



JONAS PROJECT OVERVIEW

Environmental Actions on Atlantic Coastal Waters Session

6th Atlantic Stakeholder Conference, Porto | November 2019



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Faro, Portugal



OUR CONSORTIUM

JONAS brings together nine research partners and five associated partners from five Atlantic countries.



JOINT FRAMEWORK FOR OCEAN NOISE IN THE ATLANTIC SEAS

JONAS is an Atlantic area-funded project that addresses the issue of underwater noise and the threats that it poses to sensitive species and biodiversity in the northeast Atlantic by streamlining ocean noise monitoring and risk management on a transnational basis.

CONSORTIUM





PRESENTATION CONTENT

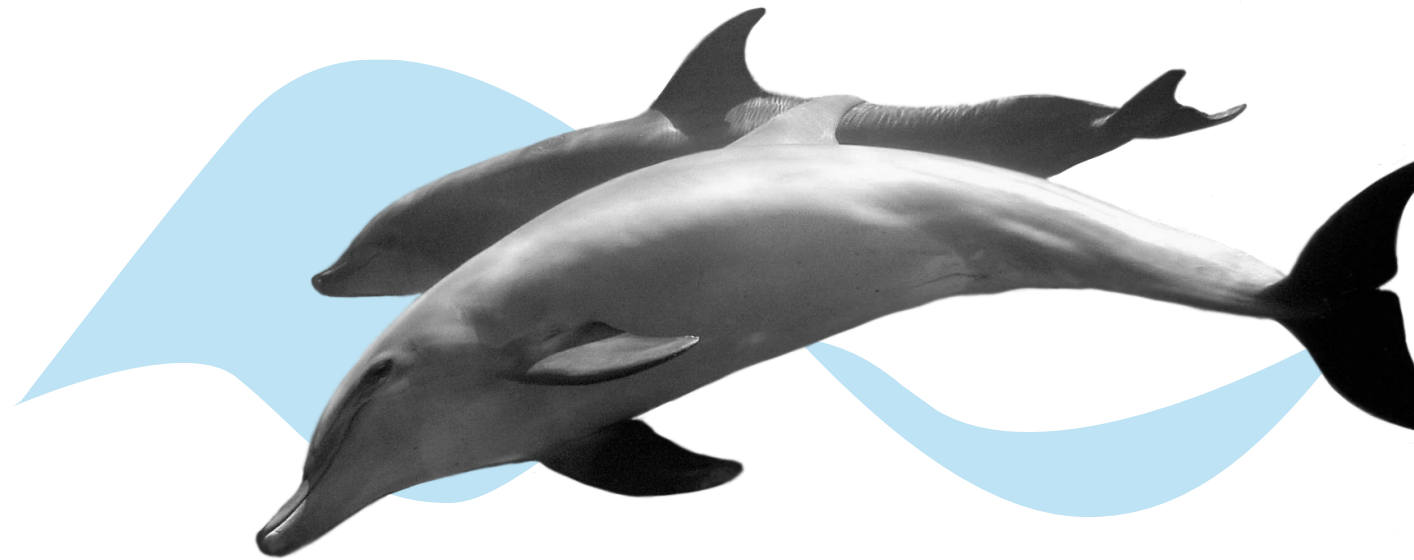


jonas
Joint Framework for Ocean
Noise in the Atlantic Seas

Interreg
Atlantic Area
