# **NOOS annual meeting 2019**





## BSH, Hamburg, 16-18 Oct 2019

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## Attendance:

Country         Institute         Name & email           BE         RBINS         Sébastien Legrand	16/10	17/10	18/10
BE RBINS			
slegrand@naturalsciences.be	yes	yes	yes
DE BSH Inga Golbeck	NOC	NOS	
Inga.Golbeck@bsh.de	yes	yes	
Xin Li	yes	yes	yes
Xin.Li@bsh.de	yes	yes	yes
Stephan Dick	yes	yes	yes
<u>Stephan.Dick@bsh.de</u>	,	,	,
Anna Friedrichs	yes	yes	yes
Anna.Friedrichs@bsh.de			
Ina Lorkowski Ina.Lorkowski@bsh.de	yes	yes	
Mayumi Wilms <u>Mayumi.Wilms@bsh.de</u>		yes	
Wilhelm Petersen			
HGZ wilhelm.petersen@hzg.de	yes	yes	
Johannes Schulz-Stellenfleth			
johannes.schulz-stellenfleth@hzg.de	yes	yes	yes
Univ. Thomas Badewien			
Oldenburg <u>thomas.badewien@uni-oldenburg.de</u>	yes	yes	
DK DMI Jacob W Nielsen	yes	yes	yes
jw@dmi.dk	yes	yes	yes
Vibeke Huess	yes	yes	yes
<u>vh@dmi.dk</u>	,	· ·	,
Jens Murawski	yes	yes	
jmu@dmi.dk GeoMETOC			
Johan Söderqvist	yes	yes	yes
FCOO) jos@fcoo.dk	yes	yes	yes
Bjarne Büchmann			
j <u>os@fcoo.dk</u>	yes	yes	
NL RWS Marc Philippart			
Marc.Philippart@RWS.NL	yes	yes	yes
Deltares Caroline Gautier	yes	yes	yes
Caroline.Gautier@deltares.nl	,05	, co	,03
NO Met.no Johannes Röhrs	yes	yes	yes
johannesro@met.no	,	,	1
IMR Henning Wehde		yes	yes
Henning.Wehde@imr.no           Christine Pequignet			
UK Met Office <u>christine.pequignet@metoffice.gov.uk</u>	yes	yes	yes
Marina Tonani			
marina.tonani@metoffice.gov.uk	yes	yes	
Richard Renshaw			
Richard.Renshaw@metoffice.gov.uk	yes		
Jerry Blackford	1/00	1/00	1100
PML JCB@pml.ac.uk	yes	yes	yes
Susan Kay	yes	yes	

<u>suka@pml.ac.uk</u>			
Yuri Artioli yuti@pml.ac.uk	yes	yes	

Excused persons

- Susanne Tam, BSH, DE
- John Siddorn, Met office, UK
- Jitze van der Meulen, KNMI, NL
- Patrick Gorringe, SMHI, SW
- Kate Collindgridge, CEFAS, UK
- Glenn Nolan, EuroGOOS office

Attendance: 12 member Institutes from 6 countries (missing SW, FR, IR)

Excused members: MDK (BE), NERSC (NO), SHOM (FR), IFREMER (FR), SMHI (SW), KNMI (NL), CEFAS (UK) (+EuroGOOS office)

Missing members: ACRI, Meteo-France (observer), NIVA, MI, NERC/NOC

## List of open actions for 2019-2020

To make the reading easier, the list of open actions has been split per topics and working groups. The numbering of the action is also preserved, keeping track of the AM in which the action has been open.

Number	What?	Who?	When?	Status
2019-1	<b>NOOS Strategy:</b> Drafting NOOS Strategy 2020-2030. Three rounds, respectively lead by Marc Philippart (beta-version, deadline Feb 2020), Jacob-Woge Nielsen (alpha-version, end May 2020) and Sébastien Legrand (blue print, to be adopted at AM 2020)	Marc Phillipart, Jacob-Woge Nielsen Sébastien	NOOS AM 2020	On- going
	The strategy should also consider the extension of NOOS activities to ecology/BGC. For instance, one could rely on PML and IMR to connect with relevant communities (ICES WGs, OSPARs WGs, etc.) and informed NOOS of the progress at the Annual Meeting (kind of ambassadors) (action 2018.23)	Legrand		
2018-6 (a)	<b>Data portal:</b> Drafting the ToRs of the data portal working group, including updating the WG members and setting an action list. The members could be the PoC identified in action 2019-5	Susanne Tam + Data portal WG	NOOS AM 2020	open
2019-2	<b>Data Portal:</b> Need to develop and communicate to NOOS members a roadmap of the data-flow from the data producers to the different CMEMS INS-TAC products.	Susanne Tam	NOOS AM 2020	open
2019-3	Data portal : - Susanne Tam to send a mock-up of the new data portal; - Members to send back their comment on it	Susanne Tam and all		open

