



Empowered lives.  
Resilient nations.

## INVITATION TO BID

### Procurement of Ice Plants and Cold Room Facilities

(ITB-GLED-18-2015)

UNDP is the UN's global development network, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. We are on the ground in 166 countries, working with them on their own solutions to global and national development challenges. The Governance for Local Economic Development Programme (GLED) is UNDP Sri Lanka's new flagship programme for strengthening governance capacities at District, Divisional and Provincial levels and improving socio-economic opportunities in vulnerable regions in the country. GLED will focus on increasing the capacity of sub-national level governance institutions, civil society, the private sector and communities in order to foster access to enhanced public sector service delivery, socio-economic development, and social cohesion across the identified lagging regions, while securing the transition from recovery to development in the North and East. The programme will help communities increase their production and "value-added" capacities and make use of productive infrastructure, new technologies and knowledge. Strengthened engagement with the private sector will increase the sustainability of livelihoods initiatives. Given the sub-national variations in Sri Lanka's human development index, GLED offers a comprehensive and targeted response.

To this effect, the United Nations Development Programme in Sri Lanka invites eligible National and or International bidders specializing in the supply, installation and commissioning of Ice Plants and Cold Room facilities to bid for the below requirement. The requirements, respective quantities and installation locations are as follows:

Lot Number	Description of Requirements	Ice Plant Capacity	Minimum ICTAD in Refrigeration	Installation Location
Lot 1	Ice Plant and Cold Room Facilities	1.5 Tons/day or 2.0 Tons/day	EM-02	Buttala, Moneragala
Lot 2	Ice Plant and Cold Room Facilities	2.0 Tons/day	EM-02	Vaharai, Batticaloa
Lot 3	Ice Plant and Cold Room Facilities	2.0 Tons/day	EM-02	Kaluvankerni, Batticaloa

Eligible bidders are encouraged to bid for each individual LOT, multiple LOTs or all LOTs. Those bidders, who wish to submit bids to multiple or all LOTs, must show proof of resources, financial capacity through the required level of ICTAD grade in refrigeration and similar projects successfully undertaken within the last 36 months for the cumulative bid price. The UNDP will **NOT** accept partial bids within each LOT and such bids will be rejected. Given the multiple and varied geographical locations of each project and budget availability, the UNDP reserves the right to award contracts to either individual, multiple or all LOTs per bidder. All international bidders must show proof of established local agents already in commercial operation and who can provide the necessary post sales warranties, maintenance, repairs and support at the district level. In the event such support is not available locally at the time of bidding, the successful bidder must establish such support networks via established local agents prior to award of contract by UNDP.

The Technical Drawings, Bill of Quantity (BOQ), Scope of Works (SOW), Specifications and all solicitation bid documents can be downloaded free of charge from [www.lk.undp.org](http://www.lk.undp.org) (operations > procurement > procurement notices) from 22<sup>nd</sup> November 2015 to 18<sup>th</sup> December 2015. A **pre bid meeting** will be held at the below address on **3<sup>rd</sup> December 2015 at 11.00am** and interested bidders are encouraged to participate.

All bids must be clearly marked with the respective **“LOT Number - ITB-GLED-18-2015”** on the top left corner of the envelope. Those who wish to bid more than one LOT have to submit the bids in separate envelopes by clearly marking the respective **“LOT Number -ITB-GLED-18-2015”** enclosed in one outer envelope.

The *deadline* for submission of the bids is **2.00pm 18<sup>th</sup> December 2015** Sri Lanka time and all bids must be sealed and delivered to the address below. *All late* offers will be rejected and returned to the bidder unopened. The bids will be opened immediately after the deadline and bidders are encouraged to participate in the public bid opening scheduled for 2.30pm 18<sup>th</sup> December 2015.

**Head of Procurement/Administration**

United Nations Development Programme (UNDP)  
202-204 Bauddhaloka Mawatha  
Colombo 07, Sri Lanka.

UNDP reserves the right to accept or reject any bid. The procurement process will be governed by the rules and regulations of the United Nations Development Programme (UNDP).



# INVITATION TO BID

**Procurement of Ice Plants and Cold Room Facilities**

*ITB-GLED-18-2015*

**Sri Lanka**



**United Nations Development Programme**

November, 2015

## Section 1. Letter of Invitation

Colombo, Sri Lanka  
November 22, 2015

### Procurement of Ice Plants and Cold Room Facilities

Dear Mr./Ms.: Bidder,

The United Nations Development Programme (UNDP) hereby invites you to submit a Bid to this Invitation to Bid (ITB) for the above-referenced subject.

This ITB includes the following documents:

- Section 1 – This Letter of Invitation
- Section 2 – Instructions to Bidders (including Data Sheet)
- Section 3 – Schedule of Requirements and Technical Specifications
- Section 4 – Bid Submission Form
- Section 5 – Documents Establishing the Eligibility and Qualifications of the Bidder
- Section 6 – Technical Bid Form
- Section 7 – Price Schedule Form
- Section 8 – Form for Performance Security
- Section 9 – Form for Advanced Payment Guarantee
- Section 10 – Contract to be Signed, including General Terms and Conditions

Your offer, comprising of a Technical Bid and Price Schedule, together in a sealed envelope, should be submitted in accordance with Section 2.

You are kindly requested to submit an acknowledgment letter to UNDP to the following address:

United Nations Development Programme  
**202-204 Bauddhaloka Mawatha, Colombo 07, Sri Lanka**  
Attention; Mr. Rohana Dissanayake email; [procurement.lk@undp.org](mailto:procurement.lk@undp.org)

The letter should be received by UNDP no later than **04th December 2015**. The same letter should advise whether your company intends to submit a Bid. If that is not the case, UNDP would appreciate your indicating the reason, for our records.

If you have received this ITB through a direct invitation by UNDP, transferring this invitation to another firm requires notifying UNDP accordingly.

Should you require any clarification, kindly communicate with the contact person identified in the

attached Data Sheet as the focal point for queries on this ITB.

UNDP looks forward to receiving your Bid and thanks you in advance for your interest in UNDP procurement opportunities.

Yours sincerely,

**Rohana Dissanayake, Head of Procurement & Administration**

## Section 2: Instruction to Bidders<sup>1</sup>

### Definitions

- a) *“Bid”* refers to the Bidder’s response to the Invitation to Bid, including the Bid Submission Form, Technical Bid and Price Schedule and all other documentation attached thereto as required by the ITB.
- b) *“Bidder”* refers to any legal entity that may submit, or has submitted, a Bid for the supply of goods and provision of related services requested by UNDP.
- c) *“Contract”* refers to the legal instrument that will be signed by and between the UNDP and the successful Bidder, all the attached documents thereto, including the General Terms and Conditions (GTC) and the Appendices.
- d) *“Country”* refers to the country indicated in the Data Sheet.
- e) *“Data Sheet”* refers to such part of the Instructions to Bidders used to reflect conditions of the tendering process that are specific for the requirements of the ITB.
- f) *“Day”* refers to calendar day.
- g) *“Goods”* refer to any tangible product, commodity, article, material, wares, equipment, assets or merchandise that UNDP requires under this ITB.
- h) *“Government”* refers to the Government of the country where the goods and related services provided/rendered specified under the Contract will be delivered or undertaken.
- i) *“Instructions to Bidders”* refers to the complete set of documents which provides Bidders with all information needed and procedures to be followed in the course of preparing their Bid
- j) *“ITB”* refers to the Invitation to Bid consisting of instructions and references prepared by UNDP for purposes of selecting the best supplier or service provider to fulfil the requirement indicated in the Schedule of Requirements and Technical Specifications.
- k) *“LOI”* (Section 1 of the ITB) refers to the Letter of Invitation sent by UNDP to Bidders.
- l) *“Material Deviation”* refers to any contents or characteristics of the bid that is significantly different from an essential aspect or requirement of the ITB, and (i) substantially alters the scope and quality of the requirements; (ii) limits the rights of UNDP and/or the obligations of the offeror; and (iii) adversely impacts the fairness and principles of the procurement process, such as those that compromise the competitive position of other offerors.

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<sup>1</sup> Note: this Section 2 - Instructions to Bidders shall not be modified in any way. Any necessary changes to address specific country and project information shall be introduced only through the Data Sheet.

- m) *“Schedule of Requirements and Technical Specifications”* refers to the document included in this ITB as Section 3 which lists the goods required by UNDP, their specifications, the related services, activities, tasks to be performed, and other information pertinent to UNDP’s receipt and acceptance of the goods.
- n) *“Services”* refers to the entire scope of tasks related or ancillary to the completion or delivery of the goods required by UNDP under the ITB.
- o) *“Supplemental Information to the ITB”* refers to a written communication issued by UNDP to prospective Bidders containing clarifications, responses to queries received from prospective Bidders, or changes to be made in the ITB, at any time after the release of the ITB but before the deadline for the submission of Bid.

## A. GENERAL

1. UNDP hereby solicits Bids as a response to this Invitation to Bid (ITB). Bidders must strictly adhere to all the requirements of this ITB. No changes, substitutions or other alterations to the rules and provisions stipulated in this ITB may be made or assumed unless it is instructed or approved in writing by UNDP in the form of Supplemental Information to the ITB.
2. Submission of a Bid shall be deemed as an acknowledgement by the Bidder that all obligations stipulated by this ITB will be met and, unless specified otherwise, the Bidder has read, understood and agreed to all the instructions in this ITB.
3. Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of any Bid by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this ITB.
4. UNDP implements a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical practices, and obstruction. UNDP is committed to preventing, identifying and addressing all acts of fraud and corrupt practices against UNDP as well as third parties involved in UNDP activities. (See [http://www.undp.org/about/transparencydocs/UNDP\\_Anti\\_Fraud\\_Policy\\_English\\_FINAL\\_june\\_2011.pdf](http://www.undp.org/about/transparencydocs/UNDP_Anti_Fraud_Policy_English_FINAL_june_2011.pdf) and [http://www.undp.org/content/undp/en/home/operations/procurement/procurement\\_protest/](http://www.undp.org/content/undp/en/home/operations/procurement/procurement_protest/) for full description of the policies)
5. In responding to this ITB, UNDP requires all Bidders to conduct themselves in a professional, objective and impartial manner, and they must at all times hold UNDP’s interests paramount. Bidders must strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. All Bidders found to have a conflict of interest shall be disqualified. Without limitation on the generality of the above, Bidders, and any of their affiliates, shall be considered to have a conflict of interest with one or more parties in this solicitation process, if they:
  - 5.1 Are, or have been associated in the past, with a firm or any of its affiliates which have been engaged UNDP to provide services for the preparation of the design, Schedule of

- Requirements and Technical Specifications, cost analysis/estimation, and other documents to be used for the procurement of the goods and related services in this selection process;
- 5.2 Were involved in the preparation and/or design of the programme/project related to the goods and related services requested under this ITB; or
  - 5.3 Are found to be in conflict for any other reason, as may be established by, or at the discretion of, UNDP.

In the event of any uncertainty in the interpretation of what is potentially a conflict of interest, Bidders must disclose the condition to UNDP and seek UNDP's confirmation on whether or not such conflict exists.

6. Similarly, the following must be disclosed in the Bid:

- 6.1 Bidders who are owners, part-owners, officers, directors, controlling shareholders, or key personnel who are family of UNDP staff involved in the procurement functions and/or the Government of the country or any Implementing Partner receiving the goods and related services under this ITB; and
- 6.4 Others that could potentially lead to actual or perceived conflict of interest, collusion or unfair competition practices.

Failure of such disclosure may result in the rejection of the Bid.

- 7. The eligibility of Bidders that are wholly or partly owned by the Government shall be subject to UNDP's further evaluation and review of various factors such as being registered as an independent entity, the extent of Government ownership/share, receipt of subsidies, mandate, access to information in relation to this ITB, and others that may lead to undue advantage against other Bidders, and the eventual rejection of the Bid.
- 8. All Bidders must adhere to the UNDP Supplier Code of Conduct, which may be found at this link: <http://web.ng.undp.org/procurement/undp-supplier-code-of-conduct.pdf>

## **B. CONTENTS OF BID**

### **9. Sections of Bid**

Bidders are required to complete, sign and submit the following documents:

- 9.1 Bid Submission Cover Letter Form (see ITB Section 4);
- 9.2 Documents Establishing the Eligibility and Qualifications of the Bidder (see ITB Section 5);
- 9.3 Technical Bid (see prescribed form in ITB Section 6);
- 9.4 Price Schedule (see prescribed form in ITB Section 7);
- 9.5 Bid Security, if applicable (if required and as stated in the DS nos. 9-11, see prescribed Form in ITB Section 8);
- 9.6 Any attachments and/or appendices to the Bid (including all those specified under the **Data Sheet**)



## **10. Clarification of Bid**

- 10.1 Bidders may request clarification of any of the ITB documents no later than the number of days indicated in the **Data Sheet** (DS no. 16) prior to the Bid submission date. Any request for clarification must be sent in writing via courier or through electronic means to the UNDP address indicated in the **Data Sheet** (DS no. 17). UNDP will respond in writing, transmitted by electronic means and will transmit copies of the response (including an explanation of the query but without identifying the source of inquiry) to all Bidders who have provided confirmation of their intention to submit a Bid.
- 10.2 UNDP shall endeavor to provide such responses to clarifications in an expeditious manner, but any delay in such response shall not cause an obligation on the part of UNDP to extend the submission date of the Bid, unless UNDP deems that such an extension is justified and necessary.

## **11. Amendment of Bid**

- 11.1 At any time prior to the deadline for submission of Bid, UNDP may for any reason, such as in response to a clarification requested by a Bidder, modify the ITB in the form of a Supplemental Information to the ITB. All prospective Bidders will be notified in writing of all changes/amendments and additional instructions through Supplemental Information to the ITB and through the method specified in the **Data Sheet** (DS No. 18).
- 11.2 In order to afford prospective Bidders reasonable time to consider the amendments in preparing their Bid, UNDP may, at its discretion, extend the deadline for submission of Bid, if the nature of the amendment to the ITB justifies such an extension.

