

**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 Riachuelo 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
PG71200-2025-01952	4220-14-591-1311	RELEASE,LIFE SAVING EQUIPMENT NAME - ITEM NAME RELEASE,LIFESAVING EQUIPMENT AGAV - END ITEM IDENTIFICATION GILET DE SAUVETAGE PLASTIMO, A PERCUSSION AUTOMATIQUE, SYSTEME HYDROSTATIQUE HAMMAR (fr: Gilet de sauvetage Plastimo, à percussion automatique, système hydrostatique Hammar) CXCX - PART NAME ASSIGNED MECANISME SEUL DE DECLENCHEMENT HAMMAR MA1 (fr: Mécanisme seul BY CONTROLLING AGENCY de déclenchement Hammar MA1)	UN	36	\$1.561,62
PG71200-2025-01965	5330-14-597-3218	GASKET NAME - ITEM NAME GASKET AAGR - CROSS-SECTIONAL SHAPE STYLE 33 AAUB - HOLE DIAMETER 7,0 MILLIMETERS NOMINAL ABKG - BOLT CIRCLE DIAMETER 96,0 MILLIMETERS NOMINAL ABKV - OUTSIDE DIAMETER 110,0 MILLIMETERS NOMINAL ABVL - APERTURE DIAMETER 74,5 MILLIMETERS NOMINAL ADVW - CROSS-SECTIONAL THICKNESS 2,0 MILLIMETERS NOMINAL AECS - BOLT HOLE QUANTITY 6 MATT - MATERIAL FIBER AND RUBBER BUTADIENE-ACRYLONITRILE CLASS	UN	1	\$121,47

		NBR STYL - STYLE DESIGNATOR 24 <b>ADDITIONAL INFORMATION: technical drawing (attachment A)</b>			
PG71200-2025-01974	4220-14-591-1309	WASHER,SOLUBLE NAME - ITEM NAME WASHER,SOLUBLE AGAV - END ITEM IDENTIFICATION GILET DE SAUVETAGE PLASTIMO, A PERCUSSION AUTOMATIQUE, A CARTOUCHE HYDROSOLUBLE (fr: Gilet de sauvetage Plastimo, à percussion automatique, à cartouche hydrosoluble) CXCX - PART NAME ASSIGNED CARTOUCHE HYDROSOLUBLE SEULE POUR TETE DE PERCUSSION PRO- BY CONTROLLING AGENCY SENSOR (fr: Cartouche hydrosoluble seule pour tête de percussion Pro- Sensor)	UN	105	\$2.668,24
PG71200-2025-02187	3120-14-590-1633	BEARING,SLEEVE NAME - ITEM NAME BEARING,SLEEVE ABHP - OVERALL LENGTH 7,5 MILLIMETERS NOMINAL ADAR - BODY OUTSIDE DIAMETER 20,5 MILLIMETERS NOMINAL ADAS - BODY INSIDE DIAMETER 16,5 MILLIMETERS NOMINAL AGAV - END ITEM IDENTIFICATION SECTIONNEMENT TYPE EVO DN32 A 2 BRIDES PLANES,NAVAL GROUP,MAT171-3185 CXCX - PART NAME ASSIGNED PALIER BY CONTROLLING AGENCY MATT - MATERIAL ISOGLISS STYL - STYLE DESIGNATOR A17C SUPP - SUPPLEMENTARY FEATURES LE DIAMETRE 16,5 SERA REPRIS POUR OBTENIR UN DIAMETRE DE 17 MM H7 <b>ADDITIONAL INFORMATION: technical drawing (attachment B)</b>	UN	10	\$1.482,35
PG71200-2025-02208	9535-14-588-6718	SHIM STOCK,LAMINATED <b>ADDITIONAL INFORMATION:</b>	UN	10	\$644,12

