

UNIVERSITY OF SPLIT  
FACULTY OF MARITIME STUDIES  
VAT No: HR24624257529  
Ruđera Boškovića 37  
21000 Split

**Procurement number: E-JN 34/26**

## **INVITATION TO TENDER**

in the simple procurement procedure for

**Experimental module with computer software for torsional vibration  
measurement and analysis – for the project 066 NPOO- EnEMar IP-UNIST-39.**

Klasa: 432-02/26-02/0005  
Urbroj: 2181-197-05-03-26-0002  
Split, May 13th, 2026

May 2026

The Faculty of Maritime Studies in Split, as a public contracting authority (hereinafter referred to as: Contracting Authority), pursuant to Article 15 of the Public Procurement Act, N.N. (Official Gazette) No. 120/2016, 114/2022 (hereinafter referred to as: Public Procurement Act), Article 6 of the Regulations on the Implementation of Simple Procurement Procedures of the Contracting Authority (hereinafter referred to as: Regulations), is conducting a simple procurement procedure E-JN 34/26 with the aim of concluding a contract for the simple procurement of a Experimental module with computer software for torsional vibration measurement and analysis – for the project 066 NPOO-EnEMar IP-UNIST-39.

Interested economic entities are hereby invited to submit a tender in accordance with the following terms, conditions and requirements.

***This procurement is financed by the project funds: Energy Efficiency and Reduction of Harmful Gas Emissions in Maritime Transport through Integrated Technical and Operational Measures – EnEMar (IP-UNIST-39) approved within the Call for Funding of Institutional Research Projects of the University of Split within the National Recovery and Resilience Facility 2021 - 2026. Funded by the European Union - NextGenerationEU.***

## **1. GENERAL INFORMATION**

### **1.1. GENERAL INFORMATION ON THE CONTRACTING AUTHORITY**

Contracting Authority Name: University of Split, Faculty of Maritime Studies

Contracting Authority Headquarters: Ruđera Boškovića 37, 21000 Split

Contracting Authority Legal Representative: prof. dr. sc. Ivan Peronja

National ID Number (OIB) / VAT number: 24624257529 / HR24624257529

Phone number: +385 21/619402

Telefax number: +385 21/619499

Internet website address: [www.pfst.hr](http://www.pfst.hr)

E-mail address: [dekan@pfst.hr](mailto:dekan@pfst.hr)

### **1.2. CONTACT PERSON**

**Contact person:**

Kristina Sladojević, M.Sc.Econ.

Telephone number: +385 21/619424

E-mail address: [ksladojevic@pfst.hr](mailto:ksladojevic@pfst.hr)

### **1.3. PROCUREMENT NUMBER: E-JN 34/26**

### **1.4. ESTIMATED VALUE OF THE PROCUREMENT: 17.500,00 EUR without VAT**

### **1.5. LIST OF ECONOMIC ENTITIES WITH WHICH THE CONTRACTING AUTHORITY HAS A CONFLICT OF INTEREST**

In accordance with Article 80 of the Public Procurement Act, and in connection with the provisions of Articles 76 and 77 of the Public Procurement Act, the Contracting Authority may not conclude procurement contracts with the following economic entities (in the capacity of a tenderer, a member of a group of economic entities or a subcontractor):

1. CANNA d.o.o. Rendićeva 2, Split, OIB: 71115963463

2. CLASSIS d.o.o., Rendićeva 18, Split, OIB: 20211978766
3. NUMEA d.o.o., 4. Gardijske brigade 28, Split, OIB: 87261959036
4. DODIG d.o.o., Ulica 4. gardijske brigade 28, Split, OIB: 14902269535
5. PANEX d.o.o., Ulica 4. gardijske brigade 28, Split, OIB: 69385340648
6. PADEL CLUB SPLIT d.o.o, Ulica 4. gardijske brigade 28, Split, OIB: 96249098266
7. RISING STAR j.d.o.o, Petra Kružića 52, Solin, OIB: 23325818962
8. GO4IT obrt, Put Jakova Rotonda 21, Seget Donji, OIB: 51225488313
9. FIMAR d.o.o., Stepinčeva 16, Split, OIB: 55546012929
10. SFAI CROATIA d.o.o., Poljička cesta 9, Split, OIB: 79659193945
11. SFAI FILIPOVIĆ SAVJETOVANJE d.o.o., Kostelska ulica 1, Zagreb, OIB: 13238273009
12. CORPORATE STRATEGY d.o.o., Poljička cesta 9, Split, OIB: 68387900830
13. FASHION FIND FOR YOU obrt za usluge, M. Getaldića 27, Split, MBO: 98763091
14. UDRUGA ZDRAVI GRAD, Vukovarska 65, Split, OIB: 01652012128
15. VAMO & TAMO obrt za prijevoz, Gornji Muć 32, Gornji Muć, OIB: 77975425780
16. AJK UNIVERSITAS, Zrinsko-Frankopanska 38, Split, OIB: 00446319994

In accordance with Article 82 of the Public Procurement Act, any contract concluded in breach of the provisions on conflicts of interest shall be deemed null and void.

