

**BRAZILIAN NAVY  
NAVY INDUSTRIAL DIRECTORATE  
REVERSE E-AUCTION**

**TERMS OF REFERENCE**

**1 - GENERAL CONTRACTING CONDITIONS**

1.1 - Supply of spare parts for the maintenance of the Submarine Humaitá during the ship docking routine, according to the conditions, quantities and requirements contained in these Terms of Reference:

OUR REFERENCE	NSN	DESCRIPTION	UNIT OF SUPPLY	QUANTITY	ESTIMATED TOTAL PRICE
PG71200-2025-00237	5330-14-582-3656	<p style="text-align: center;">GASKET</p> <p><b>NAME - ITEM NAME GASKET</b>  <b>ABKV - OUTSIDE DIAMETER 23.0 MILLIMETERS NOMINAL</b>  <b>ABVL - APERTURE DIAMETER 17.0 MILLIMETERS NOMINAL</b>  <b>ADVK - CROSS SECTION INSIDE DIAMETER 17,0 MILLIMETERS NOMINAL</b>  <b>ADVL - CROSS SECTION OUTSIDE DIAMETER 23,0 MILLIMETERS NOMINAL</b>  <b>ADVM - CROSS-SECTIONAL THICKNESS 2.0 MILLIMETERS NOMINAL</b>  <b>CXCY - PART NAME ASSIGNED JOINT POUR RACCORDS UNION JOINT PLAT</b>  <b>BY CONTROLLING AGENCY MATT - MATERIAL POLYTETRAFLUOROETHYLENE</b>  <b>STYL - STYLE DESIGNATOR CIRCULAR</b></p>	UN	2	\$165,15
PG71200-2025-00254	5340-14-594-8767	<p style="text-align: center;">RETAINER,NUT AND BOLT</p> <p><b>ADDITIONAL INFORMATION: technical drawing (attachment A)</b></p>	UN	1	\$649,41
PG71200-2025-00255	3040-14-605-1352	<p style="text-align: center;">PISTON,LINEAR ACTUATING CYLINDER</p>	UN	1	\$8.522,35
PG71200-2025-00256	5331-14-598-2874	<p style="text-align: center;">O-RING</p> <p><b>NAME - ITEM NAME O-RING</b>  <b>AGAV - END ITEM IDENTIFICATION FILTRE NT 131042 305 - SOUS-MARIN TYPE BARRACUDA</b>  <b>MATT - MATERIAL VITON</b>  <b>ADDITIONAL INFORMATION:</b></p>	UN	1	\$301,39

		<b>technical drawing (attachment B)</b>			
PG71200-2025-00260	1615-14-605-1349	<p>STOP,MECHANICAL  NAME - ITEM NAME  STOP,MECHANICAL  <b>ABHP - OVERALL LENGTH 130.0 MILLIMETERS NOMINAL</b>  <b>APGF - DESIGN TYPE SQUARE</b>  <b>ADDITIONAL INFORMATION:</b>  <b>technical drawing (attachment C)</b></p>	UN	1	\$11.140,91
PG71200-2025-00261	5310-14-503-1231	<p>NUT,SELF-LOCKING,HEXAGON  NAME - ITEM NAME NUT,SELF-LOCKING,HEXAGON  <b>AAJF - THREAD DIRECTION RIGHT-HAND</b>  <b>AAUM - LOCKING FEATURE PREVAILING TORQUE WITH NONMETALLIC INSERT</b>  <b>ACTA - NUT STYLE HEXAGON</b>  <b>ADEA - NUT HEIGHT 12,6 MILLIMETERS NOMINAL</b>  <b>ASDB - WIDTH ACROSS FLATS 15,73 MILLIMETERS MINIMUM AND 16,00 MILLIMETERS MAXIMUM</b>  <b>BZRR - THREAD SERIES ISO M</b>  <b>CQJX - NOMINAL THREAD SIZE 10,0 MILLIMETERS</b>  <b>CQQR - THREAD PITCH IN MILLIMETERS 1,5</b>  <b>CRTM - BEARING SURFACE TYPE CHAMFERED</b>  <b>CTTC - THREAD TOLERANCE CLASS 6H INTERNAL</b>  <b>FEAT - SPECIAL FEATURES QUALITE A4-80</b>  <b>MATT - MATERIAL OVERALL EXCEPT INSERT STEEL COMP A4</b></p>	UN	24	\$370,83
PG71200-2025-00264	4810-14-586-2672	<p>REPAIR KIT,VALVE  NAME - ITEM NAME REPAIR KIT,VALVE  <b>AGAV - END ITEM IDENTIFICATION TGM60/100</b>  <b>AJJW - COMPONENT QUANTITY 9,0</b>  <b>CXCY - PART NAME ASSIGNED SPARE PARTS KIT FOR 160H FUNCTIONING OR 24 MONTHS - BY CONTROLLING AGENCY</b>  <b>MAINTENANCE KIT 12 MONTHS ADSORPTION DRYER HDK-</b></p>	UN	1	\$14.260,07

