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ALL ABOUT BOATING

# LINCOLN

**Tender Document for the Provision of services for the:**

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***Development and Testing of a Dynamic Positioning  
Prototype for Small Vessels***

**Employer: Super Toys  
Country: Greece**

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## **INVITATION TO TENDER**

Super Toys within the framework of the European Union FP Horizon 2020 Project, under the GA NUMBER 727982 with the acronym LINCOLN (<http://www.lincolnproject.eu/>), is pleased to invite offers for the ***"Development and Testing of a Dynamic Positioning Prototype for Small Vessels"***.

The Invitation to Tender (ITT) will open at **12:00 pm 22 /01/2018**.

This ITT sets out the information which is required in order to assess the suitability of applicants in terms of their technical expertise, pricing, service levels and innovative solutions to meet the requirements of Super Toys for "Development and Testing of a Dynamic Positioning Prototype for Small Vessels".

The successful applicant will be required to deliver services in accordance with all attached documents and the contract that will be signed.

It is the responsibility of the tenderers to ensure that offers are received by **12:00 pm 02/02/2018**. Tenders received after this time shall not be considered, but shall be opened, recorded, marked "Late Tender" and returned to sender.

Any questions concerning this document or the tendering process should be sent via email to **vasilis.mentogiannis@gmail.com**, Vassilis Menogiannis - technical director of Super Toys Ltd no later than **26 /01/2018**.

The contract will be entered into on the basis of the total tender package (inclusive of VAT) which will be included as part of the Contract Documents including any amounts or additional made and agreed during the tender proposal assessment period.

Applicants should complete the TENDER Document (see below) and return with the completed proposal, as per the instructions set out in this ITT.



## **SPECIFICATIONS TO TENDER**

### **1. Scope of the Project**

The creation of a Dynamic Positioning (DP) system for small vessels was initiated by Super Toys based on the end-user's needs in rescue vessels to enhance safety and minimize fuel consumption in vessel's stand-by mode. The DP methodology is currently used for large scale boats based on the use of propellers around the hull, but has never been used on small vessels. This pioneering system will use water-jets to stabilize the vessel's position thus the use of the vessels propellers will not be necessary. The intention within the LINCOLN project is to create a DP system that is compact, light and of low cost.

Super Toys being an industrial partner and an end-user has developed the necessity of the creation of such a system and has the means and infrastructure to build it. However, this pioneering methodology is extremely complicated and it requires specialized technical and scientific knowledge and infrastructure to build the prototype. These requirements can only be provided in research institutes. Therefore, in order to proceed with the study and the evaluation of the prototype Super Toys will have to address specialized research institutes to help set the technical and function characteristics and collaborate in building the prototype. This task has to be financed as subcontracting. Additionally, due to the confidentiality that has to be retained in the development of this system Super Toys will address by invitation research laboratories and will assign the subcontract based on best value for money.

### **2. Technical Specifications**

The proposed contract is divided in two phases as described below:

#### Phase A -Design and simulation of the prototype DP system

1. Analysis of requirements for the problem at hand: scenarios of operation, vessel characteristics, sea environment, sensors that provide required data to the control system, actuators, available electric installation on-board, system interface.
2. Investigation of the problem of dynamic position, proposed solution, indicative layout of systems.
3. Material selection and dimensioning, characteristics of electronic measurement and control devices.
4. Mathematical representation of the system and simulation of vessel position control system in PC, in MATLAB or other suitable platform. Data is based on actual sea environment and/or simulation.
5. Interconnection of components, programming and operation of a pilot system, provided that the proposed position control equipment such as actuators, sensors (GPS/IMU etc.), data acquisition and control cards are available.

**Duration: 15/02/2018- 30/6/2018**

#### Phase B-Installation of the DP system and programming

1. Installation and tuning of the dynamic position control system on-board vessel.
2. Interconnection of sensors and actuators.
3. Programming, operation and commission of systems on-board: sensors, actuators, interfaces.

Phase B includes the costs for tests in a towing tank or sea, construction of the model and experiments.

