Invitation to Tender (ITT):

Development of CODEx Inline XBRL Viewer

Reference	Development of CODEx Inline XBRL Viewer Beta and Live Phases (Our reference FRC2023-061)
Date	05/07/2024

About the FRC

The purpose of the Financial Reporting Council (FRC) is to serve the public interest by setting high standards of corporate governance, reporting, and audit and by holding to account those responsible for delivering them. The FRC regulates auditors, accountants and actuaries and sets the UK's Corporate Governance and Stewardship Codes. The FRC seeks to promote transparency and integrity in business; our work is aimed at investors and others who rely on company accounts, audit, and high-quality risk management.

https://www.frc.org.uk/

CODEx Project

What issue is the CODEx project aiming to address?

The UK has a focus on economic growth, support for longer-term investment and a drive to maintain and enhance the UK's capital markets. A key enabler for all these goals is a data ecosystem that provides useful insights to the widest audience and at the lowest cost. To achieve this, it is critical to enable access to both the data, and the tools to analyse the data.

The UK is a world leader in collecting company and organisational data in structured digital form in the iXBRL (Inline eXtensible Business Reporting Language) format. For instance, of the 3.1 million accounts published annually on the Companies House register, 88% are available in iXBRL format. In addition, more than 500 issuers on regulated markets file their annual reports in iXBRL format with the FCA.

However, access and usability of the data is often challenging – data is contained in regulatory silos and is not in a form that is easy to view and analyse. This limits the public and regulatory value of the collected data and adds potential complexity and cost when the public, investors, regulators and government bodies are consuming such data.

The CODEx project provides an opportunity to optimise accessibility and usability of data to support economic growth in the UK, without imposing additional burden on companies by:

- facilitating investors' access to information about UK companies to inform their investment decisions, thereby supporting investment in UK companies;

- helping businesses across the UK economy make better decisions about their suppliers and creditors; and
- allowing regulators and government agencies to utilise existing data about UK companies more effectively and efficiently in their activities, without additional costs for companies.

CODEx project details

The FRC is leading the CODEx project with the view to accelerating and supporting the use of structured company and organisational data for the public and within the regulatory community.

The project is supported by funding from DSIT (Department for Science, Innovation and Technology) through the Regulators' Pioneer Fund and is being delivered by FRC colleagues with support from partner regulators (HMRC, Companies House, the Charity Commission and the FCA). The funded element of the project started in September 2023 and will run until the end of February 2025.

The outputs of the project are focused on building capability and capacity around structured data and include:

- A public element being an iXBRL (Inline eXtensible Business Reporting Language) viewer (the **Viewer**) – a tool to display individual or a small number of iXBRL files, showing the tags in the context of the human-readable report; and

- A private element being a regulatory and agency toolkit sandbox (the **Toolkit**) alongside a series of data capability sessions to develop skills, blueprints, and tools for bulk data analysis.

This procurement focuses on the Beta and Live delivery phases of the Viewer.

Important Notes:

- **Please read this ITT carefully.**

- **Please register your interest immediately. Upon receipt of your register of interest, you will be provided with access to the Alpha work.**

CODEx Viewer Work Package

The FRC aims to build a viewer to make machine readable structured data (XBRL tags) in digital reports (iXBRL) accessible to end users. The CODEx iXBRL Viewer is being developed using agile methodology with Discovery, Alpha, Beta, and Live phases, in line with the Government Service Manual and is subject to CDDO spend control assurance. Discovery and Alpha phases are complete.

This procurement is focused on delivery of the Beta and Live phases.

Pre-tender market engagement

A pre-tender market engagement webinar was held on 01/11/2023 to provide suppliers with more detailed background on the requirements. See the attached *CODEX iXBRL Viewer PME Webinar presentation* for the information shared during the event.

Discovery phase

The project entered the Discovery phase in November 2023. This phase focused on capturing user needs through detailed user research - understanding who the users are, what they need, and any problems they face.

The FRC procured a user research team via the Crown Commercial Services' Digital Outcome 6 framework to conduct user research in compliance with the UK government service manual. The user research tested the assumptions from our initial outreach and ensured that the project complied with government requirements for providing a product for public use.

During Discovery user research, 27 users across 7 user groups (supervision and policy staff within regulators and agencies, investors, preparers, FinTech companies, academics and students, and other members of the general public) were interviewed. Based on these user interviews, the user research team identified:

- four priority areas of cross-cutting user needs, which are relevant for all user groups; and
- user personas, each with specific needs and pain points.

Cross-cutting user needs

Based on the user research, the user needs are divided in 4 distinct areas:

- **Accessing iXBRL reports easily and quickly**: Across user groups, users expressed a common, overarching need for a free, centralised, and searchable

repository of company reports in iXBRL format so that they can easily identify specific reports.
- **Finding information efficiently:** Users spend an unacceptable amount of time and effort accessing relevant information from iXBRL reports and need a tool that optimises this.
- **Understanding iXBRL tags and navigating confidently:** The level of familiarity with iXBRL viewers across research participants is typically low, emphasising the need for concise, accessible, and consistent explanations and user guide elements to maximise usability and navigability.
- **Exporting data for offline analysis:** When needing to conduct more complex data analysis, users struggle to extract specific information from iXBRL reports into other formats for offline use.