		<p>MT12A  FEAT - SPECIAL FEATURES  NSPA / LD PROGRAMME  2X Y2/Y3 EXPANSION MAIN  VALVE KIT - 2X Y1/Y2 INLET MAIN  VALVE KIT - 1  RESET KEY - 4X O RINGS FOR  COLUMNS/BLOCK VALVES  ADDITIONAL INFORMATION:  technical drawing (attachment D)</p>			
PG71200-2025-00270	5330-15-154-3055	<p>04521  FEAT - SPECIAL FEATURES PER  USO SPECIFICO DELLA F.A.  NAME - ITEM NAME 04521  CLQL - COLLOQUIAL NAME  PACKING,PREFORMED  BBRG - STORAGE TYPE GENERAL  PURPOSE WAREHOUSE  ADVK - CROSS SECTION  INSIDE DIAMETER 232.06  MILLIMETERS NOMINAL  MATT - MATERIAL RUBBER  POLYMETHYLENE-  PERFLUOROALKYLENE CLASS  FKM  ADVM - CROSS-SECTIONAL  THICKNESS 3.53 MILLIMETERS  NOMINAL  ZZZK -  SPECIFICATION/STANDARD  DATA 9840-PAAC301899  PROFESSIONAL/INDUSTRIAL  ASSOCIATION  SPECIFICATION  ADVL - CROSS SECTION  OUTSIDE DIAMETER 253.59  MILLIMETERS NOMINAL</p>	UN	5	\$608,82
PG71200-2025-00278	4310-14-586-2649	<p>PARTS KIT,AIR FILTER  NAME - ITEM NAME PARTS  KIT,AIR FILTER  AGAV - END ITEM  IDENTIFICATION TGM60/100  CXCX - PART NAME ASSIGNED  DUST SCREEN FILTER / KIT DE 4  GRILLES  BY CONTROLLING AGENCY  FEAT - SPECIAL FEATURES  NSPA / LD PROGRAMME  GRILLES CIRCULAIRES PERFOREES  DIAM 88 MM / PERFORATED  CIRCULAR SCREEN DIAM 88 MM</p>	UN	2	\$761,76

