

**TERMS OF REFERENCE FOR THE PROVISION
CONSULTING SERVICES**

**REQUERIMENTS FOR SUBCONTRACTING WITHIN THE FRAMEWORK OF THE ILIAD
PROJECT (INTEGRATED DIGITAL FRAMEWORK FOR COMPREHENSIVE MARITIME
DATA AND INFORMATION SERVICES)**

Grant Agreement number: 101037643 — ILIAD — H2020-LC-GD-2020 / H2020-LC-GD-2020-4

**FUNDACION VALENCIAPORT
SPA/RAC**

A. TECHNICAL SPECIFICATIONS

1. INTRODUCTION

ILIAD is an EU funded project aimed at making Digital Twins of the Ocean (DTO), incl. marine data, easily accessible and operational for multiple end users.

ILIAD's objective is to develop and operate an interoperable and economically sustainable platform that integrates the networks of observation and forecast systems throughout the Mediterranean arc.

On the other hand, ILIAD will create, operate, and maintain several Pilots around the European Sea in order to cover and support the specific needs of end users in terms of marine data and what-if scenario building using the Digital Twins.

These observatories act as prototypes so that the monitoring activities of the marine environment that are carried out in them are easily adapted and replicated in any Mediterranean area of interest in the future. Through these observatories, existing gaps in the collection of Mediterranean marine data will be filled, while end-users from a wide spectrum of marine and maritime sectors will be able to receive accurate and timely marine observations and forecasts to assist in decision-making.

2. BACKGROUND

The ballasting and deballasting of ships makes them a potential means of transport for living organisms, which cross seas and oceans introduced into the tanks of ships. Faced with this threat to the ecosystem, in November 1993 the IMO assembly adopted its first resolution (A.774(18)) based on its own lines of action, urging the MEPC and the MSC (Maritime Safety Committee) to develop a legal framework of international application in this regard.

The International Community adopted in 2004 the Convention for the Control and Management of Ships' Ballast Water and Sediments (BWMC) with the aim of preventing, minimizing and ultimately eliminating the risk of transfer of harmful aquatic organisms and pathogens through the control and the management of ships' ballast water and sediments. The aforementioned Convention entered into force on September 8, 2017, although it will not apply to each ship until the IOPP certificate is renewed. From this moment on, the vessels must submit a plan to comply with the agreement, unless it is shown that the risk of transfer of species that may be invasive in the port of destination is acceptable.

The Specially Protected Areas Regional Activity Centre (SPA/RAC) was created in 1985 and established in Tunis through a decision of the Contracting Parties to the Convention for the Protection of the Marine and Coastal Environment of the Mediterranean (Barcelona Convention). It functions within the framework of the Action Plan for the Mediterranean – Barcelona Convention (UNEP/MAP). SPA/RAC's main mission is to assist the contracting Parties in implementing their obligations under Barcelona Convention Protocol on Specially Protected Areas and Biological Diversity with main aim to contribute to the protection,

conservation, and sustainable management of Mediterranean coastal and marine areas of special cultural and natural value and of threatened and endangered species.

The Contracting Parties (CPs) to the Barcelona Convention agreed to implement the Ecosystem Approach (EcAp) process. In their 19th COP (Athens 2016), the CPs adopted the Integrated Monitoring and Assessment Programme of the Mediterranean Sea (IMAP) (Decision IG.22/7).

Regarding Biodiversity component, the current IMAP only covers the common indicators of the Ecological Objectives (EO) related to biodiversity (EO1), non-indigenous species (EO2) and harvest of commercially exploited fish and shellfish (EO3). Marine food webs (EO4) and sea floor integrity (EO6) are not yet included in the IMAP as they need further development (i.e., proposals of indicators, Good Environmental Status (GES) description and related targets of EO4 and EO6 were discussed in the early stage of the EcAp process implementation.

In order to comply with the regulations mentioned in the previous section, and others that are applicable, the Fundación Valenciaport, within the framework of the ILIAD project, must carry out a series of actions that are the object of this document.

3. OBJECTIVE

The objective of this consultancy is divided into two phases. The first phase is dedicated to providing technical and scientific expertise to develop a Non-Indigenous Species (NIS) and ballast monitoring program and early warning system for ports, to be implemented at one of the ports managed by the Port Authority of Valencia (Spain), namely the Port of Sagunto. The second part involves carrying out the recognition of species in the outer breakwater of the Port of Sagunto. These actions must be in accordance with all the procedures and recommendations issued by the International Maritime Organization and the Barcelona Convention, following the findings of the NIS monitoring plan and early warning system report in phase I. The first phase will be evaluated by the Specially Protected Areas Regional Activity Centre (SPA/RAC), while the second part will be evaluated by the Fundación de la Comunidad Valenciana para la Investigación, Promoción y Estudios Comerciales de Valenciaport (Fundación Valenciaport).

4. TASKS AND EXPECTED RESULTS

Legislative background:

For the execution of these works, at least the following legislative background must be considered, in addition to others necessary and that may be applicable for the management and processing that is the object of this document and that are not included in the list below:

- Resolution A.1088 (28). International Convention for the Control and Management of Ships' Ballast Water and Sediments
- Recommendations, resolutions and circulars issued by the International Maritime Organization. At least the following will be taken into account:
 - MEPC. 173 (58) Guidelines for ballast water sampling (G2)
 - MEPC. 162 (56) Guidelines for risk assessment for the purposes of regulation A-4 of the ballast water management (BWM) convention (D7)

