



LEISC-SEIP Project

Light Engineering Industry Skills Council (LEISC)

Memo no: LEISC/SEIP/ICN/REOI/LMIS-12/2023/866

Date: 17/01/2023

Recruitment of Individual Consultant to Develop Labour Market Information System (LMIS) for Light Engineering Sector

LEISC-SEIP Project invites eligible National Individual Consultant to submit Expression of Interest (Eoi) for developing Labour Market Information System (LMIS) for Light Engineering Sector under **Light Engineering Industry Skills Council (LEISC)**. Detailed Terms of Reference (ToR) can be downloaded from SEIP website: <https://seip-fd.gov.bd>.

The deadline for submission of Expression of Interest (EOI) is 3.00 pm BST on 31 January, 2023 at the following address:

Executive Project Director, **Skills for Employment Investment Program (SEIP) Project**, Finance Division, Ministry of Finance, Prabashi Kallyan Bhaban (Level-16), 71-72, Old Elephant Road, Eskaton Garden, Ramna, Dhaka-1000 and the Eoi can also be submitted in PDF version through e-mail: ceo.leisc.seip@gmail.com.

Md. Rafiqul Islam Bhuiyan,
CEO, LEISC-SEIP Project

Government of the People's Republic of Bangladesh
Finance Division, Ministry of Finance
Skills for Employment Investment Program (SEIP)

Hiring Individual Consultant to Develop Labour Market Information System for LEISC

Term of References (ToRs)

1.0 Background and Objectives of SEIP Project

The Skills for Employment Investment Program (SEIP) supports the Government of Bangladesh in the reform of skills development training system as focused in the National Skill Development Policy (NSDP) 2011. It also supports private sector involvement and strengthen public-private partnership, which is significant to meet the existing and future labor market needs and to reduce skills-gap and skills mis-match. This is crucial for Bangladesh to move forward from the present "low-skill, low-wage equilibrium" to a "higher skill, higher wage virtuous cycle" necessary to achieve the status of a middle income country. The program helps the government to scale up skilling of new entrants and up-skilling of the existing workers that will contribute to higher growth and elevated productivity in the priority sectors. SEIP is strengthening the skills eco-system in Bangladesh by establishing a unified funding system and enhancing overall coordination of the currently fragmented system of skills development. This project is being implemented by Finance Division, Ministry of Finance under the financing arrangement from the Government of Bangladesh and Asian Development Bank (ADB).

The overall objective of the project is to expand the skilling capacity of identified public and private training providers of Bangladesh qualitatively and quantitatively by establishing market responsive skill ecosystem and delivery mechanisms through a combination of well-defined set of funding triggers and targeted capacity support. Quality skills training will be strengthened by implementing vocational trainers' development program; quality assurance functions and appropriate skills assessment. The project will expand mid-level trainee targets through partnership with private and public sectors. Institutional capacities for mid-level training would be strengthened and a national management & governance structure for skills development would be established through this project. The project has been supporting industries to conduct training programs by providing grants to meet their skill requirements with a provision to arrange employment of at least 60% of the newly trained graduates.

SEIP is organizing the training program in partnership with major 10 priority sectors of the economy; Light Engineering sector are in a vital position among them.

2.0 Background of the Light Engineering(LE) Sector in Bangladesh

The light Engineering sector act as a feeder of all industries by its nature. It is observed that in present era all economically strong and growing countries have been escalating their LE sector as a part of their development strategy which acts a key agent for growing a country's industrial basement such as Japan, China, India, Germany.

The LE sector supports very basic requirements of industrialization by producing a wide range of spare parts, casting, molds and dies, oil & gas pipeline, fittings, electrical & electronics, agriculture machineries and light machinery etc. and by providing repairing and servicing. The industries those benefits from spare parts produced by light engineering are including cement factories, paper mills, jute mills, textile mills, sugar mills, agriculture machinery, electrical & electronics industry, food processing, plastic, printing, fertilizer, railway, shipping, marine transport, automobiles, bye-cycle industry, construction machinery, and pharmaceutical industry, because of such role in the economy, LE sector has received special attention in government policies (Industrial Policy, 2005&2009) and