## **C. PREPARATION OF BID**

### **12. Cost**

The Bidder shall bear any and all costs related to the preparation and/or submission of the Bid, regardless of whether its Bid was selected or not. UNDP shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the procurement process.

### **13. Language**

The Bid, as well as any and all related correspondence exchanged by the Bidder and UNDP, shall be written in the language (s) specified in the **Data Sheet** (DS No. 4). Any printed literature furnished by the Bidder written in a language other than the language indicated in the **Data Sheet**, must be accompanied by a translation in the preferred language indicated in the **Data Sheet**. For purposes of interpretation of the Bid, and in the event of discrepancy or inconsistency in meaning, the version translated into the preferred language shall govern. Upon conclusion of a contract, the language of the contract shall govern the relationship between the contractor and UNDP.

### **14. Bid Submission Form**

The Bidder shall submit the Bid Submission Form using the form provided in Section 4 of this ITB.

## 15. Technical Bid Format and Content

Unless otherwise stated in the **Data Sheet** (DS no. 28), the Bidder shall structure the Technical Bid as follows:

- 15.1 Expertise of Firm/Organization – this section should provide details regarding management structure of the organization, organizational capability/resources, and experience of organization/firm, the list of projects/contracts (both completed and on-going, both domestic and international) which are related or similar in nature to the requirements of the ITB, manufacturing capacity of plant if Bidder is a manufacturer, authorization from the manufacturer of the goods if Bidder is not a manufacturer, and proof of financial stability and adequacy of resources to complete the delivery of goods and provision of related services required by the ITB (see ITB Clause 18 and DS No. 26 for further details). The same shall apply to any other entity participating in the ITB as a Joint Venture or Consortium.
- 15.2 Technical Specifications and Implementation Plan – this section should demonstrate the Bidder’s response to the Schedule of Requirements and Technical Specifications by identifying the specific components proposed; how each of the requirements shall be met point by point; providing a detailed specification and description of the goods required, plans and drawings where needed; the essential performance characteristics, identifying the works/portions of the work that will be subcontracted; a list of the major subcontractors, and demonstrating how the bid meets or exceeds the requirements, while ensuring appropriateness of the bid to the local conditions and the rest of the project operating environment during the entire life of the goods provided. Details of technical bid must be laid out and supported by an Implementation Timetable, including Transportation and Delivery Schedule where needed, that is within the duration of the contract as specified in the **Data Sheet** (DS noS. 29 and 30).

Bidders must be fully aware that the goods and related services that UNDP require may be transferred, immediately or eventually, by UNDP to the Government partners, or to an entity nominated by the latter, in accordance with UNDP’s policies and procedures. All bidders are therefore required to submit the following in their bids:

- a) A statement of whether any import or export licences are required in respect of the goods to be purchased or services to be rendered, including any restrictions in the country of origin, use or dual use nature of the goods or services, including any disposition to end users;
  - b) Confirmation that the Bidder has obtained license of this nature in the past, and have an expectation of obtaining all the necessary licenses, should their bid be rendered the most responsive; and
  - c) Complete documentation, information and declaration of any goods classified or may be classified as “Dangerous Goods”.
- 15.3 Management Structure and Key Personnel – This section should include the comprehensive curriculum vitae (CVs) of key personnel that will be assigned to support the implementation of the technical bid, clearly defining their roles and responsibilities. CVs should establish competence and demonstrate qualifications in areas relevant to the requirements of this ITB.

In complying with this section, the Bidder assures and confirms to UNDP that the personnel being nominated are available to fulfil the demands of the Contract during its stated full term. If any of the key personnel later becomes unavailable, except for unavoidable reasons such as death or medical incapacity, among other possibilities, UNDP reserves the right to render the Bid non-responsive. Any deliberate substitution of personnel arising from unavoidable reasons, including delay in the implementation of the project of programme through no fault of the Bidder, shall be made only with UNDP's acceptance of the justification for substitution, and UNDP's approval of the qualification of the replacement who shall be either of equal or superior credentials as the one being replaced.

15.4 Where the **Data Sheet** requires the submission of the Bid Security, the Bid Security shall be included along with the Technical Bid. The Bid Security may be forfeited by UNDP, and reject the Bid, in the event of any or any combination of the following conditions:

- a) If the Bidder withdraws its offer during the period of the Bid Validity specified in the **Data Sheet** (DS no. 11), or;
- b) If the Bid Security amount is found to be less than what is required by UNDP as indicated in the **Data Sheet** (DS no. 9), or;
- c) In the case the successful Bidder fails:
  - i. to sign the Contract after UNDP has awarded it;
  - ii. to comply with UNDP's variation of requirement, as per ITB Clause 35; or
  - iii. to furnish Performance Security, insurances, or other documents that UNDP may require as a condition to rendering effective the contract that may be awarded to the Bidder.

## 16. Price Schedule

The Price Schedule shall be prepared using the attached standard form (Section 7). It shall list all major cost components associated with the goods and related services, and the detailed breakdown of such costs. All goods and services described in the Technical Bid must be priced separately on a one-to-one correspondence. Any output and activities described in the Technical Bid but not priced in the Price Schedule, shall be assumed to be included in the prices of the items or activities, as well as in the final total price of the bid.

## 17. Currencies

All prices shall be quoted in the currency indicated in the **Data Sheet** (DS no. 15). However, where Bids are quoted in different currencies, for the purposes of comparison of all Bid:

- 17.1 UNDP will convert the currency quoted in the Bid into the UNDP preferred currency, in accordance with the prevailing UN operational rate of exchange on the last day of submission of Bid; and
- 17.2 In the event that the Bid found to be the most responsive to the ITB requirement is quoted in another currency different from the preferred currency as per **Data Sheet** (DS no. 15), then UNDP shall reserve the right to award the contract in the currency of UNDP's

preference, using the conversion method specified above.

## **18. Documents Establishing the Eligibility and Qualifications of the Bidder**

18.1 The Bidder shall furnish documentary evidence of its status as an eligible and qualified vendor, using the forms provided under Section 5, Bidder Information Forms. In order to award a contract to a Bidder, its qualifications must be documented to UNDP's satisfactions. These include, but are not limited to the following:

- a) That, in the case of a Bidder offering to supply goods under the Contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the goods' manufacturer or producer to supply the goods in the country of final destination;
- b) That the Bidder has the financial, technical, and production capability necessary to perform the Contract; and
- c) That, to the best of the Bidder's knowledge, it is not included in the UN 1267 List or the UN Ineligibility List, nor in any and all of UNDP's list of suspended and removed vendors.

18.2 Bids submitted by two (2) or more Bidders shall all be rejected by UNDP if they are found to have any of the following:

- a) they have at least one controlling partner, director or shareholder in common; or
- b) any one of them receive or have received any direct or indirect subsidy from the other/s; or
- c) they have the same legal representative for purposes of this ITB; or
- d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Bid of, another Bidder regarding this ITB process;
- e) they are subcontractors to each other's bid, or a subcontractor to one bid also submits another Bid under its name as lead Bidder; or
- f) an expert proposed to be in the bid of one Bidder participates in more than one Bid received for this ITB process. This condition does not apply to subcontractors being included in more than one Bid.

## **19. Joint Venture, Consortium or Association**

If the Bidder is a group of legal entities that will form or have formed a joint venture, consortium or association at the time of the submission of the Bid, they shall confirm in their Bid that : (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the joint venture jointly and severally, and this shall be duly evidenced by a duly notarized Agreement among the legal entities, which shall be submitted along with the Bid; and (ii) if they are awarded the contract, the contract shall be entered into, by and between UNDP and the designated lead entity, who shall be acting for and on behalf of all entities that comprise the joint venture.

After the bid has been submitted to UNDP, the lead entity identified to represent the joint venture shall not be altered without the prior written consent of UNDP. Furthermore, neither the lead

entity nor the member entities of the joint venture can:

- a) Submit another Bid, either in its own capacity; nor
- b) As a lead entity or a member entity for another joint venture submitting another Bid.

The description of the organization of the joint venture/consortium/association must clearly define the expected role of each of the entity in the joint venture in delivering the requirements of the ITB, both in the bid and in the Joint Venture Agreement. All entities that comprise the joint venture shall be subject to the eligibility and qualification assessment by UNDP.

Where a joint venture is presenting its track record and experience in a similar undertaking as those required in the ITB, it should present such information in the following manner:

- a) Those that were undertaken together by the joint venture; and
- b) Those that were undertaken by the individual entities of the joint venture expected to be involved in the performance of the services defined in the ITB.

Previous contracts completed by individual experts working privately but who are permanently or were temporarily associated with any of the member firms cannot be claimed as the experience of the joint venture or those of its members, but should only be claimed by the individual experts themselves in their presentation of their individual credentials.

If the Bid of a joint venture is determined by UNDP as the most responsive Bid that offers the best value for money, UNDP shall award the contract to the joint venture, in the name of its designated lead entity, who shall sign the contract for and on behalf of all the member entities.

## **20. Alternative Bid**

Unless otherwise specified in the **Data Sheet** (DS nos. 5 and 6), alternative bid shall not be considered. Where the conditions for its acceptance are met, or justifications are clearly established, UNDP reserves the right to award a contract based on an alternative bid.

## **21. Validity Period**

21.1 Bid shall remain valid for the period specified in the **Data Sheet** (DS no. 8), commencing on the submission deadline date also indicated in the **Data Sheet** (DS no. 21). A Bid valid for a shorter period shall be immediately rejected by UNDP and rendered non-responsive.

21.2 In exceptional circumstances, prior to the expiration of the Bid validity period, UNDP may request Bidders to extend the period of validity of their Bid. The request and the responses shall be made in writing, and shall be considered integral to the Bid.

## **22. Bidder's Conference**

When appropriate, a Bidder's conference will be conducted at the date, time and location specified in the **Data Sheet** (DS no. 7). All Bidders are encouraged to attend. Non-attendance, however, shall not result in disqualification of an interested Bidder. Minutes of the Bidder's conference will be either posted on the UNDP website, or disseminated to the individual firms

who have registered or expressed interest with the contract, whether or not they attended the conference. No verbal statement made during the conference shall modify the terms and conditions of the ITB unless such statement is specifically written in the Minutes of the Conference, or issued/posted as an amendment in the form of a Supplemental Information to the ITB.

## D. SUBMISSION AND OPENING OF BID

### 23. Submission

23.1 The Technical Bid and the Price Schedule must be submitted together and sealed together in one and the same envelope, delivered either personally, by courier, or by electronic method of transmission. If submission will not be done by electronic means, the Technical Bid and Price Schedule must be sealed together in an envelope whose external side must :

- a) Bear the name of the Bidder;
- b) Be addressed to UNDP as specified in the **Data Sheet** (DS no.20); and
- c) Bear a warning not to open before the time and date for Bid opening as specified in the **Data Sheet** (DS no. 24).

If the envelope is not sealed nor labeled as required, the Bidder shall assume the responsibility for the misplacement or premature opening of Bid due to improper sealing and labeling by the Bidder.

23.2 Bidders must submit their Bid in the manner specified in the **Data Sheet** (DS nos. 22 and 23). When the Bid is expected to be in transit for more than 24 hours, the Bidder must ensure that sufficient lead time has been provided in order to comply with UNDP's deadline for submission. UNDP shall indicate for its record that the official date and time of receiving the Bid is the actual date and time when the said Bid has physically arrived at the UNDP premises indicated in the **Data Sheet** (DS no. 20).

23.3 Bidders submitting Bid by mail or by hand shall enclose the original and each copy of the Bid, in separate sealed envelopes, duly marking each of the envelopes as "Original Bid" and the others as "Copy of Bid". The two envelopes, consisting of original and copies, shall then be sealed in an outer envelope. The number of copies required shall be as specified in the **Data Sheet** (DS no. 19). In the event of any discrepancy between the contents of the "Original Bid" and the "Copy of Bid", the contents of the original shall govern. The original version of the Bid shall be signed or initialed by the Bidder or person(s) duly authorized to commit the Bidder on every page. The authorization shall be communicated through a document evidencing such authorization issued by the highest official of the firm, or a Power of Attorney, accompanying the Bid.

23.4 Bidders must be aware that the mere act of submission of a Bid, in and of itself, implies that the Bidder accepts the General Contract Terms and Conditions of UNDP as attached hereto as Section 11.

## **24. Deadline for Submission of Bid and Late Bids**

Bid must be received by UNDP at the address and no later than the date and time specified in the **Data Sheet** (DS no. 20 and 21).

UNDP shall not consider any Bid that arrives after the deadline for submission of Bid. Any Bid received by UNDP after the deadline for submission of Bid shall be declared late, rejected, and returned unopened to the Bidder.

## **25. Withdrawal, Substitution, and Modification of Bid**

- 25.1 Bidders are expected to have sole responsibility for taking steps to carefully examine in detail the full consistency of its Bid to the requirements of the ITB, keeping in mind that material deficiencies in providing information requested by UNDP, or lack clarity in the description of goods and related services to be provided, may result in the rejection of the Bid. The Bidder shall assume any responsibility regarding erroneous interpretations or conclusions made by the Bidder in the course of understanding the ITB out of the set of information furnished by UNDP.
- 25.2 A Bidder may withdraw, substitute or modify its Bid after it has been submitted by sending a written notice in accordance with ITB Clause 23, duly signed by an authorized representative, and shall include a copy of the authorization (or a Power of Attorney). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be received by UNDP prior to the deadline for submission and submitted in accordance with ITB Clause 23 (except that withdrawal notices do not require copies). The respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," or "MODIFICATION".
- 25.3 Bid requested to be withdrawn shall be returned unopened to the Bidders.
- 25.4 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bid and the expiration of the period of Bid validity specified by the Bidder on the Bid Submission Form or any extension thereof.

