

**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 class 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
PG71200-2025-02083	5330-14-602-2404	GASKET NAME - ITEM NAMEGASKET AAUB - HOLE DIAMETER5,5 MILLIMETERS NOMINAL ABKV - OUTSIDE DIAMETER8,0 MILLIMETERS NOMINAL ABKW - OVERALL HEIGHT1,5 MILLIMETERS NOMINAL ABVL - APERTURE DIAMETER5,5 MILLIMETERS NOMINAL CXCX - PART NAME ASSIGNED JOINT PLAT CUIVRE D8X5,5X1,5 BY CONTROLLING AGENCY MATT - MATERIALCOPPER STYL - STYLE DESIGNATORCIRCULAR	UN	2	\$36,40
PG71200-2025-02154	5330-14-578-0470	GASKET NAME - ITEM NAMEGASKET AAGR - CROSS-SECTIONAL SHAPE STYLESOLID SINGLE OR COMPOSITION ABKV - OUTSIDE DIAMETER58,5 MILLIMETERS NOMINAL ABVL - APERTURE DIAMETER49,6 MILLIMETERS NOMINAL ADVM - CROSS-SECTIONAL THICKNESS3,0 MILLIMETERS NOMINAL CXCX - PART NAME ASSIGNED JOINT DE CHAPEAU DN 32 BY CONTROLLING AGENCY MATT - MATERIALPLASTIC POLYTETRAFLUOROETHYLENE STYL - STYLE DESIGNATORCIRCULAR ADDITIONAL INFORMATION: technical drawing (attachment A)	UN	4	\$453,61
PG71200-2026-00065	5330-14-475-7205	RETAINER,PACKING ADDITIONAL INFORMATION:	UN	10	\$309,18

		technical drawing (attachment B)			
PG71200-2026-00180	9390-14-406-6928	NONMETALLIC SPECIAL SHAPED SECTION NAME - ITEM NAME NONMETALLIC SPECIAL SHAPED SECTION CXCX - PART NAME ASSIGNED PROFILE CAOUTCHOUC-NEOPRENE NOIR REPERE 1 BY CONTROLLING AGENCY MATT - MATERIAL RUBBER CHLOROPRENE CLASS CR	MR	25	\$5.589,71
PG71200-2026-00326	3110-14-584-2868	RETAINER AND ROLLERS,BEARING NAME - ITEM NAME RETAINER AND ROLLERS,BEARING ABKV - OUTSIDE DIAMETER15,0 MILLIMETERS NOMINAL ABMK - OVERALL WIDTH13,0 MILLIMETERS NOMINAL ABXV - BORE DIAMETER12,0 MILLIMETERS NOMINAL AGYF - RETAINER FABRICATION METHODSTAMPED AGYG - RETAINER PIECE QUANTITY1 MATT - MATERIAL CAGEFIBRE DE VERRE RENFORCE DE POLYAMIDE 66 MATT - MATERIAL ROLLERSTEEL STAINLESS - USE STB000 STYL - STYLE DESIGNATORRADIAL, RETAINER AND CYLINDRICAL ROLLERS ADDITIONAL INFORMATION: technical drawing (attachment C)	UN	8	\$184,25
PG71200-2026-00334	5330-14-584-2849	GASKET NAME - ITEM NAME GASKET AGAV - END ITEM IDENTIFICATIONSOUPAPE TYPE 911 A BRIDES MN. CXCX - PART NAME ASSIGNED JOINT DE CLAPET BY CONTROLLING AGENCY MATT - MATERIALRUBBER FLUOROCARBON CLASS FPM STYL - STYLE DESIGNATORCIRCULAR	UN	1	\$588,86
PG71200-2026-00335	5307-14-605-1345	STUD,PLAIN NAME - ITEM NAME STUD,PLAIN AASA - THREAD LENGTH95.0 MILLIMETERS NOMINAL ABHP - OVERALL LENGTH95.0 METERS NOMINAL AKYN - FURNISHED ITEMS AND QUANTITYECROU H, 2 CQJX - NOMINAL THREAD SIZE 18.0 MILLIMETERS CQQR - THREAD PITCH IN	UN	56	\$25.201,84

