
Terms of Reference (ToR) – EITI database project

1. Overview

The Extractive Industries Transparency Initiative (EITI) is seeking to develop a new EITI Database, which will facilitate cross-country and time-series analysis of extractive companies' payments to governments. The EITI International Secretariat intends to engage the services of a Consultant¹ to undertake the tasks assigned in these Terms of Reference.

2. Background

The EITI is a global standard that promotes transparency and accountability in the oil, gas, and mining sectors. Additional information is available from <http://www.eiti.org>.

The launch of the [SOE Database pilot project](#) represented an improvement in the accessibility of company disclosures for International Secretariat stakeholders. The EITI Database will improve the piloted processes used in the SOE Database and create a framework and refined data analysis tool for the use of other EITI disclosures which are highlighted in these terms of reference. The EITI Database will also change how users currently interact with the data through the use of data visualisations and bulk downloads of pre-defined queries.

Context

Open data lies at the core of the EITI's mission to promote the open and accountable management of natural resources. By making data public, understandable, and usable, EITI disclosures can strengthen public debate, inform decision-making and promote public understanding of natural resource management. These objectives are underpinned by the [EITI's open data policy](#) and [data strategy](#).

EITI Data Sources

The EITI maintains publicly accessible data on country disclosures under the EITI Standard which can be accessed through eiti.org. Data is disclosed annually from around 55 EITI implementing countries and can be accessed in the following ways:

- 1. Summary Data:** EITI implementing countries disclose data on production, exports, revenues and company payments to government and company projects. This data is submitted through summary data files in Excel format and can be accessed on a publicly available [Google drive](#). Summary data files are imported to both eiti.org where the data is available for download in CSV format on our [country pages](#) or through an [API](#). As of 2024,

¹ The term 'Consultant' in the document refers to the final entity with whom we will contract, whether an individual or a firm.

summary data files are also imported to [EITI's State Owned Enterprise Database](#) (see bullet point 4 below).

- 2. Validation Assessment Data:** A record of the results [from Validation assessments of countries' disclosures against the EITI Standard](#) is stored on eiti.org. This data can be accessed on the [country pages](#) and through an [API](#).
- 3. Company Assessment Data:** A record of the results from [assessments of EITI Supporting companies](#) against EITI requirements for supporting companies is on eiti.org in an Excel file.
- 4. SOE Database:** In 2024 the EITI launched its State-Owned Enterprises (SOEs) database which covers SOEs' payments to governments and other disclosures related to oil, gas and mining activities in EITI implementing countries, accessible at <https://soe-database.eiti.org/>. The SOE database was developed and hosted on a [SQLite Database](#) and uses the [Datasette platform](#) as its front end. It was launched as a pilot for a wider EITI Database, which will maintain the same structure and platform. The Datasette platform tracks usage information on a per-query basis using the [Plausible](#) tool.
- 5. CKAN portal:** The EITI has also developed a companion CKAN open data portal not yet in use.

Current position

In Spring 2024, we undertook a scoping exercise to consider options for widening the scope of the SOE database and reviewing the overall EITI data pipeline. As a result of that exercise, we intend to use this consultancy to scale the SOE database pilot project in parallel to the operationalisation of the EITI CKAN open data portal, beginning in December 2024 and running through March 2026. The development of the new database is also intended to provide a standard-compliant, interoperable data framework for a larger project to improve the EITI data pipeline, expected to be undertaken in 2026.

The successful supplier will have access to the full documentation of the SOE Database and CKAN open data portal and other supporting documentation.

3. Objectives

The supplier will be engaged by the EITI International Secretariat to deliver the three phases of the EITI Database starting in December 2024 and completing at the end of March 2026. The supplier is expected to meet the following objectives:

- 1. Phase 1:** Refine and document the EITI Database's data schema to accommodate the current summary data, validation assessment data and company assessment datasets taking into consideration existing assessments on the current data quality and data validation processes. The schema is to be flexible to accommodate changes to the underlying requirements of these datasets and will be developed in collaboration with the EITI International Secretariat's Data, Validation and Company Assessment teams. This task would entail consultations with the EITI team leading to recommendations on specific data points on validation and companies' assessment data that could be included in the database.

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2. **Phase 2:** Deliver a database that validates and stores all EITI summary data and provides a framework for the future storage and potential publication of EITI validation data and company assessment data, without impacting the current workflow for collecting this information.
 3. **Phase 3:** Provide methods of integrating with the EITI CKAN open data portal, so that snapshots of the data can be provided as bulk downloads along with appropriate metadata and supporting documentation.
 4. **Phase 4:** Ensure that the database has functionality and products that meet the needs of the EITI International Secretariat and EITI stakeholders' user stories.
 5. **Phase 5:** Ensure that the database has documentation and the relevant plugins to enable future transition from the current Excel-based data upload to an online platform.

