

Letter of Invitation

Subject: CONSULTING SERVICES FOR “DEVELOPING AND EXPANDING OF EXISTING WEB PORTAL FOR REGISTRATION OF MANUFACTURERS AND THEIR PRODUCTS TO COMPLY WITH MINIMUM ENERGY PERFORMANCE STANDARDS (MEPS)”

Issue Date: 05-12-2023 Submission Deadline: 20-12-2023

Dear Sir/Madam,

We are writing to invite you to submit a proposal for the above-mentioned services by the date and time mentioned above. The following documents, attached with this letter, are intended to enable you to submit a complete and responsive proposal.

2. Your offer comprising a technical proposal and a financial proposal, in accordance with the guidelines in Request for Proposal/Terms of reference, should reach the following address by the submission deadline:

National Energy Efficiency & Conservation Authority (NEECA)
Building, Sector G-5/2, Islamabad
Telephone No. 051-9214673

3. Requests for additional information should be addressed to the above-mentioned officer in writing in accordance with the guidelines in Request for Proposal/Terms of reference.

4. Your technical and financial proposals should reach at the address given above on or before the last date mentioned for submission. Late submission of proposals will not be entertained.

5. You are requested to acknowledge receipt of this letter and let us know whether or not you intend to submit a proposal.

6. Documentation about existing system could be requested via email **adit.web@neeca.gov.pk**

Regards.

Administrative officer

National Energy Efficiency and Conservation Authority

REQUEST FOR PROPOSAL

National Energy Efficiency & Conservation Authority (NEECA)

Building, Sector G-5/2, Islamabad.

Contact No. 051-9214673

Hiring of Service for

Developing and Expanding of existing Web Portal for Registration of Manufacturers and Their Products to Comply with Minimum Energy Performance Standards (MEPS)

**NATIONAL ENERGY EFFICIENCY & CONSERVATION
AUTHORITY (NEECA)**

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1 Instructions to Prospective bidders

- a. The purpose, nature and cost of the services required by means of this RFP are elaborated in the Terms of Reference (TOR).
- b. The Prospective bidder shall bear all costs associated with the preparation and submission of the Proposal, NEECA will not be responsible or liable for those costs, regardless of the conduct or outcome of the solicitation.

1.1 Qualification of the Bidders

The following bidders will be eligible to apply for this tender:

1. Bidders registered with SECP, PSEB, FBR etc.
2. An affidavit stating that the bidder has never been blacklisted by any government agency or authority and that an affidavit to the effect that 3% earnest money has been placed in the financial proposal.
3. Interested bidders can't apply in Consortium or Joint Venture capacity.
4. Bidders having minimum 3 years of working experience in IT business preference will be given to those having experience in Product Registry System.

1.2 Solicitation of Documents

a. Contents for solicitation documents

The National Energy Efficiency & Conservation Authority (NEECA) is inviting proposals from qualified and experienced software development firms to enhance and expand the existing web portal designed for the registration of manufacturers and their products, ensuring compliance with Minimum Energy Performance Standards (MEPS). NEECA is dedicated to advancing energy efficiency and conservation efforts in our nation. Building upon the success of the current web portal, this project aims to further enrich the platform by expanding its capabilities to accommodate a wider range of products from various sectors. The selected firm will be expected to collaborate closely with NEECA to seamlessly integrate additional products into the portal's framework, enhancing user experience, and facilitating a streamlined registration process. This initiative represents a significant step towards promoting sustainable practices and reducing energy consumption across industries. The enhanced web portal will contribute to our ongoing commitment to a greener and more energy-efficient future.

Proposals must offer services for the total requirement. Proposals offering only part of the requirement will be rejected. The prospective bidder is expected to examine all corresponding instructions, forms, terms, and conditions contained in the Solicitation Documents. Failure to comply with these documents will be at the prospective bidder's risk and may affect the evaluation of the Proposal.

b. Clarification/Additional Information of solicitation documents

A prospective bidder requiring any clarification/ additional information of the Solicitation Documents may notify NEECA in writing at the mailing address indicated in the RFP. NEECA will respond in writing to any request for clarification/ additional information of

the Solicitation Documents that it receives earlier than one week prior to the deadline for the submission of Proposals. Written copies of the response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective bidders that have received the Solicitation Documents through email.

c. Amendments of solicitation documents

- i. At any time prior to the deadline for submission of Proposals, NEECA may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the Solicitation Documents by amendment.
- ii. All prospective bidders that have received the Solicitation Documents will be notified in writing through email of all amendments to the Solicitation Documents.
- iii. In order to afford prospective bidders reasonable time in which to take the amendments into account in preparing their offers, NEECA may, at its discretion, extend the deadline for the submission of Proposals.

1.3 Preparation of Proposal

a. Language of the proposal

The Proposals prepared by the Prospective bidder and all correspondence and documents relating to the Proposal exchanged by the Prospective bidder and NEECA shall be in the English language.

b. Documents comprising the proposal

- i. A covering letter from the Prospective bidder that is in accordance with Annexure C;
- ii. A technical proposal, including documentation to demonstrate that the Prospective bidder meets all requirements.
- iii. A financial proposal completed.
- iv. Bid Bond at the rate of 3.0% of the total financial bid, in the shape of demand draft/ pay order in favor of “National Energy Efficiency and conservation Authority”.
- v. Experience of providing services to government institutions or reputable corporate entities at national level.
- vi. Proof of provision of similar services to a national or international organization.
- vii. Profile of the key personnel which will be involved to deliver the assignment.
- viii. Firm’s legal status/registration in Pakistan.
- ix. NTN and STRN registration certificate
- x. Bidders registered with SECP, PPRA, FBR etc.
- xi. Status of administrative, operational, and financial capacity of firm
- xii. Affidavit on judicial paper that the firm has never been backlisted
- xiii. CVs of Proposed Personnel’s.

1.3.1 Technical Proposal

a. Preparation of Technical Proposal:

Technical Proposal should detail the capability and experience of delivering the services specified in the ToR. Bidder should be required to provide information as

itemized in the “Selection Criteria” and the Prospective bidder shall structure its technical proposal as follows:

- i. Expertise of Prospective bidder (excluding letters of association, if any).
 - This section should highlight the corporate capability of the Prospective bidder, including the year and state/country of incorporation and a brief description of the Prospective bidder’s past and present activities. Publicity material such as brochures and other printed matter should not be included in the proposal.
- ii. Proposed Approach and Work Plan (excluding annexes, if required).
 - This section should demonstrate how the Prospective bidder proposes to undertake each of the activities required by the TOR in order to meet or exceed the requirements. This should include the approach proposed by the Prospective bidder for conducting Market Survey for lighting.
 - A clear timetable showing the timing of each activity and the dates of delivery of the outputs and deliverables identified in the TOR must be provided.
 - All the management arrangements, including arrangements for supervision, quality assurance, logistics, etc. should be addressed in this section of the proposal.
- iii. Proposed Personnel (maximum two pages for introduction/overview, team leader’s curriculum vitae and other proposed personnel).
 - All the proposed personnel must be identified by name and the position assigned in relation to the TOR.
 - Only information that is directly relevant to the requirements of the TOR should be provided.
 - Undertaking by all proposed personnel as per Annexure-D.
- iv. **General instructions**
 - The technical proposal should not contain any financial information whatsoever on the services offered. Financial information shall be separated and only contained in the financial proposal.
 - Information which the Prospective bidder considers proprietary, if any, should be clearly marked “proprietary” next to the relevant part of the text and it will then be treated as such accordingly.
 - During the term of agreement, the consulting firm/Corporate entity shall not change, without prior approval of NEECA, the team of professional(s) and/or association with other entities as originally proposed in the technical proposal. NEECA reserves the right to reject any such proposed change(s).
 - The Prospective bidder(s) must include at least one reference in the proposal for verification by NEECA. If deemed appropriate, NEECA may visit the offices of bidder(s) at any stage for the purpose of technical evaluation before awarding the contract.