		<b>technical drawing (attachment C)</b>			
PG71200-2025-02299	5330-14-594-7147	GASKET NAME - ITEM NAME GASKET AGAV - END ITEM IDENTIFICATION MAT451-0044;PANNEAU DEMONTABLE BALLAST MATT - MATERIAL RUBBER BUTADIENE-ACRYLONITRILE CLASS NBR STYL - STYLE DESIGNATOR NON-CIRCULAR <b>ADDITIONAL INFORMATION:</b> <b>technical drawing (attachment D)</b>	UN	1	\$5.523,00
PG71200-2025-02301	5342-14-594-5835	MECHANICAL FUSE <b>ADDITIONAL INFORMATION:</b> <b>technical drawing (attachment E)</b>	UN	1	\$638,20
PG71200-2025-02315	5365-14-589-3377	SPACER,RING <b>ADDITIONAL INFORMATION:</b> <b>technical drawing (attachment F)</b>	UN	10	\$4.530,24
PG71200-2025-02325	5130-14-594-3390	BLADE,HYDRAULIC CUTTER <b>ADDITIONAL INFORMATION:</b> <b>technical drawing (attachment G)</b>	UN	1	\$5.964,39
PG71200-2025-02327	5340-14-569-7211	MECHANICAL FUSE <b>ADDITIONAL INFORMATION:</b> <b>technical drawing (attachment H)</b>	UN	1	\$1.201,46
PG71200-2025-02391	5330-14-595-8372	PACKING,PREFORMED NAME - ITEM NAME PACKING,PREFORMED AAGR - CROSS-SECTIONAL SHAPE STYLE D ADV N - CROSS-SECTIONAL HEIGHT 7,0 MILLIMETERS NOMINAL ADYT - CENTER HOLE DIAMETER 70,0 MILLIMETERS NOMINAL ADYU - PERIPHERAL DIAMETER 94,0 MILLIMETERS NOMINAL MATT - MATERIAL RUBBER NEOPRENE <b>ADDITIONAL INFORMATION:</b> <b>technical drawing (attachment I)</b>	UN	1	\$11.518,82
PG71200-2025-02392	5130-14-595-8512	CUTTER,CABLE,PNEUMA <b>ADDITIONAL INFORMATION:</b> <b>technical drawing (attachment J)</b>	UN	1	\$58.786,20
PG71200-2025-02408	5310-33-215-1523	NUT,PLAIN,HEXAGON NAME - ITEM NAME NUT,PLAIN,HEXAGON BZRR - THREAD SERIES M MATT - MATERIAL STEEL	UN	1	\$131,76

		<p>ACTA - NUT STYLE HEXAGON  AEDA - NUT HEIGHT 16.90  MILLIMETERS MINIMUM AND 18.00  MILLIMETERS MAXIMUM  ASDB - WIDTH ACROSS FLATS 29.16  MILLIMETERS MINIMUM AND 30.00  MILLIMETERS MAXIMUM  CRSQ - COUNTERSINK ANGLE 15.0  DEGREES MINIMUM AND 30.0  DEGREES MAXIMUM  AGAV - END ITEM  IDENTIFICATION  TORNILLERIA PARA PASOS DE CASCO  Y CIERRES RESISTENTES  SUBMARINOS S-70 / SCREWS FOR  THROUGH HULL AND RESISTANT  CLOSURES FOR SUBMARINES S-70  CXCX - PART NAME ASSIGNED  TUERCA HEXAGONAL / HEXAGONAL  NUT  BY CONTROLLING AGENCY  CQJX - NOMINAL THREAD SIZE 20.0  MILLIMETERS  ZZZK -  SPECIFICATION/STANDARD  DATA I9008-ISO4032  PROFESSIONAL/INDUSTRIAL  ASSOCIATION STANDARD  CQQR - THREAD PITCH IN  MILLIMETERS 2.50  AAJF - THREAD DIRECTION RIGHT-  HAND  CRTM - BEARING SURFACE  TYPE FLAT</p>			
PG71200-2025-02413	5365-14-608-9370	<p>SHIM  NAME - ITEM NAME SHIM  ABKV - OUTSIDE DIAMETER 64.0  MILLIMETERS NOMINAL  ABVL - APERTURE DIAMETER 53.0  MILLIMETERS NOMINAL  ADUM - OVERALL THICKNESS 1.0  MILLIMETERS NOMINAL  CXCX - PART NAME ASSIGNED CALE  DU FOURREAU  BY CONTROLLING AGENCY  MATT - MATERIAL COPPER ALLOY  STYL - STYLE DESIGNATOR CIRCULAR  <b>ADDITIONAL INFORMATION:  technical drawing (attachment K)</b></p>	UN	10	\$7.356,94
PG71200-2025-02424	5330-14-595-3238	<p>SEAL,PLAIN  NAME - ITEM NAME SEAL,PLAIN</p>	UN	1	\$150,46