		<b>ADDITIONAL INFORMATION: technical drawing (attachment E)</b>			
PG71200-2025-00286	5330-14-585-1177	<p>GASKET</p> <p><b>NAME - ITEM NAME GASKET</b></p> <p><b>AAGR - CROSS-SECTIONAL SHAPE STYLE SOLID SINGLE OR COMPOSITION</b></p> <p><b>ABKV - OUTSIDE DIAMETER 29,0 MILLIMETERS NOMINAL</b></p> <p><b>ABVL - APERTURE DIAMETER 22,0 MILLIMETERS NOMINAL</b></p> <p><b>ADVM - CROSS-SECTIONAL THICKNESS 2.0 MILLIMETERS NOMINAL</b></p> <p><b>CXCY - PART NAME ASSIGNED JOINT PLAT POUR RACCORDS UNION DN20</b></p> <p><b>BY CONTROLLING AGENCY</b></p> <p><b>MATT - MATERIAL PLASTIC POLYTETRAFLUOROETHYLENE</b></p> <p><b>STYL - STYLE DESIGNATOR CIRCULAR</b></p>	UN	4	\$176,47
PG71200-2025-00287	4810-14-586-2684	<p>REPAIR KIT,VALVE</p> <p><b>NAME - ITEM NAME REPAIR KIT,VALVE</b></p> <p><b>AGAV - END ITEM IDENTIFICATION TGM60/100</b></p> <p><b>AJJW - COMPONENT QUANTITY 16,0</b></p> <p><b>CXCY - PART NAME ASSIGNED SPARE PARTS KIT FOR 320H FUNCTIONING OR 48 MONTHS - BY CONTROLLING AGENCY MAINTENANCE KIT 24 MONTHS ADSORPTION DRYER HDK-MT12A</b></p> <p><b>FEAT - SPECIAL FEATURES NSPA / LD PROGRAMME 2X Y3/Y4 EXPANSION PILOT VALVE KIT - 2X Y1/Y2 INLET PILOT VALVE KIT -</b></p> <p><b>1 RESET KEY - 4X O RINGS FOR COLUMNS/BLOCK VALVES - 2X REGENERATION CHECK VALVE DN6 - 2X REGENERATION CHECK VALVE</b></p> <p><b>DN12 - 2X PRESSURIZATION CHECK VALVE - 1 PRESSURIZATION VALVE Y5</b></p> <p><b>ADDITIONAL INFORMATION: technical drawing (attachment F)</b></p>	UN	1	\$24.376,74

PG71200-2025-00288	5330-14-591-1273	SEAL, NONMETALLIC ROUND SECTION NAME - ITEM NAME SEAL, NONMETALLIC ROUND SECTION ABHP - OVERALL LENGTH 380,0 MILLIMETERS NOMINAL ADWH - CROSS-SECTIONAL WIDTH 220,0 MILLIMETERS NOMINAL AGAV - END ITEM IDENTIFICATION QUADRO FIRE CUT OFF BUTTERFL VALVE TPE QBSK/P/E/EDB/S/S 384X192 (fr: QUADRO FIRE CUT OFF BUTTERFL VALVE TPE QBSK/P/E/EDB/S/S 384x192) CXCX - PART NAME ASSIGNED JOINT DE BRIDE QFA BY CONTROLLING AGENCY	UN	9	\$32.307,88
PG71200-2025-00293	5331-14-475-7204	O-RING NAME - ITEM NAME O-RING ADVN - CROSS-SECTIONAL HEIGHT 3,53 MILLIMETERS NOMINAL ADYT - CENTER HOLE DIAMETER 53,57 MILLIMETERS NOMINAL CQFM - HARDNESS RATING 90 SH ADDITIONAL INFORMATION: technical drawing (attachment G)	UN	4	\$423,53
PG71200-2025-00295	6140-22-200-0033	BATTERY, ALKALINE ADDITIONAL INFORMATION: technical drawing (attachment H)	UN	1	\$245,68
				Total	\$ 94.310,99

1.2 - The object of the tender is not a luxury item.

1.3 - Considering that the spare parts, required for the maintenance of Submarine Humaitá, have standard codes in the cataloging system adopted by NATO with recognised and usual specifications in the market, it is understood that the items object of the tender are of a common nature for the purpose of using the tender modality reverse e-auction.

1.4 - The Purchase Order will remain in force until receipt of the order and payment.

## 2 - DESCRIPTION AND JUSTIFICATION FOR PROCUREMENT

2.1 - This document is regarding requests for the supply of items for the Navy Supply System for use during the maintenance periods foreseen in the General Maintenance Program (PROGEM).

2.2 - The PROGEM is a planning document prepared by the Operations Sector, according to the cycle of activities of each Ship, for a period of four years, and with the purpose of providing the naval, air-naval and Marine forces with full operational capacity.

2.3 - The maintenance periods are scheduled in the PROGEM, as a way to enable maintenance activities to be carried out.