1.3.2 Financial Proposal

a. Preparation of Financial Proposal and its Validity:

- i. Each Financial proposal for the whole assignment will relate to the estimates of the cost of undertaking each task/assignment. The total cost (grand total) should be all-inclusive, lump-sum amount (fixed price) in Pak Rupees. **Open-ended financial proposal shall be rejected.**
- ii. The Prospective bidder (s) shall hold the financial proposal valid for at least Six (06) Months from the last date of submission of proposals, during which time the Prospective bidder will maintain, without change, the cost and the personnel proposed for the assignment. NEECA will make every effort to select a consulting firm/Corporate entity within this period.
- iii. The Prospective bidder shall provide a detailed budget for satisfactory completion of required services, and this budget shall provide for all the costs which the TOR requires the Prospective bidder to bear. The budget must be consistent with all aspects of the technical proposal, including the approach, work plan, activities, outputs, personnel and level of effort proposed by the Prospective bidder.
- iv. A separate line item for the level of effort, unit rate and cost of each consultant/firm's services should be provided. Similarly, the Prospective bidder must show separate line item estimates, including unit rates, for all significant out-of-pocket costs (e.g., travel, hotel, communication, vehicle rental, printing and publication, etc.).

b. Proposal Currency

All prices shall be quoted in Pak Rupees.

c. Period of validity of proposals

- i. Proposals shall remain valid for Six (06) Months from the last date of submission of proposals. A Proposal valid for a shorter period may be rejected by NEECA on the grounds that it is non-responsive.
- ii. In exceptional circumstances, NEECA may solicit the Prospective bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. Any Prospective bidder granting the request will not be required nor permitted to modify its Proposal.

2 Submission of Proposals

a. Sealing and marking of proposals

- i. The Prospective bidder shall seal the Proposals in one outer and two inner envelopes, as detailed below:
 - I. The outer envelope shall be addressed to the officer identified in the RFP, and marked **RFP: "Developing and Expanding of existing Web Portal for Registration of Manufacturers and Their Products to Comply with Minimum Energy Performance Standards (MEPS) .**
 - II. Both inner envelopes shall indicate the name and address of the Prospective bidder. The bidder(s) will submit 3 copies of technical proposal with the copies duly marked "Copies" and three 3 copies of financial proposal with the copies duly marked "Copies", placed in separately sealed envelopes, clearly and appropriately marked as "Technical and Financial Proposal" respectively. These two sealed and clearly marked envelopes should then be placed in an outer envelope. If the inner envelopes are not sealed and marked as per the instructions in this clause, NEECA will not assume responsibility for the Proposal's

misplacement or premature opening. **[Add electronic copy in flash drive in each envelope]**

- ii. The envelopes must also clearly bear the instructions as:

“Do not open, except in the presence of Consultant/firm/Selection Committee (SC)”

- iii. All the pages of the financial proposals should be initialed by the person or persons duly authorized for signing the proposals. The proposals must contain no interlineations or overwriting except as necessary to correct errors made by the Consulting Firm /Corporate Entity. In that case the person or persons signing the proposal must initial such corrections.
- iv. Bid Bond at the rate of 3.0% of grand total amount of financial proposal applied by the bidder in the form of Bank Draft/Pay Order shall be submitted by the Consulting firm/ Corporate entity in the name of NEECA along with the financial proposal. This bid bond will be forfeited in case of non-compliance to the terms by the selected consulting firm/ Corporate entity as a penalty. Upon successful completion of assignment, the bid bond will be returned to the Prospective bidder. After evaluation of Proposals by the Selection Committee (SC), the bid bonds will be returned to the rejected (unsuccessful) Prospective bidders. If the bid bond is not accompanied with the proposals, the proposals will be rejected.

b. Deadline for submission of proposals

- i. Proposals must be received by NEECA at the address specified in the RFP, no later than the date and time indicated in the RFP.
- ii. NEECA may, at its own discretion extend this deadline for the submission of Proposals by amending the solicitation documents in accordance with clause sec (1.1), clause (c): Amendments of Solicitation Documents, in which case all rights and obligations of NEECA and Prospective bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

c. Late Proposals

Any Proposal received by NEECA after the deadline for submission of proposals shall be rejected.

d. Modification and withdrawal of Proposals

- i. The Prospective bidder may withdraw its Proposal after the Proposal’s submission, provided that written notice of the withdrawal is received by NEECA prior to the deadline prescribed for submission of Proposals.
- ii. No Proposal may be modified subsequent to the deadline for submission of proposals.
- iii. No Proposal may be withdrawn in the interval between the deadline for submission of proposals and the expiration of the period of proposal validity specified by the Prospective bidder in its covering letter.

3 Opening and Evaluation of Proposals

a. Clarification of proposal

To assist in the examination, evaluation and comparison of Proposals, NEECA may at its discretion, ask the Prospective bidder for clarification of its Proposal. The request for clarification and the response shall be in writing and no change in price or substance of the Proposal shall be sought, offered or permitted.

b. Preliminary examination

- i. NEECA will examine the Proposals to determine whether they are complete, whether any computational errors have been made, whether the documents have been properly signed, and whether the Proposals are generally in order.
- ii. Prior to the detailed evaluation, NEECA will determine the substantial responsiveness of each Proposal to the Request for Proposals (RFP). For purposes of these clauses, a substantially responsive Proposal is one which conforms to all the terms and conditions of the RFP without material deviations. The determination of a Proposal's responsiveness is based on the contents of the Proposal itself without recourse to extrinsic evidence.
- iii. A Proposal determined as not substantially responsive will be rejected by NEECA and may not subsequently be made responsive by the Prospective bidder by correction of the non-conformity.

c. Evaluation of Proposals

The evaluation of the bids will be done on Technical as well as Financial basis, which will be on **80-20 rule**, i.e., 80% weightage will be given to Technical Bids and 20% to Financial Bids.

To qualify the technical evaluation, the Prospective bidder(s) will have to secure at least 70% marks and be within 10% of marks secured by the highest placed bidder(s). Aggregate scores below 70% shall mean that the proposal is not responsive, while the responsive proposal shall be rated in the range of 70 - 100 per cent. A technical proposal is liable to be considered not responsive, in case it does not contain any information or does not follow the instructions as specified in the "Request for Proposal".

3.1 Evaluation Criteria

i. Professional Capability of Consulting Firm / Corporate Entity **20% Marks**

The consulting firm / company are expected to be equipped with professional skills to carry out all the tasks of the scope of work of this assignment effectively and efficiently.

- Number of completed relevant projects in last 10 years for Gov. Sector of minimum net worth of Rs. 1 Million each (2 Marks for each project) 10% Marks
- Specific Experience of same nature and scope. 10% Marks

ii. Proposed Personnel

20% Marks

(A) Project Manager

10% Marks

- Team leader should have appropriate qualifications, experience and expertise in projects of similar nature for completing the activity described in the terms of reference. He should be at least a graduate in computer from HEC recognized university with 10 years' experience with demonstrable projects to his credit. (5 Marks) (Higher qualifications and experience will be preferred.)
- CV of the project manager must include information on at least 2 successful completed projects related to web registry, including information on when and for whom the activities were undertaken. (3 Marks)
- PMP Certified of any other project management certification (2 Marks)

(B) Other Professionals (Team Members)

10% Marks

Qualifications, capabilities and adequacy of key professional staff proposed to complete the assignment described in the terms of reference.

- **System Analyst:** Academic Final Degree (1 marks for MBA, MCS or BCS) (1 marks for having 10 or above years of experience as system analyst)
- **Software Engineer / Software Developers** (Max Two profiles) (1 marks for MS, BS in computer science, software engineering or computer engineering per developer) (1 marks for having 3 or above years of experience as Software developer per developer)
- **Database designer / SQA Engineer** (Max Two profiles) (1 marks for MS, BS in computer science, software engineering or computer engineering per designer/engineer) (1 marks for having 3 or above years of experience as designer/engineer per designer/engineer)

iii. Methodology, Work plan, Innovation

40% Marks

- Demonstration of understanding of the objectives 10 % Marks
- Quality and adequacy of proposed methodology to be used in the web based program development. 10 % Marks
- Innovativeness and Proposed presentation 10% Marks
- Work plan/schedule/organization of work. 10% Marks

iv. Financial Bids.

The financial bid must be cost-effective without compromising on the quality of the Technical Bids.