#### **1.6. TYPE OF PROCUREMENT PROCEDURE:** Simple procurement procedure

## **2. PROCUREMENT INFORMATION**

### **2.1. PROCUREMENT DESCRIPTION**

The subject of this procurement is an experimental module with accompanying computer software intended for the measurement and analysis of torsional vibrations. The equipment is required for conducting experimental modeling and for integrating the obtained experimental data with corresponding numerical models, in accordance with the activities defined within the work package of the project „Energy Efficiency and Reduction of Harmful Gas Emissions in Maritime Transport through Integrated Technical and Operational Measures – *EnEMar*“ (IP-UNIST-39).

The project is approved within the Call for Funding of Institutional Research Projects of the University of Split within the National Recovery and Resilience Facility 2021 - 2026.

The delivered equipment must be new and in factory packaging (must not be repaired), with all accompanying documentation.

### **2.2. PROCUREMENT TECHNICAL SPECIFICATION**

The required technical characteristics for the Experimental module with computer software for torsional vibration measurement and analysis are specified in Form 2 - Technical Specifications.

The Tenderer is obliged to submit a completed Technical specification form (Form 2) in the tender. The Technical specification must be completed on the original template without changing the original text.

If the Tenderer changes the text or quantities specified in the technical specification form, the Contracting Authority will consider such technical specification, i.e. the Tenderer's tender, as a tender that is contrary to the Invitation to Tender and the tender will be rejected.

The tenderer is obliged, as part of the tender, to provide proof that the offered goods comply with the Contracting Authority's requirements specified in the Technical Specifications (Form 2). Such proof may be provided in the form of any appropriate document (catalogue, brochure, technical data sheet, and/or other manufacturer's technical documentation) demonstrating that the technical specifications of the offered equipment meet the required specifications.

The Tenderer is obliged to offer a warranty period for the duration specified in the Technical Specifications, which begins from the date of the successful handover of the goods. The warranty period must include the following:

- the removal of all defects and malfunctions in the delivered goods during the warranty period, at the Tenderer's expense. The deadline for removing defects and malfunctions is a maximum of 30 (thirty) days from the date of reporting the defect and/or malfunction;
- if the defect or malfunction that has occurred is not removed within the deadline for removing defects and malfunctions, the goods for which the defect or malfunction has not been removed will be replaced at the Tenderer's own expense with goods of the same technical specifications.

### **2.3. BILL OF QUANTITIES:**

*Bill of Quantities* (Form 3) is an integral part of this Invitation to Tender. The Tenderer is obliged to complete all items of the Bill of Quantities in the manner specified in the Bill of Quantities. Bill of Quantities must be signed.

## **3. PROCUREMENT CONDITIONS**

**3.1. DELIVERY DEADLINE:** The deadline for the delivery of goods is 90 (ninety) days from the date of the mutual signature of the contract.

**3.2. PLACE OF DELIVERY:** University of Split, Faculty of Maritime Studies, Ruđera Boškovića 37, 21000 Split, Croatia.

**3.3. TENDER VALIDITY PERIOD:** Tender validity period must not be shorter than 30 (thirty) days from the date of tender opening.

### **3.4. DEADLINE, METHOD AND TERMS OF PAYMENT**

The Contracting Authority will make the contractual payment to the account of the selected tenderer based on an issued e-invoice. The payment deadline is 30 (thirty) days from the date of receipt of a valid e-invoice with a signed Delivery Record or Delivery Note.

A mandatory element of the e-invoice is a reference to the contract registration number (Class and Registration Number).

Pursuant to the provisions of the Act on Electronic Invoicing in Public Procurement, the Contracting Authority is obliged to receive exclusively e-invoices in procurement procedures.

In the Republic of Croatia, e-invoices are received via the FINA platform (<https://www.fina.hr/en/homepage>), while at the European Union level they are received via the PEPPOL system (<https://peppol.eu/what-is-peppol/>), which enables economic operators to exchange electronic documents with contracting authorities in public procurement procedures.

### **3.5. METHOD OF DETERMINING THE TENDER PRICE**

The Tender price is written in numbers in absolute amounts with two decimal places.

Tenderers are required to tender, i.e. enter unit prices and total prices (rounded to two decimal places) for each item of the Bill of Quantities, in the manner specified in the Bill of Quantities.

In the Tender Offer Form (Form 1), Tenderers are required to state:

- the tender price excluding VAT,
- the amount of VAT,
- the tender price including VAT.