- MEPC. 161 (56) Guidelines on additional measures with regard to ballast water management, including emergency situations (G13)
- Guidelines from the Regional Harmonised Procedures for the Uniform Implementation of the Ballast Water Management Convention in the Mediterranean Sea (Barcelona Convention COP 23 Decision IG 26/11).
- Recommendations from The Mediterranean Quality status report regarding the Ecological Objective EO2 concerning Non Indigenous Species (NIS) (Barcelona Convention COP 23 Decision IG 26/3).
- Recommendations and procedures prepared within the framework of the Action Plan concerning species introduction and invasive species in the Specially Protected Areas and Biological diversity (SPA/BD protocol) of the Barcelona convention. At least the following will be taken into account:
 - Guidelines for controlling the vectors of the introduction into the Mediterranean of non-indigenous species and invasive marine species (https://rac-spa.org/sites/default/files/doc_alien/ld_controle.pdf)
 - Guide for risk analysis assessing the impacts of the introduction of non-indigenous species (https://rac-spa.org/sites/default/files/doc_alien/ld_analyse.pdf)
 - The UNEP/MAP Integrated and Assessment programme (IMAP) and in particular, for the Ecological Objective 2: Non-indigenous species (i.e. for the: Common Indicator 6:
- Law 16/2002 of July 1, on integrated pollution prevention and control.
- Law 21/2013, of December 9, on environmental evaluation.
- Other provisions or regulations to take into account:
 - **Self-protection plan** for facilities affected by Royal Decree 393/2007, of March 23, which approves the basic self-protection standard for centers, establishments and dependencies dedicated to activities that may give rise to emergency situations, or a standard that replaces less effective techniques. It will be the same as that currently established by the PAV for its application in the ports of Valencia, Sagunto and Gandía.
 - Any other regulations that are applicable from the Joint Harmonised Procedure for the Contracting Parties of HELCOM and OSPAR.

On the other hand, the work to be carried out will respect, when applicable, the provisions of the Water Framework Directive (2000/60/CE). In the case of artificial or highly modified masses, as is the case of the port of Sagunto, the Directive determines that they must be protected and improved in order to achieve good ecological potential and good chemical status, all following the guidelines established in the Hydrological Planning Instruction (IPH), ORDER ARM/2656/2008 of September 10, which establishes the criteria to achieve these objectives, as well as what is established in R.D. 60/2011, of January 21, on environmental quality standards in the field of water policy, and its subsequent modification, in Royal Decree 817/2015, of September 11, which establishes the criteria for monitoring and evaluation of the state of surface waters and environmental quality standards.

The activities to be carried out will be those derived from the application of the Convention and the Recommendations and procedures prepared by the International Maritime Organization in

this regard. In order to unify criteria and favor the obtaining of homogeneous results that allow comparing some ports with others, the samplings will follow the protocols described by the HELCOM/OSPAR organization and the harmonized procedure of the Ballast Water Management Convention in the Mediterranean Sea (Barcelona Convention COP 23 Decision IG 26/11)..

The bidder must appoint a person from his company as Contract Manager with the offer, who will be the interlocutor with the corresponding service of the Fundaci3n Valenciaport and SPA/RAC in relation to this contract.

SPA/RAC will be responsible for supervising the first phase, in coordination with the Port of Valencia and RAMANI when necessary. For the second phase of the contract, the bidder will be under the direct supervision of the Valencia Port, in coordination with SPA/RAC and RAMANI when necessary.

Definitions

Regarding the first phase of this contract, the tasks to be undertaken are to:

- Develop a NIS monitoring plan for ports fully aligned with the [IMAP](#), [Ballast Water Management Strategy for the Mediterranean](#), and the [regional BWM harmonised procedures](#) to be applied for the port of Sagunto* (see figure below), managed by the Port Authority of Valencia (The Deliverable is a report Document)
- Develop an early warning system based as appropriate on an eDNA approach and at the extent possible satellite oceanography and other Copernicus Marine data with pilot case for the port of Sagunto. (the Deliverable is a report Document)

Both deliverables will be presented within an online workshop which dates will be defined in common agreement between SPA/RAC, Fundaci3n Valenciaport, RAMANI and its direct partners.

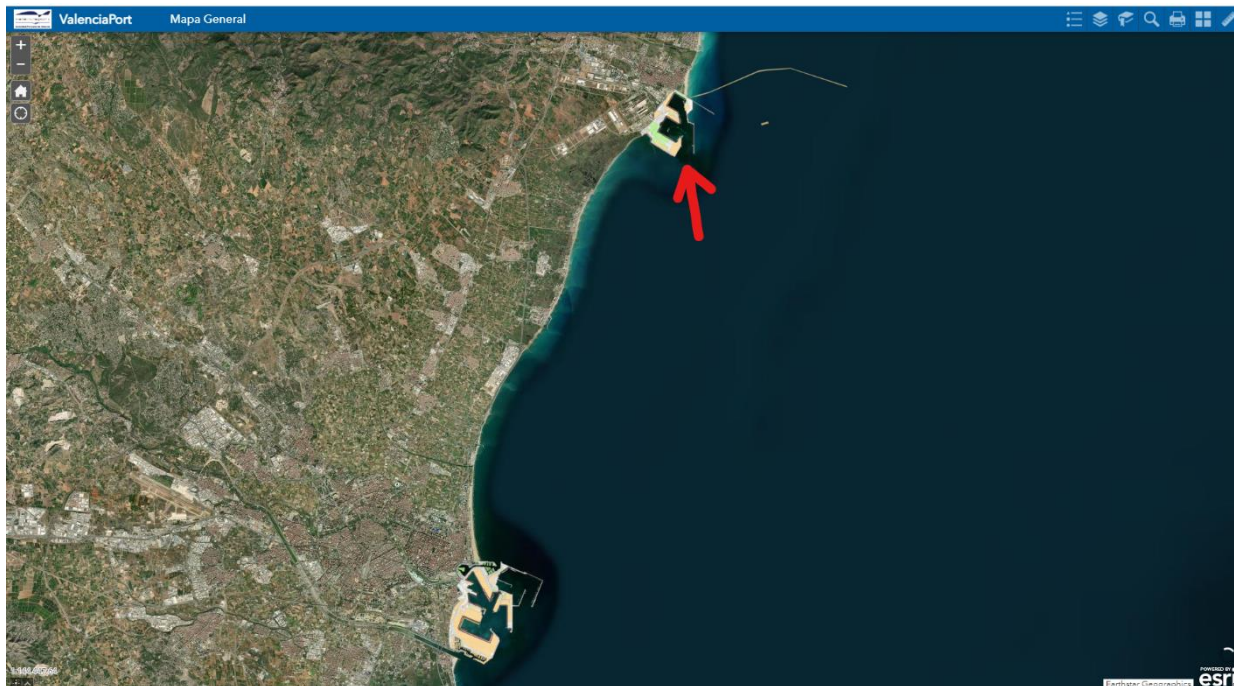


Figure 1: Location of the of the Port of Sagunto

*Further technical information about the port of Sagunto, where the monitoring plan and the early warning system shall be developed are available in this link
<https://www.valenciaport.com/puertos/sagunto/el-puerto/>

