

Rio de Janeiro, December 21th, 2023

PETRÓLEO BRASILEIRO S. A. – PETROBRAS

Request for Information (RFI)

c/o Commercial Board

Ref.: Request for Information about USV for autonomous and remote offshore operations.

Dear Sir or Madam,

PETROBRAS is carrying out a study on USV FOR AUTONOMOUS AND REMOTE OFFSHORE OPERATIONS and its objective is to obtain information from companies mapped in the Supplier Register or in Market Research, to promote improvements in its supply and specification process.

We have identified your company as a potential supplier, and we would like you to assist us by completing this RFI with the title "USV FOR AUTONOMOUS AND REMOTE OFFSHORE OPERATIONS" until **January 10th, 2024**.

It is desirable for the company to fill out all the requested information, although they are not mandatory.

Please, click on the link below to have access to the RFI form:

<https://forms.office.com/r/PUg7x0a57h>

We must emphasize that the information to be forwarded, in response to the questions made through this RFI, will be treated confidentially, and must be truthful. When accessing the material made available, the COMPANY undertakes to guarantee the confidentiality of the content contained in this RFI and cannot be disclosed to third parties.

We reiterate that Petrobras guarantees the confidentiality of the information provided by the company in this consultation, which will be used for its own use and will not be disclosed to third parties.

IMPORTANT: This consultation **does NOT constitute a proposal or start a bidding process**, not requiring PETROBRAS to contract the company. Regardless of this RFI, companies that fall into any of the impediments provided for in a future bid notice will be prevented from enrolling and submitting proposals.

1. RFI DELIVERY
 - Data Início (Start Date): 12/21/2023, at 17:00h
 - Data de Fim (End Date): 01/10/2024, at 17:00h

IT IS NOT NECESSARY TO ATTACH ANY DOCUMENT ON PETRONECT WEBSITE, just fill out the form on the link provided above. For prior knowledge, we are sending in the attachments the content of the questionnaire to be answered.

2. ATTACHMENTS
 - ATTACHMENT 01 – Content of the form.

Regards,
CENPES/PDIDP/ESUP/TEO

Request for Information – USV FOR AUTONOMOUS AND REMOTE OFFSHORE OPERATIONS

RFI: USV for autonomous and remote offshore operations

Petrobras advances reducing and eliminating risk exposure measured in Man Hours Exposed to Risk (HHER) and saving costs by replacing the large vessels (SDSVs, RSVs.) and diver operations by unmanned vehicles.

Therefore, there is a need to develop USV solutions for the inspection of offshore oil production structures and associated assets. Most inspections shall be carried out periodically to meet legal compliance and assure safety of operations. Unmanned vessels to carry out the mentioned inspections can carry tools and/or other vehicles, such as ROVs, also remotely operated or autonomous, thus eliminating the presence of men in the water (divers) and eliminating the man on board, therefore reducing exposure to the risk of people and operational costs.

There is some characteristics of Petrobras scenarios in which the solution will be applied:

- The distance from the PETROBRAS platforms to the coast is around 50km up to 200km.
- Solution is expected to be able to operate a mini ROV as minimum (electric, light work class, work class, more capable the ROV the better).
- The ROV must be capable to perform visual inspection in the water depth from 0m until 50m. The visual inspection shall verify the risers from the FPSO and the FPSO hull.
- USV can be deployed by a standardized RSV with suitable crane capacity or navigate from shore to operation location.
- The expected autonomy of USV around a minimum 5 operational days without replenishment in case it is launched/deployed by another vessel or 15 days if navigate from shore to operation location.
- The weather condition to deploy and operate the USV must be at least 2,5m of Hs.
- The solution shall include a thorough study to assure a high reliability and minimum risk operations near other units and other vessels.

1ª Parte – GENERAL DATA	
1. Registration Data	
Trading Name	
Company Name	
Group/Business Members	
CNPJ	
Address	
ZIP Code / Postal Code	
City / State / Country	
Phone Number	
E-mail	
Website	
1.1. Registration Data at Petrobras	
Do you have a valid registration with Petronect? If so, inform the registration code adhering to the segment object of this consultation.	
2. Company Units	
Unit 1	
Location of Unit 1 (City / State / Country)	
Unit 2	
Location of Unit 2 (City / State / Country)	
Unit 3	
Location of Unit 3 (City / State / Country)	
3. Staff	
Own Employees Brazil	
Own Employees World	
4. Main Customers	
Companies	
Area of expertise	
How long time as a customer?	
5. Vantagens competitivas	
Name your company's advantages over competitors:	
6. Informações econômico financeiras (consider data from the latest accounting statements)	
Qual a faixa faturamento de sua empresa?	
Qual a faixa de valor do Patrimônio Líquido?	
2ª Parte – Data	
2.1 - Is the supplier aware of the Regulatory Framework for Science, Technology and Innovation (Law 13.243/2016) and the modality of development contracting through Technological Orders (ETEC)?	
3ª Parte – Services/Goods Data	
Brief description of company's history, experience in the inspection or autonomous vessel and model business (systems developer, service provider, hardware/equipment provider, etc)	
Does the company's solution meet the desired requirements? If not, what is the current autonomy of the solution?	
Which TRL level your company's solution would be considering PETROBRAS' requirements, Brazil's regulation, services already executed in Brazil, and the checklist presented in "TRL checklist"?	
Is your company interested in a Pre Commercial Procurement (ETEC) for developing the USV solution considering the Technical Desired requirements?	
Is your company interested a Pre Commercial Procurement (ETEC) as a service provider or in consortium, partnership, joint venture or another type of association with a service provider?	
Is your company interested a Pre Commercial Procurement (ETEC) with mandatory field trials in Brazil? (costs and resources should be included in future proposal)	
Is your company interested in a Pre Commercial Procurement (ETEC) under ANP framing budget (zero profit, expenses/cost analysed and refunded)? Or non ANP frame (payments by milestones and deliverables proposed by your company)?	
Would a 2-year Pre Commercial Procurement (ETEC) be attractive to your company? (a maximum of 2 years but your company can propose shorter deadlines and that can be evaluated, field trials included in this period)	
Along Pre Commercial Procurement (ETEC) period, the development of the USV solution will be evaluated based on some characteristics, that can be related to: performance of USV in field trials, capability of inspections and expected downtime, total cost. If the final product reach the expected levels in each feature Petrobras will consider the development successful and has the possibility to execute the purchase option, that means Petrobras can start negotiate a further contract to provide service with the solution achieved by waiver of bidding (no need to do bid process) Does your company have any else important feature to be considered?	
Pre Commercial Procurement (ETEC) allows different terms concerning intellectual property. In the case of USV developing in this ETEC PETROBRAS can consider that any resulting intellectual property rights are fully assigned to the developing company, but in this case PETROBRAS asks for a financial counterpart (or some kind of valuable compensation). This can be done in several ways : direct payment, royalties , others. An alternative is a discount or credit in the future contract in case of purchase option. The propose of credit around 50% of the PETROBRAS invested amount (Pre Commercial Procurement (ETEC) value)in the future contract generated by the purchase option (and the use of credit is limited to 10% of the value of each measurement) is an attractive proposal? .What would be?	
The purchase option, the future contract to provide inspection service with the developed solution, can be proposed as typical or similar contracts in this area with daily basis payment (charter rate) or OS (service order rate) or both. Does your company is interested in these kind of measurement/payment or is there another way more interesting?	
ADDITIONAL QUESTIONS/COMMENTS	
Tell us your questions or additional comments	
Responsible for completing	
Name	
Position	
Phone Number / E-mail	
Date	