20% Marks

Total:

100% Marks

4 Award Of Contract

a. Award criteria, negotiation and award of contract

- i.** NEECA reserves the right to accept or reject any Proposal, and to annul the solicitation process and reject all Proposals at any time prior to award of contract, without thereby incurring any liability to the affected Prospective bidder or any obligation to inform the affected Prospective bidder or Prospective bidders of the grounds for NEECA's action. For purposes of transparency, however, NEECA may allow any Prospective bidders who requests to examine the results of the technical and financial evaluation of all proposals within the premises of NEECA.
- ii.** The Selection Committee (SC) shall evaluate the technical proposal received before deadline. The consulting firms/ companies who are technically qualified will be invited for a meeting to open financial proposals. The SC will determine if the financial proposals are complete and without computational errors, and they will be adjusted to correct any arithmetical errors.
- iii.** NEECA does not bind itself by the issuance of this "Request for Proposal" for selecting any consulting firm/ corporate entity and reserves the right to alter, add to, reduce, or cancel the services to be provided without assigning any reason.
- iv.** NEECA shall negotiate with the first-ranked Prospective bidder to obtain the best value for money in relation to the TOR. NEECA reserves the right to demand any such change in personnel, approach and work plan that would enable the Prospective bidder to improve its responsiveness to the TOR.
- v.** Prior to the expiry of the period of proposal validity, NEECA will award the contract to the qualified Prospective bidder after combined evaluation of technical and financial proposals, and with whom NEECA has successfully concluded contract negotiations on Work Plan / TORs etc.

b. Signing of the agreement

Within 7 (seven) days of receipt of the agreement the successful Prospective bidder with whom an agreement has been successfully negotiated shall sign and stamp the agreement and return it to NEECA.

5 Confidentiality

Information relating to evaluation of proposals and recommendations concerning awards shall not be disclosed to the firms who submitted the proposals or to other persons not officially concerned with the process, until the successful firm has been notified that it has been awarded the contract.

6 Payment terms/Schedule

After the award of contract, the assignment is required to be completed within **03 months**. Phases of the assignment (as per ToRs) will be conducted in a sequence (one after the other). NEECA will make payments, subject to the satisfactory approval of work for each task. Delivery of work and payment schedule will be as given below:

- i. **15%** of the cost of Enhancement of Web Registry and Portal Development will be paid as mobilization advance upon conducting of Orientation Meeting with NEECA. The minutes of the meeting will be issued by the hired firm/entity.
- ii. **15%** of the cost of Enhancement of Web Registry and Portal Development will be paid on development and presentation of content subject to acceptance by SC of NEECA.
- iii. **30%** of the cost of Enhancement of Web Registry and Portal Development will be paid upon successful implementation and practical demonstration of enhanced registry on web. This payment will be inclusive of the Cloud hosting required subject to acceptance by SC of NEECA.
- iv. Remaining **40%** of the cost of Enhancement of Web Registry and Portal Development will be paid upon submission of final work and report to the entire satisfaction of the SC.

7 Delay and Non-Compliance

- i. Full amount of bid bond shall be forfeited by the NEECA;
 - a) In case the consultant/firm doesn't comply with the terms of reference, or
 - b) Withdraws its bid after award of contract.
- ii. In case the consultant/firm doesn't deliver, the requisite deliverables by the specified time frame, NEECA reserves the right to
 - a) Deduct Rs. 2,000/- per day from final payment until the completion of work, or
 - b) If the total deducted amount becomes equivalent to the bid bond value, the contract shall be terminated by NEECA and the full amount of bid bond shall be forfeited in favor of NEECA.

Terms of Reference

1. Background Terms of Reference

National Energy Efficiency & Conservation Authority (NEECA) is a federal authority established under the National Energy Efficiency & Conservation (NEEC) Act 2016. NEECA has the mandate for initiating, catalyzing, and coordinating all energy conservation activities in different sectors (Agriculture, Industry, Transport, Building and Power) of the economy. EE&C has emerged as a key area of intervention in lieu of energy security and its role in climate change mitigation. NEECA formulated the first ever National Energy Efficiency & Conservation (NEEC) Policy 2022 to implement EE&C agenda in Pakistan.

Provision of reliable, affordable, efficient, secure, and clean energy has become the primary driver for sustainable economic growth of a country. (EE&C) under the Goal 07 of the Sustainable Development Goals (SDGs) is key component of all kinds of policies and planning for energy sector. Pakistan's current energy saving potential is approximately 10-12 Million Ton of Oil Equivalent (MTOE). National Energy Efficiency & Conservation Authority (NEECA) has taken certain initiatives as a part of its mandate to exploit this energy saving potential to curb the energy sector challenges. NEECA believes that there is realization about the importance of EE&C but lack of awareness about the technical information and energy consumption behavior has become a missed opportunity. Further, by not including EE&C practices in daily life caused the energy saving potential untapped.

NEECA has initiated various behavior modification activities at national level to create a culture of conservation for sustainable development. Mainly, NEECA has initiated Energy Talks/ Thursday Series to cover the key dimension of EE&C in key sectors of the economy to highlight its importance. Similarly, continuous efforts are being made for behavior modification through social media platforms in the form of short documentaries, visuals and facts about various EE&C measures and strategies. The findings of the technical reports, energy saving potential in different sectors, causes of wasting energy resources and energy performance standards of different equipment and appliances further needs massive awareness raising to contribute to national level energy saving targets.

A. Objective

Objective

The objective is to enhance and expand existing web portal and its data processing program on the back end for registration of lighting vendors and products for evaluation and approval by NEECA for use/Sale in Pakistan as per the set standards of NEECA.

This registry will be design in a flexible manner so as to add other than lighting products using the same program.

B. Scope of Work

1. The selected firm is expected to develop an approach and methodology for “Developing and Expanding of existing Web Portal for Registration of Manufacturers and their Products to Comply with Minimum Energy Performance Standards (MEPS)”. The scope covers the Upper level Requirements as provided in Annexure-E.

2. The selected firm is expected to provide maintenance and support services both for existing Web Portal and enhanced web portal for Registration of Manufacturers and Their Products to Comply with Minimum Energy Performance Standards (MEPS)” The scope covers the below:

- I. **Maintenance:** It includes the fixing the run time issues, weekly health check of the system and updates (News, Gallery, FAQs etc.) along with the efforts to keep system live and up. The services are :
 - General maintenance (User interface changes, Application functional changes, recommended database changes modification to query structure, system patches, performance tuning , archiving, upgrade of operating software)
 - Perfective maintenance activity to ensure that PRS operate at peak efficiency (Focus area: System CPU hours, General performance tuning, Storage space ,Response time, Achieving, Database performance tuning)
 - Technical and end user support
 - Monitoring , Reporting and Review services
 - Planning and Analysis
 - Subscription of services (well on time renewal of licenses and subscriptions of cloud services (AWS Cloud services))

3. There may be 20 % variation in the scope of work at discretion of the NEECA.

Note: Documentation related to existing PRS is available on demand.

C. Deliverable/Specific Outputs Scope of Work

The expected deliverables include

- GUI -mock-ups of the system (Wireframes)
- Software requirement specification document (SRS)
- Functional system with all features in scope
- User Manual of the system
- Technical Documentation of the system

The format of all deliverables will be agreed with the NEECA during the assignment. All documents will be produced in English and will be submitted electronically and as hard copies to NEECA.

D. Duration of Assignment

1. Development and implementation period for enhancement of web portal will be 06-08 months.
2. The period for Maintenance and support service shall be initially for three (3) Years.
3. The maintenance and support service period for existing web portal will start immediately after signing the agreement.
4. Maintenance and support period for enhanced web portal will start from the date of acceptance of the implementation of project by the Authority (NEECA).

General Conditions of Agreement

1. Legal Status

The Consultant/firm shall be considered as having the legal status of an independent consultant/firm Vis-à- Vis. The consultant/firm's personnel and sub-contractors shall not be considered in any respect as being the employees or agents of NEECA.

2. Source of Instructions

The consultant/firm shall neither seek nor accept instructions from any authority external to NEECA in connection with the performance of its services under this agreement. The consultant/firm shall refrain from any action which may adversely affect NEECA and shall fulfill its commitments with the fullest regard to the interests of NEECA.

3. Consultant/firm's Responsibility for Employees

The consultant/firm shall be responsible for the professional and technical competence of its employees and will select, for work under this agreement, reliable individuals who will perform effectively in the implementation of this agreement, respect the local customs, and conform to a high standard of moral and ethical conduct.

4. Assignment

The consultant/firm shall not assign, transfer, pledge or make other disposition of this agreement or any part thereof, or any of the consultant/firm's rights, claims or obligations under this agreement except with the prior written consent of NEECA.

5. Sub-Consultant/firm

In the event that the consultant/firm requires the services of sub-consultant/firm, the consultant/firm shall obtain the prior written approval from NEECA and clearance of for all sub-consultant/firms. The approval of NEECA of a sub- consultant/firm shall not relieve the consultant/firm of any of its obligations under this agreement. The terms of any sub-consultant/firm shall be subject to and conform to the provisions of this agreement.