## **26. Bid Opening**

UNDP will open the Bid in the presence of an ad-hoc committee formed by UNDP of at least two (2) members. If electronic submission is permitted, any specific electronic Bid opening procedures shall be as specified in the **Data Sheet** (DS no. 23).

The Bidders' names, modifications, withdrawals, the condition of the envelope labels/seals, the number of folders/files and all other such other details as UNDP may consider appropriate, will be announced at the opening. No Bid shall be rejected at the opening stage, except for late submission, for which the Bid shall be returned unopened to the Bidder.

## 27. Confidentiality

Information relating to the examination, evaluation, and comparison of Bid, and the recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process, even after publication of the contract award.

Any effort by a Bidder to influence UNDP in the examination, evaluation and comparison of the Bid or contract award decisions may, at UNDP's decision, result in the rejection of its Bid.

In the event that a Bidder is unsuccessful, the Bidder may seek a meeting with UNDP for a debriefing. The purpose of the debriefing is discussing the strengths and weaknesses of the Bidder's submission, in order to assist the Bidder in improving the bid presented to UNDP. The content of other bid and how they compare to the Bidder's submission shall not be discussed.

## E. EVALUATION OF BID

### 28. Preliminary Examination of Bid

UNDP shall examine the Bid to determine whether they are complete with respect to minimum documentary requirements, whether the documents have been properly signed, whether or not the Bidder is in the UN Security Council 1267/1989 Committee's list of terrorists and terrorist financiers, and in UNDP's list of suspended and removed vendors, and whether the Bid are generally in order, among other indicators that may be used at this stage. UNDP may reject any Bid at this stage.

### 29. Evaluation of Bid

29.1 UNDP shall examine the Bid to confirm that all terms and conditions under the UNDP General Terms and Conditions and Special Conditions have been accepted by the Bidder without any deviation or reservation.

29.2 The evaluation team shall review and evaluate the Bids on the basis of their responsiveness to the Schedule of Requirements and Technical Specifications and other documentation provided, applying the procedure indicated in the **Data Sheet** (DS No. 25). Absolutely no changes may be made by UNDP in the criteria after all Bids have been received.

29.1 UNDP reserves the right to undertake a post-qualification exercise, aimed at determining, to its satisfaction the validity of the information provided by the Bidder. Such post-qualification shall be fully documented and, among those that may be listed in the **Data Sheet** (DS No.33), may include, but need not be limited to, all or any combination of the following :

- a) Verification of accuracy, correctness and authenticity of the information provided by the bidder on the legal, technical and financial documents submitted;
- b) Validation of extent of compliance to the ITB requirements and evaluation criteria based on what has so far been found by the evaluation team;
- c) Inquiry and reference checking with Government entities with jurisdiction on the bidder, or any other entity that may have done business with the bidder;



- d) Inquiry and reference checking with other previous clients on the quality of performance on on-going or previous contracts completed;
- e) Physical inspection of the bidder's plant, factory, branches or other places where business transpires, with or without notice to the bidder;
- f) Testing and sampling of completed goods similar to the requirements of UNDP, where available; and
- g) Other means that UNDP may deem appropriate, at any stage within the selection process, prior to awarding the contract.

### **30. Clarification of Bid**

To assist in the examination, evaluation and comparison of bids, UNDP may, at its discretion, ask any Bidder to clarify its Bid.

UNDP's request for clarification and the Bidder's response shall be in writing. Notwithstanding the written communication, no change in the prices or substance of the Bid shall be sought, offered, or permitted, except to provide clarification, and confirm the correction of any arithmetic errors discovered by UNDP in the evaluation of the Bid, in accordance with ITB Clause 35.

Any unsolicited clarification submitted by a Bidder in respect to its Bid, which is not a response to a request by UNDP, shall not be considered during the review and evaluation of the Bid.

### **31. Responsiveness of Bid**

UNDP's determination of a Bid's responsiveness will be based on the contents of the Bid itself.

A substantially responsive Bid is one that conforms to all the terms, conditions, and specifications of the ITB without material deviation, reservation, or omission.

If a Bid is not substantially responsive, it shall be rejected by UNDP and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.

### **32. Nonconformities, Reparable Errors and Omissions**

32.3 Provided that a Bid is substantially responsive, UNDP may waive any non-conformities or omissions in the Bid that, in the opinion of UNDP, do not constitute a material deviation.

32.4 Provided that a Bid is substantially responsive, UNDP may request the Bidder to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

32.5 Provided that the Bid is substantially responsive, UNDP shall correct arithmetical errors as follows:

- a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item

total shall be corrected, unless in the opinion of UNDP there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;

- b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to the above.

32.6 If the Bidder does not accept the correction of errors made by UNDP, its Bid shall be rejected.

## **F. AWARD OF CONTRACT**

### **33. Right to Accept, Reject, or Render Non-Responsive Any or All Bid**

33.1 UNDP reserves the right to accept or reject any Bid, to render any or all of the Bids as non-responsive, and to reject all Bids at any time prior to award of contract, without incurring any liability, or obligation to inform the affected Bidder(s) of the grounds for UNDP's action. Furthermore, UNDP is not obligated to award the contract to the lowest price offer.

33.2 UNDP shall also verify, and immediately reject their respective Bid, if the Bidders are found to appear in the UN's Consolidated List of Individuals and Entities with Association to Terrorist Organizations, in the List of Vendors Suspended or Removed from the UN Secretariat Procurement Division Vendor Roster, the UN Ineligibility List, and other such lists that as may be established or recognized by UNDP policy on Vendor Sanctions. (See [http://www.undp.org/content/undp/en/home/operations/procurement/procurement\\_protest/](http://www.undp.org/content/undp/en/home/operations/procurement/procurement_protest/))

### **34. Award Criteria**

Prior to expiration of the period of Bid validity, UNDP shall award the contract to the qualified and eligible Bidder that is found to be responsive to the requirements of the Schedule of Requirements and Technical Specification, and has offered the lowest price (See DS No. 32).

### **35. Right to Vary Requirements at the Time of Award**

At the time of award of Contract, UNDP reserves the right to vary the quantity of the goods and/or related services, by up to a maximum twenty five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

### **36. Contract Signature**

Within fifteen (15) days from the date of receipt of the Contract, the successful Bidder shall sign and date the Contract and return it to UNDP.

Failure of the successful Bidder to comply with the requirement of ITB Section F.3 and this

provision shall constitute sufficient grounds for the annulment of the award, and forfeiture of the Bid Security if any, and on which event, UNDP may award the Contract to the Bidder with the second highest rated Bid, or call for new Bid.

### **37. Performance Security**

A performance security, if required, shall be provided in the amount and form provided in Section 9 and by the deadline indicated in the **Data Sheet** (DS no. 14), as applicable. Where a Performance Security will be required, the submission of the said document, and the confirmation of its acceptance by UNDP, shall be a condition for the effectivity of the Contract that will be signed by and between the successful Bidder and UNDP.

### **38. Bank Guarantee for Advanced Payment**

Except when the interests of UNDP so require, it is the UNDP's preference to make no advanced payment(s) on contracts (i.e., payments without having received any outputs). In the event that the Bidder requires an advanced payment upon contract signature, and if such request is duly accepted by UNDP, and the said advanced payment exceeds 20% of the total Bid price, or exceed the amount of USD 30,000, UNDP shall require the Bidder to submit a Bank Guarantee in the same amount as the advanced payment. A bank guarantee for advanced payment shall be furnished in the form provided in Section 10.

### **39. Vendor Protest**

UNDP's vendor protest procedure provides an opportunity for appeal to those persons or firms not awarded a purchase order or contract through a competitive procurement process. In the event that a Bidder believes that it was not treated fairly, the following link provides further details regarding UNDP vendor protest procedures:  
<http://www.undp.org/procurement/protest.shtml>

## Instructions to Bidders

### DATA SHEET<sup>2</sup>

The following data for the supply of goods and related services shall complement / supplement the provisions in the Instruction to Bidders. In the case of a conflict between the Instruction to Bidders and the Data Sheet, the provisions in the Data Sheet shall prevail.

DS No.	Cross Ref. to Instructions	Data	Specific Instructions / Requirements
1		Project Title:	ITB-GLED-18-2015
2		Title of Goods/Services/Work Required:	<b>Procurement of Ice Plants and Cold Room Facilities</b>
3		Country:	Sri Lanka
4		Minimum Qualifying Criteria (Clauses 9.1 & 9.2)	<p>All items under this clause are required to be submitted by the bidders including:</p> <p>(a) Valid business registration certificate to trade in country of origin as a supplier of Ice Plants and Cold Room Facilities.</p> <p>(b) List and value of projects performed for the last 3 years with similar nature and complexity, plus client's contact details who may be contacted for further information on those contracts. A minimum number of <b>3 contracts</b>, implemented over the past <b>3 years</b>, of a similar nature and complexity must be executed by the contractor (to comply with this requirement, work cited should be at least 70 percent complete)</p> <p>(c) List and value of on-going projects with contact details of clients and current percentage completion of each ongoing project.</p> <p>(d) Total monetary value of similar installations in Ice Plant and Cold Room Storage works performed for each of the last <u>3 years</u>.</p>

<sup>2</sup> All DS number entries in the Data Sheet are cited as references in the Instructions to Bidders. All DS Nos. corresponding to a Data must not be modified. Only information on the 3<sup>rd</sup> column may be modified by the user. If the information does not apply, the 3<sup>rd</sup> column must state "n/a" but must not be deleted.

			<p>(e) Independently audited financial accounts for the last two years in English. UNDP will check the financial accounts to compute the quick ratio (QR). Quick ratio tests the company's financial strength and liquidity by calculating a company's liquid assets in proportion to its liabilities.</p> <p>(f) <b>If QR is less than 1</b>; UNDP shall verify financial capacity of the bidder and had the authority to seek references from concerned parties &amp; banks on the bidder's financial standing. UNDP had the right to reject any bid if submitted by a contractor whom investigation leads to a result that he is not financially capable and/or had serious financial problems.</p> <p>(g) Information regarding any litigation, current or during the last five years, in which the Bidder was/is involved, the parties concerned, and the disputed amounts and awards thereof.</p> <p>(h) CVs for key personal proposed for this project implementation, commissioning and training as per minimum stated below</p>
4	C.13	Language of the Bid:	<input checked="" type="checkbox"/> English
5	C.20	Conditions for Submitting Bid for Parts or sub-parts of the Total Requirements	<p><input type="checkbox"/> Allowed <i>[if yes, describe how, and ensure that requirements properly define the sub-parts]</i></p> <p><input checked="" type="checkbox"/> Not allowed</p>
6	C.20	Conditions for Submitting Alternative Bid	<p><input checked="" type="checkbox"/> Shall not be considered</p> <p><input type="checkbox"/> Shall be considered. A Bidder may submit an alternative Bid, <u>but only if it</u> also submits a Bid that meets the base case (i.e., what is originally required by UNDP in this ITB). UNDP shall only consider the alternative bid offered by the Bidder who's Bid for the base case was determined to be a responsive Bid that offers the lowest price.</p>
7	C.22	A pre-Bid conference will be held on:	<p>Time: 11.00am Colombo, Sri Lanka Time</p> <p>Date: 12/3/2015</p>

			<p>Venue: United Nations Development Programme, 202-204 Bauddhaloka Mawatha, Colombo 07, Sri Lanka</p> <p>The UNDP focal point for the arrangement is: Mr. Anuradha Pingama Address: 202-204 Bauddhaloka Mawatha, Colombo 07, Sri Lanka Telephone: +94 11 2 580 691</p> <p>E-mail: anuradha.pingama@undp.org</p>
8	C.21.1	Period of Bid Validity commencing on the submission date	<input type="checkbox"/> 60 days <input type="checkbox"/> 90 days <input checked="" type="checkbox"/> 120 days
9	B.9.5 C.15.4 b)	Bid Security	<input type="checkbox"/> Required Amount: <a href="#">Click here to enter text.</a> Form: <a href="#">Click here to enter text.</a>  <input checked="" type="checkbox"/> Not Required
10	B.9.5	Acceptable forms of Bid Security <sup>3</sup>	<input type="checkbox"/> Bank Guarantee (See Section 8 for template) <input type="checkbox"/> Any Bank-issued Check / Cashier's Check / Certified Check <input type="checkbox"/> Other negotiable instrument <input type="checkbox"/> Cash (exceptionally, if none of the other forms are feasible) <input type="checkbox"/> Others <i>[pls. specify]</i>
11	B.9.5 C.15.4 a)	Validity of Bid Security	<p>Indicate number of days, but minimum of 90 days from the last day of Bid submission.</p> <p>Bid Security of unsuccessful Bidders shall be returned.</p>
12		Advanced Payment upon signing of contract	<input checked="" type="checkbox"/> Allowed up to a maximum of 20 % of contract <sup>4</sup> <input type="checkbox"/> Not allowed
13		Liquidated Damages	<input type="checkbox"/> Will not be imposed <input checked="" type="checkbox"/> Will be imposed under the following conditions:

<sup>3</sup> Surety bonds or other instruments issued by non-bank Financial Institutions are least preferred by UNDP. Unless stated otherwise, they shall be considered unacceptable to UNDP.