**Duration: 1/6/2018- 15/10/2019**

### **3. Mandatory Requirements**

1. Appropriate Infrastructure to undertake the project (check list of the infrastructure needed)
2. A minimum of 5 years experience in the field of marine control system design (e.g. design and experimental validation of marine propulsion control systems, mathematical modeling of marine propulsion systems, etc)



#### **4. Information and Documents to be provided for Evaluation**

1. Curriculum Vitae of the Director of the Project
2. Proof of scientific expertise related to the requested services (papers in Conferences/Journals, other research projects, similar applications)

#### **5. Tender Conditions**

5.1 Applicants shall either destroy or return all documentation related to the tender process if Super Toys so directs so.

5.2 Applicants shall ensure that tenders are both technically and arithmetically correct.

5.3 Applicants shall not alter the ITT documents. Tender proposals will be deemed to comply entirely with the terms stated therein unless the Applicant states otherwise in writing. If any alteration is made or if these instructions are not fully complied with, the tender proposal may be rejected.

5.4 Applicants will be deemed to have satisfied themselves as to the sufficiency of their tender proposal and to have included in it all costs which may be incurred in the delivery of the services. They shall also be responsible for satisfying themselves as to the accuracy of all information associated with the contract and that all eventualities have been included.

5.5 Neither the issue of the ITT to you, your preparation and submission of a tender, or the subsequent receipt and evaluation of your tender by Super Toys commits Super Toys to award a contract to you or any other bidder, even if all requirements stated in the ITT are met. Super Toys is not responsible directly or indirectly for any costs incurred by your firm in responding to this ITT and participating in this process.

5.6 Information that is supplied to potential suppliers as part of this Procurement Process is supplied in good faith. All participants shall keep strictly confidential any and all information contained in this ITT, and other information or documents made available to it by or on behalf of Super Toys in connection with this ITT. The participants shall not disclose, nor allow any such information to be disclosed.

5.7 By submitting a tender response, you are agreeing to be bound by the terms of this ITT and the Contract without further negotiation or amendment and confirms your agreement to observe the confidentiality requirements.

5.8 The **duration** of the contract is **15/02/2018 - 15/10/2019**

5.9 In the event that you have any concerns or queries in relation to the Contract, you should submit a clarification request in accordance with the provisions of this ITT by the Clarification Deadline (as defined below in the Timeline section of this ITT). Following such clarification requests, Super Toys may issue a clarification change to the Contract that will apply to all potential suppliers submitting a tender response.

5.10 Super Toys is under no obligation to consider any clarifications / amendments to the Contract proposed following the Clarification Deadline, but before the Tender Response Deadline (as defined below in the Timeline section of this ITT). Any proposed amendments that received from a potential supplier as part of its tender response shall entitle Super Toys to reject that tender response and to disqualify that potential supplier from this process.

#### **6. Instructions for Responding**

6.1 The documents that must be submitted to form your tender response are listed in Annexes 1-3 of this ITT. All documents required as part of your tender response should be submitted **by email to Vasilis Mentogiannis, technical director of Super Toys at [info@supertoys.gr](mailto:info@supertoys.gr), [vasilis.mentogiannis@gmail.com](mailto:vasilis.mentogiannis@gmail.com)**, **Financial offers must be sent by mail in a sealed envelope to the following address: Vasilis Mentogiannis, Etolias 2-4 str., Gerakas-Attiki, 15344, Greece** by the Tender Response Deadline, as set out in the Timeline section of this ITT.



6.2 The following requirements should be complied with when submitting your response to this ITT:

- Please ensure that you send your submission in good time
- Please ensure that information provided as part of its response is of sufficient quality and detail that an informed assessment of it can be made.
- Do not submit any additional supporting documentation with your ITT response except where specifically requested to do so as part of this ITT.
- All supporting documentation should be provided separately to your main tender response and clearly labelled to make it clear as to which part of your tender response it relates.
- If you submit a generic policy / document you must indicate the page and paragraph reference that is relevant to a particular part of your tender response.
- Unless otherwise stated as part of this ITT or its Annexes, all tender responses should be in the format of Super Toys requirement with your response to that requirement inserted underneath.
- Where supporting evidence is requested as 'or equivalent' – you must demonstrate such equivalence as part of your tender response.
- Responses should be concise, unambiguous, and should directly address the requirement stated.
- Your tender responses to the tender requirements and pricing will be incorporated into the Contract, as appropriate.

## 7. Evaluation Criteria

Due to confidentiality issues this procurement is conducted as a restricted procedure by invitation to preselected applicants.