considered as a thrust sector for country's economic development. Besides this, at present LE also plays role as **an import substitute sector** by producing electrical & electronic goods like switch, socket, light shed, channels, cables, electrical fans, generator, lift, motors, TV, fridge, auto bike and different spare parts like gears, pulleys, bearing, wheel etc. are meeting significant portion of country's demand whose were earlier met through import using huge foreign currency from our reserve. LE sector is mainly a capital intensive sector. According to BITAC, Country's total investment in the LE sector is only \$15 billion against the demand of \$7 trillion LE Industries products in the global market. Whichever country wants to grow this sector must be ready to infuse enough capital into the sector. Recently, the **honorable Prime Minister announced 'Light Engineering' as the product of the year 2020' to give special attention to this sector for earning more foreign exchange through exporting various products.** Unlocking the potential requires addressing a number of constraining factors that hampers rapid expansion of this sector. **One of the factors** that sector experiences is **shortage of skilled labor** and another factors is **4th industrial revolution and advancements in technology** as causes, the business solution in industry and the workplace is dramatically changing. A skilled workforce is required to sustain the present growth and future development in this sector. But skill mismatches are widespread in the TVET system in Bangladesh. The TVET strategies in the National Education Policy 2010 and the National Skills Development Policy 2021 are considered to be the most useful documents for skills development program formulation. The intricacies of the policies will need to be prioritized and implemented for skills training in Bangladesh. 4th industrial revolution and advancement in technology has also started creating huge opportunity for skilled workforce. A labor force with low levels of education and skills results in low productivity in LE sector

To meet the country's employment needs, Bangladesh needs to create 2.25 million jobs every year. However, it is observed that the nature of Light Engineering sector is so vast that has enormous scopes to employ **a huge number of unemployed youth** by imparting skills training (soft & technical skills) based on industry demand driven curricula so that industry will get skills manpower easily to mitigate the crisis of skills workforce demand and create a productive and decent workplace to produce quality product thereby entrepreneur will be able to expand their business rapidly.

SEIP is, therefore, planning to engage one 'Individual Consultant to conduct enterprise survey who will conduct in-depth assessment and prepare a clear picture of 20 enterprises in terms of their business operation, challenges in involving skilled workforce, productivity, growth of business and employment, investment in skills development and their plans in the next 5 years.

3.0 Light Engineering Industry Skills Council (LEISC)

Light Engineering Industry Skills Council (LEISC) is one of the Industry Skills Council (ISC) under National Skills Development Authority (NSDA) chaired by The Honorable Prime Minister. The one of core objectives of NSDA is to implement National Skills Development Policy (NSDP-2011) for ensuring skills workforces for the industries for improving productivity and quality of product to achieve the Sustainable Development Goals (SDGs) as well as reach the Bangladesh to develop country status by 2041. The National Skills Development Authority (NSDA) has recognized all ISCs including the LE-ISC as primary point of contact for skills and employment issues of the respective sector. To align the objectives of NSDA, the LE-ISC is working to promote a wide range of skills development activities such as identifying priority occupations, developing industry demand-driven curriculum in consultation with industry people under National Technical and Vocational Qualification Framework (NTVQF)/ Bangladesh National Qualification Framework (BNQF), supporting industry to up-skill their employees in order to improve productivity and strengthening of industry apprenticeship program for getting entry level skills workforces. At first it was formed in the year of 2010 as Sector Working Committee (SWC) with the support of Skills Development Project (SDP) funded by ADB and SDC. Later, it was renamed as Light Engineering Industry Skills Council (LE-ISC) to make it in line with the nomenclature used in NSDP 2011. LE-ISC is registered with the Registrar of Joint Stock Companies to make it operational in order to achieve the mandate specified in the National Skills Development Policy (NSDP) 2011. New board of LE-ISC has been reconstituted with the members of

different associations such as Bangladesh Engineering Industry Owners' Association (BEIOA), Agricultural Machinery Manufacturers Association Bangladesh (AMMAB), Bangladesh Die & Mold Manufacturers Association (BDMMA), Foundry Owner's Association of Bangladesh (FOAB) and Bangladesh Electrical Merchandise Manufacturers' Association (BEMMA) of the light engineering sector.

4.0 Background of the Assignment

While the NSDA is currently working a broader employment and skills database, it is still beneficial, if not essential for each sector to operate a Labour Market Information System, not just to record data and trends from industry but to also provide intelligence to the sector in terms of skills training, mainstreaming of gender and social inclusion and labour supply. A sector specific LMIS can only succeed in proving the functioning of the labour market if both data generation and service delivery functions are deliberately considered as integrated parts of a comprehensive LMIS.