European Regional Development Fund



1. Background
2. Area and objectives
3. Structure & work plan
4. Outcomes & deliverables
5. Linkages
6. Progress So Far





BACKGROUND TO JONAS

FOUNDATIONS FOR THE PROJECT

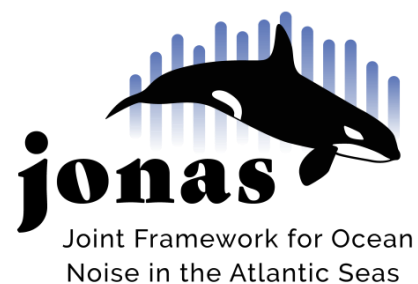
2012

BIAS PROJECT



2014

JOMOPANS



2019

JONAS

AREA & OBJECTIVES

FUNDING PROGRAMME

ERDF

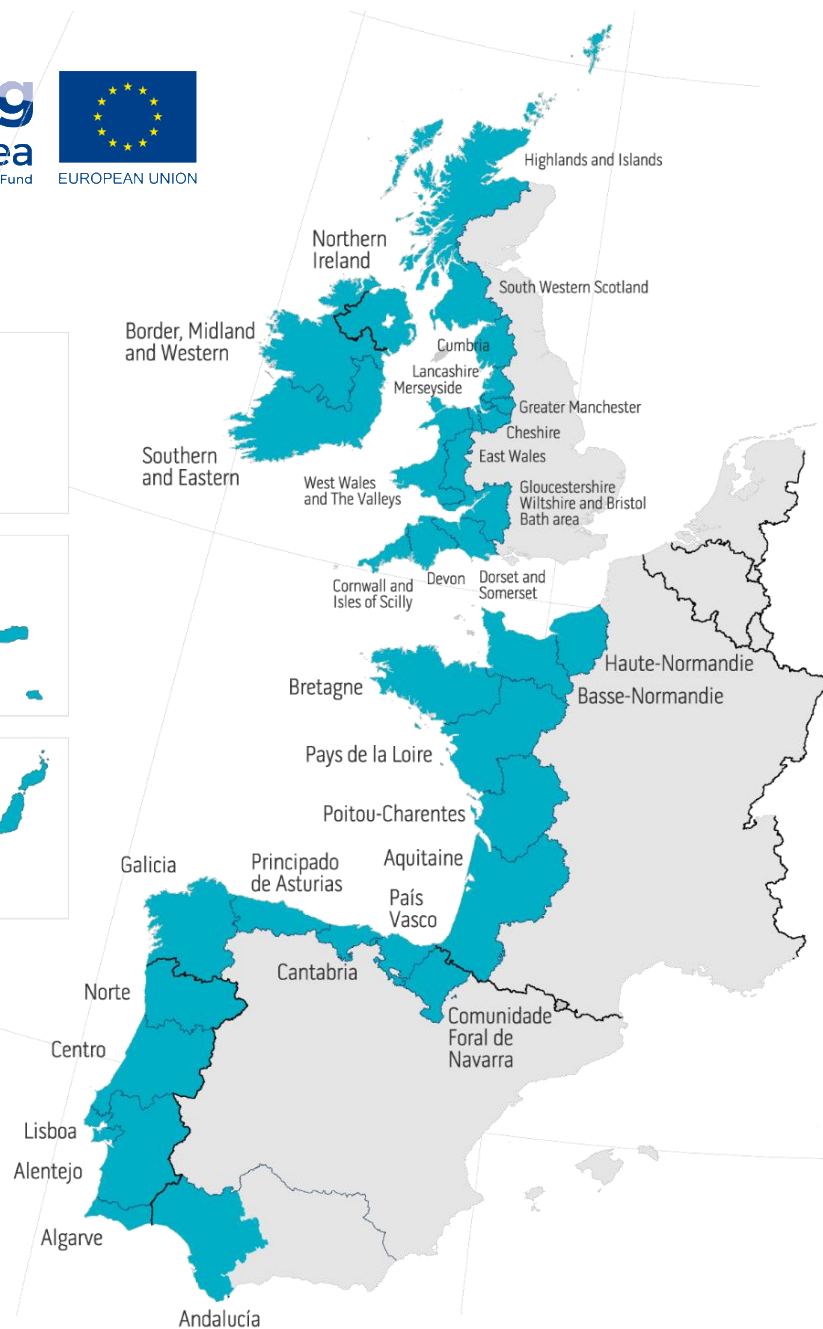
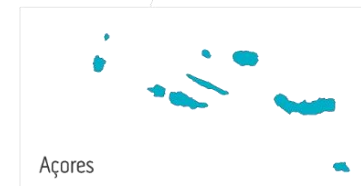
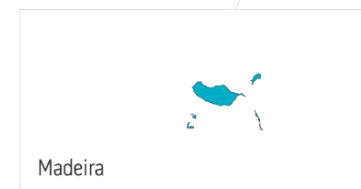
Interreg Atlantic Area
Programme

PRIORITY 4

Biodiversity, Natural
and Cultural Assets



Interreg
Atlantic Area
European Regional Development Fund



ATLANTIC AREA PROGRAMME 2014-2020



AREA & OBJECTIVES

PROJECT OBJECTIVES

- Meeting the needs of policy makers for a **consistent** and **cost-effective** approach to MSFD requirements
- Adapted to NEA specific characteristics

