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# **Work assignment**

**Development of reporting software for  
ultimate ownership disclosure**

**Office of Education and Training**

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## **1. Introduction**

In 2013, Mongolia began to disclose the information of the final owners within the framework of EITI . More than 30 of the more than 50 countries that have joined the EITTS disclose the information of the ultimate owners of companies in the extractive industry in some way. Of these, the owners of nine countries, including Armenia, Ghana, Mexico, the Philippines, and Zambia, have been exposed and are serving as role models. As part of the extractive industry openness program, the participating countries will make the ultimate owners transparent and receive the necessary support and technical assistance over the next 5 years...

In the case of Mongolia, the work of making the ultimate owners transparent began in 2016 with the creation of a Roadmap and planned implementation.

Forms 2.17.1 and 2 of the Electronic Reporting System of the Ministry of Education and Culture are receiving information on the final owner from companies and making it public.

## **2. Purpose**

Development of Final Owner Information as an additional module on the main Electronic Reporting System within the framework of EITTS Electronic Reporting System Improvement Project and Extractive Industry Open Projects.

- Get data from the Electronic Reporting System.
- Design UI/UX to be visible across all devices.
- Make necessary developments for the released prototypes (UI/UX).
- Enable download of data in open data format using necessary filters.
- Make technological updates and improvements.

## **3. Scope of Consulting Services**

Make current system coding, UI/UX improvements and bug fixes. The scope of services covers the following activities.

### **3.1 Activity 1 – Make UI/UX improvements**

- I. Develop the UI/UX and define the requirements in cooperation with the Ministry of Education and Culture for the project "Opening up the extractive industry".
- II. Make UI/UX and approve it by the Working Section of EITTS.

### **3.2 Activity 2 – Basic development**

- I. Develop according to UI/UX requirements
- II. Release information in an open data format filtered by required fields such as date, company type, mineral type and locations.

### **3.3 Activity 3 – Application Programming Interface (API) Development**

- I. Get information of the final owner from the General Land System of the State Registry to the database of the Electronic Reporting System.
- II. Development of an API that can access and download end-owner information from any device with the necessary filters.
- III. Develop dynamic documentation for web-accessible APIs, and as the API fields change, the documentation changes accordingly.

## **4. Deliverables**

All technical materials will be prepared by the Consultant with the approval of the Office. The main products will be delivered as follows.

- The consultant will develop a work plan in consultation with the Office of Education and Training.
- Software development, UI/UX improvement and implementation as per requirements.
- Web-based dynamic API documentation.
- Progress and final performance reports.
- The source code will be handed over to the Office of Education and Training.

## **5. Reference links**

Official website of EITTS – [https:// www . eitimongolia . m n /](https://www.eitimongolia.mn/)

Electronic reporting system - [https:// ereporting . eitimongolia . mn /](https://ereporting.eitimongolia.mn/)

The official website of the Ministry of Education and Culture – <https://mmhi.gov.mn/>

## **6. Confidentiality requirements**

- Store and display data according to the main framework technology. Direct access to and storage of the base is prohibited.
- Require password requirements to include uppercase letters, numbers, and special characters according to common standards.
- Internet-based attacks on web systems are prevented. For example: Brute force , Credential stuffing, SQL Injection, Cross-site scripting, Cookie poisoning, Sensitive data disclosure, Session hijacking , etc.

## **7. Software quality requirements**

- Write the code according to a common international code standard.
- Unit and Integration tests of the code have been done.
- After testing on the development server, the changes are pushed to the main server with the project developer's approval.
- the names of classes, variables, and functions cannot be read by someone other than the person writing the program, it is best to write comments in the code.

- Hard coding and Magic Number is not used. It can be included in the code with the permission of the project execution unit, along with an explanation, if necessary.