Regarding the second phase of this contract, the tasks to be undertaken are defined as:

- **Ordinary services:** Refers to the minimum work established in the scope of this technical specification for compliance with its purpose.
- **Extraordinary services:** Refers to additional sampling analytics, not planned in the minimum works established in the scope of this specification of technical specifications for compliance with its object, which could be carried out during the duration of the contract, motivated by:
 - ✓ Need to carry out a specific study in some area of the study area defined in point 4.4. for the detection of problems related to the recognition of species.

These services will include both the analysis to be carried out, the taking of samples and all the additional costs necessary to carry them out.

They will only be carried out at the express request of the person responsible for the contract or technician from the Fundació Valenciaport and will be billed by applying the unit prices established in the economic proposal.

Scope

With regard to the first phase, the monitoring plan and early warning system shall be fully in line with the [UNEP/MAP Integrated and Assessment programme \(IMAP\)](#) and in particular, for the **Ecological Objective 2: Non-indigenous species** (i.e. for the: **Common Indicator 6: Trends in abundance, temporal occurrence and spatial distribution of non-indigenous species, particularly invasive non-indigenous species, notably in risk areas in relation to the main vectors and pathways of spreading of such species**) as well as with the [Ballast Water Management Strategy for the Mediterranean](#), and the last adopted decision of the Barcelona CoP23 held in Slovenia from 5 to 8 December 2023 concerning [the Regional Harmonised Procedures for the Uniform Implementation of the Ballast Water Management Convention in the Mediterranean Sea](#).

The monitoring plan and the early warning system shall integrate, as appropriate, the latest advances in technology and modelling and include the eDNA approach for species identification. It shall consider port management team needs, logistical and financial resources. This monitoring plan should also be applicable to other ports in the Mediterranean Sea.

Meanwhile, regarding second phase of this contract, the scope of this specification is the execution of the sampling procedures in line with the procedure and guidelines from International Convention for the Control and Management of Ships' Ballast Water and Sediments and the Barcelona Convention. Specifically, the following actions will be carried out:

1. Sampling 3 sampling points located on the outer breakwater of the port of Sagunto.
2. Analysis of organisms in the water column:
 - Pathogenic bacteria: *Vibrio cholerae*, intestinal Enterococci and *E.coli*.
 - Phytoplankton.
 - zooplankton.
 - Mobile epifauna and fishes, Dinoflagellates, Benthic macrofauna

3. Analysis of benthic organisms (from the bottom):

- Infauna (organisms of soft substrate).
- Epifauna (organisms that live on the bottom).
- Encrusting organisms (fouling).

The execution of said procedures and will contemplate the historical data that Fundació Valenciaport currently has available in terms of water quality. As far as possible, indicators will be developed to assess the risk of introducing invasive species, which will remain consistent with the NIS monitoring indicators of the Correspondent Group of the Barcelona Convention on environmental monitoring (CORMON Group).

Invasive species transported through ship ballast water pose a significant threat to the fragile marine ecosystems of the Mediterranean. To effectively address this challenge, this roadmap advocates for the implementation of environmental DNA (eDNA) monitoring as a powerful and innovative tool. eDNA monitoring enables the detection and identification of invasive species by analyzing genetic material present in the water. By incorporating eDNA monitoring into existing strategies, we can enhance our ability to prevent and manage the introduction of invasive species in ship ballast water.

The primary objective of this proposal is to introduce eDNA monitoring as an integral part of the strategy to address invasive species in ship ballast water. By harnessing the power of eDNA technology, we aim for early detection, monitoring, and response to invasive species introductions, thus protecting the Mediterranean marine environment.

The Contractor will have to identify local resources to support research and routine sample analysis in eDNA monitoring specific to the Mediterranean region. Organize training programs and workshops for relevant stakeholders, including port authorities, maritime industry personnel, and environmental agencies, to enhance their understanding of eDNA monitoring techniques. Build their capacity to collect, process, and analyze water samples effectively, ensuring accurate and reliable results. Promote information exchange and coordination to ensure a unified approach in addressing invasive species threats across the region.

Advocate for the integration of eDNA monitoring into national and international regulations governing ballast water management. Collaborate with maritime regulatory bodies, such as the SPA/RAC and REMPEC to incorporate eDNA monitoring requirements into existing standards and guidelines.

Capacity building initiatives, establishment of collaborative networks, and awareness campaigns amongst professionals. Scout financial support from governmental agencies, international grants, private-sector partnerships, and regional cooperation platforms to ensure sustainable funding.

An important disclaimer is that eDNA analysis is a new technology not yet compliant with directives. Therefore, a compliance study is proposed. Genetic monitoring needs to be aligned with current guidelines and risk assessments need to be adapted.

The implementation of eDNA monitoring represents a significant advancement in the fight against invasive species in ship ballast water in the Mediterranean. By incorporating eDNA technology into existing strategies, we can enhance our ability to detect and respond to invasive species introductions promptly. This proposal emphasizes the importance of research, pilot projects, capacity building, collaborative networks, legislative support, and public awareness to

successfully integrate eDNA monitoring into the management of ship ballast water and safeguard the Mediterranean marine environment.

1.1. Study areas and location of sampling points

The established study area includes the extra-port waters of the port of Sagunto (coastal water mass).