2019-4	Data portal/ data policy :	Susanne Tam	NOOS AM	open
	- to propose a suitable data policy / Problem of data to CMEMS (CMEMS does not like data dissemination that is not monitored BUT NOOS is not CMEMS!) and to data citation (possibility of DOI ? - Jacob concern)		2020	
2019-5	Data portal / data sharing: Each member must appoint a person of contact for NRT data exchange and a person of contact for historical data exchange. These persons of contact will be contacted in case of problem with the data flow to the NOOS data portal. They might also be periodically contacted to keep track of new possible data (new sensors/platforms, etc)	Susanne Tam		open
2019-5 bis	Data portal / data sharing:         Checking with Tim Smyth if PML data (buoys and weekly vessels monitoring) are flowing to NOOS data portal	Tym Smith and Susanne Tam		open
2019-6	<ul> <li>NOOS Working Group on Drift:</li> <li>Sebastien : informing the NOOS partner when the NOOS-Drift service will be ready for use</li> <li>All : testing NOOS-Drift and sending back feedbacks</li> </ul>	Sébastien Legrand, ALL	ASAP	open
2018-6	NOOS Working Group on Drift: Updating the ToRs of the working group	Sébastien Legrand and the WG members	NOOS AM 2020	open
2019-7	<b>River project:</b> -Action to put the river questionnaire on river data use in ocean models on NOOS website	Jacob Nielsen		open

2019-8	<ul> <li>WG on sea level and waves</li> <li>Setting up the Terms of Reference, the list of participants and the work program of the new working group on sea level and waves.</li> <li>The work program could included the following topics: <ul> <li>Defining the new list of stations used in the BMA, witht the exact coordinates of the stations. This list should also include Fino1 and 3. (action 2018.07)</li> <li>Redistributing BMA data via a ftp site (action 2018.10) ,</li> <li>extending the BMA/Matroos to waves forecast (action 2018-15)</li> <li>Investigating the feasibility of an alarm system in case of extreme water level / extreme waves (action 2018.08)</li> <li>Extending the systems at stations with risk of flooding but without tide gauges (e.g. Cork) (action 2018.09)</li> <li>Developing a synoptic map with sea surface anomaly (surge) (action 2018.12)</li> <li>In case of missing observation, displaying BMA data on synoptic maps (action 2018.13)</li> <li>To clarify the conditions and feasibility to add CEFAS wavenet data. (Contact person at CEFAS : David Pearce) (action 2018-14; shared with Data portal WG)</li> </ul> </li> </ul>	Marc Philippart + Jacob Nielsen and Caroline Gautier + members iof the WG		open
2019-9	NOOS Website: Keeping the website up-to-date by checking for dead links and other inconsistencies	BSH	NOOS AM 2020	open
2019-10	New monitoring inititiative: Coordinate efforts towards a possible framework for monitoring the Skagerrak area .	Kai Herklotz (BSH) + Henning		open

2019-11	New inititative : Establishing a network to exchange information on impact of Wind farm and report next year to see if worth starting a WG (add).	and Stephan Dick/Holger Klein Sébastien Legrand + Johannes, Jerry, Marc, Henning.	NOOS AM 2020	open
2018.21	Best practice exchange:         Provide members with an example of Best Practices in repository	Glenn Nolan/EuroGOOS office	Annual Meeting 2020	Open
2018.22	Best practice exchange: To exchange best practise with the NOOS community and to consider their upload to the IOC repository https://www.oceanbestpractices.net	ALL	Continuous task	Open
2019-12	<ul> <li>Best practice exchange:</li> <li>Checking if CEASELESS deliverables can be shared,</li> <li>Sharing Hive project details to Vibeke (DMI) and Johan (FCOO) and Sebastien (RBINS).</li> </ul>	Christine Pequignet	-	open
2019-13	Best practice exchange: - Sharing the BSH Sea State QC manual when ready	Mayumi Wilms	-	open
2019-14	NOOS members To contact Penny Holiday at NOC about being a contact for NOOS	John Siddorn	NOOS AM 2020	open