<sup>4</sup> If the advanced payment that the Bidder will submit will exceed 20% of the Price Offer, or will exceed the amount of USD 30,000, the Bidder must submit an Advanced Payment Security in the same amount as the advanced payment, using the form and contents of the document in Section 10

			<p>Percentage of contract price per day of delay:0.5%</p> <p>Max. no. of days of delay :30 days</p> <p>Next course of action : Contract Termination</p>
14	F.37	Performance Security	<p><input checked="" type="checkbox"/> Required</p> <p>Amount :10% of Contract Value</p> <p>Form: Certified Bank Guarantee</p> <p><input type="checkbox"/> Not Required</p>
15	C.17 C.17.2	Preferred Currency of Bid and Method for Currency conversion	<p><input checked="" type="checkbox"/> United States Dollars (US\$)</p> <p><input type="checkbox"/> Euro</p> <p><input type="checkbox"/> Local Currency</p> <p><i>Reference date for determining UN Operational Exchange Rate : Prevailing UN Exchange Rate at time of Payment Release</i></p>
16	B.10.1	Deadline for submitting requests for clarifications/ questions	14 days before the submission date.
17	B.10.1	Contact Details for submitting clarifications/questions <sup>5</sup>	<p>Focal Person in UNDP: Mr. Anuradha Pingama</p> <p>Address:202-204 Bauddhaloka Mawatha, Colombo 07, Sri Lanka</p> <p>E-mail address dedicated for this purpose: anuradha.pingama@undp.org</p>
18	B.11.1	Manner of Disseminating Supplemental Information to the ITB and responses/clarifications to queries	<p><input checked="" type="checkbox"/> Direct communication to prospective Bidders by email or fax</p> <p><input checked="" type="checkbox"/> Direct communication to prospective Bidders by email or fax, and Posting on the website<sup>6</sup> <i>[specify exact URL Address]</i></p>
19	D.23.3	No. of copies of Bid that must be submitted	<p>Original: 01</p> <p>Copies : 01</p>
20	D.23.1 b) D.23.2 D.24	Bid submission address	<p>United Nations Development Programme (UNDP)</p> <p>Attention; Mr. Rohana Dissanayake</p> <p>202-204 Bauddhaloka Mawatha, Colombo 07</p>

<sup>5</sup> This contact person and address is officially designated by UNDP. If inquiries are sent to other person/s or address/es, even if they are UNDP staff, UNDP shall have no obligation to respond nor can UNDP confirm that the query was officially received.

<sup>6</sup> Posting on the website shall be supplemented by directly transmitting the communication to the prospective offerors.

			Sri Lanka.
21	C.21.1 D.24	Deadline of Bid Submission	Date and Time : December 18, 2015 2:00 PM
22	D.23.2	Manner of Submitting Bid	<input checked="" type="checkbox"/> Courier/Hand Delivery <input type="checkbox"/> Electronic submission of Bid <sup>7</sup>
23	D.23.2 D.26	Conditions and Procedures for electronic submission and opening, if allowed	<input type="checkbox"/> Official Address for e-submission: <i>[specify]</i> <input type="checkbox"/> Format : PDF files only, password protected <input type="checkbox"/> Password <u>must</u> not be provided to UNDP until the date and time of Bid Opening as indicated in No. 24 <input type="checkbox"/> Max. File Size per transmission: <i>[specify]</i> <input type="checkbox"/> Max. No. of transmission : <i>[specify]</i> <input type="checkbox"/> No. of copies to be transmitted : <i>[specify]</i> <input type="checkbox"/> Mandatory subject of email : <i>[specify]</i> <input type="checkbox"/> Virus Scanning Software to be Used prior to transmission: <i>[specify]</i> <input type="checkbox"/> Digital Certification/Signature: <i>[specify]</i> <input type="checkbox"/> Time Zone to be Recognized: <i>[specify]</i> <input type="checkbox"/> Other conditions: <i>[pls. specify]</i>
24	D.23.1 c)	Date, time and venue for opening of Bid	Date and Time: December 18, 2015 2:30 PM Venue : United Nations Development Programme, 202-204 Bauddhaloka Mawatha, Colombo 07, Sri Lanka
25		Evaluation method to be used in selecting the most responsive Bid	<input checked="" type="checkbox"/> Non-Discretionary “Pass/Fail” Criteria on the Technical Requirements; and <input checked="" type="checkbox"/> Lowest price offer of technically qualified/responsive Bid
26	C.15.1	Required Documents that must be Submitted to Establish Qualification of Bidders (In “Certified True Copy” form only)  <i>[check all that apply, delete those that will not be required.]</i>	<input checked="" type="checkbox"/> Company Profile, which should <u>not</u> exceed fifteen (15) pages, including printed brochures and product catalogues relevant to the goods/services being procured <input checked="" type="checkbox"/> Manufacturer (OEM) authorization letter in the case of reseller/distributor/authorized agent/etc <input checked="" type="checkbox"/> Catalogue/Brochures/pictorial visuals/etc of proposed equipment and layout

<sup>7</sup> If this will be allowed, security features (e.g., encryption, authentication, digital signatures, etc.) are strictly required and must be enforced to ensure confidentiality and integrity of contents.



			<input checked="" type="checkbox"/> EM-02 or equivalent in refrigeration in country of origin <input checked="" type="checkbox"/> Certificate of Registration of the business, including Articles of Incorporation, or equivalent document if Bidder is not a corporation <input checked="" type="checkbox"/> Already established or proposed post sales obligations in warranties, spare parts, scheduled servicing, replacements and repairs etc to support continued and uninterrupted operation for a period of 5 years from date of commissioning. <input checked="" type="checkbox"/> Official Letter of Appointment as local representative, if Bidder is submitting a Bid in behalf of an entity located outside the country <input checked="" type="checkbox"/> Quality Certificate (e.g., ISO, etc.) and/or other similar certificates, accreditations, awards and citations received by the Bidder, if any <input checked="" type="checkbox"/> Environmental Compliance Certificates, Accreditations, Markings/Labels, and other evidences of the Bidder's practices which contributes to the ecological sustainability and reduction of adverse environmental impact (e.g., use of non-toxic substances, recycled raw materials, energy-efficient equipment, reduced carbon emission, etc.), either in its business practices or in the goods it manufactures <input checked="" type="checkbox"/> Patent Registration Certificates, if any of technologies submitted in the Bid is patented by the Bidder <input checked="" type="checkbox"/> Plan and details of manufacturing capacity, if Bidder is a manufacturer of the goods to be supplied <input checked="" type="checkbox"/> Certification or authorization to act as Agent in behalf of the Manufacturer, or Power of Attorney, if bidder is not a manufacturer <input checked="" type="checkbox"/> Latest Audited Financial Statement (Income Statement and Balance Sheet) including Auditor's Report for the past <i>[indicate number of years of reference]</i> <input checked="" type="checkbox"/> Statement of Satisfactory Performance from the Top 3 Clients in terms of Contract Value the past 3 years. Client references must include names, contact details for cross reference checking by UNDP officials. <input checked="" type="checkbox"/> All information regarding any past and current litigation during the last five (5) years, in which the bidder is involved, indicating the parties concerned,
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			the subject of the litigation, the amounts involved, and the final resolution if already concluded.
27		Other documents that may be Submitted to Establish Eligibility	As deemed necessary and appropriate
28	C.15	Structure of the Technical Bid and List of Documents to be Submitted	<i>As deemed necessary and appropriate</i>
29	C.15.2	Latest Expected date for commencement of Contract	<i>February 1, 2016</i>
30	C.15.2	Maximum Expected duration of contract	06 months
31		UNDP will award the contract to:	<input type="checkbox"/> One Bidder only <input checked="" type="checkbox"/> One or more Bidders, depending on the following factors: Given the multiple and varied geographical locations of each project and budget availability, the UNDP reserves the right to award contracts to either individual, multiple or all LOTs per bidder
32	F.34	Criteria for the Award and Evaluation of Bid	<p><b><u>Award Criteria</u></b></p> <input checked="" type="checkbox"/> Non-discretionary “Pass” or “Fail” rating on the detailed contents of the Schedule of Requirements and Technical Specifications <input checked="" type="checkbox"/> Compliance on the following qualification requirements : <p><b><u>Bid Evaluation Criteria</u></b><sup>8</sup></p> <input checked="" type="checkbox"/> Minimum no. of years of experience in similar contracts: <i>[minimum 3 separate installations];</i> <input checked="" type="checkbox"/> Current ratio of not less than 1.0 <i>[modify if a higher number is required];</i> <input checked="" type="checkbox"/> Minimum no. of similar projects undertaken over the past 3 years <i>[minimum 3 separate installations];</i> <input checked="" type="checkbox"/> Full compliance of Bid to the Technical Requirements; <input checked="" type="checkbox"/> Quality Inspection and Testing Certificates for the goods to be supplied; <input checked="" type="checkbox"/> Established or proposed After-sales service arrangements at all 3 locations in Sri Lanka <input checked="" type="checkbox"/> Warranty on parts and services offered

<sup>8</sup> Pls. reconcile and ensure consistency with the contents of the Technical Specifications

			<input checked="" type="checkbox"/> User's Training for a minimum of <i>[10 persons]</i> to be conducted at <i>[all three project sites]</i> for a period of <i>[3 months]</i> ; <input checked="" type="checkbox"/> Acceptability of the Transportation/Delivery Schedule; <input checked="" type="checkbox"/> Appropriateness of the Implementation Timetable to Project Schedule; <input checked="" type="checkbox"/> Qualification of the Team Leader to directly coordinate with UNDP <i>[specify details]</i> ; <input checked="" type="checkbox"/> Qualification of all other personnel to be assigned to the contract <i>[specify details]</i> <input type="checkbox"/> Others <i>[pls. specify and list further]</i>
33	E.29	Post qualification Actions	<input checked="" type="checkbox"/> Verification of accuracy, correctness and authenticity of the information provided by the bidder on the legal, technical and financial documents submitted; <input checked="" type="checkbox"/> Validation of extent of compliance to the ITB requirements and evaluation criteria based on what has so far been found by the evaluation team; <input checked="" type="checkbox"/> Inquiry and reference checking with Government entities with jurisdiction on the bidder, or any other entity that may have done business with the bidder; <input checked="" type="checkbox"/> Inquiry and reference checking with other previous clients on the quality of performance on ongoing or previous contracts completed; <input checked="" type="checkbox"/> Physical inspection of the bidder's plant, factory, branches or other places where business transpires, with or without notice to the bidder; <input type="checkbox"/> Testing and sampling of completed goods similar to the requirements of UNDP, where available; and <input type="checkbox"/> Others <i>[click here to specify]</i>
34		Conditions for Determining Contract Effectivity	<input checked="" type="checkbox"/> UNDP's receipt of Performance Bond <input checked="" type="checkbox"/> UNDP's approval of plans, drawings, samples, etc. <input type="checkbox"/> Others <i>[click here to specify]</i> .

35		Other Information Related to the ITB <sup>9</sup>	<i>[All other instructions and information not mentioned in DSs 1-33 but are relevant to the ITB must be cited here, and any further entries that may be added below this table row.]</i>
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<sup>9</sup> Where the information is available in the web, a URL for the information may simply be provided.

### **Section 3a: Schedule of Requirements and Technical Specifications\***

Lot Number	Description of Requirements	Ice Plant Capacity	Minimum ICTAD in Refrigeration	Installation Location
Lot 1	Ice Plant and Cold Room Facilities	1.5 Tons/day or 2.0 Tons/day	EM-02	Buttala, Moneragala
Lot 2	Ice Plant and Cold Room Facilities	2.0 Tons/day	EM-02	Vaharai, Batticaloa
Lot 3	Ice Plant and Cold Room Facilities	2.0 Tons/day	EM-02	Kaluvankerni, Batticaloa

**\*Please refer to attached documents for detailed specifications on Ice Plant and Cold Room Facilities.**

## Section 3b: Related Services

Further to the Schedule of Requirements in the preceding Table, Bidders are requested to take note of the following additional requirements, conditions, and related services pertaining to the fulfillment of the requirements: *[check the condition that applies to this ITB, delete the entire row if condition is not applicable to the goods being procured]*

Delivery Term [INCOTERMS 2010] <i>(Pls. link this to price schedule)</i>	<input type="checkbox"/> FCA <input type="checkbox"/> CPT <input type="checkbox"/> CIP <input type="checkbox"/> DAP <input checked="" type="checkbox"/> Other DDP to Project Site	
Exact Address of Delivery/Installation Location	Buttala in Moneragala District, Sri Lanka, Vaharai in Batticaloa District in Sri Lanka and Kaluvankerni in Batticaloa District in Sri Lanka	
Mode of Transport Preferred	<input checked="" type="checkbox"/> AIR	<input checked="" type="checkbox"/> LAND
	<input checked="" type="checkbox"/> SEA	<input type="checkbox"/> OTHER <i>[pls. specify]</i>
UNDP Preferred Freight Forwarder, if any <sup>10</sup>	N/ap	
Distribution of shipping documents <i>(if using freight forwarder)</i>	N/ap	
Delivery Date	Supplier to Indicate in offer	
Customs, if needed, clearing shall be done by:	<input type="checkbox"/> UNDP <input checked="" type="checkbox"/> Supplier <input type="checkbox"/> Freight Forwarder	
Ex-factory / Pre-shipment inspection	N/app	
Inspection upon delivery	At port of unloading	
Installation Requirements	Required at project site	
Testing Requirements	Required at project site	
Scope of Training on Operation and Maintenance	3 months from commissioning of equipment	
Commissioning	Yes	
Technical Support Requirements	5 years	
Payment Terms <i>(max. advanced payment is 20% of total price as</i>	<input checked="" type="checkbox"/> 100% within 30 days upon UNDP's acceptance of the goods delivered as specified and receipt of invoice	

<sup>10</sup>A factor of the Incoterms stipulated in the ITB. The use of a UNDP preferred courier may be considered for purposes of ensuring forwarder's familiarity with procedures and processing of documentary requirements applicable to UNDP when clearing with customs authority of the country of destination.