Below is a table with the priority sampling areas:

Code	Description/Dock
PV1a	Outer breakwater dic Nord
PV2a	Outer breakwater dic de Llevant
PV3a	Outer breakwater contradic Sud

1.2. Technical background of the work to be carried out

Regarding the first phase of this contract, the expert will take into consideration:

- Requirements of the **Ecological Objective 2: Non-indigenous species** (i.e. for the: **Common Indicator 6: Trends in abundance, temporal occurrence and spatial distribution of non- indigenous species, particularly invasive non-indigenous species, notably in risk areas in relation to the main vectors and pathways of spreading of such species**) of the IMAP and in particular the [IMAP info system data standard, the EO2 guidance factsheet, and related monitoring protocols.](#)
- Requirement of the [Ballast Water Management Strategy for the Mediterranean](#) related to the monitoring of NIS spread.
- Guidelines from [the Regional Harmonised Procedures for the Uniform Implementation of the Ballast Water Management Convention in the Mediterranean Sea.](#)
- Recommendations from The Mediterranean Quality status ([Med QSR 2023](#)) report regarding the Ecological Objective EO2 concerning Non Indigenous Species (NIS) (Barcelona Convention COP 23 Decision IG 26/3).
- The influence of maritime traffic and port morphology in the spreading of invasive species in the Mediterranean Sea.
- The relation to origin-destination port and nearby SPAMIs, MPAs and Natura 2000 sites, in particular with regard to the assessment of risks and early warning stations.
- At the extent possible, appraise the use of satellite oceanography and other Copernicus Marine data.
- The Port of Valencia management team needs logistical and financial resources.
- Interoperability and linkage with the MAMIAS platform, Marine Biodiversity Platform of the SPA/RAC and as well as the ILIAD platform.
- Any other relevant document within the framework of the Action Plan concerning species introduction and invasive species of the Specially protected areas and biological diversity protocol of the Barcelona Convention.

The monitoring document should include the following elements:

- The methodology adopted for data acquisition, data collection and data processing of NIS
- [Selected NIS to be monitored](#), Monitoring areas and stations and the frequency of the surveys (see : [Progress in the Development of the Baseline Values for the IMAP Common Indicator 6 related to Non-Indigenous Species](#));
- Guidelines from the regional BWM harmonised procedures.
- Methods for data processing in line with related IMAP Decisions on assessment criteria and thresholds;
- Other elements, as necessary;
- Other pressures and impacts like climate change, others including main NIS pathways
- ...

The main outcome of this consultancy (Phase I) is to deliver guidelines in synergy with regulations from the OSPAR, HELCOM, Barcelona Convention and the Ballast Water Management requirements for a full, operational assessment (Phase II) that should provide important cues for crossovers with other pilot experiments, HAOP validation, and region-scale implementation of eDNA based monitoring programmes. The reports should be written in such a way that it will ease the acquisition of additional or follow-up funding. Therefore, the “Demonstrator Project” terms of reference (phase II), to be drafted under 4, is likely the most resource intensive and should deserve more attention. The ToR and other deliverable documents for phase II will also serve to:

1. Identify gaps and inconsistencies in the existing monitoring programme(s), compared with IMAP requirements and ballast water strategy and harmonised procedure.
2. Identify necessary needs/changes to be addressed for harmonization of existing monitoring programmes with requirements of IMAP (including, where necessary, introduction of new methodologies for sampling and production of data, determination of sampling points/areas and transects for making regular monitoring according to the Port of Sagunto available and projected resources).
3. Propose elements for monitoring and early warning, to be in line with IMAP requirements and taking into consideration local laboratories, research institutes and resources.
4. Find synergies in the monitoring plan with the guidelines from the the regional BWM harmonised procedures.
5. Main advantages and takeaway of the e-DNA methodologies and satellite data to monitor NIS and ballast water in the Port of Sagunto and linkages with IMAP approach.

SPA/RAC, the Fundaci3n Valenciaport and RAMANI will provide as appropriate all available technical document related to the IMAP, the Port, and the online platforms. When necessary, online technical meetings can be organized.

With regard to Phase II, following the HELCOM/OSPAR guidelines and the information included in the annexes, the different indicators established therein will be evaluated, which will be consistent with the Integrated Monitoring and Assessment Programme (IMAP) indicators of the Group of Correspondents of the Barcelona Convention on environmental monitoring (CORMON Group) and in line with the harmonized procedure for the uniform implementation of the BWM.

In order not to duplicate efforts, the sampling will take into account the information already available to the Fundación Valenciaport from previous studies, and which is described below and complement with the deliverable of the phase 1 of this project:

HEADQUARTERS	MEASUREMENTS ON SITE	LABORATORY ANALYSIS
Water column	<ul style="list-style-type: none"> - Chlorophila-a - Temperature - Salinity - Dissolved oxygen - turbidity - Total hydrocarbons 	<ul style="list-style-type: none"> - Fecal contamination: <i>Escherichia coli</i> and intestinal enterococci. - Nutrients: nitrates, nitrites, ammonium and phosphates.
Sediment	<ul style="list-style-type: none"> - Redox Potential 	<ul style="list-style-type: none"> - Total organic carbon - Kjeldahl Nitrogen - total phosphorus - Organic material - Granulometric analysis - Benthic invertebrate fauna (BOPA)

HEADQUARTERS	LABORATORY ANALYSIS
Water columna	<ul style="list-style-type: none"> - Complete analysis of all priority substances and other pollutants established in annexes IV and V of Royal Decree 817/2015, of September 11, establishing the criteria for monitoring and evaluating the state of surface waters and environmental quality standards
Sediment	Cadmium, Lead, Copper, Nickel, Zinc, Arsenic, Mercury, Chromium VI, Polychlorobiphenyls (PCBs)*, TributylTin Compounds (TBTs), PAHs*

*According to Guidelines for the characterization of dredged material and its relocation in waters of the maritime-terrestrial public domain, 2015.

A **Sampling Campaign** is defined as each of the visits made to the port for sample collection. Within a campaign, multiple samplings may be conducted, so that by the end of the year, at least the total required samplings are carried out.

1.3. DELIVRABLES:

Various reports will be made: partial reports and final report.