6. Officials Not to Benefit

The consultant/firm warrants that no official of NEECA has received or will be offered by the consultant/firm any direct or indirect benefit arising from this consultant/firm or the award thereof. The consultant/firm agrees that breach of this provision is a breach of an essential term of this consultant/firm.

7. Indemnification

The consultant/firm shall indemnify, hold and save harmless, and defend, at its own expense, NEECA, its officials, agents, servants and employees from and against all suits, claims, demands, and liability of any nature or kind, including their costs and expenses, arising out of acts or omissions of the consultant/firm, or the consultant/firm's employees, officers, agents or sub-contractors, in the performance of this agreement. This provision shall extend, inter alia, to claims and liability in the nature of workmen's compensation, product liability and

liability arising out of the use of patented inventions or devices, copyrighted material or other intellectual property by the consultant/firm, its employees, officers, agents, servants or sub-consultant/firm's. The obligations under this Article do not lapse upon termination of this agreement.

8. Insurance and Liabilities to Third Parties

8.1 The consultant/firm shall provide and thereafter maintain insurance against all risks in respect of its personnel, property and any equipment used for the execution of this agreement that is required under the law of the land.

8.2 The consultant/firm shall, upon request, provide with satisfactory evidence of the insurance required under this Article.

9. Encumbrances/Liens

The consultant/firm shall not cause or permit any lien, attachment or other encumbrance by any person to be placed on file or to remain on file in any public office or on file with against any monies due or to become due for any work done or materials furnished under this agreement, or by reason of any other claim or demand against the consultant/firm.

10. Title to Equipment

Title to any equipment and supplies that may be furnished by shall rest with NEECA and any such equipment shall be returned to NEECA at the conclusion of this agreement or when no longer needed by the consultant/firm. Such equipment, when returned to NEECA, shall be in the same condition as when delivered to the consultant/firm, subject to normal wear and tear. The consultant/firm shall be liable to compensate for equipment determined to be damaged or degraded beyond normal wear and tear.

11. Copyright, Patents and Other Proprietary Rights

NEECA shall be entitled to all intellectual property and other proprietary rights including but not limited to patents, copyrights, and trademarks, with regard to products, or documents and other materials which bear a direct relation to or are produced or prepared or collected in consequence of or in the course of the execution of this agreement. At NEECA's request, the consultant/firm shall take all necessary steps, execute all necessary documents and generally assist in securing such proprietary rights and transferring them to NEECA in compliance with the requirements of the applicable law.

12. Use of Name, Emblem or Official Seal of

The consultant/firm shall not advertise the fact that it is a consultant/firm with NEECA, nor shall the consultant/firm, in any manner whatsoever use the name, emblem or official seal of NEECA, or any abbreviation of the name of NEECA or NEECA in connection with its business or otherwise.

13. Confidential Nature of Documents and Information

13.1 All reports, drawings, photographs, recommendations, estimates, documents and all other data compiled by or received by the consultant/firm under this agreement shall

be the property of NEECA, shall be treated as confidential and shall be delivered only to authorized officials on completion of work under this agreement.

- 13.2 The consultant/firm may not communicate at any time to any other person, Government or authority external to NEECA, any information known to it by reason of its association with NEECA which has not been made public except with the authorization of NEECA; nor shall the consultant/firm at any time use such information to private advantage. These obligations do not lapse upon termination of this agreement.

14. Force Majeure; other Changes in Conditions

- 14.1 Force majeure, as used in this Article, means acts of God, war (whether declared or not), invasion, revolution, insurrection, or other acts of a similar nature or force which are beyond the control of the Parties.
- 14.2 In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the consultant/firm shall give notice and full particulars in writing to NEECA, of such occurrence or change if the consultant/firm is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under this agreement. The consultant/firm shall also notify NEECA of any other changes in conditions or the occurrence of any event which interferes or threatens to interfere with its performance of this agreement. The notice shall include steps proposed by the consultant/firm to be taken including any reasonable alternative means for performance that is not prevented by force majeure. On receipt of the notice required under this Article, NEECA shall take such action as, in its sole discretion; it considers being appropriate or necessary in the circumstances, including the granting to the consultant/firm of a reasonable extension of time in which to perform its obligations under this agreement.
- 14.3 If the consultant/firm is rendered permanently unable, wholly, or in part, by reason of force majeure to perform its obligations and meet its responsibilities under this agreement, NEECA shall have the right to suspend or terminate this agreement on the same terms and conditions as are provided for in Article 7, "Termination", except that the period of notice shall be seven (7) days instead of thirty (30) days.

15. Termination

- 15.1 Either party may terminate this agreement for cause, in whole or in part, upon thirty day's notice, in writing, to the other party. The initiation of arbitral proceedings in accordance with Article 16 "Settlement of Disputes" below shall not be deemed a termination of this agreement.
- 15.2 In the event of any termination by NEECA under this Article, no payment shall be due from NEECA to the consultant/firm except for work and services satisfactorily performed in conformity with the express terms of this agreement. The consultant/firm shall take immediate steps to terminate the work and services in a prompt and orderly manner and to minimize losses and further expenditures.
- 15.3 Should the consultant/firm be adjudged bankrupt, or be liquidated or become insolvent, or should the consultant/firm make an assignment for the benefit of its

creditors, or should a Receiver be appointed on account of the insolvency of the consultant/firm NEECA may, without prejudice to any other right or remedy it may, terminate this agreement forthwith. The consultant/firm shall immediately inform of the occurrence of any of the above events.

16. Settlement of Disputes

16.1. Amicable Settlement

The Parties shall use their best efforts to settle amicably any dispute, controversy or claim arising out of, or relating to this agreement or the breach, termination or invalidity thereof. Where the parties wish to seek such an amicable settlement through conciliation, the conciliation shall take place in accordance with the Arbitration Act, 1940.

17. Observance of the Law

The consultant/firm shall comply with all laws, ordinances, rules, and regulations bearing upon the performance of its obligations under the terms of this agreement.

18. Authority to Modify

No modification or change in this agreement, no waiver of any of its provisions or any additional contractual relationship of any kind with the consultant/firm shall be valid and enforceable against NEECA unless provided by an amendment to this agreement signed by the authorized official of NEECA.

19. Taxation

Income Tax, Sales Tax or any other applicable tax will be deducted from the payments as per provisions of the Income Tax Ordinance 2001.

**Points for Inclusion in Prospective Bidder's
Covering Letter**

Mandatory

- The date of submission must be clearly indicated.
- Use letterhead or provide the complete address, telephone number and facsimile number.
- The Prospective bidder must confirm that the services specified in the solicitation documents, including the TOR, will be completed within the time stipulated by NEECA in these documents.
- The Prospective bidder must confirm that the technical and financial proposals are valid for Six (06) months from the date of submission of proposals.
- The signatory must be an authorized officer of the Prospective bidder.
- The covering letter should not be longer than 1,500 words.

Optional

- Briefly state, in two or three paragraphs, why you feel qualified to offer the services required by NEECA.
- Provide the name of the contact person and relevant contact information, such as telephone number, email address and mobile phone number.

**Undertaking
For professional(s)/consultant/firm(s)**

I, the undersigned, hereby permit M/s. _____
to designate me as a professional in their technical proposal specifically for the purpose of completing
the activities mentioned in Scope of Work. Further, I confirm my availability during the term of
conduct of this activity.

Signature: _____

Name: _____

Date: _____

Annexure E

Upper Level Requirements Version 2.0 - PRS

Introduction:

The Product Registry System (PRS) is an advanced software solution designed to facilitate the registration and certification of products offered by vendors in Pakistan. This is the second version of the system, aimed at improving and expanding the functionalities of the previous system.

Vendors in Pakistan are required to register themselves and their products through the user-friendly Vendor Portal integrated within PRS. The system is overseen by an administrator who sets the standards and properties that vendors must provide during the product registration process. These standards ensure that the registered products meet the necessary requirements.

Upon successful registration, vendors receive a certificate of approval, indicating that their product has been thoroughly reviewed and approved by the system administrator. One crucial step in the product registration process involves vendors providing proof that their product has undergone testing at an accredited testing lab. To streamline this process, the testing Lab Portal allows lab owners to confirm and approve the product testing, providing an additional layer of verification.

In this new version, NEECA (National Energy Efficiency and Conservation Authority) aims to enhance the system's capabilities by enabling vendors to register various types of products, including fans, ovens, air conditioners, refrigerators and motors, in addition to the existing product registration for lights. To accommodate this expansion, custom forms are introduced, where the administrator defines standard attributes and corresponding values that vendors must comply with during product registration.