KEY DETAILS

March 2019 to March 2022	2.8 million euro ERDF funding	9 partners and 5 associated partners
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CONSISTENT
APPROACH

BEST PRACTICE

EU TECHNICAL GROUP
ON UNDERWATER NOISE
(EU TG-NOISE)



**OSPAR
COMMISSION**

*Protecting and conserving the
North-East Atlantic and its resources*



PROJECT AREA

OSPAR REGIONS

OSPAR regions (III IV and V)

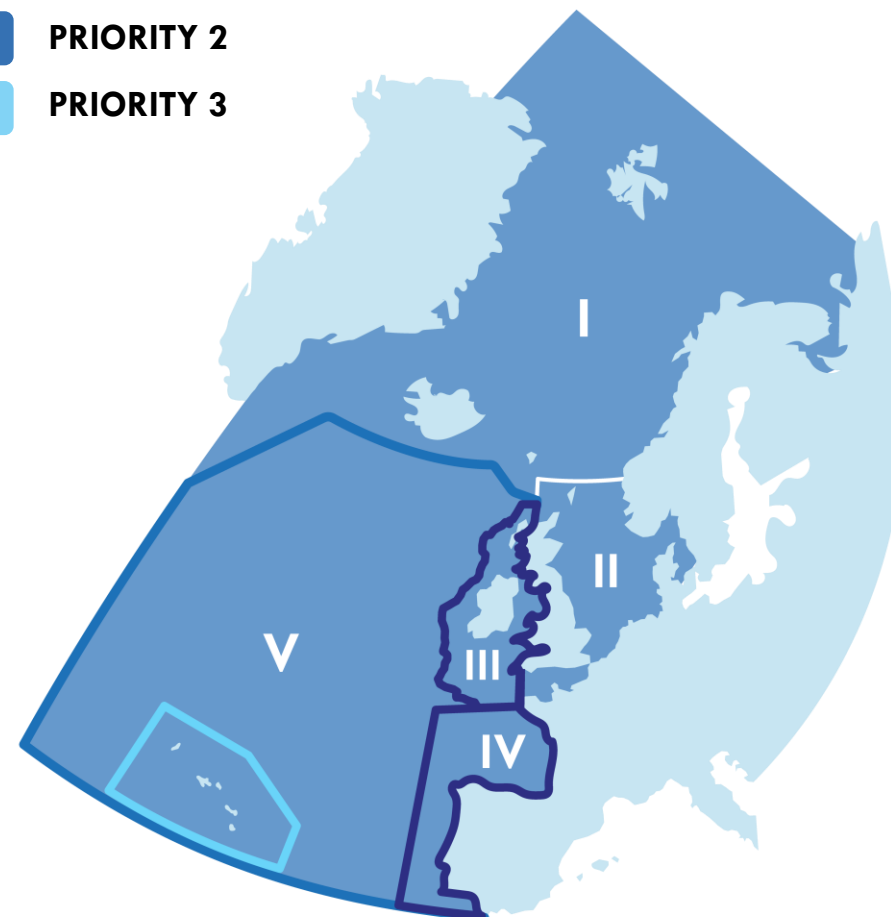
- + South to 24.5N
- + North to 80N
- Celtic Seas
- Manche (Calais)
- Bay of Biscay & Iberian Coast
- Macaronesia

Final decision will be influenced by data availability
NB limit on EMODNET (62 N), 42 W