		MILLIMETERS2.5 CTTC - THREAD TOLERANCE CLASS6G EXTERNAL MATT - MATERIALACIER INOXYDABLE THSD - THREAD SERIES DESIGNATORISO M			
PG71200-2026-00343	6850-99-336-7233	CATALYST,CARBON MONOXIDE AND HYDROCARBON OXIDIZING NAME - ITEM NAMECATALYST,CARBON MONOXIDE AND HYDROCARBON OXIDIZING AGXW - PHYSICAL FORMCYLINDRICAL FEAT - SPECIAL FEATURESTAPERED BOTH ENDS AGAV - END ITEM IDENTIFICATIONASTUTE CLASS SUBMARINE - COSAMS UNIT. CXCX - PART NAME ASSIGNED CATALYST ASSEMBLY (INTERNAL) BY CONTROLLING AGENCY ADDITIONAL INFORMATION: technical drawing (attachment D)	UN	1	\$290,51
PG71200-2026-00353	5330-14-585-1906	GASKET NAME - ITEM NAMEGASKET AAGR - CROSS-SECTIONAL SHAPE STYLESOLID SINGLE OR COMPOSITION AAUB - HOLE DIAMETER2,7 MILLIMETERS MINIMUM AND 3,3 MILLIMETERS MAXIMUM ABKG - BOLT CIRCLE DIAMETER30,0 MILLIMETERS NOMINAL ABKV - OUTSIDE DIAMETER41,5 MILLIMETERS MINIMUM AND 42,5 MILLIMETERS MAXIMUM ABVL - APERTURE DIAMETER23,5 MILLIMETERS MINIMUM AND 24,5 MILLIMETERS MAXIMUM ADVM - CROSS-SECTIONAL THICKNESS1,0 MILLIMETERS NOMINAL AECS - BOLT HOLE QUANTITY 1,0 CQFM - HARDNESS RATING 60 SHORES CXCX - PART NAME ASSIGNED JOINT PIQUAGE DBM BY CONTROLLING AGENCY MATT - MATERIALRUBBER NEOPRENE STYL - STYLE DESIGNATORCIRCULAR SUPP - SUPPLEMENTARY FEATURESTOLERANCE GENERALE JS11 H11 H11; USINAGE RA 3.2. (fr:	UN	5	\$580,35

		TOLERANCE GENERALE Js11 H11 h11; USINAGE Ra 3.2.) ADDITIONAL INFORMATION: technical drawing (attachment E)			
PG71200-2026-00356	5330-14-602-5253	GASKET NAME - ITEM NAMEGASKET ABHP - OVERALL LENGTH479,0 MILLIMETERS NOMINAL ABMK - OVERALL WIDTH287,0 MILLIMETERS NOMINAL ADUE - APERTURE WIDTH227,0 MILLIMETERS NOMINAL ADUF - APERTURE LENGTH419,0 MILLIMETERS NOMINAL ADVM - CROSS-SECTIONAL THICKNESS3,0 MILLIMETERS NOMINAL AECS - BOLT HOLE QUANTITY 18,0 AHNX - BOLT HOLE DIAMETER 12,0 MILLIMETERS NOMINAL CXCX - PART NAME ASSIGNED JOINT DE BRIDE 384X192 BY CONTROLLING AGENCY STYL - STYLE DESIGNATORNON-CIRCULAR SUPP - SUPPLEMENTARY FEATURESSUIVANT PLAN QKJE-420.00 (JE EN MINUSCULE) (fr: SUIVANT PLAN QKje- 420.00 (je EN MINUSCULE))	UN	5	\$16.606,44
PG71200-2026-00357	4820-15-179-4701	VALVE,REGULATING,FLUID PRESSURE ADDITIONAL INFORMATION: technical drawing (attachment F)	UN	2	\$676,53
PG71200-2026-00364	5342-14-582-1658	ANODE,IMPRESSED CURRENT,CATHODIC PROTECTION CORROSION PREVENTION NAME - ITEM NAMEANODE,IMPRESSED CURRENT,CATHODIC PROTECTION CORROSION PREVENTION FEAT - SPECIAL FEATURESPROTECTION CATHODIQUE ½ " G POUR GENERATEUR ANR 54/45/4 (ARR	UN	2	\$2.939,41
PG71200-2026-00382	4030-14-451-0366	CLAMP,WIRE ROPE,THREADED NAME - ITEM NAMECLAMP,WIRE ROPE,THREADED AHHT - ACCOMMODATED LAY DIRECTIONINCONNU AHNK - ACCOMMODATED MATERIAL DIAMETER3,0 MILLIMETERS MINIMUM AND 4,0 MILLIMETERS MAXIMUM MATT - MATERIALSTEEL COMP 316 STYL - STYLE DESIGNATOR1	UN	2	\$26,11