4. Functional requirements

The list below represents the technical and functional features the EITI Database must include, or documentation that must be provided with the product. (See also the Non-Functional Requirements in section 10).

Summary Data Extraction

1. The EITI database must be able to ingest and extract all information from the existing SOE and summary data databases.
2. The existing summary data import process must be amended to include extracting relevant companies' data and importing it into this database without the need for users to repeat the import process.
3. The EITI database must incorporate basic data validation and cleaning processes for incoming summary data.
4. Extracted data must be cleaned and converted into a format that is compatible with the new database.
5. The import process must provide notification of success or failure, with a user-friendly indication of any errors that have occurred.

Data Schema, Storage, and Input

1. The EITI database must use Datasette for the underlying database to ensure compatibility with other systems and interfaces.
2. The database schema must include data points that align with all EITI data collection processes involving companies' data to ensure full compatibility with other data processes as required. Examples might include implementing country validation data and company assessment data.
3. A database model with associated table schemas must be developed that follows best practices, and international standards where applicable.

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4. The database schema must be compatible with external data standards such as the Beneficial Ownership Data Standard (BODS).
 5. The EITI database must allow data uploading and editing by the EITI Data Team.
 6. The EITI database must be structured to allow analysis and reporting on the following:
 - a. Parent-subsidary relationships
 - b. Country comparisons
 - c. Year-on-year comparisons
 - d. Data analysis at the project level

Data Access

1. The EITI database must provide a web interface for data querying and visualisation, including a generic visual data explorer.
2. Users requiring editing access must be able to log in securely.
3. Roles-based access must be used to limit functionality.
4. Every external-facing page in the web interface must be styled to meet EITI branding guidelines.
5. The EITI database must provide an interface for bulk download of data.
6. The EITI database must provide a set of pre-defined queries, defined in collaboration with the EITI Data Team, for common use cases, that can be accessed in a single step via the web interface.
7. The EITI database must provide the ability to write custom queries via a web interface.
8. The EITI database must have an API compliant with the [OpenAPI specification \(v3.1.0\)](#) and beyond.

Interoperability and Integration

1. The EITI database must provide a unified user experience with EITI's other data tools.
2. The EITI database must be capable of interacting with the EITI's CKAN open data portal via API or web services to allow the linking of data in the database and any related documents.
3. The EITI database must provide a mechanism for linking (either manually by the EITI Data Team or automatically) with other open company registers such as [ESTMA](#), [Open Corporates](#) and [GLEIF](#).

5. Deliverables and milestones

The assignment is expected to take up to 90 non-consecutive consultancy days between December 2024 and March 2026. The Consultant should consider the **development** of the EITI Database, and its **hosting** and **maintenance** throughout the full period, and provide a breakdown of these figures in their submission.

The project should be delivered in 3 phases:

- 1: EITI Database schema and data quality improvements
- 2: Improved workflows
- 3: Data products and pipeline development

Details of the phases are set out in table 5.1 below. A proposed schedule is set out in 5.2 and should be agreed upon and finalised in consultation with the EITI International Secretariat.

5.1 Project Deliverables

Project Phase	Deliverable	Description of Requirement	Estimated distribution of days for the phase
1	1.1 Schema design	<p>1.1.1 In consultation with the International Secretariat and key stakeholders refine the data schema for summary data, which includes Summary Data templates 1.0, 2.0 and 3.0, for the SQLite database.</p> <p>1.1.2 In consultation with the International Secretariat and key stakeholders create the data schema for validation data, which includes the validation scorecard and validation templates for the SQLite database.</p> <p>1.1.3 In consultation with the International Secretariat and key stakeholders create the data schema for the EITI supporting company assessment data, which includes the assessment data in Smartsheet and an Excel file containing supporting company and local subsidiary relationships for the SQLite database.</p> <p>1.1.4 Provide documentation for the above schemas including a data dictionary</p>	Up to 12
1	1.2 Mapping of identified datasets to new schema	<p>1.2.1 Mapping of existing summary data files from Summary Data Templates 1.0,2.0 and 3.0 (if available) to new schema.</p> <p>1.2.2 Mapping of existing validation scorecard data and validation template data points (if available) to new schema.</p> <p>1.2.3 Mapping of existing EITI supporting company assessment data and supporting</p>	Up to 12