<i>per UNDP policy)</i>	<input type="checkbox"/> Max of 20% upon issuance of PO and the rest within 30 days from UNDP's acceptance of goods as specified and receipt of invoice <input type="checkbox"/> Others <i>[pls. specify]</i>
Conditions for Release of Payment	<input type="checkbox"/> Pre-shipment inspection <i>[pls. provide details]</i> <input checked="" type="checkbox"/> Inspection upon arrival at destination <i>[pls. provide details]</i> <input checked="" type="checkbox"/> Installation <i>[pls. provide details]</i> <input checked="" type="checkbox"/> Testing <i>[pls. provide details]</i> <input checked="" type="checkbox"/> Training on Operation and Maintenance <i>[pls. provide details]</i> <input checked="" type="checkbox"/> Written Acceptance of Goods based on full compliance with RFQ requirements <input type="checkbox"/> Others <i>[pls. specify]</i>
After-sale services required	<input checked="" type="checkbox"/> Warranty on Parts and Labor for minimum period of Please specify <input checked="" type="checkbox"/> Technical Support <input checked="" type="checkbox"/> Provision of Service Unit when pulled out for maintenance/repair <input type="checkbox"/> Others <i>[pls. specify]</i>
All documentations, including catalogs, instructions and operating manuals, shall be in this language	<input checked="" type="checkbox"/> English <input type="checkbox"/> French <input type="checkbox"/> Spanish <input type="checkbox"/> Others <i>[pls. specify, including dialects, if needed]</i>

## Section 4: Bid Submission Form<sup>11</sup>

***(This should be written in the Letterhead of the Bidder. Except for indicated fields, no changes may be made in this template.)***

---

Colombo, Sri Lanka  
12/18/2015

To: Mr. Rohana Dissanayake/Head of Procurement & Administration

Dear Sir/Madam:

We, the undersigned, hereby offer to supply the goods and related services required for *[insert: title of goods and services required as per ITB]* in accordance with your Invitation to Bid dated *Insert: bid date*. We are hereby submitting our Bid, which includes the Technical Bid and Price Schedule.

We hereby declare that:

- a) All the information and statements made in this Bid are true and we accept that any misrepresentation contained in it may lead to our disqualification;
- b) We are currently not on the removed or suspended vendor list of the UN or other such lists of other UN agencies, nor are we associated with, any company or individual appearing on the 1267/1989 list of the UN Security Council;
- c) We have no outstanding bankruptcy or pending litigation or any legal action that could impair our operation as a going concern; and
- d) We do not employ, nor anticipate employing, any person who is or was recently employed by the UN or UNDP.

We confirm that we have read, understood and hereby fully accept the Schedule of Requirements and Technical Specifications describing the duties and responsibilities required of us in this ITB, and the General Terms and Conditions of UNDP's Standard Contract for this ITB.

We agree to abide by this Bid for *[insert: period of validity as indicated in Data Sheet]*.

We undertake, if our Bid is accepted, to initiate the supply of goods and provision of related services not later than the date indicated in the Data Sheet.

We fully understand and recognize that UNDP is not bound to accept this Bid, that we shall bear all costs associated with its preparation and submission, and that UNDP will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the evaluation.

---

<sup>11</sup> No deletion or modification may be made in this form. Any such deletion or modification may lead to the rejection of the Bid.



We remain,

Yours sincerely,

Authorized Signature [*In full and initials*]: \_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Contact Details: \_\_\_\_\_

---

*[Please mark this letter with your corporate seal, if available]*

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## Section 5: Documents Establishing the Eligibility and Qualifications of the Bidder

### Bidder Information Form<sup>12</sup>

Date: *[insert date (as day, month and year) of Bid Submission]*

ITB No.: *[insert number of bidding process]*

Page \_\_\_\_\_ of \_\_\_\_\_ pages

1. Bidder's Legal Name <i>[insert Bidder's legal name]</i>		
2. In case of Joint Venture (JV), legal name of each party: <i>[insert legal name of each party in JV]</i>		
3. Actual or intended Country/ies of Registration/Operation: <i>[insert actual or intended Country of Registration]</i>		
4. Year of Registration in its Location: <i>[insert Bidder's year of registration]</i>		
5. Countries of Operation	6. No. of staff in each Country	7. Years of Operation in each Country
8. Legal Address/es in Country/ies of Registration/Operation: <i>[insert Bidder's legal address in country of registration]</i>		
9. Value and Description of Top three (3) Biggest Contract for the past five (5) years		
10. Latest Credit Rating (Score and Source, if any)		
11. Brief description of litigation history (disputes, arbitration, claims, etc.), indicating current status and outcomes, if already resolved.		
12. Bidder's Authorized Representative Information  Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i>		
13. Are you in the UNPD List 1267.1989 or UN Ineligibility List? <input type="checkbox"/> YES or <input type="checkbox"/> NO		

<sup>12</sup> The Bidder shall fill in this Form in accordance with the instructions. Apart from providing additional information, no alterations to its format shall be permitted and no substitutions shall be accepted.

14. Attached are copies of original documents of:

- ☐ All eligibility document requirements listed in the Data Sheet
- ☐ If Joint Venture/Consortium – copy of the Memorandum of Understanding/Agreement or Letter of Intent to form a JV/Consortium, or Registration of JV/Consortium, if registered
- ☐ If case of Government corporation or Government-owned/controlled entity, documents establishing legal and financial autonomy and compliance with commercial law.

## Joint Venture Partner Information Form (if Registered)<sup>13</sup>

Date: *[insert date (as day, month and year) of Bid Submission]*

ITB No.: *[insert number of bidding process]*

Page \_\_\_\_\_ of \_\_\_\_\_ pages

1. Bidder's Legal Name: <i>[insert Bidder's legal name]</i>		
2. JV's Party legal name: <i>[insert JV's Party legal name]</i>		
3. JV's Party Country of Registration: <i>[insert JV's Party country of registration]</i>		
4. Year of Registration: <i>[insert Party's year of registration]</i>		
5. Countries of Operation	6. No. of staff in each Country	7. Years of Operation in each Country
8. Legal Address/es in Country/ies of Registration/Operation: <i>[insert Party's legal address in country of registration]</i>		
9. Value and Description of Top three (3) Biggest Contract for the past five (5) years		
10. Latest Credit Rating (if any): <a href="#">Click here to enter text.</a>		
1. Brief description of litigation history (disputes, arbitration, claims, etc.), indicating current status and outcomes, if already resolved. <a href="#">Click here to enter text.</a>		

<sup>13</sup> The Bidder shall fill in this Form in accordance with the instructions. Apart from providing additional information, No alterations to its format shall be permitted and no substitutions shall be accepted.

<p>13. JV's Party Authorized Representative Information</p> <p>Name: <i>[insert name of JV's Party authorized representative]</i></p> <p>Address: <i>[insert address of JV's Party authorized representative]</i></p> <p>Telephone/Fax numbers: <i>[insert telephone/fax numbers of JV's Party authorized representative]</i></p> <p>Email Address: <i>[insert email address of JV's Party authorized representative]</i></p>
<p>14. Attached are copies of original documents of: <i>[check the box(es) of the attached original documents]</i></p> <p><input type="checkbox"/> All eligibility document requirements listed in the Data Sheet</p> <p><input type="checkbox"/> Articles of Incorporation or Registration of firm named in 2.</p> <p><input type="checkbox"/> In case of government owned entity, documents establishing legal and financial autonomy and compliance with commercial law.</p>

## Section 6: Technical Bid Form<sup>14</sup>

<b>INSERT TITLE OF THE ITB</b>
--------------------------------

<b>Name of Bidding Organization / Firm:</b>	
<b>Country of Registration:</b>	
<b>Name of Contact Person for this Bid:</b>	
<b>Address:</b>	
<b>Phone / Fax:</b>	
<b>Email:</b>	

<b>SECTION 1: EXPERTISE OF FIRM/ ORGANISATION</b>
<p><i>This section should fully explain the Bidder's resources in terms of personnel and facilities necessary for the performance of this requirement.</i></p> <p><b>1.1 Brief Description of Bidder as an Entity:</b> Provide a brief description of the organization / firm submitting the Bid, its legal mandates/authorized business activities, the year and country of incorporation, and approximate annual budget, etc. Include reference to reputation, or any history of litigation and arbitration in which the organisation / firm has been involved that could adversely affect or impact the delivery of goods and/or performance of related services, indicating the status/result of such litigation/arbitration.</p> <p><b>1.2. Financial Capacity:</b> Based on the latest Audited Financial Statement (Income Statement and Balance Sheet) describe the financial capacity (liquidity, stand-by credit lines, etc.) of the bidder to engage into the contract. Include any indication of credit rating, industry rating, etc.</p> <p><b>1.3. Track Record and Experiences:</b> Provide the following information regarding corporate experience within at least the last five (5) years which are related or relevant to those required for this Contract.</p>

<sup>14</sup> Technical Bids not submitted in this format may be rejected.

Name of project	Client	Contract Value	Period of activity	Types of activities undertaken	Status or Date Completed	References Contact Details (Name, Phone, Email)

## SECTION 2 - SCOPE OF SUPPLY, TECHNICAL SPECIFICATIONS, AND RELATED SERVICES

*This section should demonstrate the Bidder's responsiveness to the specification by identifying the specific components proposed, addressing the requirements, as specified, point by point; providing a detailed description of the essential performance characteristics proposed; and demonstrating how the proposed bid meets or exceeds the specifications.*

**2.1. Scope of Supply:** Please provide a detailed description of the goods to be supplied, indicating clearly how they comply with the technical specifications required by the ITB (see below table); describe how the organisation/firm will supply the goods and any related services, keeping in mind the appropriateness to local conditions and project environment.

Item No.	Description/ Specification of Goods	Source/ Manufacturer	Country of Origin	Qty	Quality Certificate/ Export Licences, etc. (indicate all that applies and if attached)

*A supporting document with full details may be annexed to this section*

**2.2. Technical Quality Assurance Mechanisms:** The bid shall also include details of the Bidder's internal technical and quality assurance review mechanisms, all the appropriate quality certificates, export licenses and other documents attesting to the superiority of the quality of the goods and technologies to be supplied.

**2.3. Reporting and Monitoring:** Please provide a brief description of the mechanisms proposed for this project for reporting to the UNDP and partners, including a reporting schedule.

**2.4. Subcontracting:** Explain whether any work would be subcontracted, to whom, how much percentage of the work, the rationale for such, and the roles of the proposed sub-contractors. Special attention should be given to providing a clear picture of the role of each entity and how everyone will function as a team.

**2.5. Risks / Mitigation Measures:** Please describe the potential risks for the implementation of this project that may impact achievement and timely completion of expected results as well as their quality. Describe measures that will be put in place to mitigate these risks.

**2.6 Implementation Timelines:** The Bidder shall submit a Gantt Chart or Project Schedule indicating the detailed sequence of activities that will be undertaken and their corresponding timing.

**2.7. Partnerships (Optional):** Explain any partnerships with local, international or other organizations that are planned for the implementation of the project. Special attention should be given to providing a clear picture

of the role of each entity and how everyone will function as a team. Letters of commitment from partners and an indication of whether some or all have successfully worked together on other previous projects is encouraged.

2.8. Anti-Corruption Strategy (Optional): Define the anti-corruption strategy that will be applied in this project to prevent the misuse of funds. Describe the financial controls that will be put in place.

2.9 Statement of Full Disclosure: This is intended to disclose any potential conflict in accordance with the definition of “conflict” under Section 4 of this document, if any.

2.10 Other: Any other comments or information regarding the bid and its implementation.

### SECTION 3: PERSONNEL

**3.1 Management Structure:** Describe the overall management approach toward planning and implementing the contract. Include an organization chart for the management of the contract, if awarded.

**3.2 Staff Time Allocation:** Provide a spreadsheet will be included to show the activities of each personnel involved in the implementation of the contract. Where the expertise of the personnel is critical to the success of the contract, UNDP will not allow substitution of personnel whose qualifications had been reviewed and accepted during the bid evaluation. (If substitution of such a personnel is unavoidable, substitution or replacement will be subject to the approval of UNDP. No increase in costs will be considered as a result of any substitution).

**3.3 Qualifications of Key Personnel.** Provide the CVs for key personnel (Team Leader, Managerial and general staff) that will be provided to support the implementation of this project. CVs should demonstrate qualifications in area of expertise relevant to the Contract. Please use the format below:

<b>Name:</b>		
<b>Role in Contract Implementation:</b>		
<b>Nationality:</b>		
<b>Contact information:</b>		
<b>Countries of Relevant Work Experience:</b>		
<b>Language Skills:</b>		
<b>Education and other Qualifications:</b>		
<b>Summary of Experience:</b> <i>Highlight experience in the region and on similar projects.</i>		
<b>Relevant Experience (From most recent):</b>		
<b>Period: From – To</b>	<b>Name of activity/ Project/ funding organisation, if applicable:</b>	<b>Job Title and Activities undertaken/Description of actual role performed:</b>
<i>e.g. June 2010-January 2011</i>		
<i>Etc.</i>		
<i>Etc.</i>		
<b>References (minimum of 3):</b>	<i>Name</i> <i>Designation</i> <i>Organization</i> <i>Contact Information – Address; Phone; Email; etc.</i>	
<b>Declaration:</b>		
<p>I confirm my intention to serve in the stated position and present availability to serve for the term of the proposed contract. I also understand that any wilful misstatement described above may lead to my disqualification, before or during my engagement.</p> <p>_____</p> <p>_____</p> <p>Signature of the Nominated Team Leader/Member <span style="float: right;">Date Signed</span></p>		

## Section 7: Price Schedule Form<sup>15</sup>

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The Bidder is required to prepare the Price Schedule as indicated in the Instruction to Bidders.

The Price Schedule must provide a detailed cost breakdown of all goods and related services to be provided, from unit price to lot prices. Separate figures must be provided for each functional grouping or category, if any.

Any estimates for cost-reimbursable items, such as travel of experts and out-of-pocket expenses, should be listed separately.

**Please refer to the itemized Bill of Quantity (BOQ) provided for each LOT for filling out your Price Schedules.**



## Section 8: FORM FOR PERFORMANCE SECURITY<sup>16</sup>

***(This must be finalized using the official letterhead of the Issuing Bank. Except for indicated fields, no changes may be made in this template.)***

---

To: UNDP

*[Insert contact information as provided in Data Sheet]*

WHEREAS *[name and address of Contractor]* (hereinafter called “the Contractor”) has undertaken, in pursuance of Contract No. Click to enter dated Click to enter , to deliver the goods and execute related services [Click here to enter text](#). (hereinafter called “the Contract”):

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract:

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of *[amount of guarantee]* *[in words and numbers]*, such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of *[amount of guarantee as aforesaid]* without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

This guarantee shall be valid until a date 30 days from the date of issue by UNDP of a certificate of satisfactory performance and full completion of services by the Contractor.