If the Tenderer is not subject to the value added tax (VAT) system or the subject of the procurement is exempt from value added tax, in the Tender Offer Form, in the space provided for entering the Tender price including value added tax, the same amount shall be entered as was entered in the space provided for entering the Tender price excluding value added tax, and the space provided for entering the amount of value added tax shall be left blank.

If the Tender price without value added tax (VAT) expressed in the Bill of Quantities form does not correspond to the Tender price without value added tax in the Tender Offer form, the Tender price without value added tax expressed from the Bill of Quantities shall be taken as valid.

The Tender price without value added tax (VAT) must include all costs and discounts including special taxes, excise duties and customs duties, if any, the cost of delivery and insurance of the shipment, assembly, warranty, instructions and validation costs.

**If the Tenderer is registered for value added tax (VAT) system and does not have a business establishment in the Republic of Croatia, he is obliged to state the amount of VAT in the Tender Offer and the Bill of Quantities, at the rate in accordance with the legal regulations in the Republic of Croatia (25%) and in the field of "total price with value added tax" state the sum of the Tender price without VAT and the amount of VAT, regardless of who will ultimately be liable to pay that tax.**

The unit price is defined as unchangeable.

### **3.6. TENDER SELECTION CRITERIA: Lowest price**

The VAT is non-claimable for the Contracting Authority so tender price with VAT is the reference for comparison.

## **4. TENDER COMPONENTS**

**The Tender should be written in Croatian or English language and should contain:**

- Filled out and signed Tender Offer form - Form 1
- Filled out and signed Technical specification form - Form 2
- Filled out and signed Budget form - Form 3
- Catalogue, brochure, technical data sheet, and/or other manufacturer's technical documentation) demonstrating that the technical specifications of the offered equipment meet the required specifications.

## **5. TENDER SUBMISSION PROCEDURE**

The Tender offer is submitted in electronic .pdf format to the following e-mail address:

[kristina.sladojevic@pfst.hr](mailto:kristina.sladojevic@pfst.hr)

**at the latest by 26.05.2026. at 12:00 hours**

with the e-mail subject:

„Tender offer for Experimental module with computer software for torsional vibration measurement and analysis – for the project 066 NPOO-EnEMar IP-UNIST-39; E-JN 34/26“

A Tender offer that is submitted after the deadline for Tender offer submission will be marked as late and will not be taken into consideration.

### **5.1. TENDER OPENING DEADLINE AND PLACE**

The opening of Tenders will be on 26.05.2026. at 12:00 hours. The opening of Tenders is not public.

## TENDER OFFER

Tender offer number: \_\_\_\_\_

Tender offer date: \_\_\_\_\_

**Contracting Authority:**

University of Split, Faculty of Maritime Studies  
 Ruđera Boškovića 37, Split  
 OIB/VAT: 24624257529 / HR24624257529

**Procurement subject:**

Experimental module with computer software for torsional vibration measurement and analysis, project EnEMar IP-UNIST-39; E-JN 34/26

Tenderer name and headquarters			
VAT number <sup>1</sup>		IBAN	
Economic entity in the VAT system (circle)		YES	NO
Address			
Phone no.		Telefax	
E-mail			
Name, surname and function of the legal representative for contract signature purposes			
Name, surname and function of the contact person			

**Tender price:**

Tender price without VAT	
Value added tax <sup>2</sup>	
Tender price with VAT	

**Tender validity period:**

30 days from the date of tender opening.

TENDERER:

\_\_\_\_\_  
 (name, surname and signature of the authorised representative)

<sup>1</sup>VAT number or national identification number according to the country of establishment of the economic entity, if applicable.

<sup>2</sup> If the Tenderer is not registered for VAT or the subject of the procurement is exempt from VAT, leave the box empty. If the Tenderer is registered for VAT and does not have a business establishment in the Republic of Croatia, he is obliged to state the amount of VAT in the Tender Offer and the Bill of Quantities, at the rate in accordance with the legal regulations in the Republic of Croatia (25%) and in the field of "total price with value added tax" state the sum of the Tender price without VAT and the amount of VAT, regardless of who will ultimately be liable to pay that tax.

## Technical specifications

### EXPERIMENTAL MODULE WITH COMPUTER SOFTWARE FOR TORSIONAL VIBRATION MEASUREMENT AND ANALYSIS - project 066 NPOO - EnMar IP-UNIST-39