2018.02	Checking for new opportunities:	John Siddorn	Continuous	on-
	To facilitate the engagement of the NOOS community in the CMEMS activities for User Uptake, Training and R&D. This should at least be done by advertising call for tenders and projects.		task	going
2018.17	Link NOOS - EuroGOOS NOOS-IBI ROOS collaboration -To contact IBI-ROOS co-chairs to discuss the possibility to co-locate the NOOS and IBI-ROOS annual meeting. The idea is to organise a half-day workshop on the possible synergies between the 2 ROOSes. Missed opportunity at IBI-ROOS Annual Meeting 2019 (Christine could attend but received no reply from IBI-ROOS chairs)	Co-chair	First half 2019	Open
2018.18	Link NOOS - EuroGOOS NOOS-BOOS collaboration: To organise a skype call with interested people to discuss possible NOOS/BOOS collaborations on BMA. Person of contact in BOOS : Laura Tuomi- should be Inga	Martin Verlaan	First half 2019	Not done open
2018.19	Link NOOS - EuroGOOSNOOS-BOOS collaboration on CAL-VAL.:Organise a (skype) meeting with interested people in order to identify possible NOOS- BOOS collaborations on calval. activities (best practices, common python codes, etc.).	Christine Pequignet or Inga	First half 2019 – meeting could be join to the	Open

	NOWAPS	
Person of contact in POOS , Ingo	meeting in	
Person of contact in BOOS : Inga	BSH on mid	
	October	
	2019	

## Agenda

The detailed agenda of the NOOS AM 2019 -as well as all the other meeting documents- can be found on the <u>annual meeting webpage</u> or directly downloaded at <u>http://noos.eurogoos.eu/download/annual\_meetings/documents\_for\_annual\_meeting\_2019\_(ham\_burg)/agenda\_NOOS\_AM\_2019.docx</u>

The annual meeting 2019 was organised in 8 sessions.

Day 1

- 1. Introduction / Chair reports [ppt]
- 2. Thematic workshop: NOWMAPS/NOOS joint meeting [ppt]
- 3. Progress in NOOS working group [ppt]

Day 2

- 4. Member reports [ppt1] [ppt2] [ppt3]
- 5. EuroGOOS Updates [ppt]
- 6. Other European initiatives [ppt]

Day 3

- 7. NOOS Future, towards an updated NOOS strategy [ppt]
- 8. NOOS Business Review [ppt]

## Session 1 : Introduction

Presentations are available here : [ppt]

- Welcoming words from Bernd Brugge, Head of BSH Marine Sciences Department
- Sebastien Legrand presented the NOOS co-chair reports, including :
  - co-chairs activities since NOOS AM 2018
  - NOOS challenges and bottlenecks presented at the EuroGOOS general assembly 2019
  - NOOS highlights for 2018-2019 : NOOS-Drift, Foreoast, JERICO-S3, oceanobs'19, etc.
- Agenda: adopted
- Rapporteurs: Christine Pequignet, with the help of Sébastien Legrand, has been appointed as rapporteur

## Session 2: NOWMAPS/NOOS joint meeting

Presentations are available here : [ppt]

- Marina Tonani presented the status of the CMEMS NWS-MFC and the evolution planned for the next 2 years.
- Sebastien Legrand presented how CMEMS physical analysis and forecast are used in NOOS-Drift. Added value of AMM1.5 have been discussed. Problems with WMS are reported.

- Johan Söderqvist presented some issues and discrepancies in coverage and actual value of data in CMEMS datasets.
   Action : Need to develop and communicate to NOOS members a roadmap of the data-flow from the data producers to the different CMEMS INS-TAC products.
- Inga Golbeck presented the latest developments of the MME activities
- Christine Pequignet presented the latest development and challenges in CMEMS Product Quality evaluation, including transition from class 4 metrics (domain average) to class 2 metrics (validation at fixed stations). She also presented new work on validation from bioargo and validation of the mixed layer depth.

NOOS assembly greatly appreciated the discussions with the NOWMAPS scientists that do not usually participate to the NOOS annual meetings and working groups. Both NOWMAPS scientists and NOOS assembly agreed to periodically organise joint meetings in the future – maybe every 2-3 years.

## Session 3: Progress in NOOS working groups

Presentations are available here : [ppt]

 Susanne Tam: BSH will develop a new in-situ data portal to replace : <u>http://nwsportal.bsh.de/</u>. A mock-up page has been developed and will be sent in the next few weeks to NOOS POCs to get their input. Access to data will still be through ftp or through CMEMS.

Challenges for the new data portal (requesting an active support of NOOS members):

- 1. To improve access to historic data (link with data originators)
- 2. To have clearly identified contact persons for each NRT data flow and each historical data flow (one person per institute or per monitoring network). That list of person of contact should be regularly checked and updated.
- 3. To adopt a common data policy clearly allowing redistribution of the data out of the NOOS members.