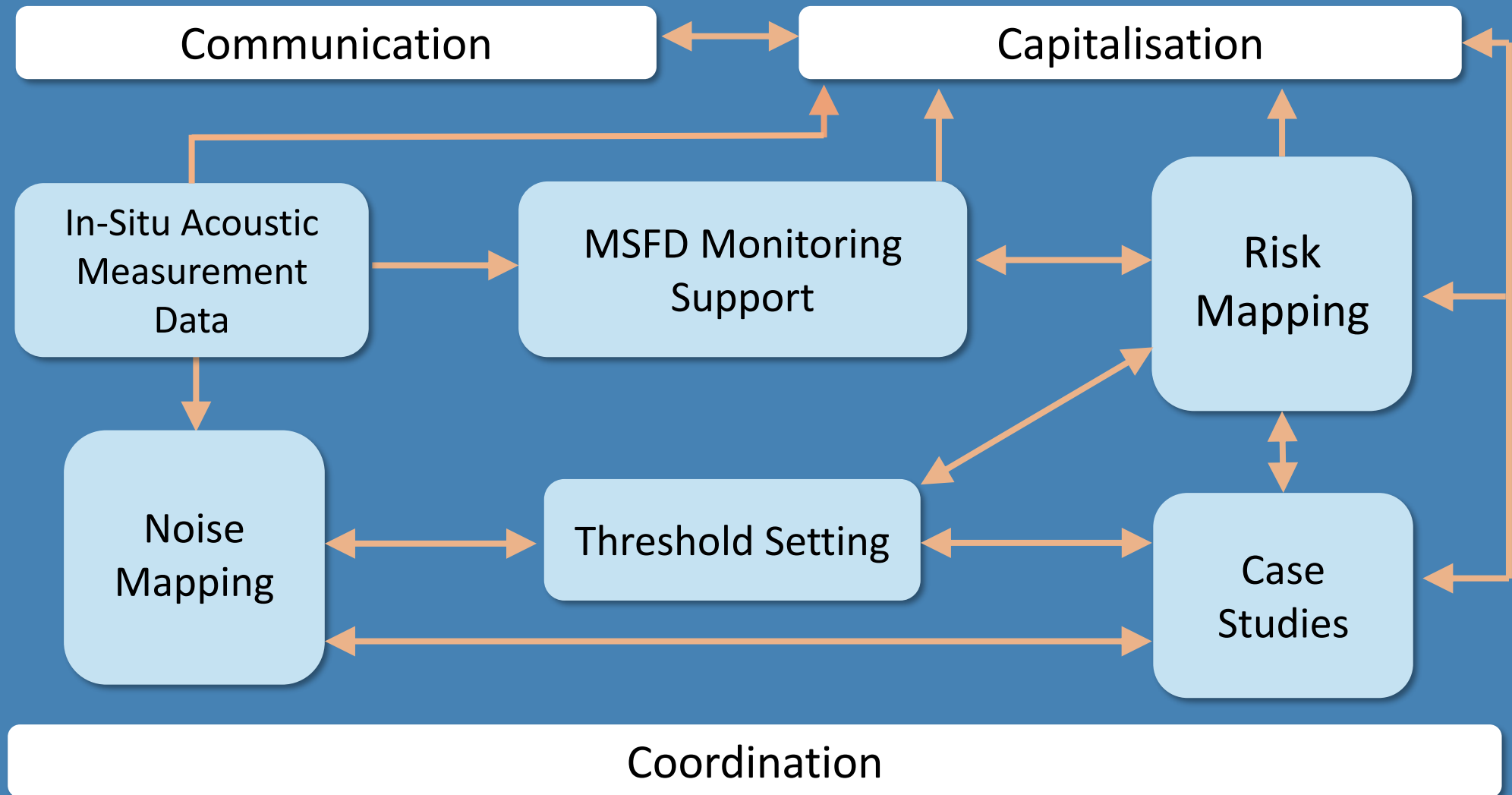
Higher resolution for EEZ's and
Priority I & II areas

- PRIORITY 1**
- PRIORITY 2**
- PRIORITY 3**



- | | |
|------------|-------------------------------|
| Region I | Arctic Waters |
| Region II | Greater North Sea |
| Region III | Celtic Seas |
| Region IV | Bay of Biscay & Iberian Coast |
| Region V | Wider Atlantic |

))) JONAS STRUCTURE AND WORKPLAN





KEY DELIVERABLES



**Data Sharing
Platform**

**Validated
Risk Maps**



VRE



**Common
Methodologies**

**Noise Reduction
Case Studies**



» OUTCOMES

EXPECTED RESULTS FROM THE PROJECT

A

CAPACITY

Enhanced technical capacity to address MSFD D11 obligations in Atlantic Area

B

HARMONY

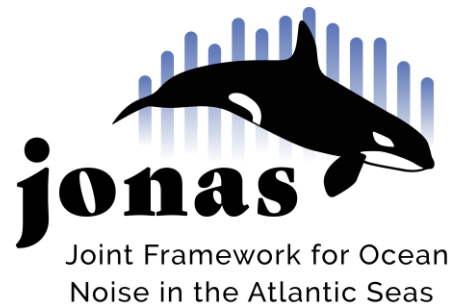
Harmonised methods based on best practice and a cooperative transnational approach