### SIGNATURE AND SEAL OF THE GUARANTOR BANK

Date .....

Name of Bank .....

Address .....

---

<sup>16</sup> If the RFP requires the submission of a Performance Security, which shall be made a condition to the signing and effectivity of the contract, the Performance Security that the Bidder's Bank will issue shall use the contents of this template

## Section 9: Form for Advanced Payment Guarantee<sup>17</sup>

***(This must be finalized using the official letterhead of the Issuing Bank. Except for indicated fields, no changes may be made in this template.)***

---

\_\_\_\_\_ [Bank's Name, and Address of Issuing Branch or Office]  
**Beneficiary:** \_\_\_\_\_ [Name and Address of UNDP]  
**Date:** \_\_\_\_\_ ++++++  
**ADVANCE PAYMENT GUARANTEE No.:** \_\_\_\_\_

We have been informed that [name of Company] (hereinafter called "the Contractor") has entered into Contract No. [reference number of the contract] dated [insert: date] with you, for the provision of [brief description of ITB requirements] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum of [amount in words] ([amount in figures]) is to be made against an advance payment guarantee.

At the request of the Contractor, we [name of Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of [amount in words] ([amount in figures])<sup>18</sup> upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor has used the advance payment for purposes other than toward providing the goods and related services under the Contract.

It is a condition for any claim and payment under this guarantee to be made that the advance payment referred to above must have been received by the Contractor on its account number \_\_\_\_\_ at [name and address of Bank].

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as indicated in copies of certified monthly statements which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of the monthly payment certificate indicating that the Consultants have made full repayment of the amount of the advance payment, or on the \_\_ day of \_\_\_\_\_, 2\_\_, 20\_\_ whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

\_\_\_\_\_  
[signature(s)]

**Note:** All italicized text is for indicative purposes only to assist in preparing this form and shall be deleted from the final product.

---

<sup>17</sup> This Guarantee shall be required if the Contractor will require advanced payment of more than 20% of the contract amount, or if the absolute amount of the advanced payment required will exceed the amount of USD 30,000, or its equivalent if the price offer is not in USD, using the exchange rate stated in the Data Sheet. The Contractor's Bank must issue the Guarantee using the contents of this template.

<sup>18</sup> The Guarantor Bank shall insert an amount representing the amount of the advanced payment and denominated either in the currency/ies of the advanced payment as specified in the Contract.

## Section 10: Contract

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**[PLEASE ATTACH HERETO THE .PDF VERSION OF THE CONTRACT THAT  
WILL BE USED AND THE GENERAL TERMS AND CONDITIONS]**

PLEASE REFER TO [WWW.LK.UNDP.ORG](http://WWW.LK.UNDP.ORG) TO REFER TO UNDP GENERAL  
TERMS AND CONDITIONS FOR INVITATION TO BID (ITB)

**BLOCK ICE PLANT AND COLD ROOM  
FOR BUTTALA**

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## **BLOCK ICE PLANT**

### **Option 01 : COLD Room System 2000kg**

#### **1.0 DESIGN CRITERIA**

1. Block ice plant capacity/Qty: 2000kg per day/ 1No
2. Ice block weight: 25kg per block
3. Machine type: Block Ice Machine
4. Ambient Temperature: Max:dry bulb temperature 35C
5. Water Quality: Refer water quality report for Buttala site
6. Water Temperature: 30C
7. Application: Transportation of fish

#### **2.0 STANDARD OF WORKS**

1. ASHRAE: American Society of Heating, Refrigeration and Air Conditioning Engineer.
2. IHVE: The Institute of Heating and Ventilation Engineers (UK)
3. ASME: American Society of Mechanical Engineers
4. ARI: Air conditioning Refrigeration Institute (USA)
5. ASTM: American Society of Testing and Materials
6. AWS: American Welding Society
7. IEC & IEEE Standards
8. Institute of Refrigeration UK

### 3.0 DESCRIPTION OF WORK

Under the scope of this project, bidders must supply & install a block ice plant capable of producing 2000kg of block ice per day. Each block would be 25kg. Client shall provide water and power supply requirement to meet selected Ice plant requirements and also supplier must specify any water treatment requirement based on provided water quality report.

### 4.0 SYSTEM DESCRIPTION

- A Block ice plant must consist with ice tanks, air cooled condenser, compressor, copper plate /shell & tube evaporator, factory assembled refrigerant piping with solenoid valves, filter dryers, stop and service valves, expansion valve etc. There must be convenient mechanical system for ice tank lifting to unload ice blocks.
- B Refrigerant shall be R134a /R410a or any other environmental friendly type.
- C Ice tank shall be fabricated with stainless steel 304 with adequate supports to keep tank firm and shall be insulated with polyurethane insulation sufficient thickness to prevent condensation of exterior of the tank. Tank lid too shall be insulated and be of a detachable type. Dimension of the tank is based on harvesting period, total production per day, ice block size etc. Ice cans shall be out of stainless steel 304.
- D. Refrigeration system shall be of air cooled type and complete system shall be mounted on a common base frame, piped, wired and tested prior to leaving manufacturing plant. Protective devices shall include Refrigerant high/low pressure cutouts and oil pressure cutout, phase failure, earth leakage, etc.
- E CaCl<sub>2</sub> (Calcium Chloride) Brine solution is preferred and supplier shall provide required composition of selected brine to meet the brine temperature -15C.
- F These Brines are properly maintained at natural acidity and protected with suitable inhibitors to have 20 to 30 years of service without corrosive effect.



#### **4.1 SUBMITTALS**

- A Submit catalog data of all materials, equipment, and products for Work in this Section.
- B Submit complete shop fabrication and installation drawings, including plans, elevations, sections, and details.
- C Submit detailed anchorage and attachment drawings.
- D Submit record "As-Built" drawings upon successful completion of the project..
- E Submit complete operating and maintenance manuals that describe proper operating procedures, maintenance and replacement parts.

#### **4.2 QUALITY ASSURANCE**

- A Supplier shall have an ICTAD Grade EM-02 or equivalent of country origin in Refrigeration and be an well-established organization. Supplier shall have the demonstrated ability to produce the specified equipment of the required quality and the proven capacity to complete an installation of this size and type within the required time limits.

#### **4.3 COORDINATION**

- A. Supplier has full responsibility for the following:
  - Making openings for service penetrations to and from the Ice making plant room.
  - Properly sealing all service penetration into the ice making plant room.
  - Field check all dimensions and make any adjustments in the block ice plant size for a proper fit.

#### **4.4 EXTENDED GUARANTEE**

- A Ice plan supplier shall provide a written guarantee of Five (5) years that the complete unit and workmanship and that it will not deteriorate excessively or otherwise fail to perform.
- B Supplier shall provide a written guarantee of five (5) years for compressor.

- C Contractor shall provide service maintenance proposal for five years period after handing over the site.
- D Contractor shall train operation staff of equipment for operation, service and maintenance for the 3 months period.
- E Manufacturer's authorization letter for proposed equipment shall be produced along with the proposal.

#### 4.5 SPECIFICATIONS:

Offered block ice plant shall be complied with specification indicated below.

Item	Specifications	Rating	Compliance
General	Power Supply	400v/3Ph/50Hz	Yes/No
	Refrigerant	R134a/R404a or equivalent	Yes/No
	Daily capacity	2000kg/day	Yes/No
	Cooling mode	Air Cooled	Yes/No
Standard Condition	Ambient Temperature	35C	
	Water inlet temperature	30C	
Operating Power	Compressor power	Below 6.5kW	Indicate actual value
	Condenser Fan	Below 1.2kW	Indicate actual value
	Lifting mechanism motor	Below 0.5kW	Indicate actual value
	Pump	Below 0.5kW	Indicate actual value
Compressor	Refrigeration Capacity	Approx: 20kW	Indicate actual value
	Condensing temperature	45C	Indicate actual value
	Evaporating temperature	-15C	Indicate actual value

	COP	Minimum 2.7kW/kW	Indicate actual value
Ice Size Range	Thickness:	.....	
	Height:	.....	
Ice Specification	Weight	25kg	Indicate actual value
	Qty	20 nos per 5hr	Indicate actual value
	Harvest times	4 times/ day	Indicate actual value
	Ice making time	5 hours	Indicate actual value
Ice machine Dimension	Size(L X W X H)		Indicate actual value
	Weight(kg)		Indicate actual value
	Pipe Size(inches)		Indicate actual value
Parts Info	Compressor		Copeland/Bitzer or equivalent
	Expansion Valve		ALCO or equivalent
	Service Valve		Danfoss or equivalent
	Solenoid Valve		Danfoss, Castal or equivalent
	PLC		Siemens or equivalent
	Switch gears		Siemens, ABB or equivalent

## 4.6 CONTROLS

A Ice plant to be provided with a control panel consisting of the following components:

- Painted steel enclosure meeting NEMA 4 & 12 ratings.
- Programmable controller
- Shall be c/w switch gears, PFR, EFR, Contactors and thermal overload protection, relays. Enclosure shall be IP54.

## 4.7 REFRIGERATION SYSTEM

A General – the refrigeration system shall use refrigerants acceptable to the Authority having jurisdiction. Utilize R-404a / R134a refrigerant, or approved equal. No CFC type refrigerants will be acceptable.

B All refrigeration line joints shall be brazed with Stay-Silv 15 brazing alloy. All piping shall be pressure leak tested and witnessed by the manufacturer.

C Unit to be from the reputed manufacturers and be UL listed.

D Condensing units must be of adequate capacity to achieve specified capacity, block ice 2000 kg/day in 3-4 harvesting cycles. Units to be complete in all respects including high/low pressure control, receiver, sight glass, liquid line drier, expansion valve and all other necessary equipment to achieve the cited performance. Compressors shall be Semi Hermetic or sealed type.

F Refrigeration lines shall be insulated to prevent any condensation. Insulation exposed to the weather must have additional protection such as Al cladding from the elements.

G Condensate drain lines to be run in CPVC tubing to nearest floor sink. To prevent condensation, drain line is to be insulated where it exits the insulated panels.

H Pressurize and leak test the entire refrigeration system.

## 4.8 ELECTRICAL

All electrically operated equipment shall be so designed that it will continue to function without damage to itself or otherwise, if the voltage and/or frequency vary within the following tolerances:

- i. Voltage -  $400 \pm 6\%$  (Grid Supply tolerance)
- ii. Frequency -  $50 \pm 0.3\%$

All electrically operated equipment shall be suitable for continuous and prolonged operation within the ambient temperature or exposed condition to the atmosphere where they are installed to operate.

- A All electrical components utilized shall be complied with electrical regulations listed IEE 16<sup>th</sup> Edition.
- B Supplier shall provide the appropriate circuits to each condensing unit and a pull box located above each cold room. All interconnecting and control wiring to be by walk-in supplier. A fused disconnect is to be provided at each condensing unit.
- C Exposed conduit inside the cold room shall be kept to a very minimum. Verify placement of all exposed piping and conduit with the Owner's Representative prior to installation.
- D To minimize penetrations, all electrical circuits shall enter the room via a minimum number of conduits, preferably one. The conduit through the wall or roof and all conduit inside the cold room shall be PVC. A seal-off fitting Crouse-Hinds type or EZS or equal shall be placed immediately outside the room and properly sealed.
- E Power supply for Ice plant machine shall be provided to electrical panel room with an isolator. All electrical and control work related to installation of Ice plant shall be done by Ref. contractor.

## **4.9 PLUMBING**

A Water supply and drain line shall be supplied and installed by contract to approved Engineering standard.

## **4.10 INSTALLATION**

- A Install Ice plant in accordance with manufacturer's written instructions and reviewed shop drawings.
- B Install interconnecting accessories in accordance with the manufacturer's written recommendations and located for ease of servicing. Provide piping in accordance with good engineering practice.
- C Suction line insulation shall be sized and installed to prevent condensation.
- D Provide individual traps for condensate drains.
- E Test all equipment operation and performance of Ice plant. Make all adjustments and repairs as required.

## **4.11 REFRIGERATING UNITS:**

Cooler:

Evaporator shall be Shell & Tube type. Cooler coils shall allow maximum mass flow rate of refrigerant to be evenly distributed throughout the evaporator, maximizing coil efficiency thus providing higher capacity with a smaller physical unit cooler dimension.

Air Cooled Condensing Unit:

Condensing unit shall be air cooled type with 3Ph, propeller axial fans with motor in built thermistors (compressor winding also). Refrigerant must be CFC free, environment friendly with ZERO ODP and LOWGWP. Compressor must be semi hermetic or sealed type, Bitzer or

equivalent make. Shall have liquid line solenoid, crank case heater, Liquid receiver, Oil separator, Oil pressure cutout, Refrigerant HP/LP cutout. Unit power supply for 3Ph shall be 400V and 1Ph would be 230V.

**Accessories such as nut & bolt, Ice can, Brine water tank, etc metal parts in machine should be made of Stainless steel -304 other than metals specified.**

#### **4.12 WATER QUALITY**

Supplier shall provide required water quality level to manufacture Ice along with offer.

#### **4.13. INSPECTION, TESTING AND COMMISSIONING**

All works shall be tested and commissioned in accordance with the relevant Standards, Specifications and Codes of Practice to the entire satisfaction of the Engineer. Commissioning process shall include the training of the facility maintenance team on proper running and maintenance of the systems, applicable maintenance schedules, operational guides and other relevant documentation. Completion of this process must be signed off by the engineer.

#### **4.14 MINIMUM SCHEDULE OF SPARE PARTS**

A manufacturer's list of recommended spare parts shall be provided for Ice plant equipment.

