# **Workshop Outline:**

# Data Quality Factors Munitions Surveys















## **Background**

The workshop outlined below is part of the research project BASTA (Boost Applied munition detection through Smart data inTegration and AI workflows), in which GEOMAR, VLIZ, EGEOS GmbH and G-tec S.A. join forces to advance methods for the technical investigation for munitions detection in the sea. BASTA is co-funded by the European Maritime and Fisheries Fund (EMFF) programme of the European Union (Grant Agreement No: 863702). For more information, please check the project website: <a href="https://www.basta-munition.eu/">https://www.basta-munition.eu/</a>

The detection of munitions in the sea is a demanding task, that is time consuming and costly. At the same time, any potential lack of diligence during offshore munitions surveys could mean that munitions target points are missed. It is therefore important to identify the factors that control the quality of offshore munitions detection. Definitions of the minimum requirements for the quality factors can ensure the execution of a thorough technical investigation while maintaining economic efficiency. There are numerous reasons for the introduction and definition of data quality factors:

- 1. Provide the ability to objectively:
  - Check the quality of data acquired during technical investigations
  - Prepare and design technical investigations for specific target objects
  - o Check the quality of pre-existing data while preparing for a technical investigation
- 2. Enable better comparison of datasets
- 3. Ease communication between client and contractor

We would like to invite you to our final workshop, to join us in determining the relevant data quality factors and threshold values for hydroacoustic and magnetic sensors. In an initial phase, we distributed a <u>questionnaire</u> on June 15, 2020. We have assessed the responses, which provided us with a lot of important information. Subsequently, we conducted a series of web-based workshops, that took place in March 2021, during which we were able to identify many of the quality factors that are relevant to munitions surveys. Additionally, preliminary threshold values for these quality factors were discussed. We then evaluated the output of the discussions. A summary of the outcomes of the previous workshops can be found <u>here</u>.

However, some questions are still open and we would therefore like to jointly enter the final phase of the data quality definitions.

#### **Basic Information**

**Dates:** September 10, 2021 **Time:** 09:00-12:00 CET

Location: GEOMAR - Helmholtz Centre for Ocean Research Kiel (Düsternbrooker Weg 20, 24105

Kiel, Room B54)

Moderators: Daniel Wehner (EGEOS), Torsten Frey (GEOMAR)

Support: Mareike Kampmeier, Marc Seidel (GEOMAR)

The workshop is an official side event of the Kiel Munition Clearance Week.

#### Goals

#### Preparation for the workshop

If you would like to participate in the workshop, we would like to ask you to prepare by reviewing the outcomes of the previous workshops, which can be found under the following links:

- 1. The quality factors for all sensors under discussion were updated and are now available here: Quality factors
- 2. Based on the workflow that is described in the Quality Guideline for Offshore Explosive Ordnance Disposal we developed a preliminary flowchart that supports the definition of the quality factors for munitions surveys. It is available here: <a href="Preliminary flowchart">Preliminary flowchart</a>
- 3. We also collected some remarks on the polls that took place during the workshops and on our subsequent evaluation. It is available here: Workshop remarks

### Goals of the workshop

We believe that it is of paramount importance to involve as many domain experts as possible into the definition of the data quality factors. With this workshop we would like to achieve the following:



- 1. Finalize the list of factors that are necessary for the determination of data quality.
- 2. Conclude the definition of threshold or default values for quality factors.

The outcomes of the workshop will be distributed among all participants of the workshops for exclusive preliminary access. Furthermore, the results of the workshop will lead to the following:

- A scientific tutorial paper on technical investigations for offshore munitions detection.
- An update of the Quality Guideline for Offshore Explosive Ordnance Disposal.

#### **Timetable**

09:00 - Introduction

- Introduction of data quality factors and their role in the EOD workflow
- Introductory round of the participants
- 09:30 Step 1: Finalize list of data quality factors
- 10:30 Short break
- 10:40 Step 2: Define threshold values for all relevant data quality factors
- 11:45 Conclusion
- 12:00 End of the Workshop

#### Contact

If you have any questions, please do not hesitate to contact Torsten Frey (<u>tfrey@geomar.de</u>) and Daniel Wehner (<u>dwehner@egeos.de</u> in Cc).