To further ensure the integrity of the registration process, NEECA has partnered with two officially registered laboratories, PCSIR (Pakistan Council of Scientific and Industrial Research) and PSQCA (Pakistan Standards and Quality Control Authority). These labs play a crucial role in defining the standards for products and are responsible for testing and verifying the products within the PRS. Instead of utilizing separate lab portals, vendors are now required to provide a certificate of testing from these two or any

other accredited labs, simplifying the verification process. For the imported products, NEECA partnered with the PNAC that will verify the international accredited lab tests provided by the vendors.

Addressing the issue of imported products, a separate portal has been developed for the Customs department of the Pakistan government. Customs officials utilize their own system and provide APIs to seamlessly integrate with the PRS. This integration allows Customs to verify imported products, ensuring they meet the necessary requirements before they are released to vendors.

Overall, the Product Registry System (PRS) represents a significant advancement in streamlining the registration and certification process for vendors in Pakistan. By implementing custom forms, collaborating with accredited laboratories, and integrating with the Customs department, the system ensures transparency, accuracy, and compliance with standards, ultimately promoting efficiency and trust in the registered products.

Purpose of the document:

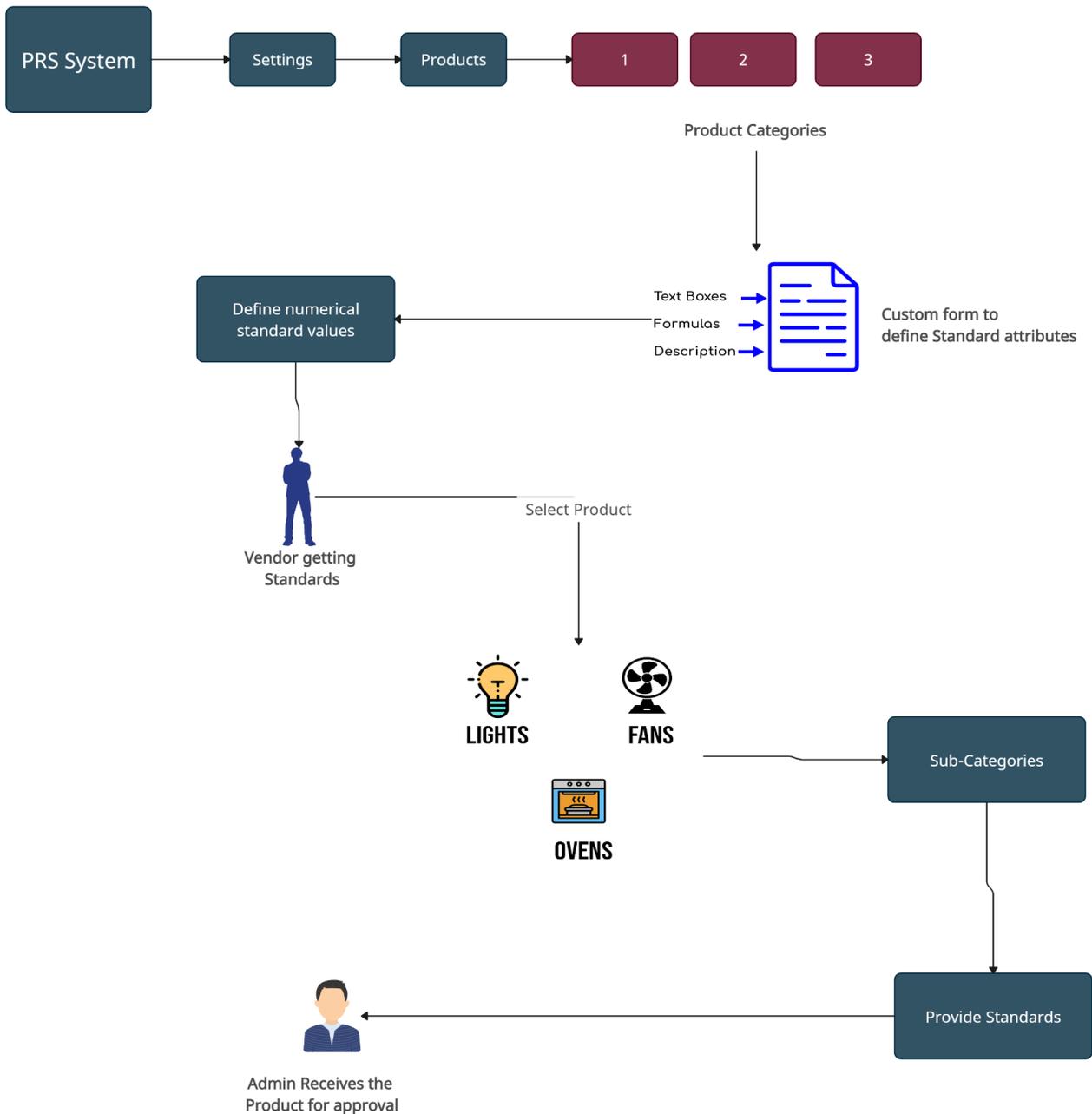
Purpose of the document is to take a sign off on the upper level requirements for the version V2.0 of the system "PRS-Products registry System". The system is aimed to optimize the flows of the already developed system, create efficient ways of the system process and provide custom solutions to the organization for multiple products.

The system will have changes that will impact the following modules:

- Products comparison calculator (The calculator formulas and details shall be provided by NEECA)
- Complaints and whistleblowing
- Internal validations and checks on the product registration form with standards defined in the settings of the system
- The flow of approval of imported products from customs
- Verification of lab reports from the national and international labs through PCSIR/PSQCA and PNAC
- Details of the products on the public website
- New or used products
- Multiple product types
- Categories of the products against each product type
- Custom forms for the definition of standards and testing standards for the types and categories of the products

The flow of multiple categories of products:

The admin must have access to manage settings where he can define product types and their subcategories. Against each sub category, the user shall be able to define standard attributes. Once standard attributes are defined, the admin shall be able to define real time values against the standards. The standards will be followed by the vendor at the time of product registration. This way, the admin can define standards for as many products as he wants to, like fans, ovens, lights and so on.



5 Steps for the overall process by NEECA:

NEECA has introduced five major steps for all the products that will get registered in the system through the following ways:

1. Product registration in compliance with standards
2. Product authorization and certification of approval
3. Monitoring of the system execution in the market
4. Cancellation of certification in case of non compliance with standards
5. Complaints made by the end users on the system execution



Pakistan Energy Labeling Scheme Registration Form For Motors

Initiation	Country where applicant is applying for registration (note: decision needed as to whether to allow registration from outside Pakistan and/or primary contact within Pakistan)			
	Select type of product you wish to register (<i>Electric Motor</i>)			
	Do you wish to register a NEW motor or a SECONDHAND motor?			
NEW MOTOR REGISTRATION				
Applicant	Company Name			
	Trading name			
	NTN number			
	Title/Role of applicant			
	Contact person name			
	Contact person title			
	Alternate contact person name			
	Alternate contact person title			
	Postal address			
	Town/city			
	Province			
	Country			
	Postal code			
	Contact phone			
	Contact mobile			
Contact fax				
Contact email				
General Product Details	Manufacturers name			
	Country of manufacture			
	Brand name			
	Year model(s) first manufactured or imported			
	Model number(s)			
	(If registering a family of models (see Note 2), list all model names and numbers covered by this application.)			
	Does this model or family replace or supplement another registered model with the same specifications?		Yes	No
	If yes, state model(s)			
	Is the date of manufacture permanently marked on the rating plate in a non-encrypted		Yes	No

	format?		
	If yes, provide an example of the date format		
	If no, provide details on how to determine (from the serial number or other permanent markings for this model) the date of manufacture		
	Website address for further details *		
Specific Product Details	Single or three-phase		
	Rated Power output (kW)		
	Rated Voltage (V)		
	Rated input frequency (Hz)		
	Number of Poles		
	The Rated Speed (rpm)		
	Motor Duty rating		
	Mounting code of IEC 60034-7 *		
	Frame code of IEC 60072 *		
	Enclosure protection rating to IEC 60034-5 (IP code) *		
	Motor design: (TEFC, ODP, other) *		
		Motor winding insulation to IEC 60034-1	Yes
Test Details	Test method		
	Test Laboratory		
	(Add another laboratory)		
	Accreditation body		
	Test laboratory accreditation code		
	Test report number		
	Test report date		
	(Upload test report)		
Performance Claim	Efficiency at 100% rated load: %		
	Efficiency at 50% rated load: %		
	International Efficiency class (IE) at 100% rated load		
	Does this model comply with MEPS?		
	MEPS not applicable (provide details)		