The LMIS will collect, capture, categorize and upload sector specific, conduct Delphi Method research, qualitative and quantitative research and forecasts and foresight exercise to build into a comprehensive and consistently maintained system. LMIS will assist in job matching, job searching, providing information about market needs, developing job profiles and improving applications skills. It will also provide sectoral data which will facilitate formulating policy and plans for skills development for the light engineering sector.

LEISC will ensure a develop system or a mechanism for gathering, organizing, structuring, managing, providing, and analyzing data and information about the occupational composition, skills demands and jobs/ vacancies available in light engineering sector including key change made within employment, jobs and occupations. LEISC will host, manage and update the system.

5.0 Objectives of the Assignment and Scope of the Services

a) Objectives of the Assignment

The main objective of the assignment is to develop Labour Market Information System (LMIS) for LEISC which will be used to identify, interpret and report the key indicators of the labour market to the government, industry owners and job seekers so that they can be used for decision taking and planning.

Specific Objectives:

The consultant(s) will be required to execute the following activities and any other tasks that will be deemed important for the success of the establishment of the Labour Market Information System (LMIS) for LEISC.

b) Scope of the Assignment:

The scope and focus of the assignment are to provide technical, strategic and facilitation support to enable the LEISC to develop a Labour Market Information System (LMIS). LMIS, is a platform for manpower management that also has the ability to collect, process, analyze, and disseminate labour market information LMIS is also the production of information and analysis for policy makers and other labour market stakeholders. Key aspects of the consultancy is the development of a website linking with skills portal, job searching & posting apps for job seekers & employers and promotional product like facebook page. The consultant will assess the current website structure and contents for ease of accessibility, quality of contents, user-friendliness, ease of maintenance/update, information retrieval. To review, update, design & develop current website using suitable, reliable, cost-effective and simple to use platform. The consultant will also develop, install, and run of final version of LMIS for Android system (mobile phone Apps) and Operationalizing the system. The consultant will collect information at least 5% respective LE industry out of 40,000 LE industries from different locations in Dhaka.

Chittagong, Gazipur, Narayagong, Bogura, etc. representing above mentioning five sub-sectors and input in the LMI system for Trial-run and final versions. All data should be entry in the online and offline data entry form. Several data entry person or administrator should get access to entry data on the same time and different location. After data entry, all analysis should be auto-generating in the LMIS system. All data set and analysis should be downloaded through MS-excel and SPSS version by the authorized person and registered person in the LMIS system. The consultant will be providing 01 years support & maintenance service after submission and running of the final version of LMIS. This support & maintenance will cover fixing all bugs and system errors as and when identified by the system users. The consultant will find out major problems of the software and fix them and he will be responsible for taking data backup and all related design/data will be open to Client. Finally, the consultant/ firm should be provide the hosting service for the duration of the contract, final source code and updated Software Requirement Specification (SRS) as well share all hosting information with LEISC and the initiative team from the get go. The consultant will also develop, install, and run of final version of LMIS for Android system and IOS (mobile phone Apps) and operationalizing the system. The consultant also should be providing a final version of operational and managerial guideline on LMIS along with the final version of LMIS software and other deliverable items. The consultant also will provide a training on operational and managerial guideline on trial run and final version of LMIS to respective authorized persons of LEISC.

6.0 The detailed Tasks of the Consultant will be the following but not limited to -

1. The consultant(s) is required to review, redesign and redevelop existing sectoral ISCs website.
2. The consultant(s) is required to review sector related literature, publication and concept note to establishing LMIS this include pre-feasibility assessments and compilation of data set that will formed the bases for the sector specific LMIS.
3. Conduct Delphi method research and a SWOT analysis, map stakeholders needs and analyses the institution and legal framework.
4. Identify and agree with the stakeholders the applications/modules to start with the sector specific LMIS.
5. Review existing Labour Market indicators to be tracked on the regular basis under the sector specific LMIS umbrella and the source of data.
6. Develop meta data for all identified indicators to ensure consistency and transparency;
7. Analyze the different formats from different sources to agree on standard data exchange format and establish mechanisms of regular data exchange from different data sources.
8. A LMIS is combination of software modules communicating with each in order to get as much information as possible from the raw data collected through surveys and administrative records of stakeholders. To achieve this the mentioned needs to be done: Develop overall architecture of the LMIS applications/modules; Develop security parameter and audit trials of the system; Develop a central data repository also known as data warehouse; Develop "Input and storage data layer interface" which is to be used to extract data from external sources and store them in their original format "staging LMIS database"; Develop a transformation solution to standardize the data extracted data from different sources; Develop staging database to avoid loss of data originality; Develop interface to load transformed data into LMIS data warehouse; Develop data manipulation functions or procedures to calculate indicators for each and every module.

