

# GLOBAL EXPRESSION OF INTEREST (EoI) UNDER INTERNATIONAL COMPETITVE BIDDING (ICB) FOR PROCUREMENT OF MECHANICAL BULK ITEMS UNDER LONG TERM RATE CONTRACT FOR RJ-ON-90/1, RAVVA & CB/OS-02 BLOCKS

Cairn India Ltd. ("CIL") is the Operator of the Onshore RJ-ON-90/1 block, on behalf of itself and its Joint Venture (JV) partners Cairn Energy Hydrocarbons Limited (CEHL) and Oil and Natural Gas Corporation Limited located in Barmer district, in the state of Rajasthan, India, Offshore Ravva Oil and Gas Field (Ravva), on behalf of itself and its Joint Venture (JV) partners Oil and Natural Gas Corporation Limited (ONGC), Videocon Industries Limited (VIL) and Ravva Oil (Singapore) Pte Ltd. (ROS), located off the east coast of the state of Andhra Pradesh, India and Offshore CB/OS-2 block, on behalf of itself and its Joint Venture (JV) partners Oil and Natural Gas Corporation Limited (ONGC) and Tata Petro dyne Limited, located off the west coast of the state of Gujarat, India.

CIL on behalf of itself and its joint venture partners invites interested contractors (Indian and International) with proven capabilities, past experience, and demonstrated HSE performance to express their interest for pre-qualification to participate in an International Competitive Bidding Process (ICB) for the packages listed below. Stand-alone Stockists and/or Traders need not apply. CIL shall enter into Long Term Rate contract for the supply of the Bulk Items on call-out order basis.

The scope includes supply, design, engineering, shop fabrication/manufacturing, testing and delivery (wherever applicable).

Sub Package Ref No.	Item Description	Brief Technical specification
Package Ref No: A Piping Items		
A 1.	Pipe: CS, LTCS,	Seamless bare pipe with plain / bevelled / threaded ends to ASME B36.10
	Galvanised	Sizes: ½" to 14"  MOC: CS to ASTM A106 Gr. B/C/API 5L, LTCS to ASTM A333 Gr.6, As per project piping material specification. (Also NACE, IBR Certified ,CS impact tested and Galvanized pipes) Pipe wall thickness ranging from Sch 10 to Sch XXS and non-standard higher thickness as per project piping material specification

Sub Package Ref No.	Item Description	Brief Technical specification
A 2.	Pipe: CS & LTCS Welded	EFSW pipe with bevelled ends to ASME B36.10  Sizes: 16" to 48"
		MOC: ASTM A672 Gr.B60 CL12/22, ASTM A671 Gr.CC 60 CL32/ API 5L (Also NACE IBR Certified and CS impact tested)
		IS 1239 / IS 3589 welded pipes for size range - $\frac{1}{2}$ to 24"
		Pipe wall thickness ranging from Sch 10 to Sch XXS and non-standard higher thickness as per project piping material specification
A 3.	Pipe: SS, DSS Seamless	Seamless bare pipe with plain / bevelled ends to ASME B36.19
		Sizes: ½" to 8"
		MOC: ASTM A312 TP304/304L ,316/316L, 321,347 ASTM A790 (UNS S32205) Pipe wall thickness ranging from sch. 10S to Sch XXS and non-standard higher thickness as per project piping material specification
A 4.	Pipe: SS, DSS Welded	Welded (EW/LSAW/HSAW) bare pipe with bevelled ends to ASME B36.19
		Sizes: 10" to 24"
		MOC: Stainless Steel MOC: ASTM A 358 CL1 TP 304/304L and 316/316L, DSS-ASTM 928 CL1 (UNS S32205). As per project piping material specification.
		Pipe wall thickness ranging from sch. 10S to Sch XXS and non-standard higher thickness as per project piping material specification.
A 5.	Composite Pipes and fittings	GRE, CPVC, HDPE, RTP Pipes, fittings, flanges as per relevant ASTM code for 150# and 300# class
A 6.	Pipe Fittings: socket weld,threaded CS,LTCS,Galvanized, SS,DSS Fittings will include Elbows, tees, caps, plugs, full and half couplings, swages, reducers (eccentric and concentric), hex Plug, unions, , sock-olets, Thread-o-lets, Nipolets, latrolet &	<ul> <li>All fittings to suit piping in accordance with ASME B31.3 &amp; ASME B 31.1</li> <li>All pipe fittings shall be to 16.11, BS-3799, MSS-SP-97</li> <li>Sizes: 1/2" to 1 1/2"</li> <li>Sch/Thickness: To match pipe Sch / Thk. (Sch. 10 - Sch XXS and non-standard)</li> <li>Rating 3000 / 6000 /9000</li> <li>MOC: ASTM A105/A350Gr.LF2</li> </ul>
	elbowlets	CL1,A182Gr.F304/304L/316/316L/321/347/F51/F60, (Also NACE, IBR Certified and Galvanized fittings for CS)