The Discovery phase:

- **Validated the underlying FRC hypothesis** for the project that there are barriers to the use of existing open-source and commercial iXBRL viewers and gaps in the functionality of these tools. The benefits for resolving these barriers seem to centre on time saved, quality of analysis and ease of use.
- **Brought to the fore user accessibility requirements and assisted digital needs** (ADNs), as per GDS best practice. We have identified specific accessibility considerations for the iXBRL viewer, in particular a night mode option for visually impaired, links to trusted resources for users with low confidence in digital solutions and other design recommendations.
- Received agreement from all 27 users interviewed to remain engaged with the programme in future phases of user research, highlighting, as an additional datapoint, the underlying demand for a better solution than existing viewers.

This initiated the Alpha phase.

Note: The user research team will work closely with the software development team selected through this procurement in the Beta and Live phases. This continuous feedback loop will ensure that the Viewer evolves to meet user needs effectively.

Alpha phase

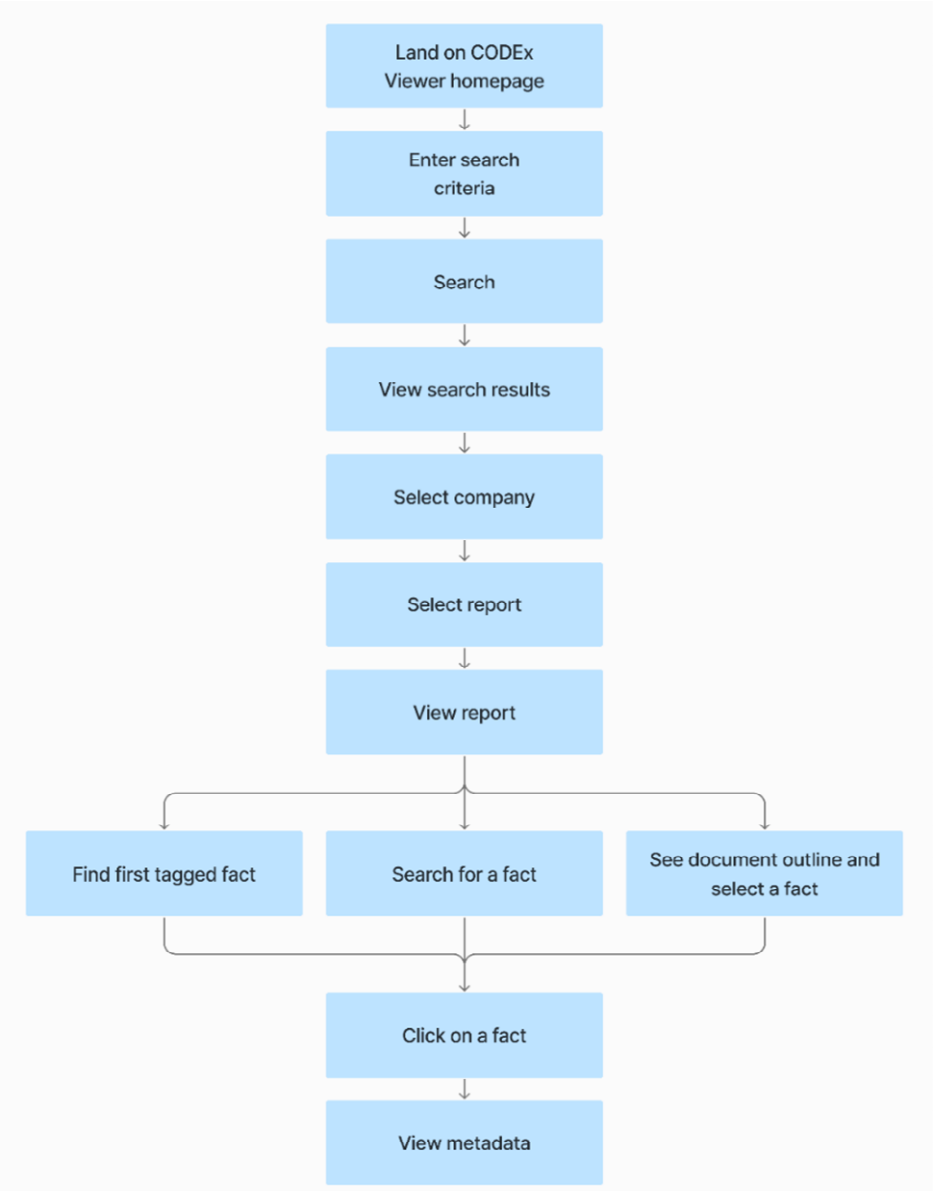
In March 2024, the FRC procured digital specialists via the Crown Commercial Services' Digital Outcome 6 framework to build the technical architecture and design a user interface which would meet the Service Standard and Technology Code of Practice (TCoP) requirements and deliver user needs identified in Discovery. They were supported by the user research team procured in Discovery to ascertain user feedback on the prototypes developed and to refine user needs and personas.

The Alpha phase was split into two development streams with TCoP at its core:

- front-end development – designing a user interface (UI) in line with accessibility needs and validating this with user research; and
- back-end development – identifying a performant technical architecture which aligns with TCoP and Government service manual standards.

User Interface (UI)

The Alpha phase focused on prototyping the core journey through the CODEx Viewer based on prioritised user needs to test our riskiest assumptions and validate that our design approach meets user needs and is accessible. The core user journey (represented in the flow below) covers searching for iXBRL reports from Companies House and FCA's publicly available repositories, opening them and viewing XBRL tags from these reports in human readable format.