1.3.1 *Partial or draft reports*

The objective of the partial reports is to periodically inform Fundació Valenciaport and SPA/RAC of the results obtained, as well as their evolution. For this reason, in the frame of Phase II, they must contain cumulative data and must be prepared in accordance with the reference regulations. In total, a report will be presented per campaign carried out. Additionally, a partial report will be presented in each extraordinary analysis that is carried out.

1.3.2. *Final reports*

Regarding Phase I, a final version of the NIS monitoring plan and NIS Early warning system applied for the Port of Sagunto as a pilot.

The report shall include:

- Introduction and context
- analysis of available scientific publications/work,
- data sources/sets,
- methodologies for monitoring and assessment of NIS in Port,
- relevant ongoing/concluded initiatives/projects at regional, sub-regional or national levels;
- regional/national institutions or key persons/experts working on NIS/Ballast Water in the Mediterranean.
- knowledge gaps.
- techniques used for NIS identification (including the e-DNA techniques), advantages and takeaways
- application to the Port of Sagunto as a pilot

Regarding Phase II, once the sampling is over, a final report will be prepared. Additionally, the successful bidder must complete and deliver to the Fundació Valenciaport an Excel with all the data related to the annual sampling. Both the raw data and the processed data will be provided, these being the property of the Fundació Valenciaport. The format and content will be provided by the Fundació Valenciaport with the history of previous years.

Regarding Phase II, all the reports will be advanced by email in pdf format, attaching the bulletins of the laboratory analysis. In addition, a printed copy of said reports must be delivered with a CD/Pen drive, with the campaign data. The bidder must propose a report model that must be approved by the Fundació Valenciaport and that will contain at least the following points:

- Study area
- Methodology
- Results by variables and sampling points
- In-depth profiles by variables and sampling points
- Instructions for the authorization of ballast water management in ports
- General conclusions, identifying and valuing by sampling point those variables that could facilitate the settlement of invasive species in the port water masses

The bidder must participate in the meetings that Fundació Valenciaport and SPA/RAC deems necessary for the analysis of the generated reports, which may be attended online.

5. TIME DURATION DELIVERABLES & TIMELINE

The total duration of the study is nine months from the date of signing the contract. 2 months for finalizing the 1st phase and 7 months for finalizing the 2nd phase.

The various reports and their respective deadlines are listed in the table below and should be in conformity with it:

Deliverables	Details	Deadlines
<p><u>Deliverable 1:</u> Work plan and Timeline</p> <p>Production of 1 document (word) detailing the work plan and timeline for phase 1 and 2.</p>	<p>Detailed work plan and timeline developed.</p>	<p>five days after the contract signature</p> <p><i>After its submission to SPA/RAC, the workplan and timetable will be validated during an online meeting with SPA/RAC, Valencia Port foundation and after consultation with partners.</i></p>
<p><u>Deliverable 2:</u></p> <p><u>Draft version</u> of the NIS monitoring plan + NIS Early warning system to be applied for the Port of Sagunto as pilote,</p> <p>Production of 2 documents (Word format) in English;</p>	<p>The report shall include:</p> <ol style="list-style-type: none"> i. Introduction and context ii. Analysis of available scientific publications/work, data sources/sets, iii. methodologies for monitoring and assessment of NIS in Port, iv. relevant ongoing/concluded initiatives/projects at regional, sub-regional or national levels; v. regional/national institutions or key persons/experts working on NIS/Ballast Water in the Mediterranean. vi. knowledge gaps. vii. Techniques used for NIS identification (including the e-DNA techniques), advantages and takeaways viii. application to the Port of Sagunto as pilote 	<p>Draft version: 45 days after validation of the work plan</p> <p><i>Validation by SPA/RAC, Valencia Port foundation and after consultation with partners.</i></p>
<p><u>Deliverable 3:</u></p> <p>Partial Reports per Campaign and for</p>	<p>Periodic reports to be submitted for each campaign and extraordinary analysis carried out. These reports must contain cumulative data and be</p>	<p>7 days after the completion of the campaign</p>

<p>Extraordinary Analyses. (Word format) in English;</p>	<p>prepared in accordance with the reference regulations. Each partial report should include:</p> <ul style="list-style-type: none"> i. Objectives of the campaign. ii. Methodology used. iii. Results obtained to date. iv. Evolution of the data. v. Observations and comments on the progress of the campaign. 	
<p><u>Deliverable 4:</u> <u>Final version</u> of the NIS monitoring plan for port + NIS Early warning system applied for the Port of Sagunto as pilote, Production of 2 documents (Word format) in English;</p>	<p>Elaborate the final version the NIS monitoring plan for port + NIS Early warning system applied for the Port of Sagunto as pilote</p>	<p>10 days following comments received from SPA/RAC and Valencia Port foundation on the Draft reports after consultation with the partners but no later than 70 days from the date of the contract signature.</p>
<p><u>Deliverable 5:</u> Final sampling report (Word and Excel format) in English;</p>	<p>A detailed document summarizing and analysing the results obtained during the year of sampling. The report shall include:</p> <ul style="list-style-type: none"> i. Objectives of the sampling. ii. Study area. iii. Methodology used. iv. Instructions for the authorization of ballast water management in ports. v. Results obtained. vi. Data analysis. vii. Conclusions and recommendations. <p>An Excel file containing all the data related to the annual sampling. This file should include both raw data and processed data.</p>	<p>10 days following comments received from SPA/RAC and Valencia Port foundation on the Draft reports after consultation with the partners but no later than 185 days from the date of the contract signature.</p>

<p><u>Deliverable 6:</u></p> <p>Presentation of the results within an Iliad 2h-2h30 online workshop</p>	<p>The aim is to present the results to end key national and regional stakeholders as well as other ports representatives in order to explore opportunities of replicability of the developed monitoring plan and early warning in other areas</p>	<p>Following the validation of the final reports by SPA/RAC and Valencia Port foundation but no later than 196 days from the date of the contract signature</p> <p><i>The date and time of the online workshop will be decided in common agreement</i></p>
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6. PLACE OF PROVISION OF THE SERVICES

The execution of the works that are the object of this Specification will be carried out by the contractor in its own premises and in the port of Sagunto. For this purpose, express and unique authorization must be requested from Fundación Valenciaport for each one of them. If granted, such authorization will be temporary. To this end, the company that is awarded the contract, if necessary, undertakes to obtain from the Fundación Valenciaport the express and unique authorization for each of its employees that it needs to locate in the offices of Fundación Valenciaport.