C

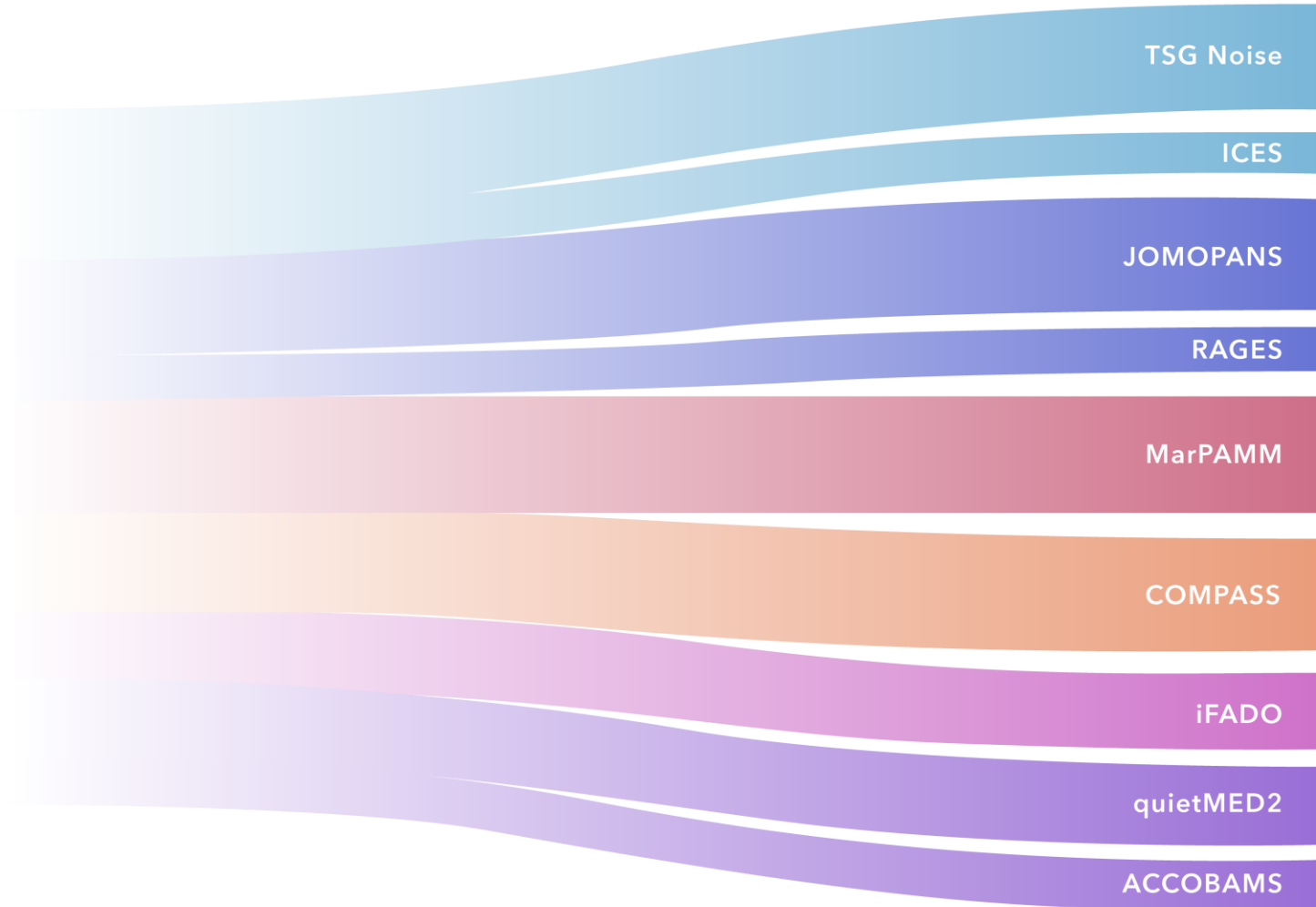
QUALITY

Improved quality and consistency of MSFD reporting - NEA





JONAS is endorsed by





PROGRESS TO DATE

DATA

- Inventory of noise monitoring capacity of the Atlantic Area
- Standards for acoustic data agreed
- List of target sensitive species created
- Data gathering, preliminary work and collaboration with other projects (JOMOPANS, RAGES, iFADO) have been established to ensure coherence and compatibility of work