Action : Susanne Tamm: To send the mock-up page to the NOOS community in order to collect feedbacks.

Action : All : to send feedbacks on the data portal to Susanne Tamm in due time.

Action : Each member to appoint person of contact to in-situ data flows for NRT and historical data

Action : Susanne : to propose a suitable data policy / Problem of data to CMEMS (CMEMS does not like data dissemination that is not monitored BUT NOOS is not CMEMS!) and to data citation (possibility of DOI ? - Jacob concern)

 Sebastien NOOS drift. This new NOOS service has been deveveloped as a multi-models ensemble prediction system for drift trajectory forecast. Operational from 15<sup>th</sup> November 2019, it can be activated on-demand by registered users. It is available at <u>https://odnature.naturalsciences.be/noosdrift/</u> or via noos web page, under community tools NOOS-Drift is currently operated by RBINS, Météo-France and Met-Norway. Other operators from the NOOS working group on drift are expected to join the service in the coming year(s) Action : To test the NOOS-Drift tools and report their comment

 Jacob Nielsen: Update on River WG: SMHI pricing policy for real time commercial data products is not solved. E-hype3 climate data available to partners with SMHI consents.
 NRT data is NOOS webpage: <u>http://noos.eurogoos.eu/observations/river-discharge-obs/</u>

Action: Jacob Nielsen: Action to put the river questionnaire on river data use in ocean models on NOOS website

- Caroline Gautier: Wave Forecast and observations WG
- Marc Phillipart Water level and Waves WG

DECISION: Approved Consolidation of working group sea level observation, sea level forecast exchange, waves observation and wave forecast into a unique Water level and wave working group. Marc could be the ad interim WG chair, the leading scientist of the previous WG continuing acting in their different tasks.

Action : consolidate the drafted ToRs, proposing a realistic schedule for activities and check the participants lists.

#### 8 WG to 5 WG

- Water level and Waves
- NOOS data portal
- NOOS Working group on drift
- MME Transport
- River discharge

### Session 4: NOOS members updates

Presentations available here : [ppt1] [ppt2] [ppt3]

actions : Member reports are expected to be uploaded on the website

The minutes only summarize some points of discussion leading to possible actions

• Jerry Blackford presentation of PML

DECISION : The NOOS assembly welcome PML as a new NOOS (associated) member

\* Action : NOOS member invited to submit abstracts to AMEMR 2020. www.amemr.com Marine ecosystem modelling research conference 13-17 July 2020

Action : To check if PML data (buoys and weekly vessels monitoring) are flowing to NOOS data portal (POC : Tim )

Action : NOOS member are invited to apply to participate to the PML annual atlantic tranship (POC: Andy Rees)

Holger Klein presentation of BSH observations

Strong need for NRT data in the Skagerrak area for Baltic Sea boundary.  $\rightarrow$  could a station be organised through the framework of NOOS, maybe involving FCOO- IMR - BSH and SMHI. This could be done in a temporary NOOS working group or in the framework of JERICO-S3. Possibility to take the opportunity of the electricity cable linking DK to NO to establish a new permanent station?

Action: Kai Herklotz (BSH): to coordinate efforts towards possible framework for monitoring the Skagerrak area . Include: Henning and Stephan Dick/Holger Klein

Henning says they have been asked about power supply for a cable that is being deployed between Norway and Germany (or Denmark, not sure), may be a possibility to deploy instruments.

- Stefan Schmolke presentation of BSH German marine pollution
- Ina Lorkowski BSH : operational ocean forecast group at BSH functional email for operational forecast : <u>opmod@bsh.de</u>
- Mayumi Wilms for Kai Herklotz presentation on BSH National Seastate portal and wave data quality control
- Marc Phillipart presented the new BMA system

Action: from last meeting for Marc to make BMA data available on ftp ,Possibility of alarm for extreme water level.

- Johannes Rohr presentation on Ocean modelling and assimilation at Met Norway
- Jens Murawsky presentation on DMI Climate atlas for Denmark

https://www.dmi.dk/klima-atlas/

Sebastien asked which institute have climate projection or atlases for sea variables.

Should we have a climate services WG?  $\rightarrow$  NO Maybe exchange of information, but maybe not scope of NOOS

 Caroline Gautier presentation on 'Delft3D-FM model North Sea' and 'SWAN-Kuststrook', Deltares'

EMODnet bathymetry gives much better results than NOOS bathymetry.

- Vibeke Huess presented 'Flooding from Storm Surges, a new initiative at DMI',
- Willy Petersen presentation on HZG: European FerryBox Data portal

Willy will retire next month.