2.4 - Maintenance is defined as the set of technical and administrative activities carried out in order to keep something in proper condition for use with reliability, safety and at appropriate cost and, in case of malfunctions, to bring it back to proper condition.

2.5 - Properly performed maintenance increases the useful life of equipment, reduces the need for supplies and allows saving resources to serve other purposes.

2.6 - Planned maintenance is carried out in a systematic and scheduled manner and takes into consideration all the necessary elements for performance: labour, material and time.

2.7 - The maintenance periods have their duration defined, in principle, by the Ship class or type. However, planning of the service, schedule and monitoring will only be efficient if the necessary spare parts are available at the Service Provider Military Organization at the right time.

2.8 - The absence of, or delay in obtaining the spare parts will cause increased costs, inefficient use of labour and delays in completing maintenance among other inconveniences, in addition to the Ship's unavailability to fulfill the Brazilian Navy's constitutional duties of public interest.

2.9 - All Military Organizations within the Brazilian Navy are responsible for maintenance since the scope includes all the infrastructure of the Navy.

2.10 - The object of the tender is in the Resource Application Program (PAR), as detailed below:

a) PAR code: 01/2025

b) Date of approval of addition to the PAR: 14/01/2025

c) Economic activity: 339030

### **3 - DESCRIPTION OF THE SOLUTION AS A WHOLE CONSIDERING THE OBJECT LIFE CYCLE AND THE PRODUCT SPECIFICATION**

3.1 - The supply of spare parts is for use on the Selective Restricted Availability for maintenance of the Submarine Humaitá, ensuring the ability of the Brazilian Navy to perform its missions.

3.2 - The object of the tender is divided into items with the aim of increasing competitiveness, the basic principle of the tender process, and to allow tenderers to present individualized proposals for each one of them, and the decision is to be made in relation to each item, which usually results in more beneficial prices.

3.3 - Proposals must meet all quality requirements in order to enable the selection of the most advantageous one through competitive tendering.

3.4 - Every spare part has a lifespan, which is an estimate of the useful life of a product based on technical conditions.

3.5 - The specifications, characteristics and models contained in the list of items indicate in detail the quality of the items able to meet the requests and, therefore, decrease or eliminate the possibility of acquisition of less durable items, which are likely to create a need for new replacement.

## **4 - REQUIREMENTS**

### **Sustainability**

4.1 - The Supplier must conduct business in accordance with the principle of sustainable development and adhere to internationally recognised fundamental standards for occupational health and safety, environmental protection, labour and human rights as well as responsible corporate governance.

### **Indication of brands or models**

4.2 - In this tender, the indication of brands, characteristics and models are permitted due to the need to maintain standardisation and compatibility with technical and performance specifications required by the Brazilian Navy.

### **Subcontracting**

4.3 - Subcontracting will not be allowed.

### **Performance guarantee**

4.4 - The need of a performance guarantee is specifically associated with the complexity of the object and the potential risks of execution of the Purchase Order. Given the low complexity of the object, there is no need for a performance guarantee, as its adoption would only increase the price.

## **5 - TYPE OF DELIVERY**

### **Delivery terms**

5.1 - According to INCOTERMS 2020:

<b>Country of origin</b>	<b>FCA</b>	<b>FOB</b>
AUSTRIA	-	HAMBURG
BELGIUM	-	HAMBURG
DENMARK	-	HAMBURG
FINLAND	-	HAMBURG
FRANCE	PARIS (LE BOURGET)	LE HAVRE
GERMANY	-	HAMBURG
GREAT BRITAIN	LONDON DEPOT	LONDON DEPOT
ITALY	-	GENOVA (LA SPEZIA)
LIECHTENSTEIN	-	HAMBURG
NETHERLANDS	-	HAMBURG
NORWAY	-	HAMBURG
PORTUGAL	-	LISBON
SPAIN	-	BARCELONA
SWEDEN	-	HAMBURG
SWITZERLAND	-	HAMBURG

5.2 - Alternatively, and for countries of origin not listed above, delivery shall be CIP/CIF Rio de Janeiro, Brazil.