The prototype tested well with users who found it easy to use and understand, considered the functionality useful and overall perceived it more user-friendly compared to existing iXBRL viewers that they were aware of. The user interface design was validated against user needs prioritised for Alpha regarding easy access to company reports and efficient information finding. The needs of accessible guides and definitions were also clarified, with recommended areas to focus on in testing during Beta.

The design is based on the GOV.UK Design System (GDS) to leverage the work that has been put into this set of well researched, tested and accessible components, and adhere to the accessibility requirements of the TCoP. The homepage, search results and company detail pages are more conformant to the GDS' existing components due to their standard page structures and content. The viewer differs from the standard Government page structure, as it has a viewport for the company report and an information panel. Although we used existing GDS components where possible, there were more deviations from standard components for this part of the interface design.

Technical Architecture

The Alpha phase focused on developing a proof of concept for the core user journey. We evaluated two approaches to delivering a cloud-based, accessible iXBRL viewer that would address the user needs identified during Discovery: either 1) adapting/extending the existing open-source software, or 2) developing a new solution specifically designed for CODEx. To view iXBRL files alongside the information required from relevant taxonomies, processing is required, which is a complicated and computationally intensive task. Either approach would involve addressing this backend processing activity.

The Alpha phase had three key areas of focus:

- A proof of concept (POC) of the Viewer as an end-to-end service, testing our riskiest requirements and validating our approach.
- An initial exploration of open-source software for processing XBRL taxonomies and iXBRL reports, including open-source iXBRL viewer, to better understand it and assess to what extent we can integrate it into a proposed solution.
- Investigating options for developing the product further in the Beta phase using Arelle for XBRL processing and developing viewer functionalities from scratch to address user needs.

Based on research and experimentation, we concluded the following:

- Develop functionality to search for iXBRL reports from different sources and for the upload of iXBRL reports from scratch.
- Use existing open-source XBRL processor, Arelle, to process published taxonomies to compute required metadata once and store that to reuse while opening an iXBRL report.
- Use an XBRL specification compliant software for processing iXBRL reports or report packages, and entity specific extension taxonomy (output of which can be appended with pre-processed output of published taxonomy) while opening an iXBRL report and exporting it to different format in the CODEx Viewer.
- Develop an accessible front-end of iXBRL viewer in compliance with the TCoP.

This approach is illustrated in the two architecture diagrams overleaf.

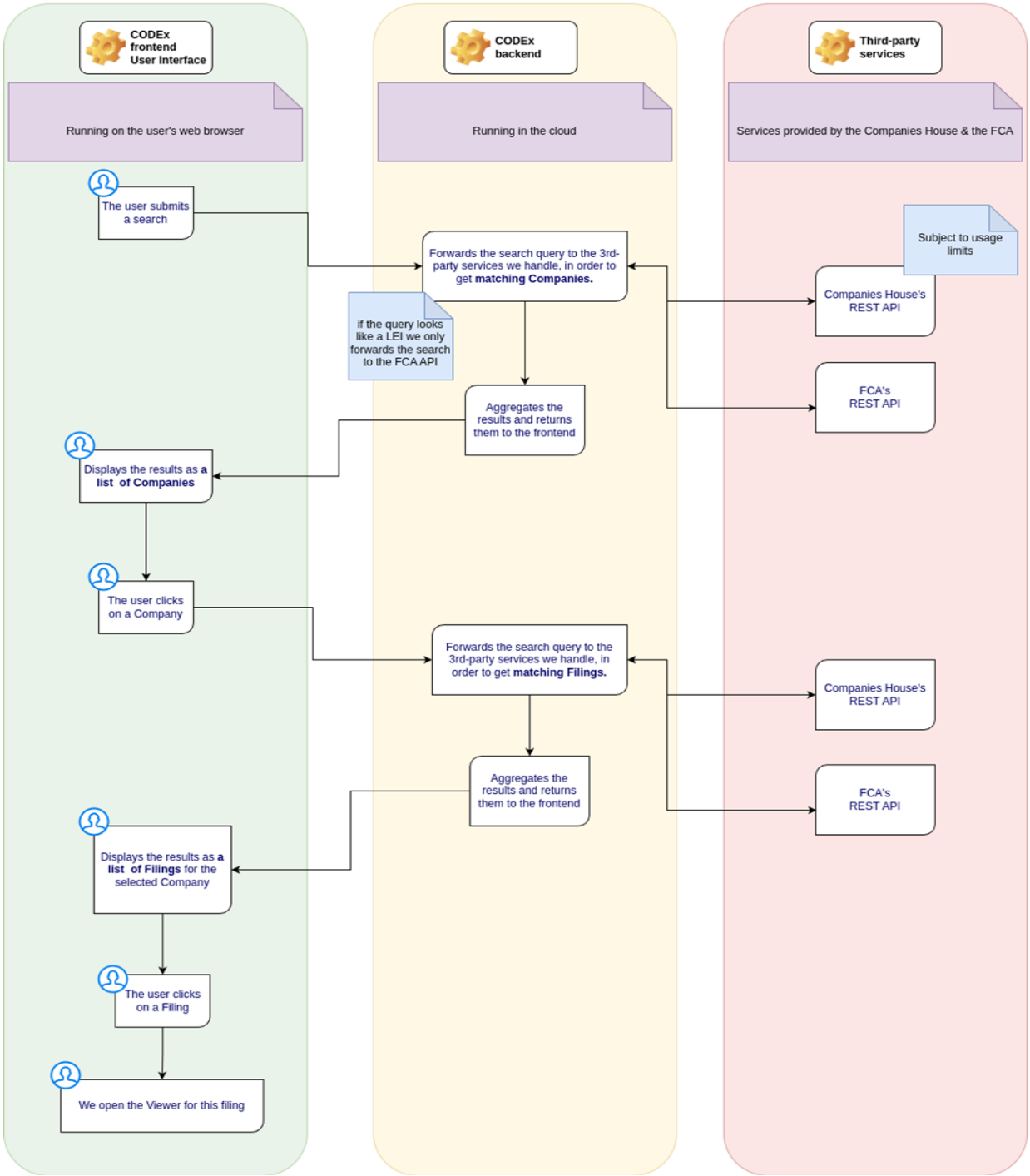
The first diagram illustrates the functionality of searching for iXBRL reports from integrated repositories.

