TENDER DOCUMENT FOR

FABRICATION & SUPPLY OF GENERAL PURPOSE CARGO CONTAINER 20' X 8' X 8'6" ISO 1CC TYPE

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NATIONAL CENTRE FOR ANTARCTIC & OCEAN RESEARCH
(*Ministry of Earth Sciences, Govt. of India*),
HEADLAND SADA, VASCO-DA-GAMA, GOA - 403 804

TENDER NO. NCAOR/AES-11304/PT-10
TENDER FOR FABRICATION & SUPPLY OF GENERAL PURPOSE CARGO CONTAINER 20' X 8' X 8'6" ISO 1CC TYPE.

1.	Fabrication & Supply of General Purpose Cargo container 20' X 8' X 8'6" ISO 1CC Type. Llyod's Register or DNV certified. **Specifications** **Quantity**	As per Annexure I 04 Nos.
2.	General Terms and Conditions	As per Annexure II
3.	Cost of Tender Documents (In Person)	1000.00
4.	Cost of Tender Documents (By Post)	1050.00
5.	Tender Documents	Tender documents can be downloaded by tenderers from NCAOR website. In case a tenderer is using the documents and forms downloaded from the website, the cost of tender documents shall be sent in the form of Bank Draft in a separate envelope along with the tender.
	EMD	**Bidders** shall submit **EMD** along with their tender, **either By DD** drawn in favour of NCAOR, for a sum of ` 35,000/- (Rupees Thirty Five Thousand only) **or** **in the form of a bank guarantee** for a sum of ` 35,000/- (Rupees Thirty Five Thousand only)
6.	Last Date and time for issue of tender documents	**MONDAY** **27.07.2015** 1600 Hrs (IST)
7.	Last Date and time for submission of sealed quotations	**TUESDAY** **28.07.2015** 1700Hrs (IST)
8.	Date and time of tender opening	**WEDNESDAY** **29.07.2015** 1000Hrs (IST)

ANNEXURE-I

TECHNICAL SPECIFICATION FOR STEEL DRY CARGO CONTAINER 20'x8'x8'6" ISO 1CC TYPE.

1. General

1.1 Scope: This specification will cover the design, construction, materials, testing and inspection performances of 20'x8'x8'6" ISO. 1CC type steel dry cargo containers. These containers specified herein will be manufactured under strict quality control and be approved by the classification society or agency.

1.2 Operational environment: The container will be designed and constructed for carriage of general cargo by marine (on or below deck), road and rail throughout the world. All materials used in the construction will be to withstand extremes of temperature range from -40°(-40°) to +70°(+158°) without effect on the strength of the basic structure and water tightness.

1.3 Standards and Regulations: The container will satisfy the following requirements and regulations, unless otherwise mentioned in this specification.

1.3.1. ISO Container Standards (1CC type)

ISO 668 - Series 1 freight containers - Classification external dimensions and ratings(4th edition - 1988)

ISO 830 - Terminology in relation to freight container (1st edition - 1981)

ISO 1161 - Series 1 freight containers - Corner fittings Specification (4th edition - 1984)

ISO 1496-1 - Series 1 freight containers - Specification and testing.

Part 1: General cargo containers for general purposes (5th edition - 1990)

ISO 6346 - Freight containers - coding, identification and marking (3rd edition - 1995)

1.3.2. T.I.R. Certification: All the containers will be certified and complied with "The Customs Convention on the International Transport of Goods under the cover of T.I.R. Carnets." or "The Customs Convention on Containers."

1.3.3. C.S.C. Certification : All the containers will be certified and complied with the requirements of the "International Convention for the Safe Containers."

1.3.4. T.C.T. Certification: All exposed wooden components used for container will be treated to comply with the requirements of "Cargo Containers-Quarantine Aspects and Procedures" of the Commonwealth Department of Health, Australia.

1.3.5. U.I.C. Registration: All the containers will be registered and complied with the "International Union of Railways."

1.3.6. Classification society: All the containers will be certified for design type and individually inspected by classification society, BV, ABS, LR, GL or CCS.

* Note : BV : Bureau Veritas (France)
ABS : American Bureau of Shipping (USA)
LR : Lloyd's Register of Shipping (UK)
GL : Germanischer Lloyd (Germany)
CCS : China Classification Society (P.R.C)

1.4 Handling: The container will be constructed to be capable of being handled without any permanent deformation under the following conditions:

1.4.1. Lifting, full or empty, at top corner fittings vertically by means of spreaders fitted with hooks, shackles or twist locks.

1.4.2. Lifting, full or empty, at bottom corner fittings using slings with terminal fittings at any angles between vertical and 45 degrees to the horizontal.

1.4.3. Lifting, full or empty, at forklift pockets using forklift truck.

1.5 Transportation: The container will be constructed to be suitable for transportation in the following modes:

1.5.1. Marine: In the ship cell guides of vessels, seven (7) high stacked. On the deck of vessels, four (4) high stacked and secured by vertical and diagonal wire lashings.