Tender responses will be checked to ensure that they have been completed correctly and all necessary information has been provided. Tenders responses correctly completed with all relevant information being provided will proceed to evaluation. Any tender responses not correctly completed in accordance with the requirements of this ITT and/or containing omissions may be rejected at this point. Where a tender response is rejected at this point it will automatically be disqualified and will not be further evaluated.

The Contract will be awarded on the basis on the following weighted award criteria:

	<b>Award Criteria</b>	<b>Weighting</b>
<b>1</b>	<b>Conformance to Specification</b> Submissions which do not, in the opinion of Super Toys, adequately meet the Performance Specification will not be marked for the Technical Merit and Price Criteria outlined below and will not be taken forward to any subsequent stages of the Tender evaluation.	<b>PASS/FAIL</b>
<b>2</b>	<b>Price</b>	<b>51%</b>
<b>3</b>	<b>Technical Merit (Quality)</b>	<b>39%</b>
<b>4</b>	<b>Interview</b>	<b>10%</b>
	<b>TOTAL</b>	<b>100%</b>

	<b>Technical Merit</b>	<b>Weighting</b>
<b>3.1</b>	Appropriate Infrastructure	<b>10%</b>
<b>3.2</b>	Previous experience on the subject	<b>10%</b>
<b>3.3</b>	Scientific Expertise of the research team, demonstrated by publications in refereed journals or conferences	<b>9%</b>
<b>3.4</b>	Technical experience on the installation of similar systems	<b>10%</b>
	<b>Total</b>	<b>39%</b>

The evaluation of submissions will be on the criteria listed above.

The information supplied will be checked for completeness and compliance before Tenders are evaluated. Failure to comply with any of the requirements or any other specified requirements might render a tender liable to disqualification. If any criteria within the specification document are classed as non compliant Super



Toys will not be able to take your tender through to the next stage. Full or partial proposals that in the opinion of Super Toys are unrealistically low or not reasonable sustainable (in terms of Quality or Price) may be rejected.

Submitted Tenders will be assessed against the above criteria and scored using the following point's system principles:

**Scoring Model** – Tender responses will be subject to an initial review at the start of Stage 2 of the evaluation process. Any tender responses not meeting mandatory requirements or constraints (if any) will be rejected in full at this point and will not be assessed or scored further. Tender responses not so rejected will be scored by an evaluation panel appointed by the Customer Organisation for all criteria other than Commercial using the following scoring model:

Points	Interpretation
10	<b>Excellent</b> – Overall the response demonstrates that the bidder meets all areas of the requirement and provides all of the areas evidence requested in the level of detail requested. This, therefore, is a detailed excellent response that meets all aspects of the requirement leaving no ambiguity as to whether the bidder can meet the requirement.
7	<b>Good</b> - Overall the response demonstrates that the bidder meets all areas of the requirement and provides all of the areas of evidence requested, but contains some trivial omissions in relation to the level of detail requested in terms of either the response or the evidence. This, therefore, is a good response that meets all aspects of the requirement with only a trivial level ambiguity due the bidders failure to provide all information at the level of detail requested.
5	<b>Adequate</b> - Overall the response demonstrates that the bidder meets all areas of the requirement, but not all of the areas of evidence requested have been provided. This, therefore, is an adequate response, but with some limited ambiguity as to whether the bidder can meet the requirement due to the bidder's failure to provide all of the evidence requested.
3	<b>Poor</b> – The response does not demonstrate that the bidder meets the requirement in one or more areas. This, therefore, is a poor response with significant ambiguity as to whether the bidder can meet the requirement due to the failure by the bidder to show that it meets one or more areas of the requirement.
0	<b>Unacceptable</b> - The response is non-compliant with the requirements of the ITT and/or no response has been provided.

The weighted scores within each sub-criteria will be added together to arrive at the total score.

## 8. Submission of the Tender

Applicants must send all documents required by email to Vasilis Mentogiannis, technical director of Super Toys at [info@supertoys.gr](mailto:info@supertoys.gr), [vasilis.mentogiannis@gmail.com](mailto:vasilis.mentogiannis@gmail.com). **Financial offers must be sent by mail** in a sealed envelope to the following address: Vasilis Mentogiannis, Etolias 2-4 str., Gerakas-Attiki, 15344, Greece by the Tender Response Deadline, as set out in the Timeline section of this ITT.