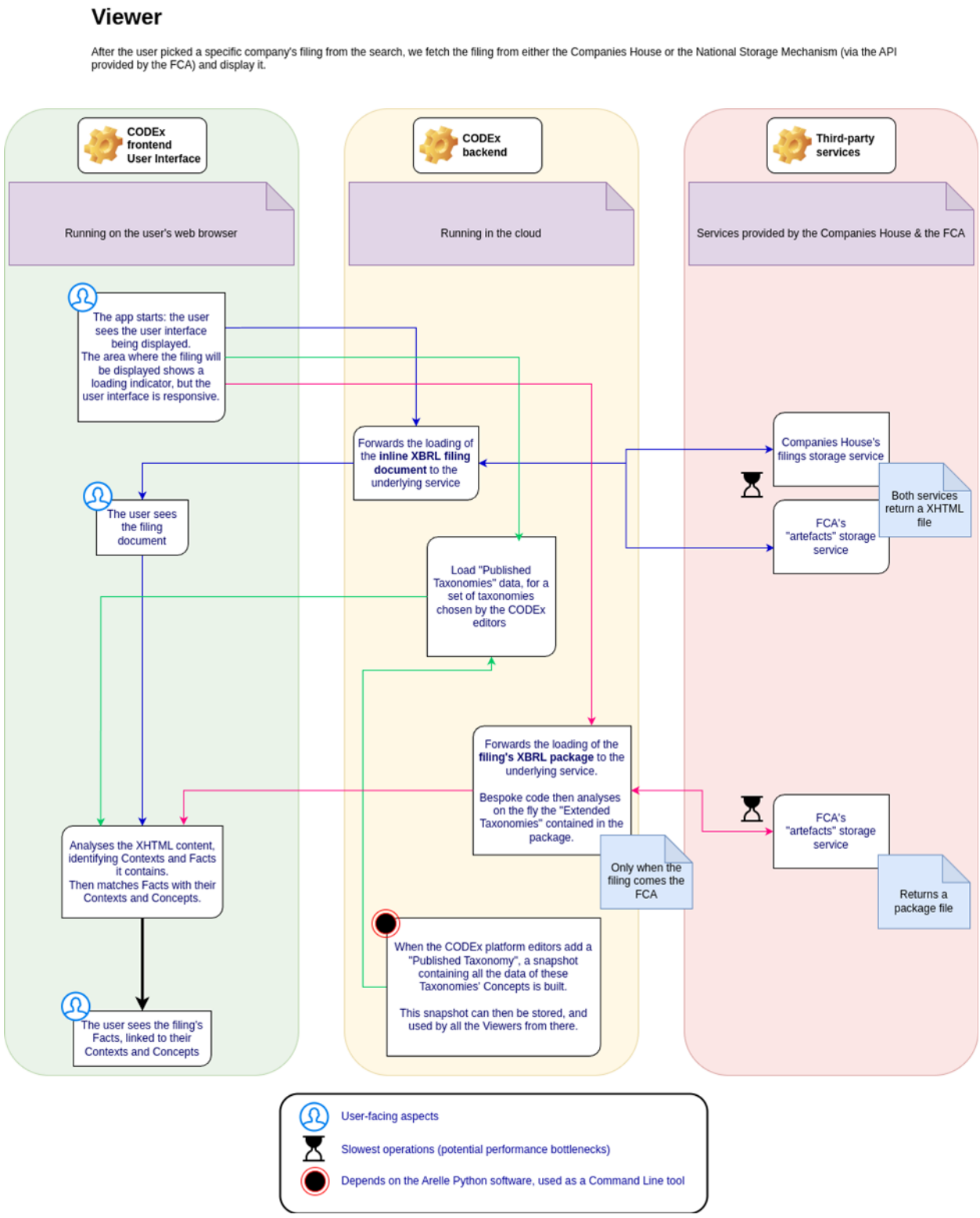
The second diagram illustrates the processing of iXBRL reports/report packages and extension taxonomies to display XBRL tags in the iXBRL report. The diagram talks about processing iXBRL reports in the CODEx Viewer UI and processing report packages and extension taxonomies in them in the CODEx Viewer backend when opening an iXBRL report/report package.

Note: This approach needs revision in Beta and the processing should be done with an XBRL specification compliant processor. The diagram does not reflect this and is kept as it is to be in compliant with the codebase which we developed in the Alpha phase.