1.5.2. Road: On flat bed or skeletal chassis, secured by twist locks or equivalent at the bottom corner fittings.

1.5.3. Rail: On flat cars or special container cars secured by twist locks or equivalent at the bottom corner fittings.

2. Dimensions and Ratings

2.1 External Dimensions

Length 6,058 + 0mm - 6mm
Width 2,438 + 0mm - 5mm
Height 2,591 + 0mm - 5mm

1) No part of the container will protrude beyond the external dimensions mentioned above.
2) Maximum allowable differences between two diagonals on anyone of the following surfaces will be as follows:
Roof, bottom and side diagonals: 13 mm
Front and rear diagonals: 10 mm

2.2 Internal Dimensions (nominal)

Length 5,898 mm
Width 2,350 mm
Height 2,390 mm

2.3 Door opening Dimensions (nominal)

Width 2,343 mm
Height 2,280 mm

2.4 Internal cubic capacity (Nominal)

33.1cu.m 1,170 cu.ft

2.5 Forklift pockets

Width 360 mm
Height min. 115 mm
Center to center 2,080 mm +/- 50 mm

2.6 Ratings

Max. Gross Weight (R) 30,480 kgs 67,200 1bs
Tare Weight (design) (T) 2,220 kgs 4,895 1bs
Max. Payload (P) 28,260 kgs 62,305 1bs

3. Materials

3.1 General: The following materials will be used in the construction of containers:

3.2 Part specification:

Parts Materials by JIS

3.2.1. All steel except screws, rivets, Anti-corrosive steel. SPA-H bolts/nuts, door hardwares or equivalent and other shown on drawings Y.P. : 35 kg/mm2 and specification T.S. : 49 kg/mm2

3.2.2. Rear corner posts (inner) Rolled high tensile steel. SM50A

Y.P. : 33 kg/mm2
T.S. : 50 kg/mm2

3.2.3. Door hinges S25C
Y.P. : 27 kg/mm2
T.S. : 45 kg/mm2

3.2.4. Door locking bars Structural steel round pipe. STK41
Y.P. : 24 kg/mm2
T.S. : 41 kg/mm2

3.2.5. Corner fittings Casted weldable steel. SCW49
Y.P. : 28 kg/mm2
T.S. : 49 kg/mm2

3.2.6. Locking gear cams and keepers S20C
Y.P. : 25 kg/mm2
T.S. : 41 kg/mm2

3.2.7. Door hinge pins Stainless steel. SUS304 Gasket retainers

3.2.8. Door gasket EPDM

3.2.9. Floor board 19-ply Hardwood plywood.

3.2.10. Ventilator ABS resin labyrinth type
* Note: Y.P. - Yielding Point
T.S. - Tensile Strength

4. Construction

4.1 General

4.1.1. The container will be constructed with steel frames, fully vertical-corrugated steel sides and front wall, horizontal-corrugated steel double doors at rear end, die-stamped steel roof , wooden flooring, corrugated double hinged doors and ISO corner fittings at eight corners.

4.1.2. All exterior welding including the base frames will be continuous welding using CO2 gas to give perfect watertight properties.

4.1.3. Interior welds - when needed - will be stitched with a minimum bead length of 25 mm.

4.1.4. Gaps between adjacent components to be welded will not exceed 3 mm or the thickness of the parts being welded.

4.1.5. Chloroprene sealant is to be applied at periphery of floor surface and inside unwelded seams, butyl sealant is used to caulk at invisible seam of floor joint area and between door gasket and frame.

4.1.6. The internal bend radii of pressed sections of steel will be not less than 1.5 time the thickness of the materials being pressed.

4.1.7. The wooden floor will be fixed to the base frames by zinc plated self-tapping screws.

4.2 Protrusion

4.2.1. The plane formed by the lower faces of all transverse members shall be positioned by 12.5 mm +5/-1.5 mm above the plane formed by the lower faces of the bottom corner fittings.

4.2.2. The top corner fittings are to protrude a minimum of 6 mm above the highest point of the roof.

4.2.3. The outside faces of the corner fittings will protrude from the outside faces of the corner posts by nominal 4 mm for the front and nominal 3 mm for the rear.

4.2.4. The outside faces of the corner fittings will protrude from the outside faces of the sides and front wall by nominal 8 mm.

4.2.5. Under maximum payload, no part of the container will protrude below the plane formed by the lower faces of the bottom corner fittings at the time of maximum deflection.

4.2.6. Under 1.8 x maximum gross weight, no part of the container will protrude more than 6.0 mm below the plane formed by the lower faces of the bottom corner fittings at the time of maximum deflection.

4.3 Corner fittings: The corner fittings will be designed in accordance with ISO 1161 and manufactured at the works approved by classification society.

4.4 Base frame structure: Base frame will be composed of two bottom side rails, eighteen cross members, and a forklift pockets

4.4.1. Bottom side rail: Each bottom side rail is built of a 50x158x30x4.5 mm thick cold formed channel section steel made in one piece. The floor guide rails of 3.0 mm thick pressed angle section steel are provided to the bottom side rails by staggered stitch welding. The lower flange of the bottom side rail is outward so as to facilitate easy removal of the cross members during repair and of less susceptible corrosion. Reinforcement plates to be made of 4.5 mm thick "L" type steel is welded to the bottom surface of both side rails around the bottom corner fitting.

4.4.2. Cross member: The cross members are made of pressed channel section steel with a dimension of 45x122x45x4.0 mm for the normal areas and 75x122x45x4.0 mm for the floor butt joints. The large one is reinforced by three 4.0 mm thick gussets. The cross members are placed fully to withstand floor strength and welded to each bottom side rail.

4.4.3. Forklift pockets: Each forklift pocket is built of 3.0 mm thick full depth flat steel top plate and two 200 mm deep x 6.0 mm thick flat lower end plates between two channel section cross members. The upper flange and web area above each forklift pocket is reinforced by 460x4.0 mm thick angle plate. The one set of forklift pockets is designed in accordance with ISO requirements.

4.5 Flooring*:* The floor will consist of six pieces plywood boards, floor center rail, and self-tapping screws.

4.5.1. Floor: The wooden floor to be constructed with 28 mm thick 19-ply hardwood plywood boards are laid longitudinally on the transverse members between the 4.0 mm thick flat bar floor center rail and the 3.0 mm thick pressed angle section steel floor guide rails stitched welded to the bottom side rails. The floor boards are tightly secured to each transverse member by self-tapping screws, and all butt joint areas and peripheries of the floor boards are caulked with sealant.