B- ADMINISTRATIVE CLAUSES

Article 1 - Conditions for participation in the consultancy

Are eligible for the present call of consultancy, is consulting firms.

Article 2- Composition and presentation of offers

The submitted offer must include separately: (i) a technical offer, (ii) administrative documents, and (iii) a financial offer.

The services provided as part of this assignment consist of an overall fixed and non-revisable cost.

The number of net working days to implement the tasks and deliverables of this consultancy is estimated to 27 effective working days (WD)

2.1 Technical offer

It must contain:

1. A cover letter outlining the consultant's suitability for the job.
2. Personal CV indicating educational background (including a copy of higher education degrees) as well as all experience in the field of marine science studies and/or environmental conservation with a focus on monitoring and assessing of Marine Non-Indigenous Species as well as the references regarding similar studies and reference.
3. A detailed methodological note on how the consultant intends to approach and implement the assignment.
4. Planning and detailed time schedule (and chronogram of intervention of the team in case of 2 experts involved in the offer).

Applicants are encouraged to send links to references of previous works completed on subjects relevant to the consultancy or share relevant documents by e-mail if those are not accessible online.

2.2 Administrative documents

The administrative offer should include the following administrative documents:

1. A certificate proving that the tenderer is registered in the commercial register, or the equivalent.
2. A tax certificate, valid on the offer submission date, proving that the consulting firm/service provider company has no outstanding tax obligations.
3. A statement delivered by the social security body to which the consulting firm/service provider company is affiliated stating that all dues have been paid and which is valid on the date of submission.
4. A sworn statement of non-bankruptcy.
5. A sworn statement that the consulting firm/service provider company is in no situation that could in any way be incompatible with the mission or compromise independence in carrying out the mission.

6. A sworn statement from each of the team of expert members, who are not staff members, confirming that they are willing to participate in the work team to carry out this mission.
7. The present call for tenders signed (date, signature and stamp of the consulting firm/service provider company at the end of the document).

If the original administrative documents are not in English or French, it should be provided with additional copies translated into English or French by a sworn translator. Should any of the administrative documents be missing, the tenderer will be contacted to complete the missing offer documents within a period of ten (10) days. If after a period of ten (10) days, the documents are still not complete the offer will be eliminated.

2.3 Financial offer

The financial offer must be expressed in Euros, in both tax-free and all tax-included prices. It should include all the costs connected to the provision of the service.

The financial offer should also include the following documents:

- submission letter, using the template attached in Annex 1; and
- the details of the global price using the template in Annex 2.

2.4 Bidding Budget

The work subject of this call will be funded by the SPA/RAC and mostly by the Valenciaport Foundation. The maximum bidding budget for the works covered by this document (ordinary services) is set at 59 THOUSAND euros, (€59,000.00), with the Phase I being €9,000 all taxes included, and the Phase II being €50,000 taxes excluded. Said amount is understood to include any expense derived from the purpose of the service, such as:

- meeting attendance,
- displacements,
- preparation of reports, or technical projects, studies or documents that may be requested by the competent body during the processing of the file,
- endorsement of reports by professional association, when necessary, and;
- drawing up plans with the sampling areas,
- sampling campaign.

Any offer that exceeds the bidding budget will not be considered as described in the present article.

Article 3 - Submission

Proposals must be received electronically at the following e-mail address:

rcompany@fundacion.valenciaport.com and car-asp@spa-rac.org before **28 June 2024 23:59 pm CEST**

E-mails should have the following subject:

**CALL FOR CONSULTANCY 101037643 — ILIAD
“REQUERIMENTS FOR SUBCONTRACTING WITHIN THE FRAMEWORK OF THE ILIAD
PROJECT (INTEGRATED DIGITAL FRAMEWORK FOR COMPREHENSIVE MARITIME
DATA AND INFORMATION SERVICES)”**

Proposals received after this deadline will not be considered.

Article 4 - Additional information

Should questions or need for clarification related to these terms of reference and their content arise, bidders may submit a written request by e-mail to:

rcompany@fundacion.valenciaport.com and car-asp@spa-rac.org ; cc: amora@fundacion.valenciaport.com, issam.achour@spa-rac.org, anis.zarrouk@spa-rac.org and dhia.quezquez@spa-rac.org no later than five (5) calendar days before the deadline for the proposal submission.

Article 5 - Terms of Payment

Payment for services performed will be made as follows:

Regarding services performed in the first phase of this contract (SPA/RAC, in charge of the budget of this part):

- 50% of the sum €9.000 all taxes included upon signature of the contract.
- 50% of the sum €9.000 all taxes included upon completion of the works (deliverable 1, 2 and 4), following a completion report prepared by the successful bidder and approved by SPA RAC.

Regarding services performed in the second phase of this contract (Fundación Valenciaport, in charge of the budget of this part):

- 30% of the sum €50.000 taxes excluded upon confirmation of the start of Phase 2.
- 30% of the sum €50.000 taxes excluded upon completion of the campaigns.
- 40% of the sum €50.000 taxes excluded upon completion of the works (deliverable 3, 5 and 6), following a completion report prepared by the successful bidder and approved by Fundación Valenciaport.

All payments will be made by bank transfer after the receipt of an invoice from the contractor. Payments shall be made to a bank account held by the contractor.

Article 6 - Evaluation procedure

The evaluation will be based on combined technical and financial criteria as follows:

6.1 Technical evaluation

The technical offers will be first examined, while the financial offers remain sealed. Applications will be evaluated based on the following criteria:

- Profile (experience and qualifications) of the firm and consultants in relation to the subject of this assignment (60 points);
- The proposed methodology for carrying out the assignment (30 points);
- The detailed schedule and timetable (including an intervention chronogram) (10 points).