Search

Users looking for a specific company's filing, from either the Companies House or the National Storage Mechanism (via the API provided by the FCA)





For hosting the CODEx Viewer our expected infrastructure includes:

- Application instances on a hosting provider which can run Docker containers - e.g. Heroku, Fly, Amazon ECS, or any Virtual Private Server (VPS)

- A PostgreSQL database
- An S3-compatible object store
- Cloudflare Content Delivery Network

Hosting options and their associated costs will be explored further during Beta.

Note: Upon receipt of your registration of interest for this ITT, you will be provided with access to the Alpha work.

Technology Code of Practice

The FRC requires software development services for the Beta and Live phases, in compliance with the Technology Code of Practice (TCoP).

The table in Appendix B: Technology Code of practice requirements outlines how we have considered each of the TCoP criteria throughout the Alpha phase. Note this is inclusive of both the user interface and the technical approach streams of work.

Future Phases

The timeline for software development during the project phases is as follows:

- Beta: August – November 2024
- Beta – Live Gating: November – December 2024
- Live: December – February 2025

The expected contract length is seven (7) months subject to contract signing.

Note: The CODEx project is financed through the Regulators' Pioneer Fund (RPF). The grant funding does not allow for any over-spend or any expenditure after February 2025.

Beta

The supplier will implement the requirements extrapolated from user needs established during the Discovery phase and refined following the Alpha phase alongside admin user and non-functional requirements including software architecture design, feature development, testing, deployment, and product delivery. For the CODEx Viewer user interface development, the supplier will build upon and implement the high-fidelity prototype developed in Alpha, working closely with the FRC and our user research partners to prioritise areas for testing with users beyond the core user journey tested in Alpha.

Beta-Live Gating

Following Beta development, the supplier and FRC project team will work together to prepare a Beta-Live gating report to enable the necessary approval process for proceeding to the Live phase. This includes internal project approvals as well as external approvals from the grant funder (RPF) and ICS (see *CDDO Spend Control* section below). In the event the necessary approval is not granted, the FRC shall have no liability to the supplier in respect of any unapproved phases.

Live

During the Live phase of the project, the supplier will launch the Viewer in a live environment and provide support by fixing software bugs reported by users and prioritised by the FRC project team and answering technical questions about the features developed and the hosting and maintenance of the product.

The successful supplier will work with the CODEx team at the FRC, consisting of accounting and taxonomy subject matter experts and a project manager, as well as the user research team referenced above.

Budget

The maximum budget is £120,000 (excluding VAT) for the combined deliverables of the Beta and Live phases.

Note: The FRC's preferred pricing model for this contract is capped time and materials against a set of agreed milestones. Bidders are open to recommend an alternative pricing model with explanation as to why it would best fit this contract.

CDDO Spend Control

As a central government organisation, the FRC is required to obtain approval from the Central Digital and Data Office (CDDO), which is part of the Cabinet Office, to spend money on certain digital and technology activities. – this process is known as digital and technology spend controls. The CODEx iXBRL Viewer meets the criteria for assessment under the spend control process.

Integrated Corporate Services (ICS) (formerly 'BEIS digital') act as the FRC's CDDO adviser and assess the proposed spend activities against the Digital and Technology pipeline assessment criteria at each phase of the project. At each stage gate, ICS adviser will determine whether the project meets the conditions to proceed to the subsequent phase.

Note: This procurement is for all remaining phases (Beta and Live) and will proceed at each stage upon authorisation from ICS.

CODEx Viewer Requirements

This procurement is for the Beta and Live phases of the project, building on the work in Discovery and Alpha to deliver a Minimum Viable Product (MVP) iXBRL Viewer.

The requirements for development of the Viewer have been split into functional and non-functional and are to be delivered in compliance with the Government Service Standard and Technology Code of Practice (TCoP). The functional requirements are grouped into the nine epics and are written from the perspective of the user personas identified in Discovery and validated in Alpha.

1.0 CDDO – The CODEx iXBRL Viewer will be developed in compliance with the Technology Code of Practice and Government Service Manual.

2.0 Administrator – As an administrator, I need to manage and maintain the CODEx iXBRL Viewer, so that it continues to deliver for the users of the service.

3.0 End-user requirements

3.1 Quicker and easier access to reports - As a Checker, Investigator, and Analyst/Researcher, I need to quickly and easily access all company reports in iXBRL format through one single platform in order to find and open the reports.

3.2 Viewing the underlying XBRL data - As a Checker, Investigator, Analyst/Researcher, or Developer, I need to view the underlying data and relevant contexts associated with a selected XBRL tag within an iXBRL report to establish a comprehensive understanding of a company.

3.3 Searching and filtering on disclosures - As a Checker, Investigator and Analyst/Researcher, I need efficient searching and filtering options in order to quickly locate and access the specific information within an iXBRL report.

3.4 Consistent and accessible user guides - As a Checker, Investigator, Analyst/Researcher or Developer, I need to have a user-friendly mechanism explaining key terminologies, features and functionalities to effectively use the iXBRL Viewer.

3.5 Navigability - As a Checker, Investigator or Analyst/Researcher, I need to navigate seamlessly across interrelated information within or across accounts in order to easily compare and analyse related content.

3.6 Export tagged disclosures in different formats - As an Analyst/Researcher, or Developer, I need to extract and download XBRL tags and other information to perform offline analysis.