9. Trial-run and making necessary adjustment and Taking feedback from external user and doing necessary adjustment in modules and reposting performance.
10. Respective information will be collected from at least 5% respective LE industry out of 40,000 LE industries from different location in Dhaka, Chittagong, Gazipur, Narayagong, Bogura, etc. representing above mentioning five sub-sectors and input in the LMI system for Trial-run and final versions.
11. All data should be entry in the online and offline data entry form. Several data entry person or administrator should get access to entry data on the same time and different location. After data entry, all analysis should be auto-generating in the LMIS system. All data set and analysis should be downloaded through MS-excel and SPSS version by the authorized person and registered person in the LMIS system.
12. Train the ISC level incumbent and Users on LMIS concepts and indicators how to extract data from different sources; how to transform and load data in LMIS; how to update the Open Source operating system; Develop To-Do-List for system administrator to ensure security and backup of the systems; how to generate indicators with the help of World Bank analytical tool ADePT and feed them in LMIS.
13. Develop an operational and managerial guideline on LMIS
14. Provide a training on operational and managerial guideline on LMIS with trial run and final version to respective authorized person of LEISC.
15. Installation of final version of LMIS and Operationalizing the system.
16. Uploading specified information.
17. The consultant/ firm should be providing the hosting service for the duration of the contract, final source code and updated Software Requirement Specification (SRS) as well share all hosting information with LEISC and the initiative team from the get go.
18. Populate database with data and test the technical compatibility.
19. Develop, install, and run of final version of LMIS for Android system and IOS (mobile phone Apps) and Operationalizing the system.
20. Develop promotional product (Facebook page) to advertise existence of the database, app and website.
21. Integrate the system with SDCMU-TMS, NSDA Skills Portal and systems of other industry sector/ sub-sector institutions.
22. Provide required and necessary support & maintenance.
23. Complete and submit the final assignments to the respective Authority.

7.0 Minimum Qualification and Experience of the Consultant

Minimum qualification and experience of the consultant will be

- B.Sc./ Masters/ PhD in Computer Science, Data Science, Data Management System or Information Technology from a recognized University
- Minimum 10 years of experience in designing and developing website, Apps and software.
- Minimum 5 years of experience in Data Management and System Analysis.

8.0 The cost and source of fund as below:

- Total estimated cost would be BDT 15,00,000.00 including all benefits.

- The VAT and Tax (as per government rules), would be deducted from the contracted amount.
- All kind of cost regarding LMIS such as, data collection, data cleaning and data entry, etc. are included in the declared amount.
- The expenses will be borne from the LEISC-SEIP fund.

9.0 Deliverables

The consultant will provide the following deliverables:

Sl.	Deliverables	Timeline
1.	An Inception report containing - i. Analysis on understanding the Concept Note for developing LMIS ii. Analysis on understanding the Terms of Reference. iii. A work plan agenda, data collection form, methodology to be used and facilitation plan. iv. An Inception report including work plan, data collection form, methodology will be present in the project standing committee (PSC) meeting or management meeting for approval.	Within 2 weeks of signing the contract
2.	i. Trial-run version of LMIS including all components which are mentioned in the concept note. ii. Installation of Trial-run version of LMIS and operationalizing the system. iii. A data set with MS-Excel and SPSS version of at least 5% respective LE industry out of 40,000 LE industries from different location in Dhaka, Chattogram, Gazipur, Narayanganj, Bogura, etc. representing above mentioning five sub-sector. and this dataset is also included in the LMI system for Trial-run versions. iv. Submit an operational and managerial guideline (final draft) on LMIS v. Provide source code and updated Software Requirement Specification (SRS) vi. Submit, and install of Trial-run version of LMIS for Android system and IOS (mobile phone Apps) and Operationalizing the system. vii. Submit a promotional product (Facebook page) to advertise existence of the database, app and website. viii. Organize and facilitate a training/ orientation on operational and managerial guideline on trial run version of LMIS to respective authorized persons of LEISC.	Within 3 months from signing the contract
3.	i. Present trial run version of LMIS at management meeting for approval and acceptance. ii. Final version of LMIS including all components which are mentioned in the concept note. iii. Installation of final version of LMIS and operationalizing the system. iv. A final clean data set with missing any data with MS-Excel and SPSS version of at least 5% respective LE industry out of 40,000 LE industries from different location in Dhaka, Chattogram, Gazipur, Narayanganj, Bogura etc. representing above mentioning five sub-sector. and this dataset is also included in the LMI system for final versions. v. Submit a final version operational and managerial guideline on LMIS vi. Provide final source code and updated Software Requirement Specification (SRS) vii. Submit, install, and install of final version of LMIS for Android system and IOS (mobile phone Apps) and Operationalizing the system.	Within 5 months from signing the contract