No.	Required Specification	Minimum technical requirements	Offered: (enter offered value or YES/NO)
(1)	(2)	(3)	(4)
<b>Data acquisition unit (DAQ) with inputs for analog and counter/digital signals, a CAN bus channels, and a port for external devices -1 PIECE</b>			
1.	External power supply	240V AC, 50-60Hz	
2.	Power supply adapter	AC/DC	
3.	Input power supply	Direct Current (DC)	
4.	Input voltage-Volt (V)	In the range of: minimum 6–9 V maximum 30–36 V	
5.	High-speed real-time data transfer port	minimum one (1) USB 2.0 or Ethernet	
6.	Connecting external memory devices	minimum one (1) USB 2.0 port	
7.	Synchronization of input channels	Clock synchronous operation all input channels with each other	
8.	Mobility	Yes	
<b>Conter/Digital channel (inputs)</b>			
9.	Number of channels	minimum 2	
10.	Frequency of the counter clock	minimum 100 MHz	
11.	Counter resolution	minumum 24-bit	
12.	Sensor supply- Volt (V)	+5 V or +12 V	
<b>Analog channel (inputs)</b>			
13.	Number of channels	minumum 3	
14.	Inputs	Voltage, current and full- bridge	
15.	Sampling frequency	minimum 200 kS/s	
16.	Analog-to-Digital Converter (ADC) type	minimum 12-bit	
<b>CAN bus channels</b>			
17.	Number of channels	Minimum one (1) channel galvanically isolated	

18.	Baud rate	not less than 500 kbit/s per channel	
19.	Interface type	CAN 2.0 standard or CAN FD	
<b>Optical sensors for measuring rotational speed using black-and-white zebra patterns (tape and disk) – 2 PIECES</b>			
20.	Sensor type	Laser tachometer with a probe utilizing a visible red laser light	
21.	Sensing gap	From 2 mm to 20 mm for black/white zebra targets	
22.	Input frequency	Minimum 60 kHz	
23.	Output signal type	TTL	
24.	Connection cable type and minimum length between the laser probe head and electronic box	Optical fiber, length $\geq 2.0$ m	
25.	Cable length between the electronics box and the digital channel (input) on the data acquisition unit	$\geq 1.0$ m	
26.	Operation temperature range	-10°C / +50°C	
27.	Connector	According to the DAQ input type	
<b>Zebra tape – 6 PIECES</b>			
28.	Type	Adhesive tape with 1-5 mm black and 1-5 mm white lines	
29.	Tape widths	10-20 mm	
30.	Tape length	From 1000 mm to 1300 mm	
<b>Zebra disc – 4 PIECES</b>			
31.	Type	Black/white adhesive encoder disc	
32.	Diameter	From 100 mm to 170 mm	
33.	Increments (Resolution)	Minimum 120 pulses/rev	
<b>Software for acquisition, storage and analysis of measured data – 1 PIECE</b>			
34.	Operating system	Minimum Windows 10 (64-bit) <b>or equivalent</b>	
35.	Multi-channel measurement	<ul style="list-style-type: none"> <li>- Setting up and configuring channels for counters, digital and analog inputs</li> <li>- Configuring math functions</li> <li>- Setting up and control the storage strategy.</li> <li>- Defining the online screen display (graphics) for visualization during measurement</li> </ul>	
36.	Data analysis	Real-time and post-processing analysis	

37.	Real-time visualization during measurement	2D/3D display- order tracking, FFT analysis, waterfall and countor plot	
38.	Data export	Excel or Matlab	
39.	Drivers	For optical sensor	
40.	Licence	minimum 12 (twelve) months	
<b>Warranty, delivery time of the equipment and training</b>			
41.	Warranty	minimum 12 months from the date of formal acceptance	
42.	Deliver time	maximum 90 (ninety) days	
43.	Training (days)	minimum 1 (one) day	

\_\_\_\_\_, \_\_\_\_\_ 2026.  
*(place)*                      *(date)*

TENDERER:

\_\_\_\_\_  
(name, surname and signature of the authorised representative)

**FORM 3.****Contracting Authority:** University of Split, Faculty of Maritime Studies, Ruđera Boškovića 37, Split**Procurement subject:** Experimental module with computer software for torsional vibration measurement and analysis - project 066 NPOO - EnEMar IP-UNIST-39**Procurement number:** E-JN 34/26**BILL OF QUANTITIES**

<i>No.</i>	<i>Item Description</i>	<i>Unit of measure</i>	<i>Quantity</i>	<i>Unit price in EUR without VAT</i>	<i>Total price in EUR with VAT</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6=4x5</i>
1.	Experimental module with computer software for torsional vibration measurement and analysis comprising: one (1x) data acquisition unit with inputs for analog and digital (counter) signals, CAN bus channels, and a peripheral device interface; two (2x) optical sensors for rotational speed measurement using black-and-white "zebra" patterns (tape and disk); six (6x) zebra tapes; four (4x) zebra disks; and one (1x) computer program for the acquisition, storage, and analysis of measured data.	set	1		
<b>TOTAL PRICE WITHOUT VAT:</b>					
<b>VAT:</b>					
<b>TOTAL PRICE WITH VAT:</b>					

\_\_\_\_\_, \_\_\_\_\_ 2026  
 (place) (date)

TENDERER:

\_\_\_\_\_  
 (name, surname and signature of the authorised representative)