Market consultation Integrated Enterprise Reporting (IER)

23 November 2023

Invest International

Market consultation

Invest International, as a contracting authority, intends to publish a tender with the aim of concluding a contract for development, maintenance and support of an Integrated Enterprise Reporting (IER) solution, including the transition of the current prototype. The form of the tender is not yet decided. The market consultation is preparation for the tender. After a written consultation, interviews will be organised with a select number of parties.

We invite you to respond to this market consultation and would appreciate your answers to our questions (see annex 1). With this consultation, Invest International wants to get a good understanding of the (im)possibilities within the market, the level of interest and the available experience. We also want to gain knowledge of vision, suggestions and ideas of market players.

Your answers will be used as input for the tender documents. Based on the market consultation, we can choose the most suitable procurement strategy and it gives the parties involved an early impression of our organisation and the goals of the IER project.

If the results of the market consultation are incorporated in the tender documents, they will not be traceable to the participants of this market consultation.

Who are we

Invest International is a Dutch state-owned financial institution. We offer tailor-made financing and project development expertise to partner governments and Dutch-linked companies in international activities that make an impact on the UN's Sustainable Development Goals (SDGs). By bringing public and private partners together, we can make SDG-related investments better financeable and more viable for governments and businesses worldwide.

We can offer a range of instruments suitable for financing small-scale initiatives, medium-scale industrial projects and large-scale infrastructure projects across the green hydrogen value chain. When deploying our funds, we make an effort to leverage the expertise of Dutch companies, demonstrate strong environmental/social commitment and strive for local impact and inclusive growth.

In this we operate as an impact investor. We guide public and private clients in the catalysation and execution of impactful projects. This allows us to forge bankable projects to facilitate the transition needed to achieve the SDGs. We focus on SDG8 and SDG13 helping create resilient economies through effective climate action.

Invest International was established in 2021 as a joint venture between the Dutch Ministry of Finance (51%) and Dutch development bank FMO (49%).

For more information, please refer to: www.Investinternational.nl

What have we done so far

Introduction: Following the incorporation of Invest International there was a focus on implementing the primary source systems to support the investment process. With these now in place the key priority is to start to integrate data from these source systems plus, amongst others, IESG, HR, Finance source systems in a single data warehouse. This data warehouse will become the single point of truth for all data needed for both internal and external reporting and analysis and it will facilitate integrated reporting for Invest International. At this point in time, this data warehouse is commonly referred to as "IER".

Chosen technology: With consideration for the organisation and initial requirements a high-level options analysis was performed to identify suitable technologies. The chosen technology from that analysis makes use of Back-end-as-a-Service together with a PostgreSql database. Rather than custom software development, we also choose to use best practice tools for aspects such as security, querying and reporting. Some related examples include use of Auth0 for authorisation and authentication aspects, Power BI for reporting, dashboarding and/or querying.

We believe this choice would provide us with the necessary flexibility, agility and scalability to develop IER in line with the organisational developments, whilst at the same time ensuring data control and oversight in a cost-effective manner both in terms of implementation and ongoing running costs. It is not our intention to revisit this choice.

Proof of Concept (POC): As this chosen technology appears to be 'out of the box' in terms of the market, we also performed a proof of concept using this technology to test key functionality and also to see the technology in practice. Focus of the POC was on the back-end and the database i.e. excluding front-end. The proof of concept was concluded to be successful with all test scenarios providing actual test results in line with those expected.

Current situation

A prototype is in the process of being developed which will facilitate the daily delivery of data from three source systems with effect from 1 January 2024. This prototype has been developed to ensure that data required to report over a full financial year will be available from key source systems from 31 December 2024. Key aspects related to the prototype are as follows:

Chosen technology

- Back-end as a service is used in combination with Hasura on PostgreSql database.
- Auth0, the facto standard within Authorisation and Authentication, coupled via JSON/REST with Mambu will be used to ensure security of this online platform.
- Data is available via Power BI for business, some SQL reporting and views are also available.

Data delivery & structure

- Daily data feed from nCino, Mambu and Exact source systems.
- Referential integrity is applied on data entering the data warehouse from source systems.
- Data model will be appx 60% complete covering the source systems in scope.