- The Technical Requirements and the Financial Offer should be in separate envelopes indicated as Technical Requirements and the Financial Offer respectively.
- The interview will be set after the evaluation of the Technical Requirements and before the financial Offer is opened.

## 9. Timeline

Activity	Date / time
Issue of Contract Notice / availability of ITT documents	22/01/2018
Deadline for clarification questions	26/01/2018
Super Toys respond to clarification questions	30/01/2018
Tender Submission Deadline	02/02/2018
Evaluation of Technical Requirements	07/02/2018
Interview	08-09/02/2018
Contract concluded with winning supplier	12/02/2018
Contract start date	15/02/2018



[ANNEX 1]

**DECLARATION BY TENDERER**

**"Development and Testing of a Dynamic Positioning System for Small Vessels"**

1. I, *[insert name]*, certify that I am the person duly authorised to sign tenders for and on behalf of *[insert company or institution name]*, the tenderer, and having read the documents, offer to supply the services or works:
  - as set out in the letter of invitation to tender, the specification and accompanying tender documents, samples and/or drawings.
  - under the terms and conditions indicated
  - at the price (or prices) specified in the attached tender documentation.
2. I understand that Super Toys reserves the right not to accept the lowest or any tender.
3. I have obeyed the rules regarding confidentiality of tenders and will continue to do so as long as they apply.
4. My company/institution as part of the fulfilment of the project is going to install and tune the DP system in situ on the vessel in Super Toys' infrastructure in Koropi-Attika-Greece.
5. My company/institution is also obliged to test the system in real life conditions in the Greek seas or in towing tank or in simulation.
6. I can confirm that I accept that any breach of any of the conditions could lead to any tender being rejected or to the rescission of the Contract by Super Toys.

Authorised Signatory	
Date	
Name in BLOCK LETTERS	
Job Title	
Company/Institution name	
Telephone Number	
E-mail address	

Please ensure that the form is completed and signed before being returned with any other supporting documentation requested, by the due date and time.

Signature and Company/ Institution stamp





[ANNEX 2]

**FINANCIAL OFFER**

<b>Phase A- Design and simulation of the prototype DP system</b>	
<b>Service provided</b>	<b>Price (VAT is not included)</b>
Analysis of requirements for the problem at hand: scenarios of operation, vessel characteristics, sea environment, sensors that provide required data to the control system, actuators, available electric installation on-board, system interface.	
Investigation of the problem of dynamic position, proposed solution, indicative layout of systems.	
Material selection and dimensioning, characteristics of electronic measurement and control devices.	
Mathematical representation of the system and simulation of vessel position control system in PC, in MATLAB or other suitable platform. Data is based on actual sea environment and/or simulation.	
Interconnection of components, programming and operation of a pilot system, provided that the proposed position control equipment such as actuators, sensors (GPS/IMU etc.), data acquisition and control cards are available.	
<b>Total</b>	

<b>Phase b- Installation of DP system and programming</b>	
<b>Service provided</b>	<b>Price (VAT is not included)</b>
Installation and tuning of the dynamic position control system on-board vessel.	
Interconnection of sensors and actuators.	
Programming, operation and commission of systems on-board: sensors, actuators, interfaces.	
<b>Total</b>	

Note in Phase B, the cost includes tests in a towing tank or sea, construction of the model and experiments.

Authorised Signatory	
Date	
Name in BLOCK LETTERS	
Job Title	
Company/Institution name	
Company/Institution address	
Telephone Number	
E-mail address	

Signature and Company/ Institution stamp



[ANNEX 3]

**TECHNICAL REQUIREMENTS**

<b>1. Company/Institution Infrastructure</b>
Provide appropriate information

<b>2. Previous experience on the subject</b>
Provide appropriate information

<b>3. Scientific Expertise of the research team, demonstrated by publications in refereed journals and conferences</b>
Provide appropriate information

<b>4. Technical experience on the installation of similar systems</b>
Provide appropriate information

Authorised Signatory	
Date	
Name in BLOCK LETTERS	
Job Title	
Company/Institution name	
Company/Institution address	
Telephone Number	
E-mail address	

Signature and Company/ Institution stamp