1) Wood species: Apitong or Keruing.
2) Glue: Phenol-formaldehyde resin.
3) Treatment:
    a) Preservative: Meganium or Equivalent. In accordance with Australian Health Department Regulations.
    b) Average moisture content will be 14% before installation.

4.5.2. Self-tapping screw: Each floor board is fixed to the transverse members by zinc plated self-tapping screws that are 8.0 mm dia. shank x 16 mm dia. head x 45 mm length, and fastened by five screws per cross member but six screws at joint areas. Screw heads are to be countersunk with about 2 mm below the floor top surface.

4.6 Rear frame structure: The rear frame will be composed of one door sill, two corner posts, one door header and four corner fittings, which will be welded together to make the door-way.

4.6.1. Door sill: The door sill to be made of a 4.5 mm thick pressed open section steel is reinforced by four internal gussets at the back of each locking cam keeper location. The upper face of the door sill has a 10 mm slope for better drainage. There is cut out at each end of the door sill and reinforced by a 200 x 75 mm channel steel as a protection against handling equipment damages.

4.6.2. Rear corner post: Each rear corner post of hollow section is fabricated with 4.5 mm thick pressed steel outer part and 40x113x12 mm thick hot rolled channel section steel inner part, which are welded continuously together to ensure a maximum width of the door opening and to give a sufficient strength against stacking and racking forces. Four (4) sets of hinge pin lugs are welded to each rear corner post.

4.6.3. Door header: The door header is constructed with a 4.0 mm thick pressed "U" section steel lower part having four internal gussets at the back of each locking cam keeper location and a 3.0 mm thick pressed steel upper part, which are formed into box section by continuous welding.

4.7 Door

4.7.1. Each container will have double wing doors at rear end frame, and each door will be capable of swinging approximately 270 degrees.

4.7.2. Each door is constructed with two 3.0 mm thick pressed channel section steel horizontal frames for the top and bottom, 100x50x2.3 mm and 100x50x3.2 mm thick rectangular hollow section vertical frames for the post side and center side of door respectively, 2.0 mm thick horizontally corrugated steel door panel, which are continuously welded within frames.

4.7.3. Two sets of galvanized "BE2566MN" bolt on model locking assemblies with forged steel handles are fitted to each door using zinc plated steel bolts and Huck bolts according to TIR requirements. Locking bar retainers are fitted with nylon bushings at the top, bottom and intermediate bracket. Locking gears should be assembled after painting of container. The shims are to be provided between locking brackets and door panel.

4.7.4. The left hand door can not be opened without opening the right hand door when the container is sealed in accordance with TIR requirements.

4.7.5. The door hold-back of nylon rope is provided to the center locking bar on each door and a hook of steel bar is welded to each bottom side rail.

4.7.6. Each door is suspended by four hinges being provided with stainless steel pins, self-lubricating nylon bushings and the brass washers, which are placed at the hinge lugs of the rear corner posts.

4.7.7. The door gasket to be made of an extruded J&C-type EPDM rubber is installed to the door peripheral frames with stainless steel gasket retainers which must be caulked with butyl sealant before installation of gasket, and fastened by stainless steel rivets at a pitch of 150 mm.

4.8 Roof structure: The roof will be constructed with five five-corrugated (die-stamped) steel panels and four corner protection plates.

4.8.1. Roof panel: The roof panel is constructed with 2.0 mm thick die-stamped steel sheets having about 5.0 mm upward smooth camber, which are welded together to form one panel and continuously welded to the top side rails and top end rails. All overlapped joints of inside unwelded seams are caulked with chloroprene sealant.

4.8.2. Protection plate: Each corner of the roof in the vicinity of top corner fitting is reinforced by 4.0 mm thick rectangular steel plate to prevent the damage caused by the mishandling of lifting equipment.

4.9 Top side rail: Each top side rail is made of a 60x60x3.0 mm thick square hollow section steel.

4.10 Side wall: The trapezium section side wall is constructed with 2.0 mm thick fully vertically continuous-corrugated steel outer panels near the each post and 1.6 mm thick intermediate inner panels, which are butt welded together to form one panel and continuously welded to the side rails and corner posts. All overlapped joints of inside are caulked with chloroprene sealant.

4.11 Front structure: Front end structure will be composed of one bottom end rail, two corner posts, one top end rail, four corner fittings and an end wall, which are welded together.

4.11.1. Bottom end rail: The bottom end rail to be made of a 4.0 mm thick pressed open section steel is reinforced by four internal gussets. There is cut out at each end of the bottom end rail and reinforced by a 200x75 mm channel steel as a protection against handling equipment damages.

4.11.2. Front corner post: Each corner post is made of 6.0 mm thick pressed open section steel in a single piece, and designed to give a sufficient strength against stacking and racking forces.

4.11.3. Top end rail: The top end rail is constructed with 60x60x3.0 mm thick square hollow section steel at lower part and 3.0 mm thick flat steel plate at upper part.

4.11.4. Front wall: The trapezium section front wall is constructed with 2.0 mm thick vertically corrugated steel panels, butt welded together to form one panel, and continuously welded to front end rails and corner posts. All overlapped joints of inside are caulked with chloroprene sealant.

4.12 Special feature

4.12.1. Customs seal provisions: Customs seal and padlock provisions are made on each locking handle retainer to cover the sealed area in accordance with TIR requirements.