3.7 Basic aggregated analysis in the Viewer - As a Checker, Investigator or Analyst/Researcher, I need to compare XBRL tags and information within and across accounts to quickly identify differences and inconsistencies.

3.8 Personalisation - As an Investigator or Analyst/Researcher, I need to personalise the features and functionalities in the viewer (e.g. search history, interfaces) in order to enhance my own workflow and overall user experience.

4.0 Non-functional requirements

Details on the user personas identified in Discovery and validated at Alpha along with prioritised user stories and detailed requirements are available in the attached Appendix A.

Procurement

1. Your tender response

Your tender response must address how you meet the following requirements.

Note: Only suppliers who can demonstrate transferable expertise and capabilities in the Essential skills and experience will be considered for evaluation.

Essential skills and experience	1. **Software Development Proficiency** Demonstrate transferable experience and capabilities in delivering similar time-bound IT solutions. From development and testing (including accessibility and security testing) to live deployment and early life support. 2. **XBRL Expertise** Demonstrate transferable experience and capabilities in working with projects relating to XBRL specification and/or iXBRL format. 3. **User Experience (UX) Design** Demonstrate transferable experience and capabilities in designing intuitive and user-friendly interfaces including users with assisted digital needs and accessibility needs.
Evaluation Weighting	**Technical competence 70%** **Cultural fit 10%** **Price 20%**
Technical Competence 1. Delivering the Minimum Viable Product (MVP) (30%)	Can you confirm you can develop and deliver the Priority 1 functional and non-functional requirements as part of this proposal? Can you confirm which of the Priority 2 and Priority 3 functional and non-functional requirements you can develop and deliver as part of this proposal? Bidders should include details of relevant skills, experience and qualifications of key resources that will work this contract to meet these requirements.

Technical Competence 2. Proposed technical solution (20%)	Provide a detailed technical approach for the requirements you plan to develop and deliver as part of this proposal, including detailed architecture specifying the libraries you'll use.
Technical Competence 3. Delivery to TCoP (5%)	Demonstrate transferable experience in developing products in line with the Technology Code of Practice (https://www.gov.uk/guidance/the-technology-code-of-practice) and UK Government Service Manual (https://www.gov.uk/service-manual) or explain how you intend to deliver to these standards? Including but not limited to developing products in line with AA level of the Web Content Accessibility Guidelines (WCAG 2.2 AA) (https://www.gov.uk/service-manual/helping-people-to-use-your-service/understanding-wcag) or similar.
Technical Competence 4. Approach and methodology (15%)	Specify your approach, methodology and proposed timetable to develop these requirements, including what you can develop and deliver. Your response should state your earliest possible start date. Your response should address and demonstrate recent transferable expertise and capabilities in: - Developing and delivering products using agile methodology. - Managing / contributing on open-source projects, providing references to the code repositories if possible. - Working with teams outside of your organisation for gathering user needs and feedback, ensuring that functionalities are effectively developed in line with user needs.
Cultural Fit 1. Diversity and Inclusion (5%)	How does your organisation ensure that it fosters a diverse and inclusive environment? Can you share any relevant initiatives or practices that you've implemented?

Cultural Fit 2. Managing change and communication (5%)	Can you describe how you respond to changes that occur during the project's execution and adapt to accommodate changes over following a plan? Detail how you ensure important decisions or changes are communicated transparently to all relevant stakeholders involved in the project?
Price (20%)	A clear breakdown of costs by phase (Beta and Live), including key milestone deliverables and dates.

To support your tender submission, bidders must confirm whether they are engaging subcontractors in the delivery of the CODEx iXBRL Viewer.

Terms and Conditions

See draft Terms and Conditions contained within the Tender Response Document.

Note: The supplier's staff will work in their own premises and FRC is not responsible for providing any work infrastructure. Virtual meetings can be arranged to work with FRC between 9.00am and 5.00pm BST Monday to Friday. However, the FRC is willing to facilitate face-to-face meetings at the London Wall office if required and agreed by both parties.

Tender clarification

It is envisaged that the top scoring suppliers will be invited to a tender clarification session. Please observe the clarification / interviews dates (see Tender Process Timeline). You are encouraged to reserve these slots should you be selected for tender clarification.

Tender evaluation

The evaluated questions (Technical Competence, Cultural Fit and Price) will be scored on your ability to meet our requirements using the scoring approach below.

SCORE

100% =	Excellent and Completely Relevant
80% =	Good and Highly Relevant
60% =	Satisfactory and Relevant
40% =	Limited and Partially Relevant
20% =	Poor and Only Partially Relevant
0% =	Not Considered Relevant

Questions & Clarifications

- Tenderers may raise questions or seek clarification regarding any aspect of this competition at any time prior to the tender clarification deadline.
- Tenderers may raise questions or seek clarification within the timeframe by sending questions to FRC's Procurement team via email Procurement@frc.org.uk in the following format:

Nature of query / clarification	Query / Clarification

- FRC will not enter into exclusive discussions regarding the requirements of this ITT with tenderers.
- To ensure that all tenderers have equal access to information regarding this tender opportunity, FRC will publish all its responses to questions raised by Tenderers on an anonymous basis.
- Responses will be published in a questions and answers document to all Tenderers who have indicated that they wish to participate through registering their interest.