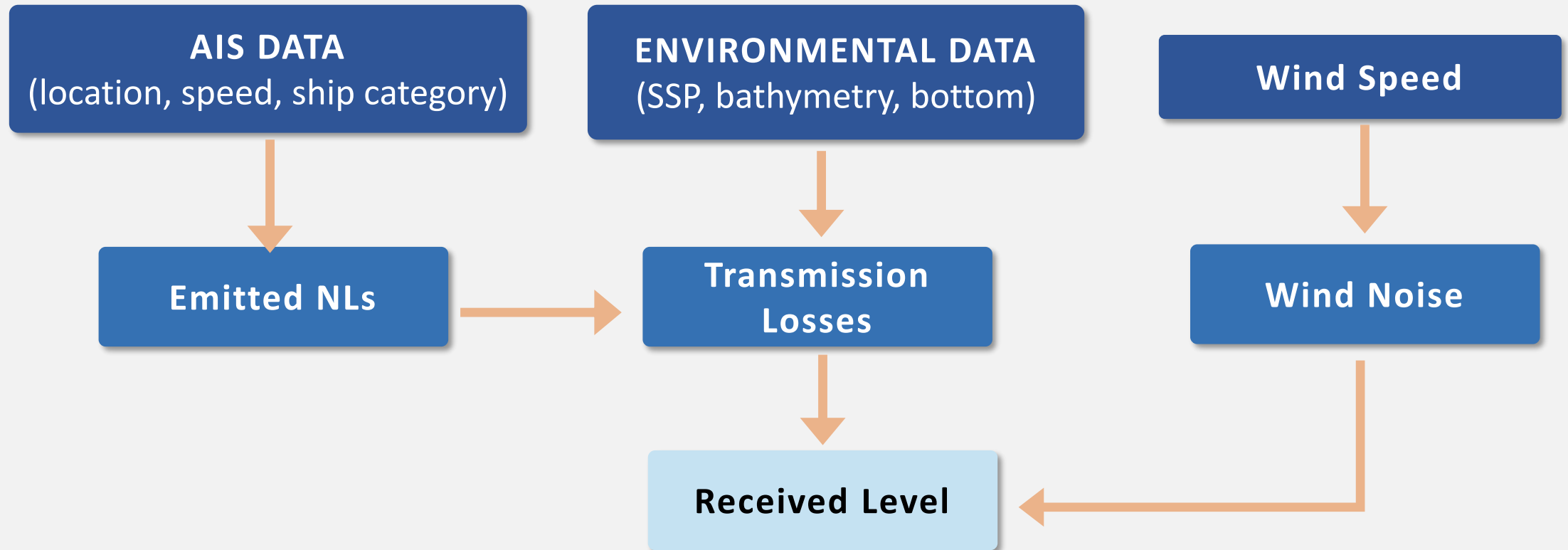
NOISE VISUALISATION PLATFORM

- Initial requirements and functionality of the JONAS online decision support tool for underwater noise

MEETINGS

- 2 project meetings: kickoff and technical
- Attendance at JOMOPANS midterm event (Gerry Sutton) and at iFADO workshop (Sergio Jesus)

))) NOISE MAPPING PROCESS



$$RL(m) = 10 \log_{10} \sum_{i=1}^I 10^{SL(i) - TL(i,m)} + W(m) \quad (\text{dB})$$

