TECHNICAL REQUIREMENTS

By submitting a Proposal, you unconditionally agree to the set of requirements in the Tender documents and all its appendices. Failure to comply with one or more requirements will result in your Proposal being disqualified from the assessment process and therefore excluded from the tendering process.

By submitting a Proposal you explicitly consent to all requirements and conditions specified in this Tender document and declare that you will continue to comply with these throughout the entirety of the contract period. Furthermore, you confirm that you will comply with all of the specified prices and rates, including any agreed indexation. Failure to comply with one or more requirements will result in your Proposal being disqualified from the assessment process and therefore excluded from the tendering process.

1) General requirements

- English is the working language for all development, communications and documentation.
- The Contractor is capable and takes responsibility for training on the front end for main users. It is anticipated that such users will not exceed 20 persons.

2) Requirements relating to transition from prototype to IER solution

- Historical data that we have built up from 1 January 2024 to the date of migration in the prototype, has to be migrated to the IER solution.
- Implementation of IER solution will be based on data feeds (including access security) and data model already defined and implemented for nCino, Mambu and Exact data in the prototype. The chosen Contractor will have the opportunity to get further insight into the data feeds and data model developed in the prototype prior to entering the contracting phase.
- The results from the IER solution will be verified against the prototype and/or the source systems, for example in a parallel run, prior to implementation in production.

3) Requirements relating to data feeds and data saved in IER solution

- All data being captured, entered and updated in IER needs to be labelled from which source it came and date/time-stamped.
- (Raw) data from source systems is available in a ‘staging’ prior to transformation via the data model (ELT).
- Data feeds from the source systems are performed (daily at most).
- The IER solution must be able to handle more complex data feeds (like arrays within tables) coming from the source systems.

- There is a mechanism to input data not already included in source systems.
- It is possible to change, remove source systems and/or add new connections from source systems.
- Referential integrity is applied on (specified) data received from source systems.
- The data warehouse is set up as a dimensional model with dimension and fact tables. Each dimension table contains a set of related attributes that describe the facts in the fact table. The fact table stores quantitative information for analysis.
- Field names, characteristics, constraints, definition can be set for each individual field in the data model.
- Static data tables (such as Country) should be made available in the data model when not delivered by the source system and should be used to check referential integrity.
- Mechanisms should be in place to monitor and flag issues without disturbing the data model, data load and further processing.

4) Requirements relating to reporting & analysis functionality

- It should be possible to drill-down from dashboards to more granular levels of data.
- IER facilitates time-travel, trend analysis, reporting and dashboard reporting. Key data to be available for time-travel will be defined as part of the project.
- IER data should be accessible via Power BI. Other deliverables will include data delivery to, for example, IATI file generator (tooling yet to be chosen), Tangelo data sources (excel/csv), (predefined) user data extracts.
- Ability to provide extended access rights to 'additional' data for 'tech-savvy'/super-users.