Sub	Item Description	Brief Technical specification
Package Ref No.		
Ref No. A 7.	Pipe Fittings: Butt welded CS,LTCS,SS,DSS Fittings will include Elbows, 3D Bends, tees, caps, plugs, reducers (eccentric and concentric), weld-o-lets, Nipolets, latrolet & elbowlets All fittings shall be seamless upto 14"NB and above 14 "NB welded for CS and LTCS. FOR SS and DSS seamless upto 8"NB and above 8"NB welded.	<ul> <li>All fittings to suit piping in accordance with ASME B31.3 &amp; ASME B 31.1</li> <li>All pipe fittings shall be to ASME 16.9 &amp; MSS-SP-97</li> <li>Wrought fittings machined from block forgings shall not be acceptable</li> <li>Sizes: 1/2" to 48"</li> <li>Sch/Thickness: To match pipe Sch / Thk. (Sch. 10 - Sch XXS and non-standard)</li> <li>MOC: ASTM A105/A234 WPC/WPB/A420 WPL6, A403 WP 304/304L/316/316L,321,347, ASTM A815 Gr. WP UNS S32205 (seamless and welded) (Also CS impact tested, NACE, IBR Certified and Galvanized fittings for cs)</li> </ul>
A 8	Flanges: CS,LTCS,SS.DSS Flanges will include SW,/Threaded, SO, WN, blind and spectacle blinds, spacer& blind and API flanges. All flanges shall be forged and those machined from bar stock will not be acceptable.	<ul> <li>Sizes: 24" and smaller shall be forged to the requirements of ASME B16.5 and API</li> <li>Flanges &gt;24" shall be as per ASME B 16.47 A series.</li> <li>Spacer &amp; Blind and Spectacle flanges shall be as per ASME B 16.48 upto 24" and beyond as per CIL STD</li> <li>Rating 150#, 300#, 600#, 900#, 1500# &amp; 2500# (Also CS impact tested, NACE, IBR Certified and Galvanized flanges)</li> <li>MOC: ASTM A105/A350 LF2 CL1/ A182 F304/304L/316/316L/321/347/F60, API Flanges 5K to 10K</li> </ul>
A 9	Gaskets	<ul> <li>All Gaskets shall be of ASME B16.20/B16.21/B16.5/B16.47A</li> <li>Size range from ½" to 48"</li> <li>Rating 150#, 300#, 600#, 900#, 1500# &amp; 2500# MOC: <ul> <li>a) Spiral wound SS304/304L, 316/316L, Duplex UNS S32205 with Graphite filler &amp; with inner &amp; outer ring.</li> <li>b) 2mm Thk. Compressed Non-Asbestos.</li> <li>c) For RTJ Flange Oval type soft iron, SS304/304L, 316/316L, Duplex UNS S32205 Insulation Gasket Kits</li> </ul> </li> </ul>
A 10	Fasteners	<ul> <li>All studs &amp; Nuts and m/c bolts shall be of ASME B-18.2.1/B18.2.2</li> <li>MOC: - <ul> <li>a) Bolts:-A193 Gr.B7,B7M Galvanised</li> <li>b) Nuts:-A194 Gr.2H,2HM Galvanised</li> <li>c) Bolts:-A193 Gr.B8</li> <li>d) Nuts:-A194 Gr.B8</li> <li>e) Bolts:-A 320 Gr.L7</li> <li>f) Nuts:-A 194 Gr.4</li> <li>g) Bolts:-A 307 Gr.B</li> <li>h) Nuts:-A 563 Gr.B</li> </ul> </li> </ul>