4.12.2. Lashing fittings: Four (4) lashing hoop rings are welded to each top and bottom side rail at recessed corrugations of side panels but not extruded any cargo space (total 16 rings). Each lashing point is designed to provide a "1,500 kgs pull load in any direction" without any permanent deformation of lashing ring and surrounding area. Three (3) lashing rods are welded to each corner post at the position of 150 mm higher from the floor and 200 mm lower from the bottom surface of top corner fitting and middle of the corner post. Each lashing rod on the corner post is designed to provide a "1,000 kgs pull load in any direction" without any permanent deformation.

4.12.3. Shoring slot: A shoring slot, having a size of 60 mm width x 40 mm depth is provided on each rear corner post so that 2 1/4" thick battens can be arranged to be able to prevent doors from damage due to shifting cargo.

4.12.4. Ventilator: Each container will have two labyrinth type small plastic ventilators. Each ventilator is fixed to the right hand upper part of each side wall by three 5.0 mm dia. stainless steel rivets in accordance with TIR requirements after drying of top coating, and caulked with silicone sealant around the entire periphery except underside to prevent the leakage of water.

4.12.5. Option: Two (2) lashing strips are welding each side panels (total 4 strips). Five (5) labyrinth type small plastic ventilators are fixed to each side wall of the

container (total 10 ventilators). The floor board should be pre-coated with a 80 microns dry film thickness of PU coating.

5. Surface preservation

5.1 Surface preparation

5.1.1. All steel surfaces - prior to forming or after - will be fully abrasive shot blasted conforming to Swedish Standard SA 2 1/2 to remove all rust, dirt, mill scale and all other foreign materials. The shot blasted surface profile shall be have a maximum peak to valley height not exceeding 50 microns and average peak to valley height of about 25 microns.

5.1.2. All door hardwires will be hot-dipping zinc galvanized with approximately 75 microns thickness.

5.1.3. All fasteners such as self-tapping screws and bolts, nuts, hinges, cam keepers and lashing fittings will be electro-galvanized with approximately 13 microns thickness.

5.2 Coating

5.2.1. *Prior to assembly:* All steel surfaces will be coated with 10 microns thick two-pack polyamide cured zinc rich epoxy primer immediately after shot blasting, and then dried up in drying room.

5.2.2. *After assembly:* All weldments will be shot blasted to remove all welding fluxes, splatters, burnt primer coatings caused by welding heat, and other foreign materials. Then all blasted weldments will be coated with zinc rich epoxy primer.

5.2.3. *The total dry film will be (microns):*
All surface of the assembled container will be have coating system as follows:

Where	*Paint name*	*DFT (u)*
Exterior surface	Epoxy zinc rich primer	30
Epoxy primer	Chlorinated rubber or Acrylic topcoat	40
Color:		40
	Total:	**110**
Interior surface	Epoxy zinc rich primer	20
Epoxy high build coating		**40**
	Total:	**60**

Under structure	Epoxy zinc rich primer	**20**
Bitumen		**190**
	Total:	**210**

6. Marking

6.1 Arrangements: The containers will be marked in accordance with ISO, TCT, UIC, CSC and TIR requirements, owner's marking specifications and other required regulations.

6.2 Materials

6.2.1. Decal: - Self-adhesive, high tensile PVC film for seven (7) years guarantee without peeling off, tenting or color fading.

6.2.2. Certification plate: 18-18 type Stainless steel plates to be chemically etched by acid.

6.3 Specifications

6.3.1. Identification plates such as consolidated data plate consisting of CSC, TIR and TCT will be riveted on the door permanently by stainless steel rivets. The entire periphery except underside will be caulked with sealant.

6.3.2. The owner's serial numbers and manufacturer's serial numbers will be stamped on top face of the bottom rear corner fitting.

6.3.3. Logo and full address should be painted on both 20' side wall as shown:

"INDIAN ANTARCTIC EXPEDITION "

National Centre for Antarctic and Ocean Research ,
Earth System Science Organisation (ESSO)
Ministry of Earth Sciences , Govt. of India
Headland Sada, Vasco-da-Gama, Goa- 403804, India

7. Testing

7.1 Prototype testing: The prototype container manufactured in accordance with this specification will be tested by manufacturer under the supervision of classification society.

Test items & loads Test methods

7.1.1. Stacking Hydraulic cylinder load will be applied to Internal load : 1.8R-T each corner post through top corner fittings. Test load : 86,400kg/post. Offset : 25.4 mm lateral 38.0 mm longitudinal Time duration : 5 minutes

7.1.2. Lifting (from top corner fitting) Lifting vertically. Internal load : 2R-T Time duration : 5 minutes

7.1.3. Lifting (from bottom corner Lifting 45 deg. to the horizontal. fittings) Time duration : 5 minutes Internal load : 2R-T

7.1.4. Lifting (for forklift pockets) Lifting by horizontal bars. Internal load : 1.6R-T Bar length : 1,828 mm Bar width : 200 mm Time duration : 5 minutes

7.1.5. Restraint (longitudinal) Hydraulic cylinder load will be applied Internal load : R-T to the bottom side rails. Test load : 2R Two times for pulling and pushing.Time duration : 5 minutes

7.1.6. Floor strength. Use of a special truck. Test load : 7,260 kgs Total contact area : 284 cm2 (16,000 lbs) Wheel width : 180 mm Wheel center : 760 mm

7.1.7. Wall strength (front) Compressed air bag will be used. Test load : 0.4 (R-T)=0.4P Time duration : 5 minutes

7.1.8. Wall strength (side) Compressed air bag will be used on Test load : 0.6 (R-T)=0.6P one side only. Time duration : 5 minute

7.1.9. Wall strength (door) Same as front wall strength test. Test load : 0.4 (R-T)=0.4P

7.1.10. Roof strength (weakest part) Applied area will be 600x300 mm Test load : 300 kgs longitudinal and transverse.

7.1.11. Racking (transverse) Hydraulic cylinder load will be applied to the Test load : 15,240 kgs header rail through top corner fittings. Two times for pulling and pushing. Time duration : 5 minutes