High level roadmap

There are currently 4 anticipated key phases in the IER implementation following which specific new developments will be added as deemed applicable. The 4 phases are as follows:

- Phase 1: IER prototype
- Phase 2: expand IER with connection of Impact and ESG data, IATI reporting data extraction and delivery, provision of data required to support the annual reporting process.
- Phase 3: optimisation of source systems already connected, expansion of IER and reporting to include changes as a result of optimisation.
- Phase 4: connect non-source system data feeds and source systems beyond those supporting the investment process e.g. HR, Finance, procurement.

Possible assignment

The possible assignment is to take over ownership of the IER prototype, develop it further towards the envisaged end state (see slide 8) and to ensure it is maintained and supported. The precise contract term has yet to be determined.

A summary of the IER end state is to implement an environment which centralises the storage of data within Invest International and makes it available, together with user-friendly reporting tools, for various reporting objectives, both internal and external.

Amongst others this includes:

- the implementation of a data warehouse, build-up of and storage of (historic) data and data updates;
- connection of (several) source systems;
- implementation of referential integrity on data entering the data warehouse and associated exception reporting;
- functionality to input (predefined) data not included in source systems by means of a user-friendly front-end;
- functionality to enrich data;
- implementation of ‘standard’ reports/data extracts;
- implementation of dashboard tools and development of ‘standard’ dashboards;
- ability of users to create their own ad hoc reports;
- ability to extract dashboard data for inclusion in stakeholder reports.

Vision of IER Project End State

INPUTS
Source Systems

Deal/product administration
ncino
MAMBU

IESG
Microsoft Azure
Power BI
Flow
Power App

IATI
Finance
HR
Procurement
Strategy

Custom data load/input to IER

PROCESSES
Storage
Data Model
Tooling &
Functionality

Centralised data storage

- Ethical walls
- Enrich data
- Data validation
- Time-travel
- Data drilldown
- Slice & dice
- Data lineage
- ...
- ....
- ....
- ....

OUTPUTS
Enterprise
broad reporting
Other required
reporting and
analysis

Reporting & Analysis Tooling including:
tangelo software
Power BI
Other tools TBD

Reporting Dashboards/Data extracts
- IATI XML report*
- IESG reporting
- Integrated Reporting
- Annual Report data & analysis
- Portfolio analysis
- Ad hoc (team) reporting needs

Reports
- Annual Report Group/BVs
- Risk Report
- Integrated Reporting
- Annual Reports Ministry

Automated dataflow

Procedure market consultation

Planning

For this market consultation, the following schedule applies:

Process steps	Date
Publishing of market consultation.	23 November 2023
Deadline for submitting questions related to the information provided.	4 December 2023, 12:00 PM
Target date for responding to these questions.	7 December 2023
Deadline for submitting answers to questionnaire market consultation (see annex 1)	14 December 2023, 12:00 PM
Send invitation to interviews	15 December 2023
Interviews (in person, at our office in The Hague)	9, 10 and 11 January 2024

If you have any questions and/or comments related to the project, please submit them before 4 December 2023, 12:00 PM to Ilona van der Kaaij via procurement@investinternational.nl or via a message in TenderNed. We will respond to your questions no later than 7 December 2023.

Contact person

All communication regarding this process is through Ilona der Kaaij, by using the following contact details:

P: +31 6 2530 5011
E: TenderNed or procurement@investinternational.nl

Please note that it is not allowed to contact other employees within Invest International regarding this project.

Disclaimer

The market consultation is preparation for a tender that Invest International intends to publish to select a Contractor for development, maintenance and support of an Integrated Enterprise Reporting solution, including the transition of the current prototype. This is not part of the formal procurement procedure; it aims to present its objectives before publishing the tender, provide some context on the possible assignment, gauge the general interest from the industry and more importantly gather feedback and suggestions from participants for finalising the tender documents.

This document provides a general guidance of the market consultation objectives. It contains information which shall not be considered legally binding for Invest International to proceed with the tender nor a confirmation that any recipient will be automatically eligible to participate in the subsequent tender. The information contained in this document should not be relied upon for any due diligence process or as a basis for procurement or contracting related matters.

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