Sub Package Ref No.	Item Description	Brief Technical specification
A 11	Corrosion Coupons	Supply of Retrievable Multidisc Corrosion Coupons with Access Fittings along with retrieval tool
A12	Injection Quill	Supply of injection quill. Material SS-316/DSS-32205 as per detail mentioned in the data sheets
A13	Bleed Rings	Supply of Bleed Rings.  Material: CS, SS-316, DSS-32205 as per details mentioned in the data sheets
	Package	e Ref No: B Valves / Strainers
B 1	Ball Valves Fire safe	<ul> <li>Common for B1 to B5</li> <li>All valves to meet: ASME B16.10 end to end dimensions</li> <li>Sizes: ½" to 48"</li> <li>Rating: 150#, 300#, 600#, 900# &amp; 1500#, 2500#</li> <li>All valves shall meet the project Valve material</li> </ul>
B 2	Gate/Globe/Check Valves	<ul> <li>All Valves shall heet the project valve material specification.</li> <li>All Ball valves shall be designed to ASMI B16.34/API 6D/ BS/ ISO 17292 standards at tested to API 598/API 6D</li> <li>API valves shall meet designed and tested in accordance with API 6A</li> <li>Butterfly valves shall meet API-609/BS EN 593</li> <li>Gate to API 600/602/ISO10434/ISO15761</li> <li>Globe to BS 1873/ISO 15761,</li> <li>Check to BS 1868/ISO 15761,</li> <li>Dual Plate check valve to BS 594</li> <li>Plug valve to BS5353</li> <li>Needle valve to API 602 /ISO 15761</li> </ul>
В3	Butterfly Valves	
B 4	Plug Valves	<ul> <li>valve shall meet ASME 16.34</li> <li>Material of construction ((Cast and Forged) CS- A 105/A 216 Gr WCB/WCC, LTCS- A 350 Gr LF2 CI-1/A 352 Gr LCB, SS- A 182 Gr F 304/304 L/316/316 L/DSS- A 182 F51/F60 also NACE,</li> </ul>
B 5	Needle Valves	<ul> <li>IBR</li> <li>API 5000 #,10000# Valves for Wellheads</li> <li>2-1/16" to 4-3/16"</li> </ul>
В 6	Y/T type Strainer, Basket Type Strainers	• Strainer MOC: CS, SS & DSS with internal SS / DSS mesh for all size ½" -48".
В7	Steam Traps as per data sheet	• Steam Trap: ½" – 11/2" – CS/SS Flanged, Thermodynamic/Thermostatic type, internal SS 304/316