Minimum Criteria	Scoring	
	In the case of one expert involved	In the case of two experts involved

General Experience of the consultancy firm	<u>Experience</u>	Relevant experience in managing project and teams in in relation with marine biodiversity monitoring and assessment studies with a focus on NIS and ballast water	<u>20 points Maximum</u> (5 points / reference+ 2 additional points/experience in the Mediterranean/or +3 additional points/experience in Mediterranean coasts of Spain/ or +1 additional points/experience with e-DNA)	
		No similar experience	0 points (in this case the offer is eliminated)	
Lead consultant	Experience	Relevant scientific background and experience in marine biodiversity monitoring and assessment studies with a focus on NIS and ballast water	<u>35 points Maximum</u> (10 points / study+ 2 additional points/study in the Mediterranean/or +3 additional points/study in Mediterranean coasts of Spain)	<u>20 points maximum</u> (6 points / study+ 2 additional points/study in the Mediterranean/or +3 additional points/study in Mediterranean coasts of Spain/ or +1 additional points/experience with e-DNA)
		No similar study	0 points (in this case the offer is eliminated)	
	Diploma	Post-graduate university degree in marine science and /or environmental science or equivalent field	<u>5 points maximum</u>	<u>5 points maximum</u>
		University degree in the above- mentioned fields	3 points	3 points
		No university degree in the above-mentioned fields	0 point (in this case the offer is eliminated)	0 point (in this case the offer is eliminated)
	Associate consultant	Experience	Relevant scientific background and experience in marine biodiversity monitoring and assessment studies with a focus on NIS and ballast water	<u>N/A</u>
No similar study			<u>N/A</u>	0 point
Diploma		Post-graduate university degree in marine science and /or environmental science or equivalent field	<u>N/A</u>	<u>5 points maximum</u>
		University degree in the above- mentioned fields	<u>N/A</u>	3 points
		No university degree in the above-mentioned fields	<u>N/A</u>	0 point

Methodology, time planning schedule, chronogram of intervention of the team	The methodological note evaluation	Methodology clearly presented, well developed, and meets the terms of reference and the study's objectives	<u>30 points maximum</u>
		Methodology more or less well developed but clearly meets the terms of reference and the study's objectives	20 points
		Methodology poorly developed and meets partially the terms of reference and the study's objectives	10 points
		Methodology not clearly presented and does not meet the terms of reference and the study's objectives, or no methodology presented	0 points
	Planning and time schedule, and chronogram	Realistic planning clearly presented, coherent with the time schedule considering the requested time for reports validation and chronogram of intervention	<u>10 points maximum</u>
		Realistic planning but more or less well presented, fairly coherent with the time schedule and the chronogram of intervention	5 points
		Planning unclearly presented, doesn't respect the deadline, or no planning or no time schedule or no chronogram of intervention	0 point

Any offer that has not attained the minimum score of 80 points will be eliminated.

In the event of no offer obtains 80 points or more, the call for consultancy process will be declared unsuccessful.

6.2. Financial evaluation

Once the technical evaluation has been completed, the financial offers of applicants that have not been eliminated during the technical evaluation will be examined.

The evaluation committee will check that the financial offers do not contain any obvious arithmetical errors. Any possible obvious arithmetical errors will be corrected, and the corrected figures will be taken into consideration.

The evaluation committee will then proceed to a financial comparison. The lowest financial offer that is judged acceptable will receive 100 points. The other offers will be attributed a score based

on the following equation:

Financial score = (amount of the lowest accepted offer/amount of the offer in question) x 100

6.3. Conclusions of the evaluation committee

The choice of the best offer is achieved by weighting the technical and financial scores using a distribution key of 40/60 basis. To this end:

- The technical score will be multiplied by a coefficient of 0.40.
- The financial score will be multiplied by a coefficient of 0.60.

The weighted technical - financial scores thus calculated will be added to ascertain the offer with the best technical and financial score.

If two offers obtain the same weighted technical-financial scores, preference will be given to the applicant in the following order:

- having obtained the best technical score.
- having obtained the best score for methodology.
- having obtained the best total score for experience and qualifications of experts.

Note: The selection process may include interviews (through a teleconferencing platform), as well as a pre-selection phase followed by requests for complementary information / negotiation if required.

Article 7 - Monitoring, control and validation of the work

The contractor will work under the supervision of a monitoring committee to discuss, validate and finalise the various phases, tasks and deliverables.

The contractor will submit draft version of each deliverable.

The contractor will submit the final version of deliverables as indicated in section 4 (TASKS AND EXPECTED RESULTS) and section 5 (TIME DURATION OF THE CONTRACT, DELIVERABLES & TIMELINE) of the technical specifications.

Article 8 - Penalty

In the absence of completion by the consultant of the services at his/her charge within the contractual deadlines envisaged, it will be applied as of right and without notice, a penalty of one two hundredth (1/200) of the total amount of the contract (All Taxes Included - ATI) for each calendar day of delay.

The amount of the late penalties will be deducted from the accounts. The amount of the penalties is capped at 10% of the total amount of the contract in ATI. When this threshold is reached, Fundación Valenciaport and SPA/RAC reserve the right to terminate the contract at the holder's fault, in accordance with Article 12 (Cancellation conditions) below, without that the holder cannot raise disputes or claim any compensation.

Article 9 - Intellectual property rights, ownership of document

All legal rights throughout the world in works or inventions created by the provider in connection with the consultancy shall be allowed to Fundación Valenciaport and SPA/RAC. The provider recognizes that such rights include, but are not limited to, copyright and other rights in written material, sound and video recordings (including films), maps, photographs, etc. as well as patents and other rights in inventions, and that the said rights enable Fundación Valenciaport and SPA/RAC to control and authorize, where appropriate all publications, publicity material and other exploitation of the said works and inventions.

All the plans, drawings, software, photos, videos, data, presentations, study reports and any other documents, elaborated and submitted by the provider to Fundación Valenciaport and SPA/RAC for the execution of the contract, will become and remain the property of Fundación Valenciaport and SPA/RAC, and the consultant will submit them to Fundación Valenciaport and SPA/RAC.