		<p>ABHE - OUTSIDE DIAMETER 63,0 MILLIMETERS NOMINAL</p> <p>ABVM - ACCOMMODATED SHAFT DIAMETER 53,0 MILLIMETERS NOMINAL</p> <p>ADUC - SEAL WIDTH 8,0 MILLIMETERS NOMINAL</p> <p>CPCW - HOUSING BORE DIAMETER 63,0 MILLIMETERS NOMINAL</p> <p>CXCY - PART NAME ASSIGNED JOINT A LEVRE KP63 BY CONTROLLING AGENCY</p> <p>MATT - MATERIAL PB95</p> <p><b>ADDITIONAL INFORMATION: technical drawing (attachment L)</b></p>			
PG71200-2025-02554	5330-14-589-1055	<p>SEAL,PLAIN NAME - ITEM NAME SEAL,PLAIN</p> <p>ABVM - ACCOMMODATED SHAFT DIAMETER 33,4 MILLIMETERS NOMINAL</p> <p>ADUC - SEAL WIDTH 2,88 MILLIMETERS NOMINAL</p> <p>CPCW - HOUSING BORE DIAMETER 28,2 MILLIMETERS NOMINAL</p> <p>CQCF - CONSTRUCTION 3 PIECES FEAT - SPECIAL FEATURES JOINT TORIQUE DIMENSIONS 34,10X3,60 (fr: Joint torique dimensions 34,10x3,60)</p> <p>MATT - MATERIAL SUIVANT STF33-07- 02-019E : NBR 20A8</p> <p>MATT - MATERIAL X2CRNI18-9 MATT - MATERIAL PLASTIC POLYTETRAFLUOROETHYLENE</p>	UN	5	\$912,00
PG71200-2025-02555	5330-14-589-1057	<p>SEAL,PLAIN NAME - ITEM NAME SEAL,PLAIN</p> <p>ABVM - ACCOMMODATED SHAFT DIAMETER 21,34 MILLIMETERS NOMINAL</p> <p>ADUC - SEAL WIDTH 2,88 MILLIMETERS NOMINAL</p> <p>CPCW - HOUSING BORE DIAMETER 17,25 MILLIMETERS NOMINAL</p> <p>CQCF - CONSTRUCTION 3 PIECES FEAT - SPECIAL FEATURES JOINT TORIQUE DIMENSIONS 23,00X3,60 (fr: Joint torique dimensions</p>	UN	23	\$2.825,98

		23,00x3,60) MATT - MATERIAL SUIVANT STF33-07- 02-019E : NBR 20A8 MATT - MATERIAL X2CRNI18-9 MATT - MATERIAL PLASTIC POLYTETRAFLUOROETHYLENE <b>ADDITIONAL INFORMATION: technical drawing (attachment M)</b>				
					Total	\$106.017,25

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 Riachuelo, 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: 01/2026

b) Date of approval of addition to the PAR: 08/12/2025

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 Riachuelo, 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, according to the justifications contained in the Preliminary Technical Studies.

### **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.

5.8 - For items classified as perishable, elastomeric, chemical or with defined shelf-life, the supplier must also provide the following information:

- a) Lot/Batch Number;
- b) Date of manufacture - DOM;
- c) Expiration Date or Shelf-Life

## **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 106.017,25, 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: 91535, 91536, 91537, 91530, 91534 UGE: 40015;
- b) Funding source: 3050000144, 1050000144, 1000000000;
- c) Work program: 236871, 236885;
- d) Item of expenditure: 339030;
- e) Internal plan: P.3DR.HU, P.3X1.HU, P.3X2.HU, P.3X3.HU, P.3X4.HU, P.3X1.RI, P.3X3.RI, P.3X4.RI, P.3DR.TO, P.3X1.TO, P.3DR.RI.

Rio de Janeiro, RJ, 25<sup>th</sup> March 2026.

SAINT-CLAIR DANTAS OLIVEIRA SANTOS  
Captain (Ret.)  
Submarine Project Management Chief of Department

LEANDRO BRILHANTE REGLY  
Lieutenant-Commander  
Supply Advisor

BRUCE ENGLE FRÓES  
Lieutenant-Commander  
Ship Manager Auxiliary

Approved by:

MARCELO ANTONIO ROCHA AFONSO  
Captain  
Expenditure Authorising Officer