Source: Florent Courtois, JONAS meeting, Nantes September 2019



ESSENTIAL DATA SETS

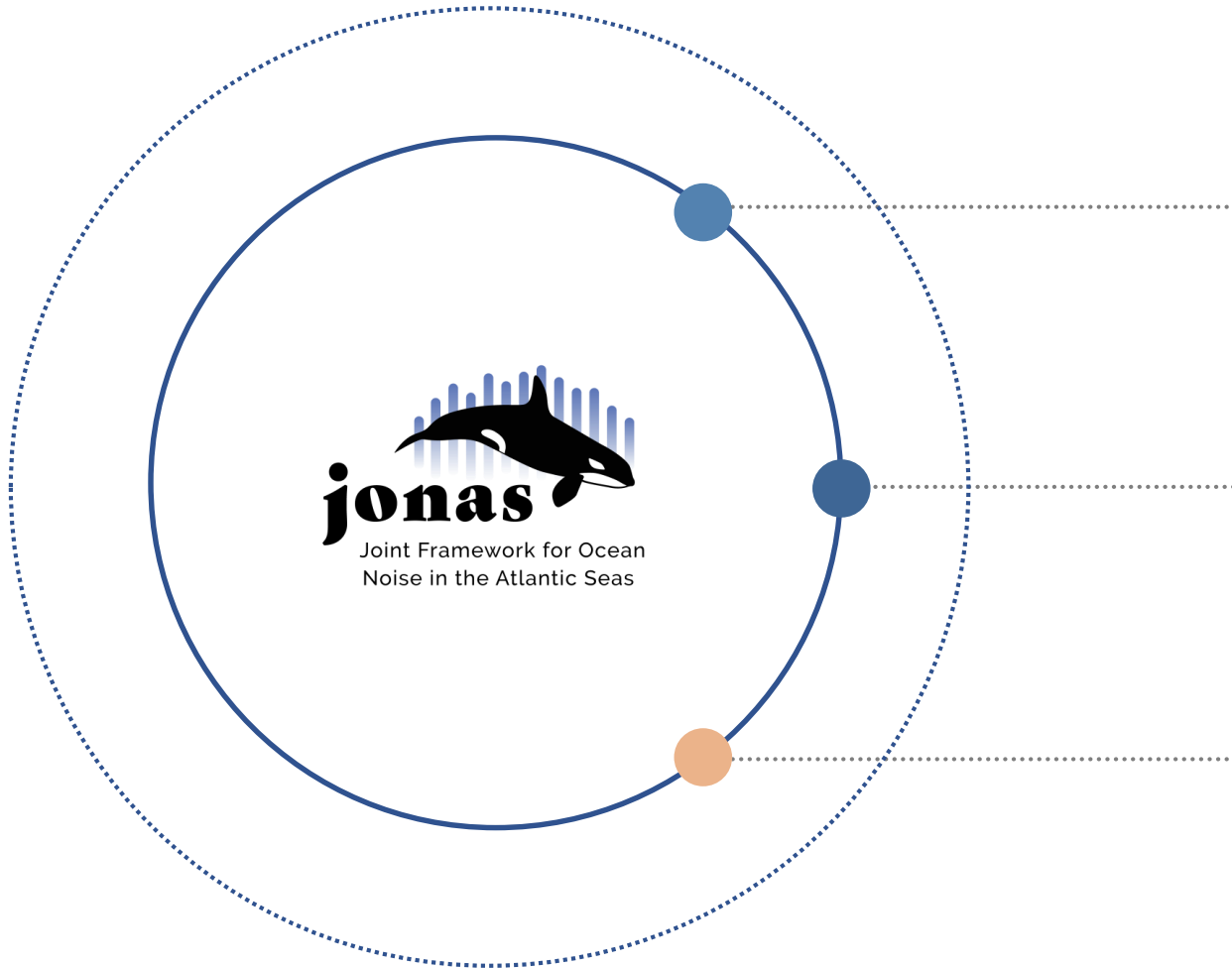


THE MAIN “INGREDIENTS”

- ▶ **AIS:** many data sets; coverage; spurious data
- ▶ **Source Level:** very approximate levels by ship type
- ▶ **Environment:** either measured or modelled T, S profiles; bathymetry; seafloor properties required in coastal areas;
- ▶ **Acoustic Models:** computational burden
- ▶ **Acoustic Data:** for model validation and calibration; time-space dependent; standardisation issues



NEXT STEPS



COMPLETE DATA COMPILATION

Finalise all acoustic and environmental datasets for input into models

SENSITIVE SPECIES

Map the distributions of sensitive species and agree methodologies for setting noise thresholds

START MODELLING

Combine the biological and non-biological data and maps to produce risk maps for the Atlantic Area



UPCOMING EVENTS

DEC 2019



WORLD MARINE MAMMAL CONFERENCE

Joint booth with the JOMOPANS project
Barcelona www.wmmconference.org

MAR 2020



JONAS WORKSHOP No.1

First user requirements workshop for the
development of the Underwater Noise Online
Decision Support Tool.



THANK YOU

We look forward to engaging with you. Contact us at : jonas@ucc.ie.

Visit our website for info, news updates and to register for our newsletter:

WWW.JONASPROJECT.EU

Follow along with the project on Twitter at:

 [@JONAS_PROJECT](https://twitter.com/JONAS_PROJECT)