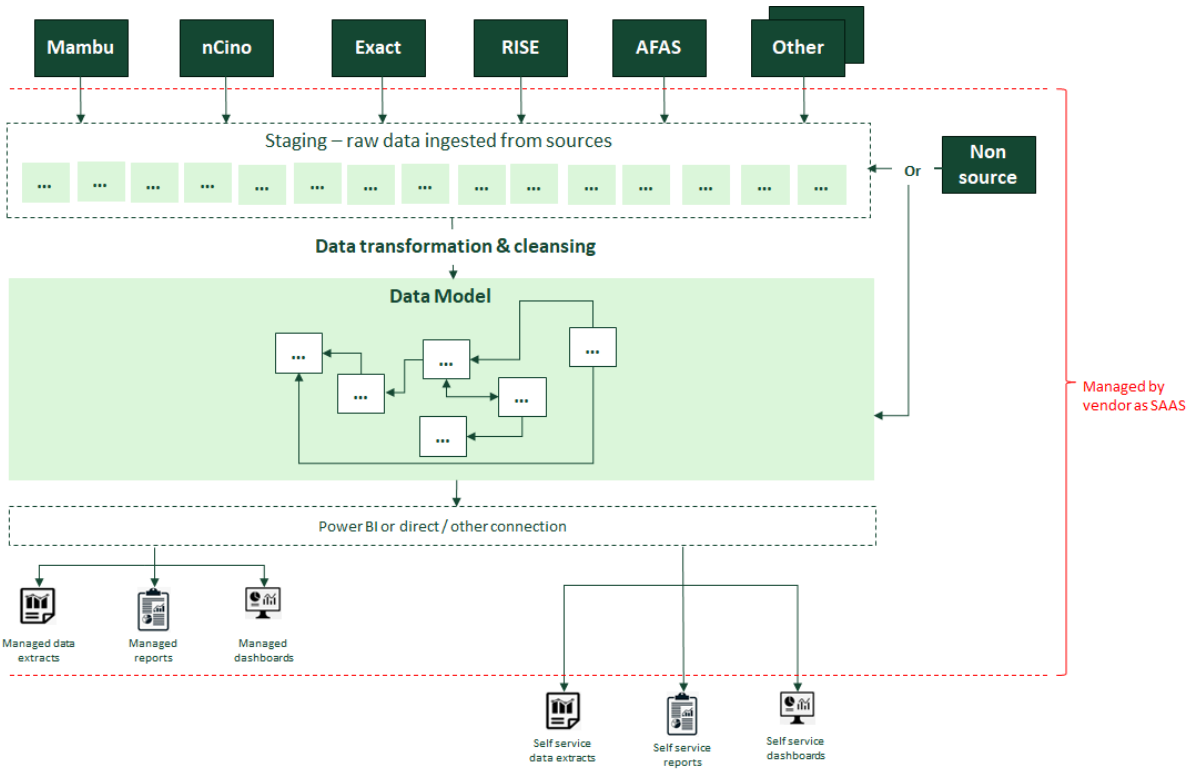
5) Requirements relating to security and architecture

- The IER solution should use one of the following technology:

  i. back-end-as-a-service/Hasura in combination with a (PostgreSQL) database, or

  ii. Azure based solution using standard Azure components

  For Invest the IER environment must be managed by the Contractor as a SAAS (Software As A Service) or in this case Reporting As A Service solution. Any virtual machines or infrastructure needed for the IER must be completely managed by the Contractor. See logical picture below:



- Access to specific data is limited through secure and role based access thereby ensuring data is secure and only accessible to authorised persons. If data is stored outside of the Invest International Azure tenant, access should be via Azure AD Single Sign-on (SSO).
- The complete IER solution should be a SAAS solution.
- The solution should be scalable without impact (adding more resources can be done almost instantly without impacting the working environment). This will support cost efficiency by only using resources that are needed.
- The solution must provide archiving/purging functionality (for legal reasons Invest might have to archive or purge data).
- All data in IER must be kept and processed within the EU.
- Privacy and protection of personal data must be ensured within the IER in accordance with relevant (GDPR) laws and regulations.
- Backup and disaster recovery processes should be in place for the IER to ensure business continuity. Specific requirements related to backup and disaster recovery are defined in the SLA.
- Backup and restore processes should be in place for the IER to ensure quick (partial) restore due to various possible errors e.g system, ingestion, modelling.
- All source code, customisation and configuration created by Contractor during implementation and maintenance will be owned by Invest International to use as it deems applicable. The code will be handed over to Invest International immediately upon request.

All code, customisation and configuration will only be used for Invest International (internal) purposes and not for reselling. Handover of code, customisation and configuration must also be part of the Exit plan.

- Ownership/IP of code, customisation and configuration by Invest must allow for Invest International to activate implementation costs.
- The solution must be able to provide an environment for development and testing and acceptance of changes without impacting the production/reporting environment.
- Data should be available in an audit trail.
- Data lineage and data catalogue must be documented. Due to the limited size and complexity this probably doesn't require additional/specific tooling.
- All connections between source systems and IER must be secure (encryption/authentication tokens).

