
*Invite for Expression of Interest*

Last Date of Submission: 26/12/2018

Bureau of Energy Efficiency
Ministry of Power, Government of India,
4th Floor Sewa Bhawan, R. K. Puram,
New Delhi - 110066
**Expression of Interest (EOI)** is invited from the Agencies/Organisations to aid Bureau of Energy Efficiency (BEE) to adopt and implement serialized QR Code under the Standard & Labelling (S&L) Programme. The Agency/Organisation hired shall also be responsible for the maintenance and developmental support of the S&L portal and S&L app. The Agency/Organisation needs to submit an EOI as per the guidelines described in “5.0 Preparation of EOI” along with annexure 1.

### 1.0 Overview of Standards and Labeling Scheme

The key objective of this programme is to provide the consumer an informed choice about the energy saving and thereby the cost saving potential of the relevant marketed product. The scheme was launched on 18th May 2006 and is presently invoked for 22 equipment/appliances, i.e. Room Air Conditioner (Fixed Speed), Colour Television, Direct Cool Refrigerator, Distribution Transformer, Frost Free Refrigerator, Stationary Type Water Heater, Tubular Fluorescent Lamps, RAC (Cassette, Floor Standing Tower, Ceiling, Corner AC) Room Air Conditioner (Variable Speed), Led Lamps, Ceiling Fan, Computer, Domestic Gas Stove, General Purpose Industrial Motor, Agricultural Pump Set, Washing Machine, Ballast, Solid State Inverter, Office Automation Products, Diesel Engine Driven Monoset pumps for Agricultural Purposes, Diesel Generator Set and Chillers of which the first 10 appliances have been notified under mandatory labeling. The other appliances are presently under voluntary labeling phase. The energy efficiency labeling programs under BEE are intended to reduce the energy consumption of appliance without diminishing the services it provides to consumers.

The S&L program of BEE has advanced at a rapid pace. From Preparatory stage to Mandatory stage, testing has been identified as a key component of S&L program. Effective testing helps to assess the actual performance of products in the preparatory stage, thus helping in setting realistic standards to transform the market. Testing also plays a key role in voluntary/mandatory phase to ensure authentic compliance to standards.

Considering the growing penetration of S&L program in India and the increasing number of products registered for star labelling, BEE has decided to adopt the QR Code so that the consumers can make informed decisions at the time of purchase of products by readily accessing the technical specifications with the scan of a QR Code.

### 2.0 Overview of S&L Web Portal

The Awarded Agency is expected to deploy a team of IT professionals who will address the day to day objectives. Following are the key features of the Standard & Labelling web portal:

**For General Public:**
1. Public can search & compare the star rating appliances of various manufacturers approved by BEE.
2. Can view & download the list of models of approved star rated appliances.

**For Manufacturers:**
1. Manufacturers can register their company at BEE’s Standard & Labelling online web portal after paying the security deposit through online payment or by demand draft.
2. Manufacturers can register their models online for the star label accreditation.
3. Manufacturers can upload various documents as requested by BEE pertaining to the star labelling.
4. The software automatically calculates the star label rating depending upon the parameters entered by manufacturers.
5. Manufacturers can generate approval letter.

For BEE:
BEE is the administrator of the web portal. It has all the rights to maintain the facilities required for the manufacturers, laboratories, IAME through the web service provider.
2. The web portal enables communication between manufacturers and BEE.
3. Manufacturers can register their models online for the star label accreditation.
4. The software automatically calculates the Star Label rating depending upon the parameters entered by manufacturers.
5. The web portal provides flexibility for addition of new products under S&L program.
6. Reporting facility helps to download reports for data analysis.

For Labs:
1. Check Testing Laboratories that are empanelled with BEE and those products check tested will be uploaded.
2. Labs are allowed to upload the reports of the check tested products can be generated for analysis of energy saving.

For IAME:
1. The scrutiny of applications, approval letter to the manufacturers can be generated by IAME provides flexibility for addition of new products under the Labelling Program.

S&L Application Software Advantages:
The advantages of Standard & Labelling web portal are as under:
1. Manufacturers can file their applications online.
2. Easy tracking of applications filed by manufacturers.
3. Reports can be downloaded easily.
4. Minimizes paperwork.
5. The list of BEE approved models is available in the public domain through linkage of the S&L application with the website of BEE.
6. More effective communication between manufacturers and BEE.
7. Analysis of energy savings and generation of reports thereof.

Technology Currently Used and Its Description
Front End (Page View) : ASP.NET 4.0
Business Process : C# . ADO.NET, LINQ
Back End (Database) : MS SQL SERVER 2012 / MS SQL SERVER 2017
Platform Windows : R2 2008 / R2 2012
Webserver : IIS7
Others : AJAX, XML, BI, etc.
Mobile Application (Star Label App)

BEE has a mobile application for Standard and Labelling program available on android and iPhone. The mobile application is linked with the database of beestarlabel.com web portal.

3.0 Objective of EOI

Labels on an appliance enable a Consumer to know about the performance of an appliance, eventually helping a Consumer to make informed decision on cost and energy savings at time of purchasing an appliance. However, the possibility to misguide Consumers cannot be overlooked, hence with the adoption of Unique Serialised QR code on every appliance under the S&L scheme, BEE wants to ensure the authenticity of the labels used in the market, so that fraudulency and misuse of Star Labels could be obviated.

