summary of task team activities from OPST meeting....

**COSS-TT** : New co-chair: Alexander Kuparov. 140 online seminars held since 2019, very good platform to exchange on scientific results Interest from estuaries community, increasing number of people interested in near shore processes, storm surge. COSS-TT is very much involved in Coastpredict.

#### Historic Focus Areas:

- Science** in support of Coastal Ocean forecasting
- Coastal and Regional (pre-)operational ocean **forecasting systems** and applications
- Seamless **integration** between Coastal and Regional systems (R/COFS under COSS-TT) and Large scale systems (LOFS under OceanPredict)
- Synergy between **altimetry and modelling** in coastal regions

#### New focus areas:

- Observing infrastructure in the coastal seas, integration with models and with forecasting
- COSS modelling and seamless integration with larger-scale estimates
- Land-Ocean Continuum: integration of coastal ocean and estuaries/deltas/wetlands, coastal cities
- Coastal projections & scenarios, coastal vulnerability





## 2. OP state of play



### Summary of task team activities from OPST meeting....

**IV-TT:** Issue CLASS 4 server, comparing Class4 with system evolution (need a timeline of system status from OPOS), **Class 4 activity needs to transit from IV-TT to operational centers , approach options**

**CP-TT:** Good forum to discuss challenges in coupling, DA-CP TT joint 2025 meeting, themes: tropical cyclones, impact of initial conditions on coupled systems, diurnal SST cycles

**OPOS-WG :** Leveraging DCC Atlas infrastructure for reporting, system reporting important (see note from IV-TT), tracking system improvements/growth/end use... Establishing best practices.

*Note:* All groups trending for routine online seminar series



# 3. Updates on OP programme office



past & future activities, reorganization  
with the two offices

## Overview

- Event organization
- Web update (TT meetings and seminars)
- OPST-8 planning
- OP '24 symposium planning
- EuroSea/OceanPredict workshop
- OP-DCC support (compilation team and website beta-testing)
- Finances (reports and budget)
- Starting to work with Stephanie (week visit in Aug)
- Co-chair, OP '24 and regular programme office meetings



### 3. Updates on OP programme office



past & future activities, reorganization  
with the two offices

#### Event organisation since OPST-7 meeting (Feb 2023) including web updates:

- **CP-TT** member's **meeting** - 20 March 2023
- **IV-TT** member's **meeting** - 28 March 2023
- **COSS-TT meeting** – 2-4 May 2023 in Montreal at ECCC
- **DA-TT meeting** – 9-11 May 2023 in Rome at CNR
- **A-TSCV workshop** – 13 June 2023
- **SynObs meetings** – every 2 months
- **EuroSea/OP WS-2** – July 2023
- **MEAP-TT seminars** – monthly
- **OPST-8 meeting** – 6-10 Nov 2023, in-person event in Busan, South Korea (hybrid)



# 3. Updates on OP programme office



past & future activities, reorganization  
with the two offices

## Programme office evolution

- Programme Office now at 100% (50+50% FTE)
- Stéphanie Cuvén started in Aug 2023
- Still catching up on tasks
- Funding from three dedicated OP sponsors to direct support MOi (EUMETSAT, Gov of Canada, MOi)





