

# Participating in the JOMOPANS project

Mathias Andersson and the team from the Swedish Defence Research Agency - FOI



Jomopans End-event 2021-06-10

# Participation in Jomopans

- Buildings on the legacy of the BIAS project/HELCOM monitoring
- FOIs goals:
  - WP 2 lead the work for Communication and Harmonisation
  - WP 3 contribute in the development of the standards and calibration work
  - WP 4 contribute in the validation process of the modelling work
  - WP 5 build and deploy a high capacity hydrophone station



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# Vinga monitoring station

- Construct a real time monitoring station fibre optic hybrid cable (power and fibre)
- Deploy it outside Gothenburg, west coast of Sweden
- Automatic signal processing based on the project standard
- Shipsignature station store AIS and acoustic data







# What have we learned!

- Harmonisation
  - very valuable to exchange information with past, present and future initiatives
- Modelling
  - increased knowledge of radiated noise from ships
  - evaluation of different models an impact of different environmental factors
  - scale of ship noise in relation to other source
- Building a monitoring station
  - time consuming, high costs
  - electric disturbances
  - valuable with real time data collection
- Signal processing and validation
  - strength of automatic processing
  - visualisation of results
  - validation of data and model

The collaboration within the project and others is the greatest outcome!









European Regional Development Fund

**EUROPEAN UNION** 

# JOMOPANS

JOINT MONITORING PROGRAMME FOR AMBIENT NOISE IN THE NORTH SEA

WP2 Communication

End event, 10 June 2021

## Aim, strategies and tools

- Be active and both share and receive knowledge with stakeholders (e.g. managers, scientific community, public)
- Two strategy reports: communication and harmonisation with past, on-going and new projects
- Dialog with Policy Advisory Board and experts groups such as ICG Noise (OSPAR) and TG Noise (EU)
- Workshops, scientific conferences, national and international experts meetings
- Tools: website, twitter, newsletters, policy brief, video, radio, TV, articles
- Templates for reports, memo, PowerPoint



Interreg





# Outreach

#### WP 2 Harmonization effort



Below template shall be completed after a meeting, conference or other key event where relevant projects, report etc. for JOMPOANS, has been presented. This, in order to make JOMPOANS methodology and outputs in line with regional solutions and recommendations from intergovernmental agencies and NGOs. After completion, send it to Mathias andersson@foi.se

#### JOMOPANS members name: Christ, Petter, Ewan, Niels, René Data of reporting: 22-10-2018

Point of contact: Niels/Christ	
Affiliation:	
Email:	Telephone:
Was JOMPOPANS presented in any way: yes	Will there be a follow up in any way: no When:
	Niels/Christ Affiliation: Email: Was JOMPOPANS presented

Describe the event: Attendance: about 150

From 10 to 14 September 2018 the international ESOMM conference was held in conjunction with the JIP Programme at Scheveningen in The Netherlands. With a lot of experts on acoustics and sea mammals present it was an evelent opportunity to discuss the Jonopans project.

The 6th International Meeting on the Effects of Sound in the Ocean on Marine Mammals (ESOMM-2018) and the 3rd Programme Review Meeting of the IOGP & P Sound & Marine Life Joint Industry Programme (JIP-PRM) have held their meetings together in Scheveningen (part of The Hague, Netherlands).

The meeting was organized by TNO and others and the most recent advances on underwater acoustics and the effects on sea life (especially marine mammals) were discussed. The JIP meeting focussed on the efforts from the oil and gas industry or mitigate the effects of exploration (using sound) on the environment.

Jomopans is regarded as one of the major initiatives for sound monitoring and a number of the Jomopans partners were present in Scheveningen. A good opportunity to discuss the project with the ISO visitors to the conference and at the same time keeping up with all other initiatives.

 
 Marine Scotland presented a poster in which the role Jomopans in marine monitoring is discussed.

 Has information being shared with relevant WP leader: n/a
 Has relevant documents being uploaded to the sharepoint: yes/no

Where:

58 events/meetings/ contacts has been recorded # of organisations



### # of people



informed about approach



### Website

#### s://northsearegion.eu/jomopans/





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JOMOPANS	Joint Monitoring Programme for Ambient Noise North Sea (JOMOPANS)
About	The aim of this project is to develop a framework for a fully operational joint monitoring programme for ambient noise in the North Sea. Output will be the tools necessary for
Newsletters	managers, planners and other stakeholders to incorporate the effects of ambient noise in their assessment of the environmental status of the North Sea, and to evaluate measures to improve the environment.
News	
Partners	Programme and registration End Event 10 June 2021
Events	
Contact	Norrens 2 Norrens 3 Norrens 2 Norrens 2 Norren
Output library	A constraints of the second se
Presentations	Experimental and the second seco
Events history	
Publications, presentations, reports	
External links	
	Download the Jomopans fact sheet or newsletter.
	To subscribe to the newsletter, send a mail to jomopans@rws.nl
	To unsubscribe to the newsletter, send this mail to jomopans@rws.nl
	Tweets by jomopans

### Website statistics





### Newsletters

- One-twice a year
- Available online and at meetings
- Sent out to 311 recipients









#### NEWS

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#### Scotland to help monitor North Sea underwater noise

(3 12 December 2017



Scotland is to be involved in a programme of monitoring underwater noise in the North Sea.