- Specify the information about deposited non-refundable Fees payable to NEECA

Company Registration Fees:

Demand Draft/ Pay Order No: _____

Dated: _____

for Amount Rs.: _____

Product/Appliance Registration Fee:

Demand Draft/ Pay Order No: _____

Dated: _____

for Amount Rs.: _____

Model Registration Fee:

Demand Draft/ Pay Order No: _____

Dated: _____

for Amount Rs.: _____

Renewal Fee:

Demand Draft/ Pay Order No: _____

Dated: _____

for Amount Rs.: _____

- **Estimated production per annum of product/appliance of Model for which the application is submitted?**

- **The following documents should be attached with the application**
 - Company Brochure**
 - Product Brochure/catalogue**
 - Product Test Report issued by an Accredited Lab**
 - Original Demand Draft(s)/ Pay Order(s)**

Signature: _____

Name: _____

Designation: _____

Date: _____

(Stamp of the firm/company)

Pakistan Energy Labeling Scheme Registration Form For LED lights:

1. Applicant information

- a. Name of Company/Firm: _____
- b. Address: _____
- c. Products Offered (tick all applicable):
 LED Bulbs LED Tubular Lamps LED Down Lights LED Street Lights
- d. Type of facility:
 Manufacturing Assembly Import Others: _____
- e. Location of Factory/Plant/Business: _____
- f. Telephone:
Factory: _____
Office: _____
- g. Name of Company Managing Director/Director of the factory/firm:

- h. Name of Contact Person: _____
Phone #: _____
Mobile#: _____
E-mail: _____

2. Company/Firm Sale Tax Number: _____

3. Company/Firm National Taxpayer Number: _____

4. Whether the firm/factory is registered with the local Chamber of Commerce and Industry? If YES then fill the following;

Registration #: _____

Year: _____

5. Whether a member of any Association? YES NO If YES:

Name: _____

Membership No: _____

Year: _____

6. Whether you have sales/distributors/retailers network for the specific product? (Tick the applicable box)

- | | | | |
|----------------------|--------------------------|----------------------|--------------------------|
| Throughout Pakistan | <input type="checkbox"/> | Khyber Pakhtun Khuwa | <input type="checkbox"/> |
| Punjab | <input type="checkbox"/> | Sindh | <input type="checkbox"/> |
| Azad Jammu & Kashmir | <input type="checkbox"/> | Baluchistan | <input type="checkbox"/> |
| Gilgit Baltistan | <input type="checkbox"/> | | |

7. Details of Product to be Registered

Brand Name	
Model Number	
Bar Code	
Lamp type (bulb, tube, down light, street light)	
Country of Origin	
Date of manufacture/assembly/import	
Lamp length (mm)	
Maximum Lamp diameter (mm)	
Minimum Rated Voltage (Volt)	
Maximum Rated Voltage (Volt)	
Rated Frequency (Hertz)	
Rated Power (Watts)	
Rated Power Factor	
Standby Power (Watts)	
Rated Flux (Lumens)	
Rated Efficacy (Lumens/Watt)	
Rated Correlated Color Temperature (CCT in Kelvins)	
Chromaticity tolerance (+/- Kelvin)	
Rate Color Rendering Index	
Rated Lifetime (hours)	
Mercury Content (mg) Must be zero	
Risk Group Rating as per IEC 62471	
Warranty (Years)	

8. Read and understand the “NEECA (Pakistan Energy Labels for LED) Regulations, 2021. Do you agree with the requirement, criteria and conditions for grant of Pakistan Energy Label given in these Regulations?

YES NO

9. Specify the information about deposited non-refundable Fees payable to NEECA

Company Registration Fees:

Demand Draft/ Pay Order No: _____

Dated: _____

for Amount Rs.: _____

Product/Appliance Registration Fee:

Demand Draft/ Pay Order No: _____

Dated: _____

for Amount Rs.: _____

Model Registration Fee:

Demand Draft/ Pay Order No: _____

Dated: _____

for Amount Rs.: _____

Renewal Fee:

Demand Draft/ Pay Order No: _____

Dated: _____

for Amount Rs.: _____

10. Estimated production per annum of product/appliance of Model for which the application is submitted?

11. The following documents should be attached with the application

- a. Company Brochure
- b. Product Brochure/catalogue
- c. Product Test Report issued by an Accredited Lab
- d. Original Demand Draft(s)/ Pay Order(s)

Signature: _____

Name: _____

Designation: _____

Date: _____

(Stamp of the firm/company)

Pakistan Energy Labeling Scheme Registration Form For Refrigerators:

To be filled in by the applicant

1. Applicant information

a. **Name of Company/Firm:**

b. **Address:**

c. **Location of Factory/Plant:**

d. **Telephone:**

Factory: _____

Office: _____

Name of Company Managing Director/Director of the factory/firm:

e. **Name of Contact Person:**

Phone #: _____

Mobile#: _____

E-mail: _____

2. **Company/Firm Sale Tax Number:** _____

3. **Company/Firm National Taxpayer Number:** _____

4. **Whether the Company/firm is registered with the local Chamber of Commerce and Industry? If YES then fill the following;**

Registration #: _____

Year: _____

5. **Whether a member of any Association? YES NO If YES:**

Name: _____

Membership No: _____

Year: _____

6. **Whether you have sales/distributors/retailers' network for the specific product? (Tick the applicable box)**

Throughout Pakistan Khyber Pakhton Khuwa

Punjab Sindh

Azad Jamu & Kashmir Baluchistan

Gilgit Baltistan

7. Detailed information of the product for which labeling is required:

- a. **Brand Name:** _____
- b. **Model Name:** _____
- c. **Date of Manufacturer or Imported year:** _____
- d. **If Imported, Origin of the Country of the product:** _____
- e. **Rating of Product/Appliance in kW:** _____
- f. **Rated Annual Energy Consumption:** _____
- g. **Total Volume In Litre:** _____
- h. **Type of Refrigerant:** _____
- i. **Color (specify all the available colors):**

- j. **Is the product granted PS Mark by Pakistan Standards & Quality Control Authority (PSQCA)**
YES NO If YES: Specify the
No. _____
- k. **Any other salient feature of the product regarding energy consumption/ efficiency:**

8. Read and understand the “NEECA (Pakistan Energy Labels for Refrigerators) Regulations, 2021. Do you agree with the requirement, criteria and conditions for grant of Pakistan Energy Label given in these Regulations?

YES NO

9. Specify the information about deposited non-refundable Fees payable to NEECA

Company Registration Fees:

Demand Draft/ Pay Order No: _____

Dated: _____

for Amount Rs.: _____

Product/Appliance Registration Fee:

Demand Draft/ Pay Order No: _____

Dated: _____

for Amount Rs.: _____

Model Registration Fee:

Demand Draft/ Pay Order No: _____

Dated: _____
for Amount Rs.: _____

Renewal Fee:

Demand Draft/ Pay Order No: _____
Dated: _____
for Amount Rs.: _____

10. Estimated production per annum of product/appliance of Model for which the application is submitted?

11. The following documents should be attached with the application

- a. Company Brochure
- b. Product Brochure/catalogue
- c. Product Test Report issued by an Accredited Lab
- d. Original Demand Draft(s)/ Pay Order(s)

Signature: _____

Name: _____

Designation: _____

Date: _____

(Stamp of the firm/company)

Pakistan Energy Labeling Scheme Registration Form For ACs:

To be filled in by the applicant

1. Applicant information

a. **Name of Company/Firm:**

b. **Address:**

c. **Location of Factory/Plant:**

d. **Telephone:**

Factory:

Office:

e. **Name of Company Managing Director/Director of the factory/firm:**

f. **Name of Contact Person:**

Phone #: _____

Mobile#: _____

E-mail: _____

2. **Company/Firm Sale Tax Number:** _____

3. **Company/Firm National Taxpayer Number:** _____

4. **Whether the Company/firm is registered with the local Chamber of Commerce and Industry? If YES then fill the following;**

Registration #: _____

Year: _____

5. **Whether a member of any Association? YES NO If YES:**

Name: _____

Membership No: _____

Year: _____

6. Whether you have sales/distributors/retailers' network for the specific product?

(Tick the applicable box)

- | | | | |
|---------------------|--------------------------|----------------------|--------------------------|
| Throughout Pakistan | <input type="checkbox"/> | Khyber Pakhton Khuwa | <input type="checkbox"/> |
| Punjab | <input type="checkbox"/> | Sindh | <input type="checkbox"/> |
| Azad Jamu & Kashmir | <input type="checkbox"/> | Baluchistan | <input type="checkbox"/> |
| Gilgit Baltistan | <input type="checkbox"/> | | |

7. Detailed information of the product for which labeling is required:

- a. Brand Name: _____
- b. Model Name: _____
- c. Date of Manufacturer or Imported year: _____
- d. If Imported, Origin of the Country of the product: _____
- e. Rating of Product/Appliance in kW: _____
- f. Rated Annual Energy Consumption: _____
- g. Cooling capacity/Compressor Type: _____
- h. Type of Refrigerant: _____
- i. Color (specify all the available colors):

- j. Is the product granted PS Mark by Pakistan Standards & Quality Control Authority (PSQCA)
YES NO If YES: Specify the
No. _____
- k. Any other salient feature of the product regarding energy consumption/ efficiency:

8. Read and understand the "NEECA (Pakistan Energy Labels for Room Air Conditioners) Regulations, 2021. Do you agree with the requirement, criteria and conditions for grant of Pakistan Energy Label given in these Regulations?