Common database: <u>http://ferrydata.hzg.de</u> for European ferryBox on fixed routes (10 routes).

Access data from web based feature OGC WFS netcdf or via openDAP. Some research vessels also have their data in the data base as survey vessels, ex. RV Polarstein

• Johannes Schulz-Stellenfleth presentation on Activities around model coupling and data assimilation at HZG

Action: on Sebastien to establish a network to exchange information on impact of Wind farm and report next year to see if worth starting a WG (add Johannes, Jerry, Marc, Henning....).

## Session 5: EuroGOOS updates

• Henning Wehde on behalf of Glenn Nolan : EuroGOOS update [ppt]

#### Report of NOOS ambassadors

- Science advisory WG (Henning):compiled a paper in 2016 on how operational oceanography can develop. Expectation is that this WG would influence European program such as H2020, but this has not always been successful recently
- DataMEQ WG (Susanne T?), ongoing discussion as part of seadatanet and INSITU TAC
- Coastal WG (Sébastien ) 7 actions , they are very active on mapping the different models and parameters, want to have contact with users. White paper on expectation of coastal oceanography.
- Technology WG
- Ferry box TT, Willy Petersen, HGZ 2see www.ferrybox.org
- Sea Mammals TT (John?)
- HF-Radar TT (Johanes ?)
- Tide gauge TT (Anna?, Martin?)
- NOOS/BOOS interactions (?)
- NOOS/IBI-ROOS interactions (?)

Session on ambassador updates will be revised as not very successful.

## Session 6: Other European initiatives

- Jens Murawsky presentation on CLAIM, H2020 project on cleaning Marine Litter by developing and Applying Innovative Methods. For Med and Baltic seas. Ex. Pre-filtering and photocatalytic device to clean near the source. Mediterranean sea has 10x more microplastics than Baltic. Samplers will be installed on FerryBoxes. Use HBM model at different resolution 900m for Baltic S
- Vibeke Huess from DMI, presentation on CMEMS BAL MFC
- Sebastien Legrand presentation on Sea Datanet AISBL

Action: on Christine to ask Andy Saulter if CEASELESS deliverables can be shared, and send Hive Details to Wibeke (DMI) and Johan (FCOO) and Sebastien (RBINS).

### Session 7: NOOS future, towards an updated NOOS strategy

In this session, the partners have thoroughly discussed their vision and expectation of the NOOS Future [ppt] (cf annex 2).

This discussion will prepare the drafting of an updated NOOS stratefy.

**Target for strategy**: blue print for new strategy for next annual meeting, with 2 pre-versions (late Feb 2020, and end of May 2020) ahead of the blue print.

Marc Phillipart is contact for the first version ; Jacob Nielsen is contact for second version; Sebastien Legrand is contact for final blue print version

#### Session 8: Business Review

- 1- Approval of minutes from 2018: Approved
- 2- Review actions from 2018 : cf annex 1
- 3- Review signatories

#### New member: PML

24 members and associated members: list of person of contact has been updated, but may need review

BE: MDK, RBINS

DE: BSH, HZG, U of Oldenburg,

UK: MO, CEFAS, PML, NOC

DK: GeoMETOC (formerly FCOO), DMI

NL: RWS, Deltares, KNMI

IR: Marine Institute

NO: IMR, Met Norway, NERSC, NIVA

SW: SMHI

FR: IFREMER, ACRI, Meteo-France, SHOM

Action: on John Siddorn to contact Penny Holiday at NOC about being a contact for NOOS

**Issue**: Signature pages of MoU are lost. From now on, we keep the new one and rebuild from there.

4- Election of new steering group member and co-chair

In 2018-2019, the NOOS steering Group was made of :

Henning Wehde (co-chair, 2015) Sebastien Legrand (co-chair, 2016) Jacob Nielsen (2016) Marc Philippart (2016) John Siddorn (2017) Susanne Tamm (2018)

Henning Wehde term ended in 2019 and did not run for another term (no more time for the position). Johan Söderqvist is appointed as NOOS Steering Group Member. Among the steering group member, nobody wanted to replace Henning as NOOS co-chair. The new steering committee is therefore made of:

Sebastien Legrand (chair, 2016) Jacob Nielsen (2016) Marc Philippart (2016) John Siddorn (2017) Susanne Tamm (2018) Johan Söderqvist (2019) At the NOOS annual meeting 2020, the terms of Sebastien Legrand, Jacob Nielsen and Marc Philippart will end. The annual meeting will therefore have to vote for

- 3 new steering committee members
- 2 co-chairs.