5.3 - The Purchase Order provides further details of the rules that apply in relation to delivery.

### **Goods warranty**

5.4 - A certificate of warranty of at least 12 months from the date of delivery will be required from the Supplier.

5.5 - The Supplier undertakes to substitute, at no expenses to the Navy, any goods found to be defective due to incorrect design, faulty material or workmanship. This warranty is valid if the goods have been properly handled and used in accordance with instructions from the Supplier. Notification of any defect must be made promptly upon any defect arising and before the warranty period expires.

5.6 - The faulty goods, where applicable, will be returned by the Navy to the Supplier at the Supplier's expenses.

5.7 - At the Supplier's expense, the faulty goods will be returned to the Navy repaired, or identical working items will be supplied to replace them.

## **6 - MONITORING AND SUPERVISION OF PERFORMANCE**

6.1 - A representative will be appointed to monitor and supervise the delivery of the goods, making notes in a proper register of all occurrences related to performance and determining what is necessary to correct the flaws or defects found.

6.2 - The inspection referred to in this item does not exclude or reduce the Supplier's liability, including in relation to third parties, for any irregularity, even if resulting from technical imperfections or latent defects.

6.3 - The representative of the Navy will record in the appropriate register all occurrences related to the supply, indicating the day, month and year, as well as the name of the employees eventually involved, determining what is necessary to correct the observed flaws or defects and forwarding the notes to the competent authority for the appropriate measures.

## **7 - RECEIPT AND PAYMENT**

### **Receipt of the order**

7.1 - The goods must be delivered according to INCOTERMS 2020 and instructions contained in the Purchase Order.

7.2 - The goods will be provisionally received for the purpose of subsequent verification of conformity with the specifications.

7.3 - The goods may be rejected, in whole or in part, when not in accordance with the specifications and must be replaced at the Supplier's expense.

7.4 - Final receipt of the goods will be after quality and quantity check and consequent acceptance.

### **Validation of expenditure**

7.5 - A duly signed original commercial invoice with full bank details is required for validation of the expenditure.

### **Payment terms**

7.6 - As specified in the Purchase Order, payment will be made against the original commercial invoice within 30 days after delivery through bank transfer to the account indicated by the Supplier.

## **8 - SUPPLIER SELECTION METHOD AND CRITERIA**

### **Proposal selection method and evaluation criteria**

8.1 - The Supplier will be selected through a tender process, in the reverse e-auction format, based on the lowest price per item.

## **Qualification requirements**

8.2 - For purposes of qualification, the tenderer must submit the following documents:

### **Legal qualification**

8.3 - Certificate of incorporation of equivalent document. If the document has already been presented at the time of registration with the BNCE, submission may be waived.

### **Technical, economic and financial qualification**

8.4 - The submission of documents related to the company's technical, economic, and financial records is waived because the acquisition is to be made through a Purchase Order.

## **9 - ESTIMATED PRICES**

9.1 - The estimated total price is USD 94.310,99, according to the prices shown in table in item 1.1.

## **10 - BUDGET ADEQUACY**

10.1 - The expenses arising from any eventual Purchase Order will be supported by specific financial resources included in this year's General Budget of the Brazilian Government, as detailed below:

- a) Operation/Unit: 0001 / UGR: 91536 e UGE: 40015;
- b) Funding source: 3050000144;
- c) Work program: 236871;
- d) Item of expenditure: 339030;
- e) Internal plan: P.3DR.HU.

Rio de Janeiro, RJ, 15<sup>th</sup> October 2025.

**SAINT-CLAIR DANTAS OLIVEIRA SANTOS**

Captain

Submarine Project Management Chief of Department

**LEANDRO BRILHANTE REGLY**

Lieutenant-Commander

Supply and Procurement Advisor

LEANDRO JUSTINO DE ABREU  
Lieutenant-Commander  
Ship Manager

Approved by:

MARCELO ANTONIO ROCHA AFONSO  
Captain  
Expenditure Authorising Officer