YES NO

9. Specify the information about deposited non-refundable Fees payable to NEECA

Company Registration Fees:

Demand Draft/ Pay Order No: _____

Dated: _____

for Amount Rs.: _____

Product/Appliance Registration Fee:

Demand Draft/ Pay Order No: _____

Dated: _____

for Amount Rs.: _____

Model Registration Fee:

Demand Draft/ Pay Order No: _____

Dated: _____

for Amount Rs.: _____

Renewal Fee:

Demand Draft/ Pay Order No: _____

Dated: _____

for Amount Rs.: _____

10. Estimated production per annum of product/appliance of Model for which the application is submitted?

11. The following documents should be attached with the application

- a. **Company Brochure**
- b. **Product Brochure/catalogue**
- c. **Product Test Report issued by an Accredited Lab**
- d. **Original Demand Draft(s)/ Pay Order(s)**

Signature: _____

Name: _____

Designation: _____

Date: _____

(Stamp of the firm/company)

Definitions in settings:

The above mentioned are the requirements that the system would be able to create in the settings of the system. The administration shall be able to define these attributes in the settings and shall be able to define values against these defined attributes for the specific category of the product.

Define standards for the stars calculations:

The system may need to get enabled in such a way where the admin of the system must be able to define formulas for the star calculation of the products. Some of the stars standards define by NEECA would be the following:

For ACs:

Star Rating Band & Classification

1. Star Rating Band

The star rating shall be in accordance with the following table:-

Rated cooling capacity (kW)	< 4.5	4.5 ≤ - ≤10.5
5 star	≥ 4.80	≥ 4.50
4 star	4.30 ≤ CSPF < 4.80	4.00 ≤ CSPF < 4.50
3 star	3.90 ≤ CSPF < 4.30	3.70 ≤ CSPF < 4.00
2 star	3.50 ≤ CSPF < 3.90	3.30 ≤ CSPF < 3.70
1 star	3.20 ≤ CSPF < 3.50	3.00 ≤ CSPF < 3.30

2. MEPS requirement

MEPS requirements shall be in accordance with following table:.

Rated cooling capacity (kW)	< 4.5	4.5 ≤ - ≤10.5
MEPS requirement	≥ 3.20	≥ 3.00

For Refrigerators:

Star Rating Band & Classification

1. Star Rating Band

The star rating shall be in accordance with the following table:-

	Star rating band	
two (2) door refrigerator/freezer	1 star	$0.576 \times V_{adj} + 420 \geq CEC > 0.504 \times V_{adj} + 368$
	2 star	$0.504 \times V_{adj} + 368 \geq CEC > 0.432 \times V_{adj} + 315$
	3 star	$0.432 \times V_{adj} + 315 \geq CEC > 0.374 \times V_{adj} + 273$
	4 star	$0.374 \times V_{adj} + 273 \geq CEC > 0.288 \times V_{adj} + 210$
	5 star	$CEC < 0.288 \times V_{adj} + 210$

2. MEPS requirement

The following equation shall be used to determine the MEPS requirement.

$$CEC \text{ (kWh/year)} = a \times V_{adj} + b$$

where

a is a variable allowance factor in kWh/litres/year

b is a fixed allowance factor in kWh/year

V_{adj} is adjusted volume in litres.

The MEPS requirement is follows.

$$\text{MEPS requirement} = 0.576 \times V_{adj} + 420 \text{ (kWh/year)}$$

For LEDs:

Star Rating Band & Classification

1. Star Rating Band

The star rating shall be in accordance with the following table:-

Rated cooling capacity (kW)	< 4.5	4.5 ≤ - ≤10.5
5 star	≥ 4.80	≥ 4.50
4 star	4.30 ≤ CSPF < 4.80	4.00 ≤ CSPF < 4.50
3 star	3.90 ≤ CSPF < 4.30	3.70 ≤ CSPF < 4.00
2 star	3.50 ≤ CSPF < 3.90	3.30 ≤ CSPF < 3.70
1 star	3.20 ≤ CSPF < 3.50	3.00 ≤ CSPF < 3.30

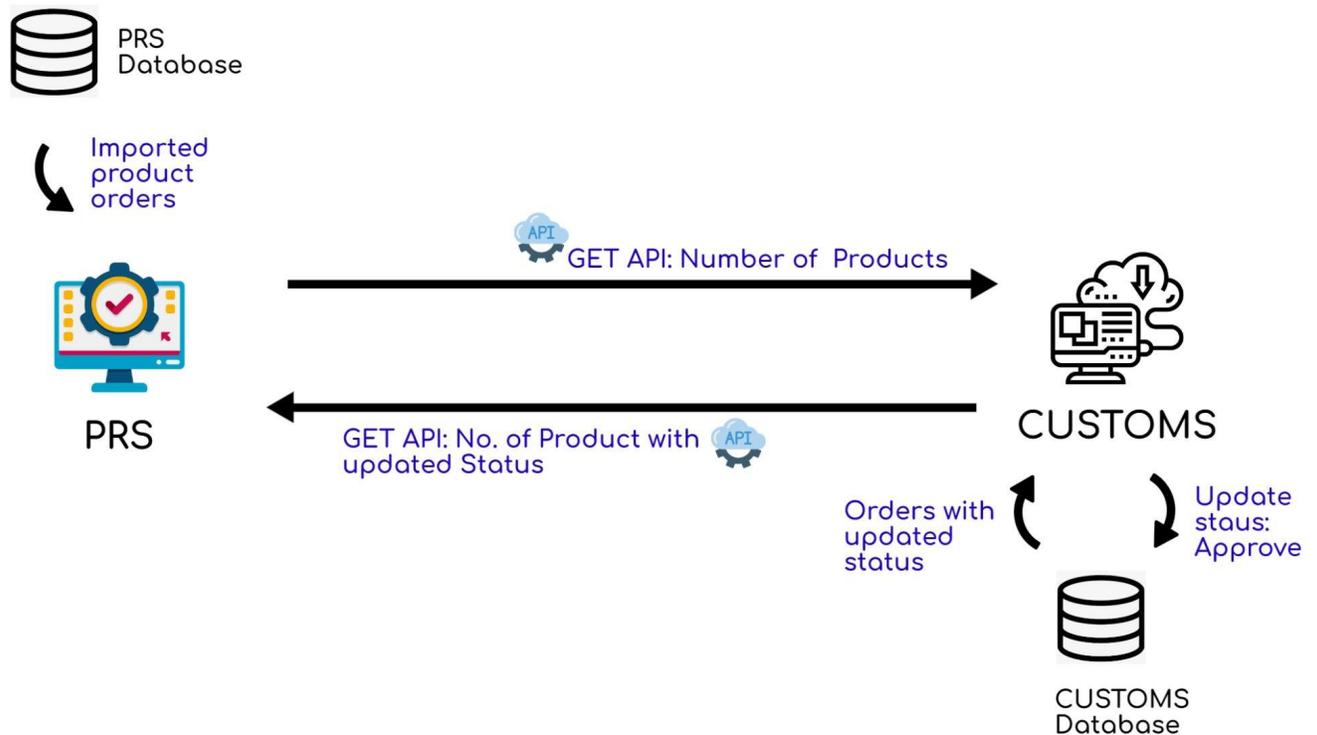
2. MEPS requirement

MEPS requirements shall be in accordance with following table:.