Tender process timeline

Note: All times are GMT + 1 (also known as BST)

DATE/TIME	ACTIVITY
05/07/2024	Publication of the Invitation to Tender
15/07/2024 at 13:00	Supplier's Deadline to submit clarification questions to procurement@frc.org.uk
16/07/2024 at 17:00	FRC's Deadline for publication of responses to clarification questions
23/07/2024 at 17:00	Deadline for supplier submission of tender to the FRC – Bid should be submitted to procurement@frc.org.uk
26/07/2024	Suppliers updated / invited to tender clarification session
30-31/07/2024	Supplier tender clarification session (if required) The intention is for these sessions to be held virtually using MS Teams. Provisional dates – times **30/07/2024 – 10:00** **30/07/2024 – 11:30** **30/07/2024 – 13:30** **30/07/2024 – 15:00** **31/07/2024 – 10:00** **31/07/2024 – 11:30**
31/07/2024 by 16:00	Tender Outcome
12/08/2024	Latest Contract Start Date

2. Conduct

2.1.1. The tenderer must not communicate to any person the tender price, even approximately, before the date of the contract award other than to obtain, in strict confidence, a price for insurance required to submit the tender.

2.1.2. The tenderer must not try to obtain any information about any other person's tender or proposed tender before the date of the contract award.

2.1.3. The tenderer must not make any arrangements with any other person about whether or not they should tender, or about their tender price.

2.1.4. The tenderer must not offer any incentive to any member of FRC's staff for doing or refraining from doing any act in relation to the tender.

2.1.5. If the tenderer engages in any of the activities set out in this paragraph or if FRC considers the tenderer's behaviour is in any way unethical FRC reserves the right to disqualify the tenderer from the procurement.

2.1.6. The tenderer represents and warrants that a conflicts of interest check has been carried out, and that check revealed no conflicts of interest.

2.1.7. Where a conflict of interest exists or arises or may exist or arise during the procurement process or following contract award the tenderer must inform the FRC and submit proposals to avoid such conflicts.

2.1.8. Tenderers must obtain for themselves at their own responsibility and expense all information necessary for the preparation of tenders. The FRC is not liable for any costs incurred by the tenderer as a result of the tendering procedure. Any work undertaken by the tenderer prior to the award of contract is a matter solely for the tenderer's own commercial judgement.

3. Due Diligence

3.1.1. While reasonable care has been taken in preparing the information in this ITT and any supporting documents, the information within the documents does not purport to be exhaustive nor has it been independently verified.

3.1.2. Neither FRC, nor its representatives, employees, agents or advisers:

- makes any representation or warranty, express or implied, as to the accuracy,
- reasonableness or completeness of the ITT and supporting documents; or
- Accepts any responsibility for the adequacy, accuracy or completeness of the information contained in the ITT and supporting documents nor shall any of them be liable for any loss or damage, other than in respect of fraudulent misrepresentation, arising as a result of reliance on such information or any subsequent communication.

3.1.3. It is the tenderer's sole responsibility to undertake such investigations and take such advice, including professional advice, as it considers appropriate in order to make decisions regarding the content of its tenders and in order to verify any information provided to it during the procurement process and to query any ambiguity, whether actual or potential.

3.1.4. It is a requirement that the successful supplier (i) comply with all applicable laws and regulations including, without limitation, the Bribery Act 2010, the Equality Act 2010 and the Modern Slavery Act 2015; and (ii) in addition to any contractual requirement(s), inform the FRC immediately upon becoming aware of any event (including actual or threatened court proceedings) which may impact upon the reputation of the FRC, whether or not connected with the Supplies and/or Services.

4. Submitting a Tender

4.1.1. Tenderers must submit their tender response no later than the deadline set out in the Tender process timeline above (23/07/2024 by 17:00 GMT + 1)

4.1.2. Tenderers must align their tender response with the attached *Tender Response Document* format.

4.1.3. A Tender must remain valid and capable of acceptance by the Authority for a period of 120 days following the submissions deadline set out in the Tender process timeline above (23/07/2024 by 17:00 GMT + 1). A Tender with a shorter validity period may be rejected.

5. Evaluation

5.1.1. FRC will award the contract on the basis of the tender which best meets the evaluation criteria aligned to the requirements.

6. Acceptance of Tender & Notification of Award

6.1.1. FRC reserves the right to amend, add to or withdraw all or any part of this ITT at any time during the procurement.

6.1.2. FRC shall not be under any obligation to accept the lowest price tender or any tender and reserves the right to accept such portion or portions as it may decide, unless the tenderer includes a formal statement to the contrary in the tender. FRC also reserves the right to award more than one contract to fulfil the requirement.

6.1.3. The tenderer will be notified of the outcome of the tender submission at the earliest possible time.

6.1.4. Where the procurement process is subject to EU public procurement directives, a minimum standstill period of 10 calendar days will apply between communicating the award decision electronically to tenderers and awarding the contract.

6.1.5. Nothing in the documentation provided by FRC to the tenderer during this procurement or any communication between the tenderer and FRC or FRC's representatives, employees, agents or advisers shall be taken as constituting an offer to contract or a contract. No tender will be deemed to have been formally accepted until the successful tenderer has received a formal contract award letter from FRC.

7. Additional Information

7.1.1. Tenderers must not undertake any publicity activity regarding the procurement within any section of the media.

7.1.2. The FRC reserves the right to take up references. You may be required to provide references in the *Tender Response Document* / upon request. References must be relevant to the FRC requirement and in the last five years.