Other European countries along the sea are also to take part in the project which is due to begin on 1 January

A network of devices deployed off Scotland's east coast by Marine Scotland will be



Du tror kanskie det er stille under havoverflaten? Absolutt ikke! Både naturen og menneskene skaper støy forurensing i havet. Entry FEL

har ikke vedtatt direktivet.

men giennom Oslo-Paris-kon-

vensjonen (OSPAR) har Norge

forpliktet seg til å overvåke og

regulere støyforurensning.

Målet er støy varsling

### Nå kan havet få støyvarsling

MILJØ

Støyforurensning finnes også i sløen, ikke bare på landjorda. Jo mer menneskeskapt støy, jo mer påvir-kes livet under vann.

EU startet nå i år prosiekt der Når du dykker under vann, blir Forsvarets forskningsinstitutt



#### Des scientifiques étudient les sons sous-marins en mer du Nord

Alain Norro travaille à l'Institut royal des Sciences naturelles de Belgique. Il vient de remettre en place un micro qui capte les sons sous la mer du Nord. Mais à quoi ca sert?

Vous avez placé une première fois votre installation en mer du Nord en mai 2019. Cette idée d'étudier les sons sous-marins fait partie d'un projet européen?

Oui. On peut étudier deux types de sons dans l'eau : les sons impulsionnels, comme les explosions ou le battage de pieux pour installer des éoliennes en mer, et les bruits ambiants. C'est ce second volet qui est couvert par un programme européen qui s'appelle Jomopans. D'autres pays participent à ce programme en mer du Nord ?

Jui les Pays-Ras l'Angleterre l'Allemagne, la Suède et la Norvège. Nous avons tous installé des micros sous-marins dans nos eaux territoriales (la surface de mer qui appartient à chacun des pays). Comment fixe-t-on des micros dans Feau ?

On a une station permanente installée sur un pylône en mer. Nous y avons placé un enregistreur fixe.

Jomopans Project to Monitor Continuous Sound

min 4 ..

rent la température de l'eau. Téléteau de pêche qui était passé un vation du niveau de la mer, la haupeu trop près. À qualla profondaur la micro tour doe varues to kimileo Votre station mesure donc les est-li placé ? bruits ambiants depuis plus d'un Notre critère en mer du Nord est de mettre nos micros 2m au-des-Ca, c'est la théorie. Mais en pratique, guand on veut faire des mesures en mer, surtout dans des endroits très fréquentés comme la ment, ces 10 m sont une movenne

sus du fond marin. Pour notre station, ca veut dire à une dizaine de mètres de profondeur. Évidem-

mer du Nord, un tas de problèmes puisqu'il y a une différence d'envi-

SVL NYHETER

/ INRIKES

Mathias Andersson, marinbiolog på Totalförsvarets forskningsinstitut, visar en hydrofon som används för att mäta ljudnivåer under vattnet. Foto: SVT/Sandra Kjellström

#### EU-projekt undersöker hur fiskar i haven påverkas av buller

Publicerad 28 juni 2019

Torsk och andra fiskar i havet störs av buller från bland annat fartyg, som gör att de får svårare att hitta föda och upptäcka sina fiender. Just nu pågår ett EU-projekt för att utforska det här området mer.



Lokalt

# Harmonisation workshop 2019

Monitoring continuous underwater sound – beyond acquisition in cooperation with IQOE

Nine large scale and long term monitoring projects and programs where presented from three continent (North America, Europe and Australia



"The workshop states that the sharing of knowledge and data in the field of underwater acoustics is essential to progress in the scientific field as well as on the management of underwater sound. International co-operation needs to be established and supported in order to realize a facility for sharing and disseminating acoustical data from monitoring programmes."



# Multimedia comic - Underwater sound illustrated in a different way

In 2019, design and media student Philine Dorenbusch accompanied scientists of the JOMOPANS project on a field trip to the North Sea.

The aim was to create a multimedia report covering various aspects of underwater sound from a more artistic point of view. The report was prepared in cooperation with the BSH and is part of her Bachelor thesis. EINE KEPOKTAGE VON PHILINE DORENBUSCH IN ZUSAMMENARBEIT MIT DEM BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

AUTES MEER















http://lautes-meer.de/

https://northsearegion.eu/jomopans/news/co mic/



# Scientific meetings (and others)

> 2019-12-07 World Marine Mammal - Conference, Barcelona, Spain.

- JOMOPANS had a joint booth at the conference with the EU Interreg project JONAS and the project results was also presented in various posters. The conference had more than 2700 attendees.
- 2020-02-21 Ocean Sciences Meeting, San Diego, USA.
  - JOMOPANS was presented at the meeting in the soundscape session and raised a lot of interest. In addition, special discussions were held with NOAA, IQOE and organisations represented at the exhibition. The meeting as a whole had about 6000 attendees.
- > 2020-06-02 TG Noise meeting, online.
  - TG Noise is a committee under the Common Implementation Strategy of the MSFD. TG Noise addresses all issues related to D11 of the MSFD. JOMOPANS was presented at the meeting.