The provider does not have the right to use or copy the products resulting from this consultancy, whatever their form or their media, without the explicit written non objection of Fundación Valenciaport and SPA/RAC.”

Article 10- Arbitrage, dispute settlement

Every dispute arising from or in connection with this contract execution shall be solved by way of amicable negotiations by the parties. The contract is deemed to have been made in Spain and to be subject to Spanish law. In case of dispute, only the courts of Valencian Legal Courts shall have jurisdiction.

Article 11 - Liability and insurance

Fundación Valenciaport and SPA/RAC do not accept any liability for acts of third parties, accidents, sickness, losses of any kind, however caused arising during the implementation of the specific actions and the production of the relative outputs expected. The bidder confirms that themselves or any involved staff will be covered by appropriate insurance.

Article 12 - Force majeure

Force majeure means any event outside the control of a party so that it is impossible for one party to carry out his obligations or the implementation of these obligations becomes so difficult that it is considered to be impossible to carry them out under such circumstances.

The party which invokes force majeure must inform its co-contractor within seven (7) days of its occurrence so that the contractual deadline will be suspended with a joint agreement between the parties for the period which is covered by the case of force majeure.

Fundación Valenciaport and SPA/RAC have a right to assess the circumstances of the impediments invoked by the holder as a case of force majeure to see if they are convincing, and if this should not be the case, then the days of discontinued work will be accounted for as days of delay.

Failure by either party to fulfil any of its contractual obligations does not entail a contract

termination or failure to fulfil its contractual obligations if such a failure is due to a case of force majeure, if the party that finds itself in such a situation has done the following:

- a. has taken all the reasonable precautions and measures to allow it to comply with the terms and conditions of the contract; and
- b. has informed the other party of the event, as soon as possible. Any timeline given to a party for the execution of its contractual obligation will be prolonged by a period which is equal to the period during which that party was prevented from fulfilling its obligations.

Any timeline given to a party for the execution of its contractual obligations will be prolonged by a period which is equal to the period during which that party was unable to fulfil its obligations due to the case of force majeure.

Article 13 - Cancellation conditions

Fundación Valenciaport and SPA/RAC could cancel this contract through a notification in writing addressed to the tenderer after one of the events indicated in the following paragraphs:

- a. no respect of the deadline of the execution;
- b. in the case described in the Article 7 (Penalty) when the amount is capped at 10% of the total amount of the contract;
- c. non-conformity to the content of the service listed in the technical specifications of the present consultancy;
- d. If the tenderer goes bankrupt or into receivership;
- e. If, after a case of force majeure, the holder is unable to execute a substantial part of the Services for a period equal to at least sixty (60) days;
- f. If the tenderer was involved in corruption or fraudulent manipulations in order to obtain the contract or during the execution of the contract. For the purpose of the clause: a person is guilty of "corruption" if he/she offers, gives, solicits or accepts any kind of advantage in order to influence the action of a public official during the selection or the execution of the contract; and undertakes "fraudulent manipulations" which distort or denature the facts so as to influence the selection or the execution of the contract to the detriment of the borrower; by "fraudulent manipulations" is meant any agreement or collusive manipulation of the tenderers (before or after submitting the proposals) so as to artificially maintain the prices of the tenders at levels which do not correspond to prices which would have resulted from free and open competition and which deprive the borrower of the advantages of free and open competition; or
- g. If Fundación Valenciaport and SPA/RAC, on its own initiative and for any reason whatsoever, decide to terminate the contract.

Article 14– Conflict of interests

14.1 - Prohibition of incompatible activities

The contract tenderer, the personnel and agents must not engage, directly or indirectly, during the contract implementation period, in professional or commercial activities which could be incompatible with the activities with which they have been entrusted due to the present contract.

14.2 - Non-participation of the holder and his associates in certain activities

The tenderer and his associates are prohibited, during the contract duration and at the end of the contract period, to provide good, works or services means for any project stemming from the services or closely connected with the present contract services (except for the implementation of the present contract services and their continuation).



ANNEX 1 SUBMISSION LETTER

I, the undersigned (the Firm), after having taken due note of the dossier documents of thecall for consultancy N°..... launched by

....., pertaining to a mission of.....

..... I hereby pledge to execute the requested services in conformity with the provisions defined in the documents referred to, for the prices as established by myself without taking into account the taxes and knowing that the stamp duties and registration are to be covered by the insurer. The total price of the bid is

() Euros ATI. I take due note of the fact that you are not obliged to proceed with the tendering procedure and that I cannot claim compensation. I pledge that the conditions in my offer will remain valid for a period of one hundred and twenty days (120 days) starting from the day after the date for the deadline for the receipt of tenders. Fundación Valenciaport and SPA/RAC pledges to pay the amount after the signing of a convention into the bank current account of the Bank In the name of Under the number of RIB (BIC – IBAN)

In, on
(Name, first name and function) Right for submission
(Signature)



ANNEX 2 DETAILS OF TOTAL PRICE

The bidder, in support of its bid, should provide a breakdown of each unit price according to the following model:

Designation	Unit price	Tasks 1		Tasks 2		Tasks 3 ...		Task 4....		Task 5		Task 6		Total Tasks (1+2+3+4+5...)	
		D u r a t i o n	S u b - t o t a l	D u r a t i o n	S u b - t o t a l	D u r a t i o n	S u b - t o t a l	D u r a t i o n	S u b - t o t a l	D u r a t i o n	S u b - t o t a l	D u r a t i o n	S u b - t o t a l	D u r a t i o n	S u b - t o t a l
												Fees			
Lead expert															
Associate expert															
												Other costs			
Travel and accommodation if any															
Other costs necessary for the proper execution of the present consultancy															
Sub-total / task (excluding VAT)															
TOTAL Excluding VAT															
VAT Amount															
TOTAL All Taxes Included															

Amount of the offer excluding Tax is fixed at the sum of

.....
Amount of the VAT is fixed at the sum of

.....
Amount of the offer is fixed at the sum of Taxes Included (ATI).

All

(Signature and official stamp of the bidder)