Sebastien Legrand, Jacob Nielsen and Marc Philippart can all be re-appointed for another term.

- 5- Review of decisions and actions points taken in AM 2019 / Setting priorities for 2019-2020
  - Continue working on strategy
  - Continue WG work
  - Wind mill impact

Make sure to have a chapter on NOOS internal and external communication plan in the strategy

NOOS2019-8: Action on BSH to make Annual update to web site links and names and inconsistencies

- 6- Decision of the 3 to 5 priorities to given by SG to EuroGOOS (see above)
- 7- Next Annual meeting : Bergen Norway, IMR Second half of Oct 2020 possibly: 27-29 Oct week 44

Thematic workshop: ?

- 8- AOB
  - SG needs to find a better way for members to report annually.

### Short SG meeting

Present : Sébastien Legrand, Marc Philippart, Jacob Woge Nielsen and Johan Soderqvist

Agenda :

- Feedbacks on the AM 2019. What did go well? What to improve?
- How to improve SG way of working.

#### Feedbacks NOOS AM

- General feeling : very positive
  - All the presentations were interesting and supported by adequate ppt.
  - Q&A sessions were very productive, everyone feeling free to comments

• People appreciated to be able to vote and/or take decision during the technical sessions. This also speed up the formal business meeting to less than 1 hour.

- What to improve :
  - EuroGOOS session :

• The session quickly turned into a bilateral discussion between Henning and Sebasien, the other persons having quickly disconnected; We really missed the presence of the EuroGOOS general secretary

• SG must redesign the ambassadors report ... maybe could take the form of a poster session (Advantage of the poster session could be reorganised in all EuroGOOS ROOSes, TTs and WGs meeting annual meeting) -> EuroGOOS office in charge to centralise the posters.

#### How to improve SG way of working

- The steering group will organise periodic video conference (bi-monthly?)
- The steering group must better follow the implementation of the different NOOS projects: importance to have up-to-date factsheets and a list of expected the expected deliverables. Drafting a mindmap of how the different projects are related is also important.

## Annex 1 : Status of action points from NOOS AM 2018

2018.01	To organise a web-conference in order to decide the best way to get feedbacks on the fitness-for- purpose of the CMEMS products for MSFD assessments and to start an inter-comparison of the different approaches, methodologies and tools used through the NOOS members in their respective MSFD assessments. The creation of a temporary working group could also be discussed. Co-chair to invite CEFAS presenting development in CefMAT ( <u>https://emeco.azurewebsites.net/</u> ).	E. Garnacho, J. Siddorn and S. Legrand	First half 2019	not happened but close
2018.02	To facilitate the engagement of the NOOS community in the CMEMS activities for User Uptake, Training and R&D. This should at least be done by advertising call for tenders and projects.	John Siddorn	Continuous task	on-going
2018.03	To report to the CMEMS Science Advisory Committee that the numerous limitations associated to the current tender framework (administrative burden, strong IPR rules, limitation to 150.000€ on 18 month, obligation to maintain the activities well after the end of the contract, obligation to support the cost of translation of several documents from English to French by a sworn interpreter) do prevent or strongly discourage ROOSes to submit tenders for the User Uptake, Training and R&D calls.	Glenn Nolan	January 2019	Done, close
2018.04	<ul> <li>Update survey of 2017 with focus on</li> <li>Expectation of the relationship between NOOS and CMEMS</li> <li>•</li> </ul>	Sebastien Legrand	January 2019	Not done but close
2018.05	To write the new NOOS strategy document	Steering group	Before summer break 2019	On-going
2018.06	To write the ToRs of the working group; A new template merging TORs and factsheets is wished less marked by EuroGOOS Create new template	Each NOOS WG and project leader	Before summer break 2019	On- going : missing : data portal and NWGD
2018.07	To circulate the exact coordinates of the new list of stations used in the BMA. This list should also include Fino1 and 3 To be reconsidered in the new WG on sea levels and waves	Marc Philippart	Before summer break 2019	Open