# 3. Updates on OP programme office



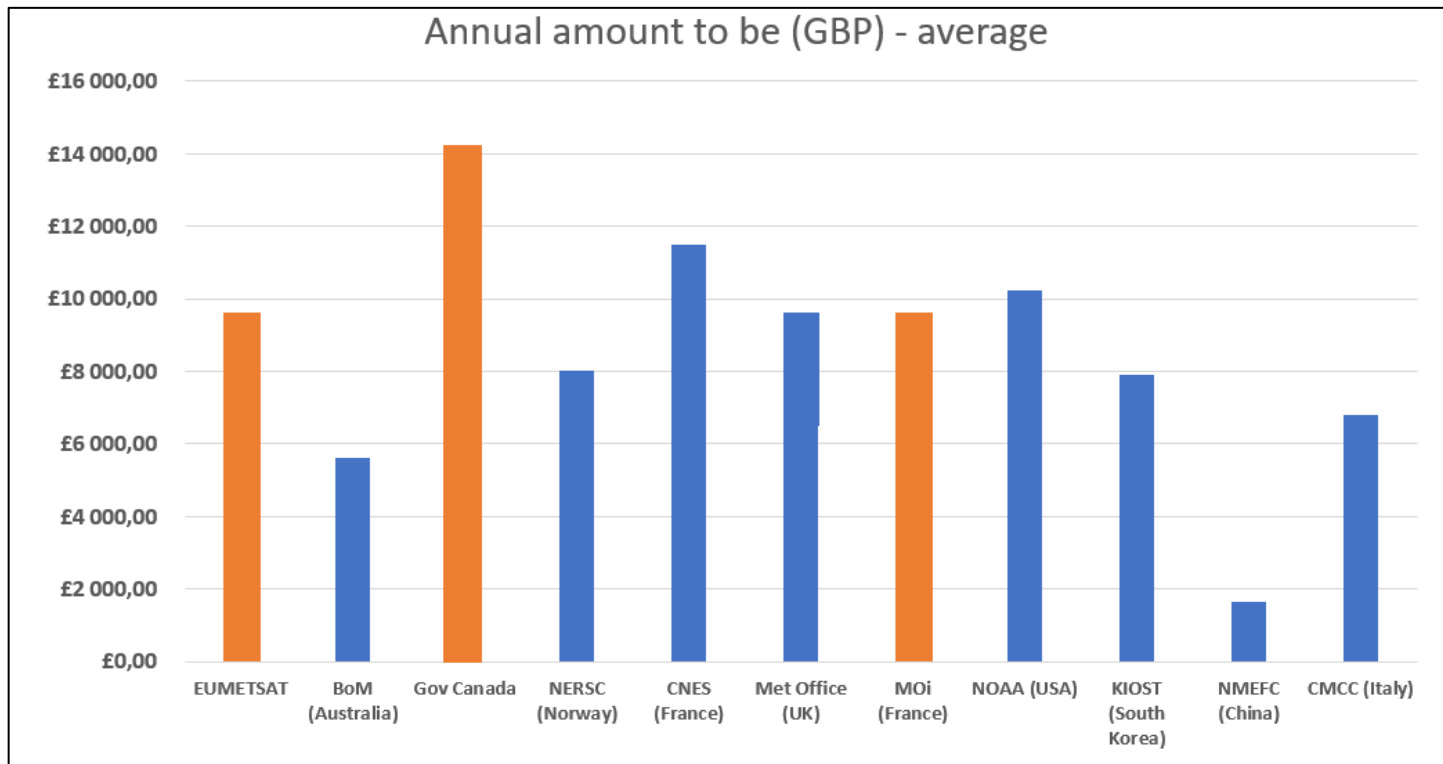
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## Now and future plans

- Job share since Sep (mainly KWB: OPST and SC: OP '24)
- After OPST-8: Next focus on communication
  - Website updates (SynObs and ForeSea webpages), publications update, update of list observations for operational use
  - OP Newsletters
  - OP '24 organisation, advertisement, registration, abstracts, etc.
  - TT workshop support (e.g. CP-TT, 19-22 May 2025)
  - Communication plan for ForeSea (communications committee)
  - Support OSOP-WG and OP-DCC (website, Atlas)



# 4. OP funding status



*(average fundings for the last 3yrs)*



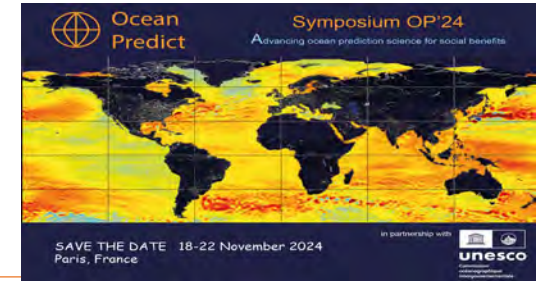
## 4. OP funding status



- Almost all funding support this FY received
  - Waiting for CNES
  - To contact NMEFC and CMCC
- Funding split between Met Office and MOi (EUMETSAT, CONCEPTS and MOi) now, ~ £33k to MOi and ~ £52k to Met Office (average, can fluctuate)
- Question whether ESA and INCOIS could restart support?
- Setting up MoUs or letter of agreement with sponsors



## 4. OP funding status OP'24 symposium



at Maison de l'UNESCO in Paris -  
November 18-22, 2024

**Estimate cost: 400 pers.**

Conference rooms rentals, all included = 90 k€  
Catering = 70 k€

} 160 k€

Registration fees = 35-50 k€ (140-200 registration fees: 250 €/ pers. and 0 € for early career or students). Vouchers for lunch, coffee, social event

**TOTAL** = 110-125 k€ (+ 10% subject to the 2024 rate increase) = **120-140 k€**

**Confirmed contributions: Moi: 50k€ + Met Office: 10k€ = 60 k€**

- Issue with funding from OP '24, as not enough sponsors have committed support
- Need about **60-80k€** - conflict with programme office support





## 5. OP'24 (Science part)



### Objectives (high level)

The Symposium will seek to:

- accelerate the evolution of operational oceanography
- identify the growing and changing needs of users and how to enhance service delivery
- align the objectives with the goals of the UN Decade of Ocean Science for Sustainable Development (UNDOS, 2021-2030)