PG71200-2026-00396	4320-14-585-3169	PARTS KIT,ROTARY PUMP NAME - ITEM NAMEPARTS KIT,ROTARY PUMP AGAV - END ITEM IDENTIFICATIONELECTROPOMPE A VIS AJJW - COMPONENT QUANTITY9,0 AJJX - COMPONENT DOCUMENT ORIGININDUSTRIAL AJJY - DOCUMENT SOURCES3863 AJKD - NONSUPPLY ITEMS AND QUANTITIESIMO AB; REPERES: 134 LOCKING SCREW; 162 NYLON SLEEVE SOCKET; 418 GASKET; 423 GASKET; 506 O-RING ALT GASKET; 509 SHAFT SEAL; 556 GASKET; 602 SEALING WASHER; 605 O- RING. AYDR - DOCUMENT IDENTIFICATIONACD LOW PRESSURE PUMP CXCX - PART NAME ASSIGNED G053 MINOR KIT BY CONTROLLING AGENCY	UN	2	\$840,47
PG71200-2026-00398	5331-14-598-2874	O-RING NAME - ITEM NAMEO-RING AGAV - END ITEM IDENTIFICATIONFILTRE NT 131042 305 - SOUS-MARIN TYPE BARRACUDA MATT - MATERIALVITON ADDITIONAL INFORMATION: technical drawing (attachment G)	UN	2	\$164,71
PG71200-2026-00404	5315-14-597-6609	PIN,GROOVED,HEADLESS NAME - ITEM NAMEPIN,GROOVED,HEADLESS AAGZ - FIRST END STYLEOVAL ABHP - OVERALL LENGTH19,5 MILLIMETERS MINIMUM AND 20,5 MILLIMETERS MAXIMUM CQBB - SECOND END RELATIONSHIP WITH FIRST ENDIDENTICAL CQFM - HARDNESS RATINGVIKERS HV 30, MINIMAL 210,0 AND VIKERS HV 30, MAXIMAL 280,0 CQFX - PIN SMALL END DIAMETER4,0 MILLIMETERS NOMINAL CRDY - FIRST END LOCATIONBOTH ENDS CSCG - PIN LARGE END DIAMETER4,3 MILLIMETERS MINIMUM AND 4,4 MILLIMETERS MAXIMUM	UN	4	\$115,88

		CSKM - FIRST END OUTER RADIUS4,0 MILLIMETERS NOMINAL CXC - PART NAME ASSIGNED GOUPILLES CANNELES A CANNELURES PROGRESSIVES SUR TOUTE LA BY CONTROLLING AGENCY LONGUEUR 4X20 ACIER INOXYDABLE AUSTENITIQUE A1 MATT - MATERIAL ACIER INOXYDABLE AUSTENITIQUE A1 MDCL - MATERIAL DOCUMENT ISO 3506-1 ASSN STD SINGLE MATERIAL RESPONSE AND CLASSIFICATION STYL - STYLE DESIGNATOR 103 ADDITIONAL INFORMATION: technical drawing (attachment H)			
PG71200-2026-00425	4330-14-603-0454	FILTER ELEMENT,FLUID NAME - ITEM NAME FILTER ELEMENT,FLUID CXC - PART NAME ASSIGNED FILTER ELEMENT BY CONTROLLING AGENCY MATT - MATERIAL CUAL-C ADDITIONAL INFORMATION: technical drawing (attachment I)	UN	1	\$9.243,54
PG71200-2026-00429	5310-14-445-7312	WASHER,KEY NAME - ITEM NAMEWASHER,KEY AAUB - HOLE DIAMETER85,0 MILLIMETERS NOMINAL ABKV - OUTSIDE DIAMETER100,0 MILLIMETERS NOMINAL ABLC - EXTERNAL STRAIGHT KEY WIDTH50,0 MILLIMETERS NOMINAL ABPX - MATERIAL THICKNESS 1,5 MILLIMETERS NOMINAL MATT - MATERIALSTEEL COMP 321 NRAA - DISTANCE FROM CENTERLINE TO END OF LONGEST KEY90,0 MILLIMETERS NOMINAL NRAB - DISTANCE FROM CENTERLINE TO END OF SHORTEST KEY65,0 MILLIMETERS NOMINAL STYL - STYLE DESIGNATORA222	UN	7	\$605,88
PG71200-2026-00899	5310-14-326-7421	WASHER,FLAT NAME - ITEM NAMEWASHER,FLAT AAGR - CROSS-SECTIONAL SHAPE STYLRECTANGULAR AAUB - HOLE DIAMETER30,0	UN	8	\$1.061,36

		MILLIMETERS NOMINAL ABMW - PERIPHERAL SHAPE STYLEROUND ABMX - CENTER HOLE SHAPE STYLEROUND ABNM - THICKNESS1,0 MILLIMETERS NOMINAL ADAV - OVERALL DIAMETER40,0 MILLIMETERS NOMINAL MATT - MATERIALCOPPER ALLOY CU-SN12 MDCL - MATERIAL DOCUMENT F0110 NATIONAL SPEC SINGLE MATERIAL RESPONSE AND CLASSIFICATION ADDITIONAL INFORMATION: technical drawing (attachment J)			
Total					\$65.515,04

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 class Ria-chuelo, 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 class 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:

Country of origin	FCA	FOB
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 65.515,04 , 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, 4th August 2026.

SAINT-CLAIR DANTAS OLIVEIRA SANTOS

Captain (Ret.)

Submarine Project Management Chief of Department

LEANDRO BRILHANTE REGLY

Lieutenant-Commander

Supply Advisor

FELIPE GOMES FONTES

Lieutenant-Commander

Ship Manager

Approved by:

MARCELO ANTONIO ROCHA AFONSO

Captain

Expenditure Authorising Officer