Sub Package Ref No.	Item Description	Brief Technical specification
В8	Hoses and Quick connect couplings	<ul> <li>Sizes: ½" - 6" of various lengths with quick end coupling or flanged end.</li> <li>Butt welded annular corrugated, heavy wall SS (No inter locking) with double SS breeding, length 1m to 15m</li> <li>High strength synthetic chord reinforced natural rubber hose with neoprene liner inside, corrugated finish outside with quick end coupling or flanged end, length 1m to 15m</li> </ul>
B 9	Sample bomb Sampling system	Sampling bottle of 1 ltr. capacity of SS material along with needle valve and flanged end hose of SS.  C Structural Steel and Assessariae
C 1	Package Ref No: Structural Steel	C Structural Steel and Accessories
C I	Sections Steel	All standard structural steel members like: ISMB, ISMC, ISA, Plates, Flats, ISHB, UB, UC, NPB, WPB, Connection bolts (prop class 8.8 & 4.6)with nuts & washers, Anchor bolts, Erection Bolts, Hilti Bolts (Mechanical & Chemical), rods, structural Pipes etc. in all sizes
C 2	Grating Material	Serrated / Plain GI gratings (Electric arc welded
		/Electroforged), FRP gratings with clamps & Hex head bolts , washer & nuts
	Package Ref N	No: D Line Pipes and Accessories
D 1	API 5L X65 Line Pipe	<ul> <li>API 5L X65, ASME Class 600/900/1500 Line Pipe in accordance to PSL-2 with Epoxy Coating / PUF insulation for the following sizes:</li> <li>Seamless from 2" to 16" having thickness 5.6mm to 18mm</li> <li>HSAW/LSAW above 16" to 30" having thickness 9.5mm to 32 mm</li> <li>Interested Parties may express their interest for supply of Bare pipes/Coated pipes/ coating only /Coating&amp; Insulation/ Insulation only</li> </ul>
D 2	Internally Coated Line Pipe	Internal coating (Liquid Epoxy/Fusion Bonded Epoxy/Thermoplastic material) of Linepipes 4"-48"
D3	Line Pipe - DSS / SS	Duplex Stainless Steel Line Pipes 2"-36", Manufacturing, testing and packing as per international applicable Standards
D 4	Actuated Ball Valves	Size: 8" to 24"  Type: Two Pieces split body, Welded body, API-6D.  Class Rating: ASME 600# & 900#  Actuator Type: Motor/ Gas/Gas over oil-  Hydraulic/Electro-hydraulic
D 5	Control Globe Valves	Size: 10" to 24" Type: Globe Class Rating: ASME 600# & 900#
D 6	Induction Bends	5 D/10 D Induction Bends (or higher bends) of various sizes up to 24"

Sub Package Ref No.	Item Description	Brief Technical specification
D 7	Monolithic Insulation Joints	As per relevant International standards/manufacturing standards. Size upto 24" and Rating upto 900#.
D 8	Pig Signaller	Intrusive and Non-Intrusive type
D 9	Anchor Flanges	Design, manufacture and supply of Anchor Flanges for pipeline sizes 4"" to 30", designed to ASME Sec VIII BPVC and AISC (ASD) 9th Ed for pipeline applications, MOC A 105 / SA694 - F52 and F60/Equivalent
D 10	Barred Tee and Flow Tees	As per relevant International standards/manufacturing standards. Size upto 48"
D 11	Choke Valves	Inlet size upto 6"; rating upto 1500# (API 5K) Outlet size upto 10"; rating upto 2500# Full API Bore Electrically Actuated

# Specific Pre-Qualification Criteria ("GO"/"NO GO"): Technical

# For items A1 to A13, B1 to B9

- Demonstrate similar quantities of supplies to Oil & Gas projects of pipes, fittings and valves in size range for a single or multiple project
- Demonstrate manufacturing capability with detail of all facilities including manufacturing capability per month
- Demonstrate availability of valid Monograms (API/ASTM etc.)
- Demonstrate required quality approvals are available
- Identify raw material sourcing details
- In house testing arrangements
- Details of Frame Agreement with local and international Clients if any.
- Proof of enlistment with any company like ONGC, Gail, EIL, etc. in India and Shell/Exxon/Armaco etc. in outside India.
- · Location Area of manufacturing facility

## For items C1 & C2

- Manufacturing facilities, Demonstrate manufacturing capability
- Demonstrate Valid BIS license
- Submit test certificates,
- Demonstrate in-house QA/QC capabilities
- Details of Frame Agreement/Term Contract with local and international Clients if any.
- For C7, Submit proofs of Source of basic material,
- Produce manufacturing valid licenses, proofs of fabrication facilities,
- Submit PTR,
- Submit Fire rating test certificate in case of FRP grating.