7.1.12. Racking (longitudinal) Hydraulic cylinder load will be applied Test load : 7,620 kgs to the top side rail through top corner fitting on one side only. Two times for pulling and pushing. Time duration : 5 minutes

7.1.13. Operation of door After completion of test, the operation of doors, locks, hinges, etc. will be checked.

7.1.14. Dimensions and weight After completion of test, the dimensions and weight will be checked.

7.1.15. Weatherproofness Inside dia. of nozzle : 12.5mm Distance : 1.5 m Speed : 100 mm/sec Pressure : 1 kg/cm2

* Note: R - Maximum Gross Weight
T - Tare Weight
P - Maximum Payload

8. Guarantee

8.1 Structure All the containers shall be guaranteed by manufacturer to be free from defects in materials, workmanship and structure for a period of one (1) year from the date of acceptance of the container by the buyer.

8.2 Painting

8.2.1. The paint system coated on the container surface shall be guaranteed to be free from corrosion and failure for a period of three (3) years from the date of acceptance of the container by the buyer.

8.2.2. Corrosion is defined as rusting which exceeds RE3 (European Scale of degree of Rusting) on at least ten (10) percent of the total container surface, excluding that resulting from impact or abrasion damage, contact with solvents or corrosive chemicals and abnormal use.

8.2.3. If the corrosion exceeds RE3 as defined above within the guarantee period, inspection of the corrosion shall be carried out by the buyer, and paint manufacturer to detect the cause. As the result of the inspection, if it is mutually agreed and accepted that the corrosion has been caused by the defective paint quality and/or poor workmanship, and/or paint manufacturer shall correct the defect on their accounts.

8.3 Decals: Decals applied on the container shall be guaranteed for a period of seven (7) years without peeling off, tenting or color fading if decals are supplied by manufacturer.

TECHNICAL COMPLIANCE STATEMENT FOR FABRICATION & SUPPLY OF GENERAL PURPOSE CARGO CONTAINER 20' X 8' X 8'6" ISO 1CC TYPE.

SR. NO.	SPECIFICATIONS FOR FABRICATION & SUPPLY OF GENERAL PURPOSE CARGO CONTAINER 20' X 8' X 8'6" ISO 1CC TYPE	COMPLIED/ NOT COMPLIED	EXTRA FEATURES
1	**General** 1.1 Scope 1.2 Operational environment 1.3 Standards & Regulations 1.3.1 ISO Container Standards (ICC type) 1.3.2 T.I.R. Certification 1.3.3 C.S.C Certification 1.3.4 T.C.T Certification 1.3.5 U.I.C Registration 1.3.6 Classification society 1.4 Handling 1.5 Transportation		
2	**Dimensions and Ratings** 2.1 External Dimensions 2.2 Internal Dimensions (nominal) 2.3 Door opening Dimensions (nominal) 2.4 Internal cubic capacity (Nominal) 2.5 Forklift pockets 2.6 Ratings		
3	**Materials** 3.1 General 3.2 Part specification		
4	**Construction** 4.1 General 4.2 Protrusion 4.3 Corner fittings 4.4 Base frame structure 4.5 Flooring 4.6 Rear frame structure 4.7 Door 4.8 Roof structure 4.9 Top side rail 4.10 Side wall 4.11 Front structure 4.12 Special feature		
5	**Surface preparation** 5.1 Surface preparation 5.2 Coating		
6	**Marking** 6.1 Arrangements 6.2 Materials 6.3 Specifications		
7	**Testing** 7.1 Prototype testing		
8	**Guarantee** 8.1 Structure 8.2 Painting 8.3 Decals		

Annexure - II

TERMS AND CONDITIONS FOR SUBMISSION OF QUOTATION.

1) The National Centre for Antarctic and Ocean Research (NCAOR) **invites sealed quotations in two-parts** from the reputed firms for the **"FABRICATION & SUPPLY OF GENERAL PURPOSE CARGO CONTAINER" at** NCAOR, GOA as per the specifications given in Annexure I.

2) The technical and financial Bids should be submitted in two separate sealed covers, super scribing "**Part-I Technical Bid for "FABRICATION & SUPPLY OF GENERAL PURPOSE CARGO CONTAINER" Tender No., due date and "Part-II Financial Bid for "FABRICATION & SUPPLY OF GENERAL PURPOSE CARGO CONTAINER" Tender No., due date. Both the bids should be kept in a single cover by super scribing tender for "FABRICATION & SUPPLY OF GENERAL PURPOSE CARGO CONTAINER"** sealed and addressed to the Director, National Centre for Antarctic and Ocean Research, Headland-Sada, Vasco-da-Gama, Goa-403 804. **Offer sent through fax will not be accepted**.

3) Overwriting and corrections should be attested properly. The bid should be complete in all respects and should be duly signed. Incomplete and unsigned bids will not be considered at all.

4) All relevant technical literature pertain to items quoted **with full specifications** (Drawing, if any), information about the products quoted, including brochures if any should accompany the quotation.

5) A list of **reputed clients** to whom the firm has supplied similar items to be furnished along-with the quotation.

In the TECHNICAL BID, the Bidder should furnish the Name and address of the Purchasers placed orders on similar equipment with order No, date, Description and quantity, Date of Supply alongwith Contact person Telephone No, Fax No, and e mail address of Purchaser.

The Bidder should enclose copies of Purchase Orders only in the FINANCIAL BID.