### Bill of Quantities (Option- 01)

No	Description	Unit	Qty	Bill Of Quantities	
				Rate USD.	Amount USD.
	<b><u>COLD ROOM UNIT AND ICE PLANT UNIT:</u></b>				
	The Bidder is requested to refer the General Notes, Drawings, Specification and other relevant documents prior to pricing of items in this trade.	Note			
	Rates shall include for supply, installation, commissioning and maintaining of the following items according to Drawings, Specifications and complete to working order with all connections to the approved of the Engineer and relevant Authorities.	Note			
	The Bidder shall submit the following information on the items/equipment quoted for together with the Bid.				
	1. Make				
	2. Model No.				
	3. Technical data				
	4. Country of manufacture				
	5. Delivery period				
	6. Lead time for manufacturing				
	7. Port of shipping				
	8. Schedule of equipment	Note			



	The rates shall include for providing custom duty, clearing charges, insurance during handling, re-handling, transport, storage until ready for installation (if any) delivery of equipment up to the point of installation and until handing over.	Note			
	All equipment shall be guaranteed for a period of 60 months from the date of commissioning.	Note			
	The Bidder shall provide all dimension, technical information for all necessary builders work to the Engineer in advance in relation with the program of work.	Note			
	Rates for all pipes shall include for all pipe supports, hangers, saddles, brackets, screws, nails, tees, bends, sockets, reducers and the like and fixing material, cutting holes and chases in concrete / brick/ block/ work, special or normal painting, etc	Note			
	All pipes in and out to the building shall have flexible connection to accommodate movement due to any structural settlements to avoid any cracks.	Note			
	Rate of pipe shall include fire barriers, sleeves & other material as specified when passing through wall or met with another services.	Note			
	<b>ICE PLANT</b>				
1	Supply and install Ice plant capacity 2000kg/day with all necessary accessories ( refer specification)	Item	1		
	<b>COLD ROOM</b>				
2	Supply and install cold room consist with 1nos coolers and matching air cooled condensing units , insulation wall panels, air cuirtains, door with electric heater, temperature/humidity recorders, drain line .... etc as per	Item	1		

	given in the specification and drawings. Cooler capacity shall be 5kW.				
3	Supply & installation of Switch Board, electrical, control wiring for whole system of Cold room unit and Ice plant	Item	1		
4	Submission of As Built drawings, Operation and maintenance manual	Item	1		
5	Testing and commissioning of the full Refrigeration System.	Item	1		
6	5 years guarantee on successful performance of ice plant cold room, 5 years guarantee on compressor and 5 years guarantee on post installation maintenance.	Item	1		
7	3 months training on operation, service and maintenance	Item	1		
8	Applicable Freight, Insurance, complete import tax/duty and delivery at site, Buttala, Sri Lanka for complete ice plant and cold room equipment and accessories. [DDP - Buttala, Sri Lanka (INCOTERMS 2010)]	Item	1		
	<b>Total (USD)</b>				

## **Option 02 : COLD Room System 1500kg**

### **1.0 DESIGN CRITERIA**

1. Block ice plant capacity/Qty: 1500kg per day/ 1No
2. Ice block weight: 25kg per block
3. Machine type: Block Ice Machine
4. Ambient Temperature: Max:dry bulb temperature 35C
5. Water Quality: Refer water quality report for Buttala site
6. Water Temperature: 30C
7. Application: Transportation of fish

### **2.0 STANDARD OF WORKS**

1. ASHRAE: American Society of Heating, Refrigeration and Air Conditioning Engineer.
2. IHVE: The Institute of Heating and Ventilation Engineers (UK)
3. ASME: American Society of Mechanical Engineers
4. ARI: Air conditioning Refrigeration Institute (USA)
5. ASTM: American Society of Testing and Materials
6. AWS: American Welding Society
7. IEC & IEEE Standards
8. Institute of Refrigeration UK

### 3.0 DESCRIPTION OF WORK:

Under the scope of this project, bidders must supply & install a block ice plant capable of producing 1500kg of block ice per day. Each block would be 25kg. Client shall provide water and power supply requirement to meet selected Ice plant requirements and also supplier must specify any water treatment requirement based on provided water quality report.

### 4.0 SYSTEM DESCRIPTION

- A Block ice plant must consist with ice tanks, air cooled condenser, compressor, copper plate /shell & tube evaporator, factory assembled refrigerant piping with solenoid valves, filter dryers, stop and service valves, expansion valve etc. There must be convenient mechanical system for ice tank lifting to unload ice blocks.
- B Refrigerant shall be R134a /R410a or any other environmental friendly type.
- C Ice tank shall be fabricated with stainless steel 304 with adequate supports to keep tank firm and shall be insulated with polyurethane insulation sufficient thickness to prevent condensation of exterior of the tank. Tank lid too shall be insulated and be of a detachable type. Dimension of the tank is based on harvesting period, total production per day, ice block size etc. Ice cans shall be out of stainless steel 304.
- D. Refrigeration system shall be of air cooled type and complete system shall be mounted on a common base frame, piped, wired and tested prior to leaving manufacturing plant. Protective devices shall include Refrigerant high/low pressure cutouts and oil pressure cutout, phase failure, earth leakage etc.
- E  $\text{CaCl}_2$  (Calcium Chloride) Brine solution is preferred and supplier shall provide required composition of selected brine to meet the brine temperature -15C.

#### **4.1 SUBMITTALS**

- A Submit catalog data of all materials, equipment, and products for Work in this Section.
- B Submit complete shop fabrication and installation drawings, including plans, elevations, sections, and details.
- C Submit detailed anchorage and attachment drawings.
- D Submit record "As-Built" drawings upon successful completion of the project.
- E Submit complete operating and maintenance manuals that describe proper operating procedures, maintenance and replacement parts.

#### **4.2 QUALITY ASSURANCE**

Supplier shall have an ICTAD Grade or equivalent of country origin in Refrigeration and be an well-established organization. Supplier shall have the demonstrated ability to produce the specified equipment of the required quality and the proven capacity to complete an installation of this size and type within the required time limits.

#### **4.3 COORDINATION**

Supplier has full responsibility for the following:

- Making openings for service penetrations to and from the Ice making plant room.
- Properly sealing all service penetration into the ice making plant room.
- Field check all dimensions and make any adjustments in the block ice plant size for a proper fit.

#### 4.4 EXTENDED GUARANTEE

- A Ice plant supplier shall provide a written guarantee of Five(5) years that the complete unit and workmanship and that it will not deteriorate excessively or otherwise fail to perform.
- B Supplier shall provide a written guarantee of five (5) years for compressor.
- C Contractor shall provide service maintenance proposal for five years period after handing over the site.
- D Contractor shall train operation staff of equipment for operation, service and maintenance for the 3 months period.
- E Manufacturer's authorization letter for proposed equipment shall be produced along with the proposal.

#### 4.5 SPECIFICATIONS

Offered block ice plant shall be complied with specification indicated below.

Item	Specifications	Rating	Compliance
General	Power Supply	400v/3Ph/50Hz	Yes/No
	Refrigerant	R134a/R404a or equivalent	Yes/No
	Daily capacity	1500kg/day	Yes/No
	Cooling mode	Air Cooled	Yes/No
Standard Condition	Ambient Temperature	35C	
	Water inlet temperature	30C	

Operating Power	Compressor power	Below 5.0kW	Indicate actual value
	Condenser Fan	Below 1.2kW	Indicate actual value
	Lifting mechanism motor	Below 0.5kW	Indicate actual value
	Pump	Below 0.5kW	Indicate actual value
Compressor	Refrigeration Capacity	Approx: 14kW	Indicate actual value
	Condensing temperature	45C	Indicate actual value
	Evaporating temperature	-15C	Indicate actual value
	COP	Minimum 2.7kW/kW	Indicate actual value
Ice Size Range	Thickness:	.....	
	Height:	.....	
Ice Specification	Weight	25kg	Indicate actual value
	Qty	15 nos per 5hr	Indicate actual value
	Harvest times	4 times/ day	Indicate actual value
	Ice making time	5 hours	Indicate actual value
Ice machine Dimension	Size(L X W X H)		Indicate actual value
	Weight(kg)		Indicate actual value
	Pipe Size(inches)		Indicate actual value
Parts Info	Compressor		Copeland/Bitzer or equivalent

	Expansion Valve		ALCO or equivalent
	Service Valve		Danfoss or equivalent
	Solenoid Valve		Danfoss, Castal or equivalent
	PLC		Siemens or equivalent
	Switch gears		Siemens or equivalent

#### 4.6 CONTROLS

Ice plant to be provided with a control panel consisting of the following components:

- Painted steel enclosure meeting NEMA 4 & 12 ratings.
- Programmable controller
- Shall be c/w timer, switch gears, PFR, EFR, Contactors and thermal overload protection, relays. Enclosure shall be IP54.

#### 4.7 REFRIGERATION SYSTEM

- A General – the refrigeration system shall use refrigerants acceptable to the Authority having jurisdiction. Utilize R-404a / R134a refrigerant, or approved equal. No CFC type refrigerants will be acceptable.
- B All refrigeration line joints shall be brazed with Stay-Silv 15 brazing alloy. All piping shall be pressure leak tested and witnessed by the manufacturer.
- C Unit to be from the reputed manufacturers and be UL listed.



- D Condensing units must be of adequate capacity to achieve specified capacity, block ice 2000 kg/day in 3-4 harvesting cycles. Units to be complete in all respects including high/low pressure control, receiver, sight glass, liquid line drier, expansion valve and all other necessary equipment to achieve the cited performance. Compressors shall be Semi Hermatic or sealed type.
- F Refrigeration lines shall be insulated to prevent any condensation. Insulation exposed to the weather must have additional protection such as Al cladding from the elements.
- G Condensate drain lines to be run in CPVC tubing to nearest floor sink. To prevent condensation, drain line is to be insulated where it exits the insulated panels.
- H Pressurize and leak test the entire refrigeration system.

#### **4.8 ELECTRICAL**

- A All electrical components utilized shall be complied with electrical regulations listed IEE 16<sup>th</sup> Edition.
- B Supplier shall provide the appropriate circuits to each condensing unit and a pull box located above each cold room. All interconnecting and control wiring to be by walk-in supplier. A fused disconnect is to be provided at each condensing unit.
- C Exposed conduit inside the cold room shall be kept to a very minimum. Verify placement of all exposed piping and conduit with the Owner's Representative prior to installation.
- D To minimize penetrations, all electrical circuits shall enter the room via a minimum number of conduits, preferably one. The conduit through the wall or roof and all conduit inside the cold room shall be PVC. A seal-off fitting Crouse-Hinds type or EZS or equal shall be placed immediately outside the room and properly sealed.

#### **4.9 PLUMBING**

- A Water supply and drain line shall be supplied and installed by contract to approved Engineering standard.

#### 4.10 INSTALLATION

- A Install Ice plant in accordance with manufacturer's written instructions and reviewed shop drawings.
- B Install interconnecting accessories in accordance with the manufacturer's written recommendations and located for ease of servicing. Provide piping in accordance with good engineering practice.
- C Suction line insulation shall be sized and installed to prevent condensation.
- D Provide individual traps for condensate drains.
- E Test all equipment operation and performance of Ice plant. Make all adjustments and repairs as required.

#### 4.11 REFRIGERATING UNITS:

##### **Cooler:**

Evaporator shall be Shell & Tube type. Cooler coils shall allow maximum mass flow rate of refrigerant to be evenly distributed throughout the evaporator, maximizing coil efficiency thus providing higher capacity with a smaller physical unit cooler dimension.

##### **Air Cooled Condensing Unit:**

Condensing unit shall be air cooled type with 3Ph, propeller axial fans with motor in built thermistors (compressor winding also). Refrigerant must be CFC free, environment friendly with ZERO ODP and LOWGWP. Compressor must be semi hermetic or sealed type, Bitzer or equivalent make. Shall have liquid line solenoid, crank case heater, Liquid receiver, Oil separator, Oil pressure cutout, Refrigerant HP/LP cutout. Unit power supply for 3Ph shall be 400V and 1Ph would be 230V.

**Accessories such as nut & bolt, Ice can, Brine water tank.etc metal parts in machine should be made of Stainless steel -304 other than metals specified.**

#### **4.12 WATER QUALITY**

Supplier shall provide required water quality level to manufacture Ice along with offer.

#### **4.13 ELECTRICAL WORKS**

All electrically operated equipment shall be so designed that it will continue to function without damage to itself or otherwise, if the voltage and/or frequency vary within the following tolerances:

- i. Voltage -  $400 \pm 6\%$  (Grid Supply tolerance)
- ii. Frequency -  $50 \pm 0.3\%$

All electrically operated equipment shall be suitable for continuous and prolonged operation within the ambient temperature or exposed condition to the atmosphere where they are installed to operate.

#### **4.14 INSPECTION, TESTING AND COMMISSIONING**

All works shall be tested and commissioned in accordance with the relevant Standards, Specifications and Codes of Practice to the entire satisfaction of the Engineer. Commissioning process shall include the training of the facility maintenance team on proper running and maintenance of the systems, applicable maintenance schedules, operational guides and other relevant documentation. Completion of this process must be signed off by the engineer.

#### **4.15 MINIMUM SCHEDULE OF SPARE PARTS**

A manufacturer's list of recommended spare parts shall be provided for Ice.