#### For items D4 to D10

- Past track record (PTR) for instruments supplied to EPC upstream Oil and gas projects in Desert environment.
- Issue list of sub suppliers
- Demonstrated delivery performance
- Details of Frame Agreement with local and international Clients if any.

· Licences for Softwares.

#### For items D1 to D3

- Demonstration of supplies of 5000 MT of Seamless and/ or 7000 MT of HSAW/LSAW of API 5L X-65 grade Pipe in the above size range for a single Project.
- Demonstration of manufacturing capability of 5000 tonnes/per month of X-65 grade Pipe in above size range.
- Capabilities of external coating shop in terms of proven track record and availability for the pipes sizes as specified above.

#### For Item D11

- Past track record (PTR) for instruments supplied and working satisfactorily (for 6 months as a minimum) to EPC upstream Oil and gas projects in hot and Desert environment
- Confirm compliance with ATEX requirements
- Issue list of sub suppliers for manifolds and tube fittings, where applicable.
- Demonstrated delivery performance
- Details of Frame Agreement with local and international Clients if any.
- Details of DGMS and CCOE approvals, if available.
- Details of SIL certification with available certificates for ESD valves, solenoids, Fire and Gas Detectors and PLC.

Only those contractors (both Indian & International) possessing substantial and proven record in manufacturing/supply of above items/packages of similar scale with excellent delivery schedule & who are interested to enter into Long Term rate Contract should respond to this notice. Contractors are requested, as a minimum, to submit the documents listed against package A to D.

In addition to the above requested document, contractor shall also submit credentials to support the specific qualification criteria for each package.

Contractors are requested, as a minimum, to submit the following documents and details:

- 1. Letter of interest with detailed company information
- 2. Technical Catalogue of the Item/Package with lead time for manufacturing
- 3. Lists of similar supplies successfully executed in the last five years and those of currently under execution with delivery performance records, job value, client certification, client references etc. (With emphasis of work carried out in Oil and Gas Sector)
- 4. Company's manufacturing set up with Capacity details and Geographical location.
- 5. Current Shop floor loading chart.
- 6. Experience of working in remote onshore location & desert terrain.
- 7. Quality assurance/control practices and certifications to manufacture such items.
- 8. Health, Safety and Environment (HSE) policies, certifications, procedures and statistics on HSE performance covering the last four (4) years.
- 9. Company's financial performance documents (Audited Balance sheets and Profit and Loss statements, Auditors Report and Notes to Accounts etc.) for last 2 (two) years. Latest financial statement should not be older than 12 months on the date of Expression of interest. The following financial evaluation criteria will be used for evaluation of financial standing –
- Turnover in each of the immediately preceding two (02) financial years should be equal to or more than the estimated average annual contract value.
- Positive Net Worth in each of the immediately preceding two (02) financial years.
- Liquidity ratio in each of the preceding two (02) financial years shall not be less than 0.60.

## Also, note -

i. Normally standalone financials of the bidding entity only will be considered. However, consolidated financials at the bidding entity level, if available, can also be submitted. Parent company or Affiliate's financials can be submitted and considered, subject to submission of Parent/ Affiliate company guarantee. This should be clearly mentioned in the EOI response.

- ii. In case of consortium, the financials of the leader of the consortium (in whose name the bid is submitted) will be evaluated. However, consortium partner's financials can also be considered subject to submission of corporate guarantee by such consortium partner. This should be clearly mentioned in the EOI response.
- iii. Evaluation will be done only on the basis of the published Annual reports / Audited financials containing Auditor's report, Balance sheet, Profit & Loss a/c and Notes to Accounts
- iv. In case of unaudited statements (if there are no audit requirements for auditing of financials as per the local law), the financials shall be accompanied by a certificate from a Certified Accountant. Certificate should also mention the fact that there is no requirement of audit of the financials as per the local law.

All qualifications and exceptions brought out in Auditor's report and Notes to Accounts would be factored in while undertaking financial evaluation

The interested suppliers should evince interest to participate in EoI within Fourteen (14) days of publication of Expression of Interest.