6) Quotation should be **valid for a period of 90 days** from the date of tender opening and the period of delivery required should also be clearly indicated. The containers are required at NCAOR latest by 10.10.2015. If the supplier fails to deliver the goods within the time to be

agreed upon, for delayed deliveries and for delays in installation (wherever applicable) NCAOR reserves the right to **levy liquidated damages** at the rate of 0.5% per week or part their of upto maximum of 5%.

7) Warranty shall commence from the date of acceptance of the containers supplied under the Purchase Order / Contract. The **warranty period** should be indicated.

8) Technical Bid should contain EMD.

Bidders shall submit **EMD** along with their tender, **either By DD** drawn in favour of NCAOR, for a sum of ` 35,000/- (Rupees Thirty Five Thousand only) **or in the form of a bank guarantee** for a sum of ` 35,000/- (Rupees Thirty Five Thousand only) from any reputed bank (scheduled bank) initially valid for 180 days from the date of closing of the tender as per the proforma enclosed. This bank Guarantee in original shall be submitted along with the technical bid only.

Tender without EMD in the envelope containing technical bid shall be summarily rejected. The EMD of unsuccessful bidders shall be returned within 15 days of the award of contract.

The earnest money will be liable to be forfeited, if the tenderer withdraws or amends impairs or derogates from the tender if any respect within the period of validity of his tender.

9) Please **specify the Make/Brand** and Name of the Manufacturer with address, country of origin and currency in which rates are quoted.

10) The Purchaser requires that the bidders suppliers and contractors observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the following are defined:

“Corrupt practice” means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution:

“fradulent practice” means a misrepresentation or omission of facts in order to influence a procurement process or the execution of contract;

"collusive practice" means a scheme or arrangement between two or more bidders, with or without the knowledge of purchaser, designed to establish bid prices at artificial, noncompetitive levels; and

"coercive practice: means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of contract;

The purchaser will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the contract in question; The Decision of Director, NCAOR shall be final and binding.

11) Bidders that doesn't manufacture the goods it offers to supply shall submit Manufacturer's Authorization form on the letterhead of the Manufacturer duly signed and stamped by a person with the proper authority to sign documents that are binding on the Manufacturer as per the following format should be submitted failing which the quotation will not be considered.

To
The Director
NCAOR
GOA

Sub: Manufacturers' Authorization form against Tender No:_____

We_____(Name of the Manufacturer) who are official manufacturers of _____(Type of goods manufactured) having factories at _____(full address of Manufacturer's factories) do hereby authorize _____(Name of the Bidder) to submit a bid against your Tender No._____for the _____Goods manufactured by us and to subsequently negotiate and sign the contract.

We hereby extend our full guarantee and warranty with respect to the Goods offered by the above firm

Manufacturer's Name:
Signature of Authorized
representative of the Manufacturer:

Duly authorized to sign this Authorization on behalf of : _____(Name of the Bidder)
Date:

In case the bidder not doing business within India, shall furnish the certificate to the effect that the bidder is or will be represented by an agent in India equipped and able to carry out the supply, maintenance, repair obligations etc., during the warranty and post warranty period or ensure a mechanism at place for carrying out the supply, maintenance, repair obligations etc., during the warranty and post- warranty period.

12) Compliance Statement: Container point-by-point comparison / compliance statement with **technical specification** indicated in the tender, should be enclosed along with your tender as well as any other extra features of the equipment be shown separately therein and also **compliance statement for all commercial terms** of the tender document.

13) NCAOR is not entitled to issue form **"C/D**". No sales Tax or any other Tax shall be payable by us unless payment of the same is specifically mentioned by the suppliers in their bids and same is legally leviable.

14) NCAOR is **exempted from the payment of Excise Duty / Custom Duty** as per Govt. notification. Hence, the rates should be split into basic cost and Excise Duty if any.

15) Technical Bid should contain all details and specifications of the container offered, delivery schedule, warranty , payment term, installation, post-warranty, user-list, service support **WITHOUT PRICE** and **Financial bid should contain** details of the price(s) of the item(s) quoted in the technical bid. The technical bid should not contain any references to the pricing.

In case the technical bid contains any direct or indirect reference to quoted price the bid is liable to be rejected.

16) Please submit your quote on F.O.R. destination basis. However tender should contain item-wise prices including total ex-works price approx. cost of Transportation charges for delivery up to Goa, India.

17) A Committee constituted by the Director, NCAOR for the purpose reserves the right to open the bids. Only technical bids will be opened on the date and time mentioned in the tender document. The financial bids of those tenderers whose technical bids are found to be meeting our specifications only will be opened in their presence at date and time to be notified later.

18) A technical Committee constituted by the Director will assess the product supplied/installed for their quality and their conformity to the specifications provided by the firm in their quotations. Any item(s) identified by the Committee to be not as per the specifications or are found to be of inferior quality will be rejected, and the bills towards the supply will not be processed for payment till proper replacements are provided.

19) **No advance payment** will be made. Payment shall be made within 30 days from the date of receipt, acceptance of the containers. The payment will be authorized after submission of a Bank Guarantee for 10% value of the order towards warranty guarantee. The **performance Bank Guarantee** should be furnished within 15 days from the date of placement of order from a reputed bank (scheduled bank in India **or** foreign bank operating in India) valid till 60 days after the warranty period.

20) The submission of tender shall be deemed to be an admission on the part of the tenderer, had fully acquainted with the specifications, drawings etc. and no claim other than what stated in the tender shall be paid in the event of award of Purchase Order.

21) Acceptance of this tender form and submission of the quote within the stipulated time would be treated as:

a) The tenderer has understood all requirements as described in our Tender document.

b) Acceptance to provide/establish all the facilities mentioned in our tender without any price escalation, if the tenderer finds it necessary to add any hardware or software or any other materials during implementation.

c) Agreeing to execute order to the satisfaction of NCAOR or its authorized representatives within the stipulated time.