2018.08	To study the feasibility of an alarm service in case of extreme high and low level forecast To be reconsidered in the new WG on sea levels and waves	Marc Philippart	Before annual meeting 2019	Open
2018.09	In order to attract interest of MI, to develop a demonstration case with a station at risk of flooding for which there is no tide gauge (e.g. Cork) To be reconsidered in the new WG on sea levels and waves	Marc Philippart	Before annual meeting 2019	Open
2018.10	To redistribute all the BMA forecasts via a ftp site To be reconsidered in the new WG on sea levels and waves	Marc Philippart	Before annual meeting 2019	Open
2018.11	UK met office should implement a ftp box to exchange sea level observations The ftp box should be circulated between forecasters.	John Siddorn Marc Philippart	ASAP	Done
2018.12	To develop a synoptic map with sea surface anomaly (surge) . To be reconsidered in the new WG on sea levels and waves	Jacob Nielsen	Annual meeting 2019	Open
2018.13	In case of missing observations, to study the feasibility of display BMA forecast on the synoptic maps (both for sea level and sea level anomaly maps) + In any case, add explanation on the page To be reconsidered in the new WG on sea levels and waves	Jacob Nielsen with the help of Marc?	Annual meeting 2019	Open
2018.14	To clarify the conditions and feasibility to add CEFAS wavenet data in the WG. David Pearce is the person at CEFAS to be convinced to get access to the data To be reconsidered in the data portal (Anna took note)	Caroline Gautier and Susanne Tamm.	Annual meeting 2019	Open
2018.15	To extend the BMA/Matroos to waves forecast To be reconsidered in the new WG on sea levels and waves	Caroline Gautier, Marc Philippart and WG members	Annual meeting 2019	Open
2018.16	To send to the steering group the list of participants to each task teams	Glenn Nolan	ASAP	Done close
2018.17	NOOS-IBI ROOS collaboration	Co-chair	First half 2019	Open

	<ul> <li>-To contact IBI-ROOS co-chairs to discuss the possibility to co-locate the NOOS and IBI-ROOS annual meeting. The idea is to organise a half-day workshop on the possible synergies between the 2 ROOSes.</li> <li>Missed opportunity at IBI-ROOS Annual Meeting 2019 (Christine could attend but received no reply from IBI-ROOS chairs)</li> </ul>			
2018.18	NOOS-BOOS collaboration: To organise a skype call with interested people to discuss possible NOOS/BOOS collaborations on BMA. Person of contact in BOOS : Laura Tuomi- should be Inga	Martin Verlaan	First half 2019	Not done open
2018.19	NOOS-BOOS collaboration on CAL-VAL.: Organise a (skype) meeting with interested people in order to identify possible NOOS-BOOS collaborations on calval. activities (best practices, common python codes, etc.). Person of contact in BOOS : Thorger Brüning should be Inga	Christine Pequignet	First half 2019 – meeting could be join to the NOWAPS meeting in BSH on mid October 2019	Open
2018.20	Short presentation (3 slides) with required information and EuroGOOS priorities, for circulation before redaction of NOOS program	Glenn Nolan	ASAP	Done
2018.20	EuroGOOS to escalate the need for E-Hype trough agreement with EEA / Copernicus flooding alarm service (Issue : too high fee requested by SMHI)	Glenn Nolan	Annual Meeting 2019	Done but difficult issue
2018.21	Provide members with an example of Best Practices in repository	Glenn Nolan	Annual Meeting 2019	Open
2018.22	To exchange best practise with the NOOS community and to consider their upload to the IOC repository https://www.oceanbestpractices.net	ALL	Annual meeting 2019	Open

2018.23	To develop a strategy to extend NOOS activities to ecology/BGC -> Relying on PML and IMR to connect with relevant communities (ICES WGs, OSPARs WGs, etc.) and informed NOOS of the progress at the Annual Meeting (kind of ambassadors)	Steering group	Annual meeting 2019	On-going
2018.24	Formulation of a new decision making procedure, allowing to bring the decisions closer to the technical discussion	Steering group	Annual meeting 2019	Done CLose
2018.25	Members to send contact details of participants to the validation working group	All members	ASAP	Not Done, not sure of the status of the validation working group

## Annex 2 : Notes taken by Christine Pequignet during the session 7 NOOS Future, towards an updated NOOS strategy [ppt] Red is add up

• Reviewing NOOS MoU: 98 goals

**Goal 1:** Coordinate improve and harmonise development of operational oceanography data and services  $\rightarrow$  yes we do, KEEP.

**Goal 2:** Provides analysis forecasts and model based products describing the marine conditions of the NWS → Through CMEMS products, MME, KEEP

**Goal 3**: Provide long term high quality observations data and long time series to advance scientific understanding  $\rightarrow$ 

**Goal 4**: Co-operate with national agencies and multi-national organisations (eg. ICES, OSPAR...) in the NWS area to maximise the efficiency of the Observing systems and to maximise the value of the information products  $\rightarrow$  not really successful involved, but still relevant

**Goal 5**: Develop NOOS pursuant to the EuroGOOS strategies and GOOS principles  $\rightarrow$  still relevant , not always following GOOS principles, for example haven't done much on Ocean health

**Goal 6**: Increase the quality of and harmonise (NOOS community) user oriented <del>operational</del> (needed or relevant</del>) products (not necessarily NOOS products).  $\rightarrow$  haven't been very outside user oriented, but inside users yes.