### Structure

Plenary & Splinter sessions

In-person preferred  
*(not for remote presentation)*

Abstracts ideally indicate any links to UNDOS Programs

Active session for audience participation

### Themes

**Theme 1:** Operational oceanography: Past, present, and future

**Theme 2:** Coastal / regional

**Theme 3:** Polar ocean / sea ice

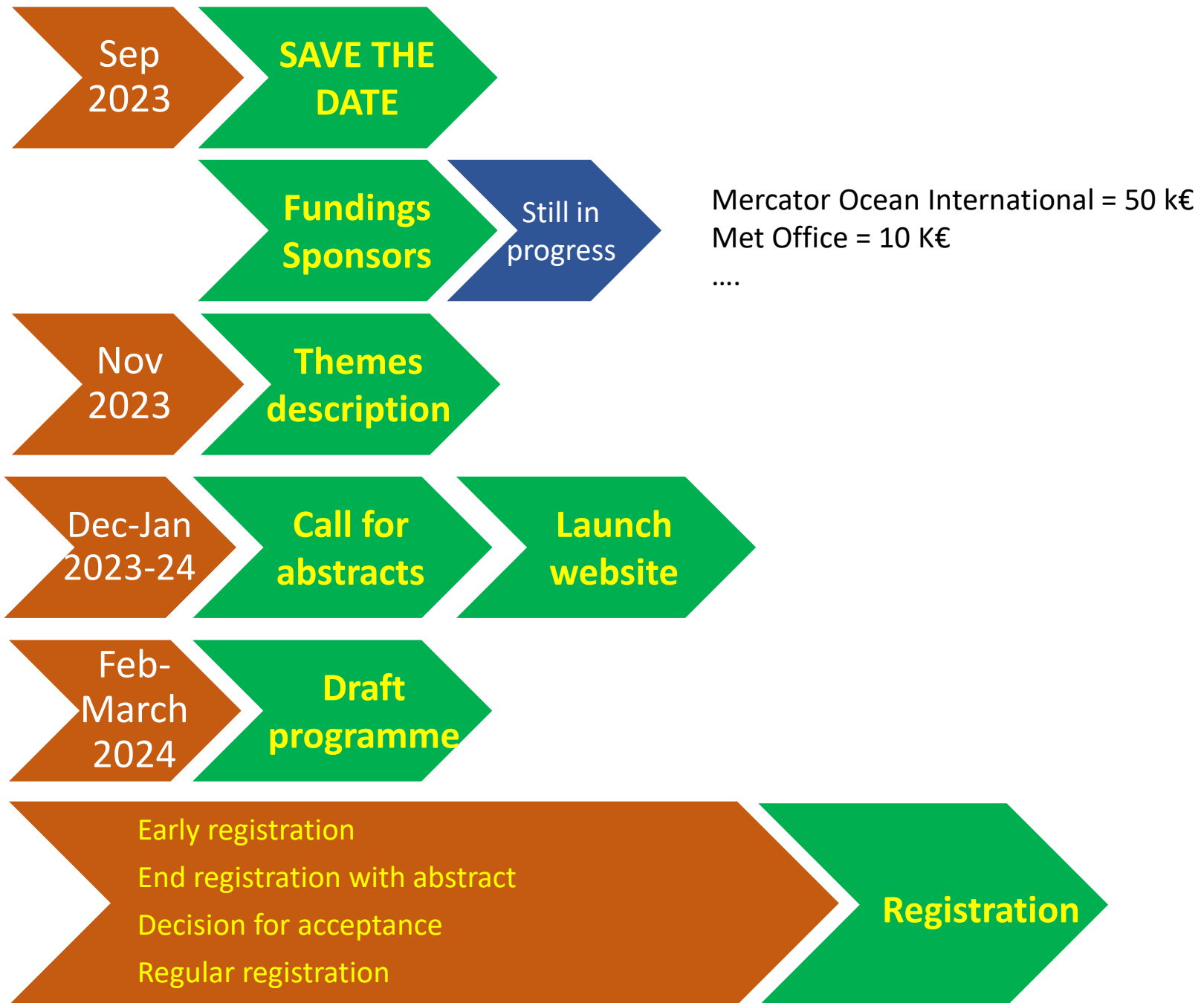
**Theme 4:** Global/Open ocean

**Theme 5:** New developments in measurements/observations, modelling, data assimilation, machine learning/AI, digital twins, etc.

**Theme 6:** Ocean prediction (systems and) services

**Theme 7:** User applications and societal benefits

*(In progress)*





## 6. OP/ ForeSea / OceanPrediction DCC



### 6. Links OceanPredict / Foresea & DCC OceanPrediction and implications on the OceanPredict programme office activities

synthesis of discussion that will take place the first day of OPST-8



# OPAS meeting



- AOB