### Bill of Quantities (Option- 02)

No	Description	Unit	Qty	Bill Of Quantities	
				Rate USD.	Amount USD.
	<b><u>COLD ROOM UNIT AND ICE PLANT UNIT:</u></b>				
	The Bidder is requested to refer the General Notes, Drawings, Specification and other relevant documents prior to pricing of items in this trade.	Note			
	Rates shall include for supply, installation, commissioning and maintaining of the following items according to Drawings, Specifications and complete to working order with all connections to the approved of the Engineer and relevant Authorities.	Note			
	The Bidder shall submit the following information on the items/equipment quoted for together with the Bid.				
	1. Make				
	2. Model No.				
	3. Technical data				
	4. Country of manufacture				
	5. Delivery period				
	6. Lead time for manufacturing				

	7. Port of shipping				
	8. Schedule of equipment	Note			
	The rates shall include for providing custom duty, clearing charges, insurance during handling, re-handling, transport, storage until ready for installation (if any) delivery of equipment up to the point of installation and until handing over.	Note			
	All equipment shall be guaranteed for a period of 60 months from the date of commissioning.	Note			
	The Bidder shall provide all dimension, technical information for all necessary builders work to the Engineer in advance in relation with the program of work.	Note			
	Rates for all pipes shall include for all pipe supports, hangers, saddles, brackets, screws, nails, tees, bends, sockets, reducers and the like and fixing material, cutting holes and chases in concrete / brick/ block/ work, special or normal painting, etc	Note			
	All pipes in and out to the building shall have flexible connection to accommodate movement due to any structural settlements to avoid any cracks.	Note			
	Rate of pipe shall include fire barriers, sleeves & other material as specified when passing through wall or meet with other services.	Note			
	<b>ICE PLANT</b>				
1	Supply and install Ice plant capacity 1500kg/day with all necessary accessories ( refer specification)	Item	1		
	<b>COLD ROOM</b>				

2	Supply and install cold room consist with 1nos coolers and matching air cooled condensing units , insulation wall panels, air curtains, door with electric heater, temperature/humidity recorders, drain line, etc as per given in the specification and drawings. Cooler capacity shall be 5kW.	Item	1		
3	Supply & installation of Switch Board, electrical, control wiring for whole system of Cold room unit and Ice plant	Item	1		
4	Submission of As Built drawings, Operation and maintenance manual	Item	1		
5	Testing and commissioning of the full Refrigeration System.	Item	1		
6	5 years guarantee on successful performance of ice plant cold room, 5 years guarantee on compressor and 5 years guarantee on post installation maintenance.	Item	1		
7	3 months training on operation, service and maintenance	Item	1		
8	Applicable Freight, Insurance, complete import tax/duty and delivery at site, Buttala, Sri Lanka for complete ice plant and cold room equipment and accessories. [DDP - Buttala, Sri Lanka (INCOTERMS 2010)]	Item	1		
<b>Total (USD)</b>					

## **COLD ROOM UNIT**

### **1.0 DESIGN CRITERIA**

1. Cold room size: Approx.: 4 m x 3m x 2.4m height
2. Interior Temperature: -5°C or less
3. Ambient Temperature: Maximum dry bulb temperature 35°C
3. Door Size: Refer technical specification 4.5(B)
4. Floor: 100mm Polyurethane panels (density – 40kg/m<sup>2</sup>) with 2.5mm Al chequer plate and heater mat to be maintained +5°C temperature in between floor & insulation panel.  
  
Level of Cold room concrete floor is at least 100mm above reference to outside floor level.
5. Wall: 100 mm thick polyurethane insulation on walls exposed to ambient condition
6. Product Load: 2MT of Ice Blocks have to be stored
7. Supplementary load: Approx.: 5 kWth

### **2.0 STANDARD OF WORKS**

1. ASHRAE: American Society of Heating, Refrigeration and Air Conditioning Engineer.
2. IHVE: The Institute of Heating and Ventilation Engineers (UK)
3. ASME: American Society of Mechanical Engineers
4. ARI: Air conditioning Refrigeration Institute (USA)
5. ASTM: American Society of Testing and Materials
6. AWS: American Welding Society
7. IEC & IEEE Standards
8. Institute of Refrigeration UK

### **3.0 DESCRIPTION OF WORK**

This cold room shall be used as Ice storage for proposed Ice plant at Buttala and cold room shall be located next to the Ice making plant room. The civil work related with this work shall be covered by a separate contract.

Air cooled condensing units shall be used to maintain adequately high temperature difference between cold room and compressor suction temperature (6-8°C) to maintain cold room conditions. Multiple Coolers are preferred for easy service and maintenance. Refrigerant shall be R404 or equivalent. Condensing units shall be located in the at ground level outdoor close to cold room and refrigerant piping shall be anchored to walls.

### **4.0 SYSTEM DESCRIPTION**

Maintain cold room temperature of -5°C.

#### **4.1. SUBMITTALS**

- A Submit complete materials list, including catalog data of all materials, equipment, and products for Work in this Section. Include refrigeration related calculations/selection and electrical requirements.
- B Submit complete shop fabrication and installation drawings, including plans, elevations, sections, and details.
- C Submit detailed anchorage and attachment drawings.
- D Submit record "As-Built" drawings upon successful completion of the project..
- E Submit complete operating and maintenance manuals that describe proper operating procedures, maintenance and replacement parts.



## 4.2 QUALITY ASSURANCE

- A Supplier shall have an ICTAD Grade in Refrigeration and be a well-established organization and production facility specializing in this type of equipment. Supplier shall have the demonstrated ability to produce the specified equipment of the required quality and the proven capacity to complete an installation of this size and type within the required time limits.

## 4.3 COORDINATION

- A. Supplier has full responsibility for the following:
- Making openings for service penetrations to and from the cold room.
  - Properly sealing all service penetration into the cold room with silicone.
  - Field check all dimensions and make any adjustments in the cold room size for a proper fit.

## 4.4 EXTENDED GUARANTEE

- A Cold room supplier shall provide a written guarantee of Five (5) years that the insulated structure shall be free of defects in material and workmanship and that it will not deteriorate excessively in its intended performance or otherwise fail to perform.
- B Supplier shall provide a written guarantee of five (5) years for each compressor.
- C Contractor shall provide service maintenance proposal for five years period after handing over the site.
- D Contractor shall train operation staff of equipment for operation, service and maintenance for the 3 month period together with relevant operations and maintenance manuals.
- E Manufacturer's authorization letter for the proposed equipment shall be produced along with the proposal.

## 4.5 PRODUCTS

### A Wall Panels

- 1 Insulated panels shall be minimum 100 mm thick, be of modular construction incorporating wall panels and be of Polyurethane type construction. Panels shall consist of insulation sandwiched between interior and exterior metal skin. Panel edges to have tongues and grooves that cam-lock together assuring an air tight vapor proof joint. Construction shall allow disassembly for possible relocation or expansion at a later date.
- 2 All panel insulation shall be Class 1 "foamed-in-place" 40kg/m<sup>3</sup> polyurethane foam insulation expanded with "Ozone Safe" 245a and UL certified as having a flame spread rating of 25 or less and smoke density no greater than 450 per ASTM E84.
- 3 The sheet metal finish will be plain smooth surface.

### B Door construction

- 1 Hinge type door construction shall match the insulated panels. Each entrance to have a clear opening of approximately 36" wide by 72"H. Each door shall be equipped with approximately a 14" x 14" heated viewing window or vacuum double glazed window.

## 4.6 CONTROLS

### A Cold room to be provided with a control panel consisting of the following components:

- Painted steel enclosure meeting NEMA 4 & 12 ratings.
- Programmable controller including analog temperature input.
- Color touch screen including room temperature display, temperature setting adjustment, alarm setting adjustment, alarm monitoring, alarm logging and temperature logging to a USB drive.
- Alarm contacts for remote monitoring.
- Suitable air relief valve shall be installed to the cold room.

- Shall be c/w defrosting timer, switch gears, PFR, EFR, Contactors and thermal overload protection, relays. Enclosure shall be IP54.

#### 4.7 REFRIGERATION SYSTEM

- A General – the refrigeration system shall use refrigerants acceptable to the Authority having jurisdiction. Utilize R-404A refrigerant, or approved equivalent. No CFC category refrigerants shall be acceptable.
- B All refrigeration piping required shall be furnished and installed by trained staff.
- C All refrigeration line joints shall be brazed with Stay-Silv 15 brazing alloy. All piping shall be pressure leak tested and witnessed by the Owner.
- D Condensing units and evaporator coils to be from the reputed manufacturers and be UL listed.
- E Condensing units must be of adequate capacity to achieve and maintain the individual room operating temperature requirements and must be sized to handle additional loads appropriate for the application. Units to be complete in all respects including high/low pressure control, receiver, sight glass, liquid line drier, expansion valve and all other necessary equipment to achieve the cited performance. Units to be air-cooled and located as per the relevant drawings. Compressors shall be of Semi Hermatic or sealed type.
- F Refrigeration lines shall be adequately insulated to prevent any condensation. Insulation exposed to the weather must have additional protection from the elements, where piping passes through floor slabs, core drill slab and install pipe sleeves. Provide fire stopping at penetrations to achieve the specified fire rating. All hangers to support tubing to meet local codes and conditions
- G Condensate drain line to be run in CPVC tubing to nearest floor sink. To prevent condensation, drain line is to be insulated where it exits the insulated panels.
- H Pressurize and leak test the entire refrigeration system.

## 4.8 ELECTRICAL

All electrically operated equipment shall be so designed that it will continue to function without damage to itself or otherwise, if the voltage and/or frequency vary within the following tolerances:

- i. Voltage -  $400 \pm 6\%$  (Grid Supply check for CEB compliance tolerance)
- ii. Frequency -  $50 \pm 0.3\%$

All electrically operated equipment shall be suitable for continuous and prolonged operation within the ambient temperature or exposed condition to the atmosphere where they are installed to operate.

- A All electrical components utilized shall comply with electrical regulations listed.
- B Supplier shall provide the appropriate circuits to each condensing unit and a pull box located above each cold room. A fused disconnect is to be provided at each condensing unit.
- C Exposed conduit inside the cold room shall be kept to a very minimum. Verification of placement of all exposed piping and conduit shall be with the Owner's Representative prior to installation.
- D To minimize penetrations, all electrical circuits shall enter the room via a minimum number of conduits, preferably one. The conduit through the wall or roof and all conduits inside the cold room shall be PVC. A seal-off fitting Crouse-Hinds type or EZS or equal shall be placed immediately outside the room and properly sealed.
- E Power supply for Ice plant machine shall be provided to electrical panel room with an isolator. All electrical and control work related to installation of Ice plant shall be done by Ref. contractor.

## 4.9 PLUMBING

The cold room supplier shall install a condensate drain line from evaporator coil to drain located outside the cold room.

#### **4.10 INSTALLATION**

- A. Install cold rooms in accordance with manufacturer's written instructions and reviewed shop drawings.
- B. Install sheet metal closure trim that matches insulated panel finish between all building walls and insulated panels.
- C. Verify placement of all exposed piping and conduit with the Owner's Representative prior to installation.
- D. Install interconnecting accessories in accordance with the manufacturer's written recommendations and located for ease of servicing. Provide piping in accordance with good engineering practice.
- E. Suction line insulation shall be sized and installed to prevent condensation.
- F. Provide individual traps for condensate drains.
- G. Test all equipment operation and performance of cold room. Make all adjustments and repairs as required.
- H. Clean all rooms inside and out, including the roof of each walk-in. Remove all debris and marks.

#### **4.11 REFRIGERATING UNITS**

Cooler:

Cooler coils shall allow maximum mass flow rate of refrigerant to be evenly distributed throughout the evaporator, maximizing coil efficiency thus providing higher capacity with a smaller physical unit cooler dimension.

Casing shall be in high quality powder coated Aluminum, centre plates shall be built in to enhance air side performance and structural strength for models with 2 or more fans.

Fins shall be produced from high grade aluminum with double sine wave pattern and rippled fin edge or equivalent to produce higher heat transfer efficiencies.

Fan motors shall be of high efficiency type and fitted with thermistor motor protection and conform to relevant safety standards.

Capacity ratings must be tested in accordance with ASHRAE dry box standards and product shall be quality assured with all manufacturing facilities are ISO 9001:2000 accredited.

Air Cooled Condensing Unit:

Condensing units shall be air cooled type with 3Ph, propeller axial fans with motor in built thermistors (compressor winding also). Refrigerant must be CFC free, environment friendly with ZERO ODP and LOWGWP. Compressor must be semi hermetic reciprocating, Bitzer or equivalent make. The sub system shall have liquid line solenoid, crank case heater, Liquid receiver, Oil separator, Oil pressure cutout, and Refrigerant HP/LP cutout. Unit power supply for 3Ph shall be 400V and 1Ph would be 230V.

**Accessories such as nuts & bolts etc metal parts in machine should be made of Stainless steel -304 other than metals specified.**

#### **4.13 INSPECTION, TESTING AND COMMISSIONING**

All works shall be tested and commissioned in accordance with the relevant Standards, Specifications and Codes of Practice to the entire satisfaction of the Engineer. Commissioning process shall include the training of the facility maintenance team on proper running and maintenance of the systems, applicable maintenance schedules, operational guides and other relevant documentation. Completion of this process must be signed off by the engineer.

#### **4.14 MINIMUM SCHEDULE OF SPARE PARTS**

A manufacturer's list of recommended spare parts shall be provided for cold room equipment.

## 5.0 SCOPE OF WORK OF REFRIGERATION CONTRACTOR

Works which are done by contractor mark as “√”

Description of work	Refrigeration contractor	Other contractor
Supply & Install of Ice Plant machine	√	
Supply & Install of Cold room unit, wall panels, door, etc	√	
Supply & Install Electrical control and power panel board, wiring...etc. (Power supply shall be provided to electrical plant room with isolator by electrical contractor.)	√	
Drainage line system		√
Condensate drain lines	√	
Training of site staff	√	
Ventilation system		√
Water supply and purification system		√

Bidder shall produce spare parts list and 5 years service maintenance cost along with the offer

Item	Description	Unit	Qty	Amount. Rs
1	Recommended spare parts for cold room unit and Ice plant (specify )	Item	1	
	Service and maintenance shall be carried out minimum 4 service per year.			
2	Service and maintenance for first year	Item	1	
3	Service and maintenance for 2nd year	Item	1	
4	Service and maintenance for 3rd year	Item	1	
5	Service and maintenance for 4th year	Item	1	
6	Service and maintenance for 5th year	Item	1	

Plan –ICE PLANT