Manufacturers would be mandated to affix QR codes for every appliance bearing a BEE star label in future. Moreover, the adoption of QR Code could portray a relevant picture of the Energy Market scenario in the Indian context by empowering the end consumer to check the authenticity of label using a smart phone or text message, by tracking the sale of various categories of appliances at various stages in the supply chain with the help of serialised QR Codes; this will aid the Government in bringing cogent policy reforms for the changing and challenging energy market of India.

Objective is also to ensure manufacturers/ distributors/ retailers to register the sale of appliances with the help of BEE Star Label app. BEE aims to explore the technology of QR Code and a fail-proof way to adopt and implement it to prevent counterfeit of appliances and labels in and with the view of logging sale so that every QR Code on an appliance once sold could be registered in the database of BEE.

The purpose of inviting EOI is to seek proposals from various IT organisations which could help BEE implement a robust QR code system for its star labelling for benefit of the end customer & to understand sales trends of appliances in the Indian market.
4.0 Implementation Model:

I. Generation of unique Serialised QR Code for every appliance under S&L programme of BEE. A file has to be generated from the server of BEE bearing all the details in sets of QR codes which can then be downloaded by the Manufacturers and accordingly reproduced with the help of pre-configured secured systems. The solution should prevent/identify/issue an alert to the customer and BEE, moment an imitation of an already issued QR Code at the time of sale & checks and balances to this effect need to be built in.

II. The server should be able to track and record the movement of a lot or stack of appliances from the manufacturing/assembly line onwards upto the point of sale.

III. The existing BEE star labelled mobile app is to be configured in a way which can give sufficient privileges to the remote users who may not have sufficient IT infrastructure to track the sale/movement of the appliances.

IV. Privileges for the Customer/Retailer to register the QR Code against a Consumer at the PoS.

V. No QR Code to be repeated in the process cycle and if any encountered, to be counterchecked with the database and disabled or rendered invalid for sale.

VI. Maintenance and development of S&L portal ie www.beestralabel.com. The portal receives and approves application from the manufacturers and receive labelling fee along with other features. The Agency should be willing to make any developments/revamps in the Website deemed necessary by BEE.

VII. Maintenance and development of beestarlabel app. which will have all the existing features along with the QR Code scan and registration feature. The Agency should be willing to make any developments/revamps in the App deemed necessary by BEE.
5.0 Preparation of EOI:

5.1 Expression of Interest (EOI): Bidders shall submit technical proposals clearly describing methods with suggestions and timelines to implement such a system for S&L programme of BEE. While preparing the proposal the agencies are expected to examine the nature of work along with their reference standards. The EOI shall be submitted alongwith following desirables:

I. Brief description about the agency.
II. An outline of experience on similar assignments under taken and methodology used.
III. Certificate of Registration/ incorporation in India.
IV. Work plan and how BEE’s objective can be fulfilled (methodology) and improvised. Suggestions and Recommendations should be a part of the work plan.
V. The proposal shall be submitted in original (signed hardcopies) prepared with indelible ink. It shall not contain any over-writing. The EOI shall be placed in a sealed envelope clearly marked with “Proposal – Implementation of QR Code & maintenance, design & upgradation of BEE S&L portal and App”.
VI. Pre submission meeting is to be held on 20th Dec 2018 at BEE Conference Hall, 4th Floor, Sewa Bhawan, R K Puram, Delhi 66 at 1500 hrs. You may contact Mr Sanjay Chhettri (sanjay.chhettri@beenet.in) for arranging passes to enter the premises of Sewa Bhawan for the meeting and for any further queries on the submission of EOI.

6.0 Submission of EOI:

1) The envelope shall be clearly marked with “EOI for the implementation of QR Code & Maintenance, Design & Upgradation of BEE S&L Portal & App ”. This envelope shall be sent to The Secretary, Bureau of Energy Efficiency, 4th Floor, Sewa Bhavan, R.K. Puram, New Delhi-110066.

2) The last date for sending the proposal document is 26th Dec 2018 upto 1500 hours.

7.0 Other Terms & Condition:

I. BEE will evaluate the EOI received from the bidders, in accordance with the method of evaluation set by BEE.

II. In case of any dispute during process of verification, the decision by DG, BEE, will be considered as final decision.

III. Acceptance of the Proposal will rest with the Competent Authority of the BEE.

IV. BEE reserves the right to cancel this EOI in whole or in part when it is in the best interest of the BEE.
General Information

A. General

1. Name of the Agency : _________________________________________
2. Address : __________________________________________
3. Does this Agency come under any Ministry/State Govt./Deptt. : __________________________________________
   If yes, please mention : __________________________________________
4. Year of Incorporation in India: __________________________________________
5. Total number of Staff : __________________________________________
6. Year of registration: __________________________________________
7. Regulatory Body of registration: __________________________________________
8. Date of Expiry of registration : __________________________________________

B. Communication Details

1. Name of the Organization : __________________________________________
2. Name of the Authorized Representative to whom all Communications shall be made : __________________________________________
3. Designation : __________________________________________
4. Phone : __________________________________________
5. Fax : __________________________________________
6. Email-ID : __________________________________________

(Information for at least 2 representatives shall be provided)