22) NCAOR will not be liable for any obligation until such time NCAOR has communicated to the successful bidder of its decision to release the Purchase Order.

23) NCAOR will not be responsible for any postal delays.

24) Bidders shall note that NCAOR will not entertain any correspondence or queries on the status of the offers received against this Tender Invitation.

25) Tenders from Manufacturers/Suppliers/Tenderers whose performance was not satisfactory in respect of quality of supplies and delivery schedules in any organizations, are liable for rejection. The tenders that do not comply with the above criteria and other terms & conditions are liable for rejection.

26) The Director, NCAOR does not bind to accept the lowest quotation and reserves the right to himself, to reject or partly accept any or all the quotations received without assigning any reason.

27) All disputes arising in connection with executing the purchase order will be subject to the Jurisdiction of the Courts in Goa only.

COMMERCIAL COMPLIANCE STATEMENT FOR "FABRICATION & SUPPLY OF GENERAL PURPOSE CARGO CONTAINER"

Sr. No.	COMMERCIAL SPECIFICATION FOR "FABRICATION & SUPPLY OF GENERAL PURPOSE CARGO CONTAINER.	COMPLIED/ NOT COMPLIED	EXTRA FEATURES
1	A list of **reputed clients** to whom the firm has supplied similar items to be furnished along-with the quotation.		
2	In the TECHNICAL BID, the Bidder should furnish the Name and address of the Purchasers placed orders on similar equipment with order No, date, Description and quantity, Date of Supply alongwith Contact person Telephone No, Fax No, and e mail address of Purchaser.		
3	The Bidder should enclose copies of Purchase Orders only in the FINANCIAL BID.		
4	SSI, NSIC Registration Certificate		
5	Quotation should be **valid for a period of 90 days** from the date of tender opening and the period of delivery required should also be clearly indicated.		
6	Warranty shall commence from the date of acceptance of the containers supplied under the Purchase Order / Contract.		
7	**Bidders** shall submit **EMD** along with their tender, **either By DD** drawn in favour of NCAOR, for a sum of ` 35,000/- (Rupees Thirty Five Thousand only) **or in the form of a bank guarantee** for a sum of ` 35,000/- (Rupees Thirty Five Thousand only) from any reputed bank (scheduled bank)		
8	**Tender without EMD in the envelope containing technical bid shall be summarily rejected**. The EMD of unsuccessful bidders shall be returned within 30 days of the award of contract.		
9	Please **specify the Make/Brand** and Name of the Manufacturer with address, country of origin and currency in which rates are quoted.		
10	**Compliance Statement:** Equipments point-by-point comparison/compliance statement with **technical specification** indicated in the tender, should be enclosed along with your tender as well as any other extra features of the equipment be shown separately therein and also **compliance statement for all commercial terms** of the tender document.		
11	NCAOR is not entitled to issue form **"C/D"**. No Sales Tax or any other Tax shall be payable by us unless payment of the same is specifically mentioned by the suppliers in their bids and same is legally leviable.		
12	To avail duty concessions i.e. **Excise Duty** as per Govt. notification 10/97 & **Custom Duty** as per Govt. notification 51/96, NCAOR will provide exemption certificates. Hence, the rates should be split into basic cost and Excise Duty if any.		
13	**Technical Bid should contain** all details and specifications of the equipment offered, delivery schedule, warranty, payment term, installation, training, post-warranty, user-list, service support **WITHOUT PRICE** and **Financial bid should contain** details of the price(s) of the item(s) quoted in the technical bid. The Technical bid should not contain any references to the pricing.		
14	**In case the technical bid contains any direct or indirect reference to quoted price the bid is liable to be rejected.**		
15	F.O.R GOA price should be indicated. However tender should contain item-wise prices including total ex-works price, Excise Duty, VAT/Taxes, Charges for Inland Transportation, Insurance and other local services required for the delivering the goods on F.O.R GOA.		
16	A Committee constituted by the Director, NCAOR for the purpose reserves the right to open the bids. Only technical bids will be opened on the date and time mentioned in the tender document. The financial bids of those tenderers whose technical bids are found to be meeting our specifications only will be opened in their presence at date and time to be notified later.		
17	A technical Committee constituted by the Director will assess the product supplied/installed for their quality and their conformity to the specifications		

	provided by the firm in their quotations. Any item(s) identified by the Committee to be not as per the specifications or are found to be of inferior quality will be rejected, and the bills towards the supply will not be processed for payment till proper replacements are provided.		
18	**No advance payment** will be made. Payment for indigenous stores shall be made within 30 days from the date of receipt, acceptance and satisfactory installation of equipment.		
19	The **performance Bank Guarantee** should be furnished within 15 days from the date of placement of order from a reputed bank (scheduled bank in India **or** foreign bank operating in India) valid till 60 days after the warranty period.		
20	**The submission of tender** shall be deemed to be an admission on the part of the tenderer, had fully acquainted with the specifications, drawings etc. and no claim other than what stated in the tender shall be paid in the event of award of Purchase Order.		
21	**Acceptance of this tender** form and submission of the quote within the stipulated time would be treated as: • The tenderer has understood all requirements as described in our Tender document. • Acceptance to provide/establish all the facilities mentioned in our tender without any price escalation, if the tenderer finds it necessary to add any hardware or software or any other materials during implementation. • Agreeing to execute order to the satisfaction of NCAOR or its authorized representatives within the stipulated time.		