	viii. Submit a promotional product (Facebook page) to advertise existence of the database, app and website.	
	ix. Organize and facilitate a training on final operational and managerial guideline on final run version of LMIS to respective authorized persons of LEISC.	
4.	i. Provide knowledge transfer, orientation training, operational support & maintenance service after submission and running of the final version of LMIS. This knowledge transfer, orientation training, operational support will cover all the necessary steps to enable the client to operate the system independently and smoothly. The maintenance will cover fixing all bugs and system errors as and when identified by the system users. The consultant will find out major problems of the software and fix them and he will be responsible for taking data backup and all related design/data will be open to Client.	Within 6 months from the date of signing the contract and final submission of LMIS

It is worthwhile to mention that the consultant will submit a progress report at the end of every month to the LEISC and SDCMU as well.

10.0 Period of assignment

The assignment will be for a period of 6 months with intermittent arrangements starting from 17th February 2023 and ending on 16th August 2023.

11.0 Payment Schedule

Sl	Deliverables	Payment schedule
1.	After acceptance of Inception report (Deliverable items under serial 1 of section 9: Deliverables)	10%
2.	After submission, review and Present trial run version of LMIS at management meeting by Consultant for approval of Trial-run of LMIS and operational and managerial guideline on LMIS (Deliverable items under serial 2 of section 9: Deliverables)	30%
3.	After approval of final version of LMIS (Deliverable items under serial 3 of section 9: Deliverables)	35%
4.	After providing effective maintenance and service and approved by management (Deliverable items under serial 4 of section 9: Deliverables) upon condition of 1 year free service & maintenance from the date of final submission of LMIS.	25%

12.0 Duty station

The consultant will work from his/her office, attend meetings at SEIP office, LEISC and association offices and conduct field visits, workshops, meetings etc. in Bangladesh as and when required.

13.0 Counterpart communication & Support:

SDCMU, SEIP and LEISC will provide support as per provision of ToR.

14.0 Documentation required from the consultant:

The consultant must provide (a) forwarding letter with detailed CV (b) evidence/certificates of research/study experience (c) updated income tax certificates (d) a work plan and (e) the technical proposal and the expected cost statement/budget (all inclusive) to accomplish the entire assignment.

It is to be noted that the LEISC shall not provide any computer/ laptop/vehicles support to the consultant. But, setting space with furniture at office, power supply, photocopy, internet facilities when work at

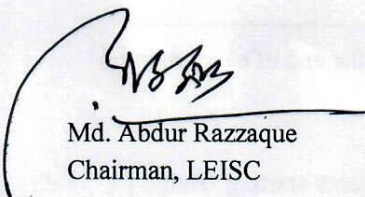
office, will be provided to the consultant. Therefore, the consultant to include all related expenses in the estimated cost statement.

15.0 Disclaimer

SEIP and LEISC-SEIP project reserves the right to accept or reject any or all proposals/application without assigning any reason whatsoever. However, value-for-money will be an important criterion in selection of the consultant.

16.0 Disclosure of Information

It is understood and agreed that the Consultant shall, during and after the effective period of the contract, treat as confidential and not divulge, unless authorized in writing by LEISC-SEIP Project, any information obtained during the performance of the Contract. Information will be made available for the Consultant on a need-to-know basis.



Md. Abdur Razzaque
Chairman, LEISC