		<p>company subsidiary data points (If available) to new schema.</p> <p>1.2.4 Update data schema documentation to include the mapping of data points where transformations are highlighted.</p>	
1	1.3 Data cleaning and initial import	<p>1.3.1 Using the EITI data quality assessment clean and import data mapped to the refined schema for summary data files into the SQLite database.</p> <p>1.3.2 In consultation with the International Secretariat identify and address data quality issues in the validation scorecard and validation template data and import data mapped to the created schema into the SQLite database.</p> <p>1.3.3 In consultation with the International Secretariat identify and address data quality issues in the EITI supporting company assessment and supporting company subsidiary data and import data mapped to the created schema into the SQLite database.</p> <p>1.3.4 Update the EITI data quality assessment document with sections that cover validation and supporting company assessment to include learnings and methods applied to clean the data.</p>	Up to 11
2	2.1 Enhancements to import process for new data	2.1.1 Extend the existing summary data import process to include this database, incorporating the data quality findings from Phase 1.	Up to 10
2	2.2 Data Interoperability	2.2.1 Assess and refine the elements of the summary data import process, these include: <ul style="list-style-type: none"> a) EITI ID assignment, b) BODS mapping, c) Open Corporate ID assignment. 	Up to 10
2	2.3 Summary Data import app	<p>2.3.1 Delivery of a summary data import app that imports, cleans and provides feedback to the user on data quality for Summary Data 2.0 and 3.0.</p> <p>2.3.2 Provide technical documentation and user guides for the International Secretariat.</p>	Up to 10
3	3.1 Data Products	<p>3.1.1 Provide a data visualisation component in Datasette with the ability to filter or use facets (time series data).</p> <p>3.1.2 Provide a data explorer tool built using the Datasette API.</p>	Up to 7
3	3.2 CKAN integration	<p>3.2.1 Apply styling to the EITI CKAN Open Data portal in line with EITI CKAN design mock-up. Design assets will be included.</p> <p>3.2.2 In Consultation with the EITI International Secretariat design and connect preset queries as</p>	Up to 6

		open format downloads from the EITI Database to the CKAN Open Data portal.	
3	3.3 Data pipeline development	3.3.1 Delivery of an assessment of any plugins or additional requirements for Datasette/SQLite to enable the future editing of existing data in the database.	Up to 6
3	3.4 Usage statistics	3.4.1 Provide improvements to the Plausible usage statistics tool. 3.4.2 Provide an automated report for maintenance.	Up to 6

5.2 Project milestones

Item	Estimated deadline
Contract signature	Early December
Inception meeting to agree and finalise scope of assignment and provide information for needs assessment	2 days after contract signing.
Execution of Phase 1:	End of March 2025
Execution of Phase 2:	End of June 2025
Execution of Phase 3	End of March 2026

6. User stories

Following interviews and surveys with EITI stakeholders, the user personas below have been created to describe the needs and concerns of the main types of users of the EITI Database.

EITI national secretariats:

- As a National Secretariat member, I submit data annually to the EITI International Secretariat. I am interested in accessing quick facts and insights from that data to inform my decision-making or to engage with stakeholders. My priorities are an engaging user interface, quick page loading and data visualisation which can be shared with my stakeholders.

International partners:

- As an international partner of the EITI, I am interested in tracking the progress of EITI disclosures at a global or regional level. My priorities are the ability to aggregate and disaggregate the progress on EITI disclosures and to download or integrate through the web this summarised data into my data models.

Civil society:

- As a member of a civil society organisation, I am interested in tracking the progress of EITI disclosures in my country and sharing data with other interested organisations. My priorities are an engaging user interface, quick page loading, update notifications and data visualisation which can be shared with my stakeholders.

Researchers:

- As a researcher I am interested in how I can access the data to quickly inform my paper. My priorities are being able to access data in open formats, metadata, and adherence to international data standards so that my work is consistent and credible.

Data aggregators:

- As a data aggregator I am interested in complimenting my existing library of datasets used for decision making. My priorities are having recognised identifiers for interoperability with my other datasets, being able to access data in open formats and a high level of data quality to facilitate integrating EITI data with my other datasets.

EITI supporting companies:

- As an EITI supporting company, I submit data bi-annually to the EITI International Secretariat. I am interested in accessing quick facts and insights from that data to inform my decision-making or to engage with stakeholders. My priorities are an engaging user interface, quick page loading and data visualisation which can be shared with my stakeholders.

7. Constraints

Both the EITI database and the CKAN Open Data Portal will be accessed through eiti.org as a subdomain. Each platform has a separate hosting architecture, CKAN is currently within a managed instance and Datasette is hosted on Google Cloud.