QUESTIONNAIRE

a. **Name of the Manufacturer / Tenderer**

b. **Full postal address with Telephone, Telefax, Email**

c. **Please specify whether Public Limited, Company, Private Organization or Partnership Firm**

d. **Nature of the Business**

e. **Date of Establishment**

f. **Present Turnover**

g. **Permanent Income Tax Ref. No.**

h. **C.S.T. / S.T. NO.**

i. **Address & Telephone Nos. Of your branch office in GOA (please specify whether Distributing/Servicing/Marketing the products)**

j. **Technical Compliance statement.**

k. **Commercial Compliance statement.**

l. **Reference of reputed Customers**

m. **Details of the highest order executed and value thereof**

n. **Authorization from Manufacturer/Supplier attached**

o. **Tender fee submitted/enclosed.**

p. **E.M.D. attached with BID.**

q. **Infrastructure facilities required for installation & commissioning attached**

r. **Technical Specifications/Literature/Brochure attached**

s. **Tender Acceptance**

TENDER ACCEPTANCE UNDERTAKING

To

The Director,
NCAOR, Headland Sada
Vasco - Goa

Having examined the tender document for **FABRICATION & SUPPLY OF GENERAL PURPOSE CARGO CONTAINER 20' X 8' X 8'6" ISO 1CC TYPE** we the undersigned, hereby offer to supply the equipment in conformity with all specifications and conditions set out in the tender document.

We enclosed all the relevant documents as per the tender.

We understand that you are not bound to accept the lowest or any tender received.

Date :

(Signature of Bidder)

Name :

Designation :

Seal

BANK GUARANTEE FORMAT FOR FURNISHING EMD

To

NATIONAL CENTRE FOR ANTARCTIC & OCEAN RESEARCH
Headland Sada, Vasco-da-Gama, GOA 403 804, INDIA

Whereas _____
(Hereinafter called the "tenderer"
has submitted their offer dated _____
for the supply of _____
(Herein after called the "tender"
WE_____ of having our registered office
At _____ are bound unto the NATIONAL
(Hereinafter called the Bank)
CENTRE FOR ANTARCTIC & OCEAN RESEARCH, Ministry of Earth Sciences, Govt. Of India having its office at Headland Sada, Vasco Goa 403 804, India (herein after called NCAOR which expression shall unless repugnant to the context or meaning thereof include all its successors, administrators, executors and assigns) in the sum of _____ for which payment will and truly to be made to. NCAOR, the Bank binds itself, its successors and assigns by these presents. Sealed with the common seal of the said Bank this _____day of _____2015.

THE CONDITIONS OF THIS OBLIGATION ARE:

1) If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.

2) If the tenderer having been notified of the acceptance of his tender by NCAOR during the period of its validity.

2.a) If the tenderer fails to furnish the Performance security for the due performance of the contract.

2.b) Fails or refuses to execute the contract

We undertake to pay NCAOR up to the above amount upon receipt of its first written demand, without NCAOR having to substantiate its demand, provided that in its demand the NCAOR will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

This guarantee is valid until the _____ day of _____2015.

Signature of the bank

NATIONAL CENTRE FOR ANTARCTIC & OCEAN RESEARCH
(*Ministry of Earth Sciences, Govt. Of India*)
Headland Sada, Vasco-da-Gama GOA 403 804, INDIA
Tel: 91- (0) 832 2525571 Telefax: 91- (0) 832 2525573
Email: warlu62@ncaor.gov.in Website: www.ncaor.gov.in

PUBLIC TENDER

Director, National Centre for Antarctic & Ocean Research (NCAOR) invites sealed tenders in two-parts (part I – Technical bid & part II Financial bid) super scribing Tender No. Item and due date from well established/ reputed manufacturers / authorized and bonafide vendors for supply of the following:-

Sl. No	Tender No.	Item Description	Qty.	Cost of Tender Doc.		EMD	
				Rs.	US$	Rs.	US$
1	NCAOR/AES-11297/PT-07	SUPPLY OF LIVING MODULE AND UTILITY MODULE	4 SETS	2,000.00	50.00	1,00,000.00	1700.00
2	NCAOR/AES-11301/PT-08	SUPPLY OF HALF BIN (6 M HALF HEIGHT CONTAINER)	8 NOS	2,000.00	50.00	1,00,000.00	1700.00
3	NCAOR/AES-11298/PT-09	PROCUREMENT OF INVENTORY TRACKING & MANAGEMENT TOOL FOR ANTARCTIC EXPEDITION, NCAOR	08 Nos	500.00	__	15,000.00	__
4	NCAOR/AES-11304/PT-10	FABRICATION & SUPPLY OF GENERAL PURPOSE CARGO CONTAINER 20' X 8' X 8'6" ISO 1CC TYPE	04 Nos	1000.00	__	35,000.00	__

Last date for issue of tender documents : **27.07.2015**
Last date for submission of quotation : **28.07.2015**
The details of tender documents are also available in our website http://www.ncaor.gov.in and Central Public Procurement Portal http://eprocure.gov.in. Interested suppliers may download the details and submit the quotation on or before the due date along with tender fee.
The quotation without tender fee will not be considered.
Tender forms can be obtained from the Procurement section of NCAOR on all working days either by post or in person between 1000 – 1600 hours on payment of tender fees in the form of crossed Demand Draft payable at Vasco-da-gama only, from a Nationalized bank drawn in favor of NCAOR along with separate requisition indicating tender number and item. Tender forms can be obtained by speed post by remitting Rs. 50/- by Indian bidders and US$ 15.00 by Foreign bidders in addition to the cost of tender documents.
The Director, NCAOR is not responsible for any transitional/postal delays.
The quotations will be **opened on 29.07.2015** in the presence of tenderers or their authorized representatives.
The Director, NCAOR reserves the right to accept or reject any quotation in full or part thereof without assigning any reason.

Sd/-
For & on behalf of NCAOR