Rated cooling capacity (kW)	< 4.5	4.5 ≤ - ≤10.5
MEPS requirement	≥ 3.20	≥ 3.00

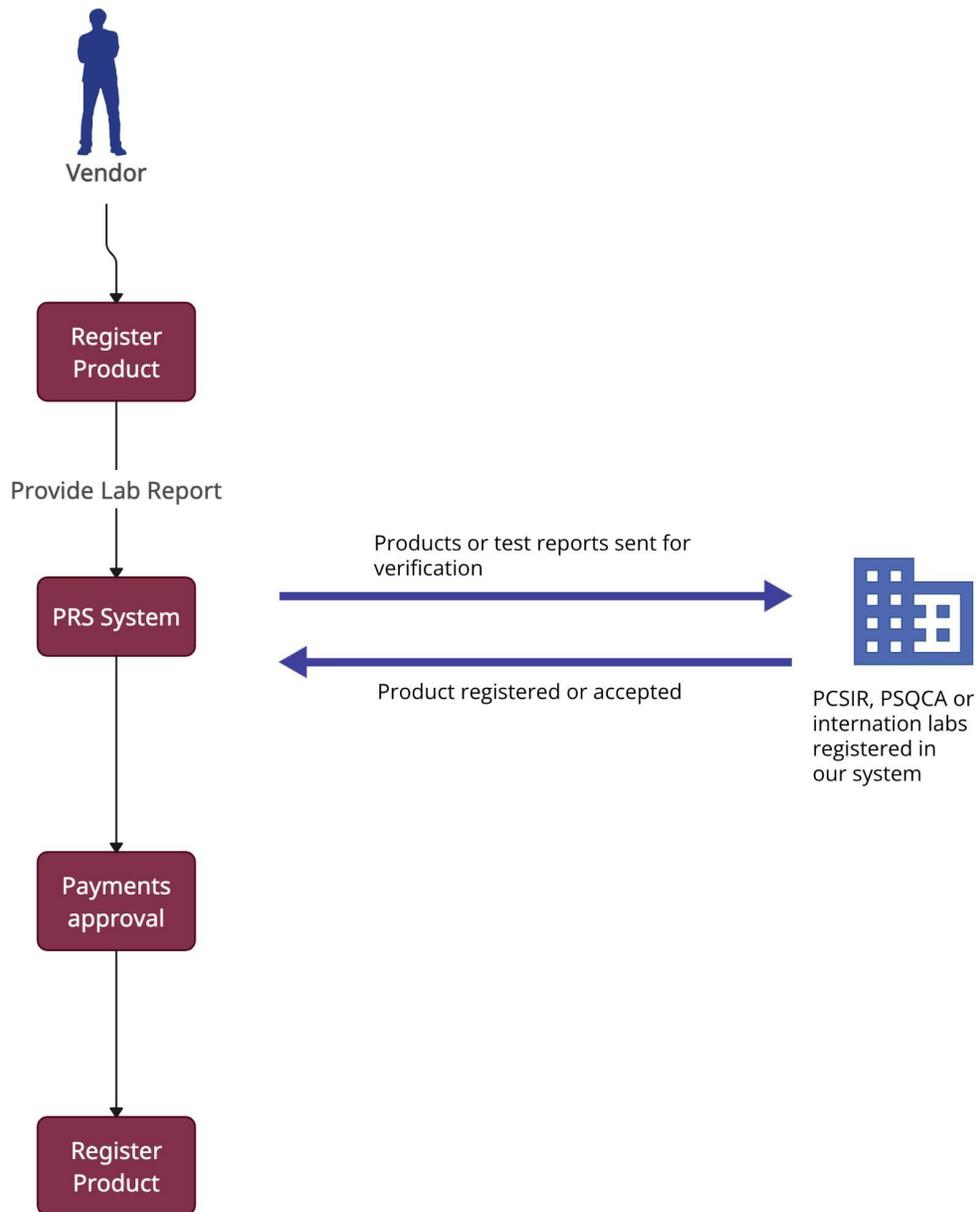
Imported products verification from customs:

The system shall communicate to the CUSTOMS' system through APIs. The number of imported products shall be provided to the customs through an API where they will have to confirm it, change its status to verified/Unverified.



Lab tests verification:

The lab testing reports shall be verified through the PRS from the labs. The vendors shall provide the PNAC accredited lab certificate that will be already verified, or will be verified after application by the PNAC.. PCSIR and PSQCA may also get involved in the process for verifying and defining the product's standards.



The role of PNAC:

The Pakistan National Accreditation Council (PNAC) can play a role in the validation of internationally tested products within the context of the Product Registry System (PRS).

PNAC is responsible for ensuring the competence and reliability of conformity assessment bodies, including testing laboratories. If a product has been tested by an internationally recognized and accredited testing laboratory, PNAC can assess the accreditation status and credentials of that laboratory.

PNAC may review the testing laboratory's accreditation documentation, quality management system, proficiency testing participation, and compliance with international standards such as ISO/IEC 17025 for testing laboratories. By evaluating the accreditation status and credentials of the testing laboratory, PNAC can provide validation and assurance that the internationally tested products meet the required quality and testing standards.

In the PRS, if a vendor presents internationally tested products, they can provide documentation or certificates from the accredited testing laboratory. The PRS can then incorporate a step where PNAC reviews and verifies the accreditation status of the testing laboratory. This validation process adds an extra layer of assurance to the product registration and certification process, instilling confidence in the quality and conformity of the internationally tested products.

It's important to note that PNAC's involvement in validating internationally tested products would depend on the specific procedures and requirements set by NEECA and the PRS. Collaboration and coordination between PNAC, NEECA, and the PRS would be essential in ensuring the smooth integration of PNAC's validation processes within the system.

Important Points:

The development and implementation of the Product Registry System (PRS) requires careful consideration of various factors and active involvement of key stakeholders to ensure its successful integration with external systems and the fulfillment of requirements. It is vital to acknowledge and address certain assumptions related to the Customs Department, the Pakistan National Accreditation Council (PNAC), and the involvement of entities like PSQCA and PCSIR.

Regarding the Customs Department, it is essential to recognize that the integration of their system through APIs is subject to discussion and agreement. To clarify the technical aspects and establish a clear understanding of the requirements, it is crucial to schedule meetings with the Customs Department's technical team. These meetings will help in resolving any potential challenges and ensure a seamless integration process.

Similarly, the integration of PNAC with the PRS should not be assumed without proper confirmation. It is necessary to initiate discussions with PNAC and engage with relevant stakeholders to explore the feasibility of integrating our system with their existing infrastructure. Meetings with PNAC officials, technical teams, and domain experts will provide insights into their specific system requirements and compatibility considerations. These discussions will help determine the best approach for collaboration and integration.

In the case of PSQCA and PCSIR, assumptions regarding their utilization of the PRS or the need to connect with their existing systems should be validated through direct engagement with the respective stakeholders. To gain clarity on their expectations, requirements, and preferences, meetings and visits with the domain stakeholders, technical teams, and other relevant personnel are necessary. This collaborative approach will ensure a comprehensive understanding of their workflows and enable the PRS to align effectively with their processes.

The aforementioned assumptions and requirements will be meticulously documented in the Software Requirements Specification (SRS). This document will be developed in close coordination with the stakeholders, reflecting the outcomes of meetings, discussions, and visits. The SRS will serve as a comprehensive roadmap for the development of the PRS,

capturing the precise needs of each stakeholder and providing the foundation for successful implementation.

The involvement of all relevant stakeholders, including representatives from the Customs Department, PNAC, PSQCA, PCSIR, and other entities, is crucial for a comprehensive and successful PRS. Their insights, feedback, and clearances will help ensure that the system meets the needs of all parties involved and operates seamlessly within the established workflows. By prioritizing stakeholder engagement and incorporating their requirements into the development process, the PRS will be poised to deliver an efficient and effective product registration and certification solution.

Summary:

Requirement:

As per discussions with NEECA and Clasp, it is concluded that initially we have to accommodate the management of multiple categories of items.

Also it is observed that to improve the automation of different processes and fulfill the requirements for the the newly added appliances we will have to made following changes in the existing PRS workflow

- Products comparison calculator (The calculator formulas and details shall be provided by NEECA)
- Complaints and whistleblowing
- Internal validations and checks on the product registration form with standards defined in the settings of the system
- The flow of approval of imported products from customs
- Verification of lab reports from the national and international labs through email
- Details of the products on the public website
- New or used products
- Multiple product types
- Categories of the products against each product type
- Custom forms for the definition of standards and testing standards for the types and categories of the products