**Goal 7**: Decrease the production costs Optimize the production of public products and services by sharing workload  $\rightarrow$ 

Goal 8: Identify new customers Enlarge the community of end users for operational oceanographic products → KEE

**Goal 9**: Further develop the market for operational oceanographic products  $\rightarrow$  leave to EuroGOOS

NOOS MoU frames the scope of co-operative activities [NOOS will not take over activities bound to OSPAR, the EEA or in the framework of the WFD and MSFD...]

- 1- Observations and forecasting-model simulations and added value products
- 2- Data and product management
- 3- Research
- 4- Product development
- 5- Co-production by co-operation
- 6- Education and training
- 7- Raise awareness of NOOS Promotion to other organisations

NOOS historical strategy defined by 5 strategy principles

1- Develop online marine data and products

- 2- Give reliable description of marine conditions, including physical (and include grain size and bottom roughness) sedimentological and ecosystem BGC variables
- 3- Provide analysis, forecast and model based products describing marine conditions
- 4- Established a marine database from which time series and statistical analyses can be obtained, including trends and changes in the marine environment and the economic environmental and social impacts
- 5- Collaborate with national and multi-national agencies in the NWS area to maximize efficiency of the ocean observing systems and maximise the value of the information products

Why a new NOOS strategy:

- External reasons (the European landscape has changed since the strategies were developed, it was before CMEMS, EMODnet..., before GOOS focused on Ocean health and climate, and before the EOVs
- Internal reason: good to regularly think of strategy and see if we ar ealign with the strategy and see if we need to change the strategy. Also we have new delegates, and it

See the drivers photo to develop the strategy.

NOOS stakeholders:

- It would be good to target relevant ICES working group.
- Operation services
- policy makers

What is a strategy? "Set of coordinated actions, skilful operations, manoeuvres to achieve a goal."

How to define strategy? Follow EuroGOOS way of defining their strategy with 5 bold steps

#### • 5 bold steps:

- Vision
- Mission: how to contribute to achieve missions
- Strategy objectives: top priorities or initiatives
- Values: quality and behaviour
- Supports: trends or factors in the environment that support the 5 steps
- Challenges: identify what could prevent you from achieving the objectives

Long term visions for NOOS:

- Decision making should be for policy and operational
- Provide the evidence-based information to support activities in the fields of marine safety, environmental protections (and monitoring) and climate and sustainable use of the marine ecosystems,
- Economics: marine energy, mariculture, maritime safety and operations
- Share knowledge to the different national policy

NOOS missions: How do we differ from the CMEMS and other pan-european structuring activities, why is NOOS important

- no preference to single products, prefer integration of products and efforts in multi-product approach, taking into account national priorities and by comparing the various products
- Owner/producers of insitu observations and knowledge
- Share knowledge, tools, observations and data
- facilitate collaborations
- We are the backbone in operational oceanography in the NWS closely connected to the national services
- NOOS is the submerged part of the iceberg with CMEMS being the emerged part.
- NOOS is bottom up approach
- Enforcing an adequate place of NOOS in the pan-european structuring activities

#### • SWOT analysis (Strengths, Weakness Opportunities and Threats)

#### NOOS strength:

- submerged part of the iceberg
- stability and sustainability
- redundancy in model coverage and observations
- Closed connection to national services
- Willingness to help each other
- Co-production independent from external funding
- independent from politics
- similar of cultural approach and no language limitations

#### NOOS weakness:

- Not self confident
- No strict planning
- No enforcement when work is not done
- Slow progress due to voluntary work and/or no funding
- Not enough capacity for innovation
- No administrative support to improve outreach (websites, newsletters, lack of outreach material...)
- Poor visibility
- Sleeping members

#### Marc Offered to make a video for NOOS once strategy is defined

#### NOOS opportunities:

- More collaboration in monitoring
- Established clever communication with communities active in the fields of BGC and climate activites → to improve knowledge sharing
- Coordinating /taking initiative in more EU projects in which NOOS members work together

- Covering regional aspects of climate change, e.g. Develop together statistical information based on long timeseries /re-analysis (both climate change and present state) and present on NOOS website
- More NOOS community communication via the websites and mailing list (add mailing lists for WGs).

#### NOOS threats:

 CMEMS EMODnet, Copernicus Emergency services (JRC for storm surge), lot talks with policy makers → risk of taking national NOOS members budget to develop and maintain those kind of services.