The Consultant will be expected to undertake the following maintenance tasks for both the EITI Database and CKAN Open Data portal:

- To provide maintenance services for the EITI SOE database (which is a Datasette product) and CKAN Open Data platforms
- To facilitate the hosting for the EITI SOE database and CKAN Open Data platforms
- To enable EITI staff to access a test environment for future enhancements

8. Consultant qualifications

The Consultant should be a prominent firm, organisation, or individual(s) that the EITI International Secretariat considers to be credible, trustworthy, and technically competent. The Consultant must demonstrate and if possible, provide evidence of:

Required experience:

- Proven experience in the development of open data tools and platforms.
- Familiarity with database schema design best practices.
- Familiarity with tools such as SQLite databases, Datasette, CKAN, Drupal and DKAN is required.

Desirable qualifications:

- Knowledge of the extractives sector, governance, and corruption issues.
- Prior experience with the EITI or similar transparency initiatives.

To ensure the quality and independence of the assignment, the Consultant must disclose any potential or actual conflicts of interest in the technical and financial proposals and describe how these conflicts will be managed or mitigated.

9. Ways of working

The Secretariat expects to work with the Consultant as follows:

- Consultant will hold virtual meetings with partners, organised with EITI's assistance, to elaborate on user needs, refine or validate the specifications of features, and/or conduct usability testing.
- Consultant will hold regularly scheduled virtual meetings with the IS to discuss progress updates and agree on goals and tasks for the following period.
- Both parties will agree on a communications tool to share project-related information
- Consultant will be given an induction to and demonstration of the EITI tools relevant to this project.

9.1 Subcontractors

Where subcontractors are used for any project task information on the subcontractor's role and experience will be submitted to the EITI International Secretariat data team for review before starting the task.

10. Non-Functional Requirements (NFRs)

EITI has adapted the **Product Quality Model (4.2) of the ISO/IEC 25010:2011 standard** as our NFRs Framework. Our specific NFRs can be found in [the accompanying spreadsheet](#). In each case, please indicate the extent to which your solution meets the requirement via the dropdown list. The explanation for each option is included in the spreadsheet. For each requirement please also add supporting information in the Supplier Comments column, if required.

11. Procurement process

Consultant will be selected following a Quality and Cost-Based Selection procedure. They should submit two separate proposals:

1. A **Technical Proposal**, outlining:

- the experience of the Consultant/s, including examples of previous open data tools and/or platforms delivered,
- the proposed methodology and outline work plan (**one page max**) in response to the Terms of Reference (TORs),
- the key experts' qualifications and competence, and
- a section on potential conflicts of interest. This section should identify any areas of work, including past, present, or future consultancies related to the EITI, which might pose a

conflict of interest. Please also describe strategies that you intend to use to minimize those risks.

The Technical Proposal should not include any financial information. Technical proposals containing material financial information will be declared non-responsive.

2. A **Financial Proposal**, presented in USD, should clearly state a lump sum amount that includes all costs associated with the assignment, inclusive of applicable taxes. It must specify both the proposed number of consultancy days and the corresponding daily rate. The consultant should estimate the number of days required for platform maintenance over the contract period, with final terms to be finalised during contract negotiations. EITI will cover platform hosting costs up to USD 3,200.

The Financial Proposal should be submitted as a password-protected PDF file. Passwords should not be sent with the proposal; they will be requested following the evaluation of the Technical Proposals. Financial Proposals without password protection will be considered non-responsive.

Submission instructions: Proposals must be delivered by email to skasimova@eiti.org by the close of Thursday 21 November. The email subject line should read "Proposal for EITI Database Project – [Consultant Name]". Late submissions will not be considered.

Clarification process: The EITI reserves the right to seek clarifications on Technical Proposals if necessary. Clarifications may be requested in writing or through an interview, depending on the complexity of the issues. Consultants will be given a deadline to respond to any requests for clarification. Answers to any questions submitted about the TOR will be shared with all bidders to ensure transparency.

Evaluation criteria and weighting: Proposals will be evaluated through a two-stage process comprising a technical assessment followed by a financial assessment. Only proposals that achieve a minimum qualifying score in the technical assessment will advance to the financial evaluation stage. The technical proposal will contribute 70% to the overall evaluation score, with the financial proposal accounting for the remaining 30%.

The criteria for assessing the technical proposals will be based on the following:

- Experience of the Consultant relevant to the Assignment
- Adequacy and quality of the proposed methodology, and work plan in responding to the Terms of Reference (TORs)
- Key qualifications and competence based on the Qualification requirements (see section on qualification requirements above)

Shortlisting and Interviews: A shortlist of up to two Consultants may be selected based on the evaluation scores. Shortlisted Consultants may be invited to present their proposals virtually or participate in interviews to clarify specific aspects of their submissions. Presentations will not affect the evaluation score but may provide information for clarifications.

12. Payment Terms

Payments will be tied to the completion of key deliverables, with the payment structure to be agreed at the contract signing.