6) Requirements relating to support and maintenance

- The Contractor must provide support and maintenance for the system.
- Due to the limited size and complexity of this IER solution, Invest International wants to only have a contract with and deal with 1 Contractor for the whole contract (implementation and support and maintenance). Sub-contracting is not preferred but if needed, it should be completely transparent to Invest.
- The Contractor must deliver an SLA containing quantitative and qualitative targets to allow for monitoring the services delivered and actions taken when targets are not met.
- First line support should be available. Specific requirements e.g. service availability, incident and change management, etc must be defined in the SLA.
- The Contractor must provide an exit plan as part of the implementation clearly stating the handover of the data, documentation, source code, customisations and configuration aspects after end-of-contract in case Invest International wants to migrate to another solution or supplier.
- Control and version management should be applied within the development process. This should also be incorporated into the disaster recovery processes.
- The Contractor must have a change management process in place to ensure changes are implemented in a controlled manner.
- It should not be possible to implement changes to the production (PROD) environment except through predefined and authorised release management.
- New/changes to requirements developed, can only be approved for release to PROD following successful (user) acceptance testing.

- All key aspects of coding and data should be documented including amongst others, data & table definitions, coding, controls/validations, monitoring processes, errors and error resolution.
- The Contractor will setup and maintain documentation on the code, customization configuration, data model, data lineage and a data catalogue. This documentation must be made available to Invest upon request.
- Service level reports reporting on the Service Levels/ Key Performance Indicators (KPI's) agreed in the Service Level Agreement will be provided monthly and discussed with Invest upon request by Invest. All data in the IER is property of Invest and will be made available upon request. The contractor will make sure the data in IER is protected and secure. Only authorized Invest employees can access the data.
- The contractor cooperates in periodical audits. This can include providing admin access to the IER to auditors.
- The contractor has a business continuity plan in place or has a description of provisions that ensure access of Invest to the data which are owned by Invest International in case of insolvency, resolution, or discontinuation of business operations.

7) Requirements relating to resourcing

- The Contractor must provide an experienced SCRUM Master who is responsible for day-to-day management of the sprints. The SCRUM Master is the key point of contact for the internal project manager for the overall project and with the product owner for sprint content and priority.
- The Contractor must provide experienced Business Analysis capacity to support the translation of Invest's business requirements to relevant user stories and usable increments.
- Changes to the resourcing of the Contractor project team is communicated at least one sprint length in advance of the change taking place.
- Experience and knowledge of new resources in the project team and/or maintenance and support should be equivalent to the existing resources. The cost and responsibility of onboarding new resources to the team lies with the Contractor.
- The Contractor must have experience with the translation and organisational implementation of strategic and tactical KPI’s to management steering dashboards.
- The Contractor must have experience with dashboard and reporting design
- The Contractor must clarify how sprints will be executed (length of sprints, resources involved from Contractor, resources/hours needed from Invest, sprint components such as sprint planning, demo, retro).

Invest International

8) Requirements relating to prices/rates

- A maximum budget of € 350.000 (excluding of VAT) will be applied for duration of the assignment (contract period including possible extension). This price includes all aspects of the IER such as project and implementation costs, maintenance, 'standard' changes and support, licences (excl. Power BI user licences), any tooling needed for monitoring, back-up and restore and hosting. This price is exclusive of non-standard changes which occur after the implementation of Phase 4.
- Prices/rates are all inclusive. This means that they include wage costs, overheads (such as business premises and wage costs of non-production workers), costs of support activities, costs of using equipment (such as computers) arising from the contract, the Contractors costs relating to (feedback) sessions, profits, expense insurance, travel and accommodation costs, etc.
- The Contractor needs to clarify 'standard' change types and examples included within the scope of the contract.
- The Contractor needs to clarify 'non-standard' change types and examples excluded within the scope of the contract and associated pricing indication in Appendix xx.
- Cost of maintenance, 'standard' changes, and support including hosting/consumption and licences (excl. Power BI user licences) for the solution should be provided in the Pricing sheet (appendix 5).
- With exception for Power BI user licences, if components of the proposed IER solution have a cost per user, please use 175 accounts as guidance for calculations provided in Pricing sheet (appendix 5).
- If Azure components, hosting/consumption and/or licences (excluding Power BI user licences) are included in the proposed IER solution, these should be priced using CSP list prices. A reference to and description of the corresponding CSP price list should also be provided.
- If the IER solution is an Azure based solution, it will be incorporated in the (existing) Invest International Azure tenant and service provision contract. The service provider responsible for maintaining and supporting the Invest tenant environment will work closely with the chosen Contractor to setup of the environment, the components and assign necessary licences.
- The cost of external tooling to validate and publish IATI reporting is excluded from this assignment.