7.1.3. Please use the attached *Tender Response Document* for your reply.

7.1.4. There will not be a standstill period.

7.1.5. This tender is published and managed by FRC's Procurement Team Procurement@frc.org.uk.

8. Terms and Acronyms

FRC - Financial Reporting Council - UK regulator for auditors, accountants and actuaries, which also sets the UK's Corporate Governance and Stewardship Codes.

CODEx – Company and Organisational Data Explorer - a project run by the FRC to develop a regulatory Toolkit to simplify access to, and analysis of public structured data, including a public facing iXBRL Viewer.

XBRL – eXtensible Business Reporting Language - a data standard for business reporting.

iXBRL/inline XBRL – open standard that enables a single document to provide both human-readable and structured XBRL data.

CDDO – Central Digital and Data Office – Cabinet Office department responsible for managing the digital and technology spend controls process.

TCoP – Technology Code of Practice – a set of criteria to help government design, build and buy technology and the standard used for the spend control process.

Appendix A: CODEx Viewer Requirements Details

Details on the user personas identified in Discovery and validated at Alpha along with prioritised user stories and detailed requirements are available in the *Viewer detailed requirements* spreadsheet. This contains three tabs:

- User personas
- CODEx Viewer Requirements
- CDDO requirements

Appendix B: Technology Code of practice requirements

Criteria	**Evidence**
Define user needs Understand your users and their needs. Develop knowledge of your users and what that means for your technology project or programme	Our focus of the prototype was on priority user needs defined in the Discovery phase. We ran two rounds of user testing during the Alpha phase, updating both the prototype and our understanding of user needs to reflect our learnings. During our technical explorations, we kept defined user needs at the forefront of our thinking. From a technical point of view one of the key areas to consider was the performance of the end product, something we knew was a real pain point in existing services, and this was central to our technical approach.
Make things accessible Make sure your technology, infrastructure and systems are accessible and inclusive for all users	Accessibility was a key factor in deciding what the most appropriate solutions architecture should be. We ran an accessibility audit on the software that was being explored to be reused within this project and this fed into our recommended technical approach. Our recommended approach ensures we can consider accessibility and standards compliance from the outset rather than trying to retrofit, which can often be costly, unsustainable, and ineffectual. We based our design on the GOV.UK Design system, which uses components that are well researched and

	tested to meet required Accessibility standards. In areas where this was not directly possible, accessibility needs were considered when proposing an alternative solution.
Be open and use open source Publish your code and use open-source software to improve transparency, flexibility and accountability	Our intention is to open source the product when we go live, including all that that entails from the perspective of documentation, community engagement, and maintainability. **Note:** The Alpha code will be made available to bidders upon registering interest in the ITT.
Make use of open standards Build technology that uses open standards to ensure your technology works and communicates with other technology, and can easily be upgraded and expanded	Making use of open standards is an inherent outcome of this project in that it aims to support users of the existing XBRL standard and provide them with a new service which, to an extent, rewards adoption of that standard. The proposed service also ensures reuse of the FRC's own taxonomies.
Use cloud first Consider using public cloud solutions first as stated in the Cloud First policy	Creating a cloud-based platform was a key requirement for us. When exploring Arelle, one of the main challenges we were tackling was how to make use of this software in a cloud-based environment. Our recommended technical approach is a cloud-based solution and resulting infrastructure considerations are provided as part of this.
Make things secure Keep systems and data safe with the appropriate level of security	The development agency delivering the technical recommendation holds ISO 27001:2013 certification which influences the confidentiality, integrity and availability of the way we work. Security is inherent in our technical approach and specific consideration has been given to sensitive requirements such as individual users uploading documents, with constraints around how, where and for how long this data is stored to ensure the appropriate level of security for this use case.

Make privacy integral Make sure users rights are protected by integrating privacy as an essential part of your system	User logins, nor any personal data collection, are not planned as part of the service for public users so we've determined there is no need for a Data Protection Impact Assessment.
Share and reuse technology Avoid duplicating effort and unnecessary costs by collaborating across government and sharing and reusing technology, data, and services	A focus of Alpha was how we could make the most use of existing services, with a focus on Arelle. The intention here was to benefit from existing work, speeding up initial development where possible, as well as potentially benefiting in the future from adopting components of a product which is a going concern, with its own pool of maintainers. Our design is based on GOV.UK Design System to benefit from the wealth of work that has been put into providing well researched, accessible and tested UI components.
Integrate and adapt technology Your technology should work with existing technologies, processes and infrastructure in your organisation, and adapt to future demands	We have provided a technical architecture that will integrate via APIs with two key publicly available databases to provide data from these existing technologies within the new system. We have ensured that infrastructure recommendations are considering both the short-term requirements for the length of this project, and also enabling the project to be taken forward easily by another organisation.
Make better use of data Use data more effectively by improving your technology, infrastructure and processes	We are integrating with two open data sets via their APIs to ensure data about companies and their filings is current and accurate. This data will be retained on the system minimally, if at all, to ensure it is kept for no longer than absolutely necessary. No personal data will be collected as part of the system.
Define your purchasing strategy Your purchasing strategy must show you've considered commercial and technology	There's no off the shelf alternative for CODEx; we've exhaustively established that reusing the existing open-source tool doesn't meet the user needs identified by the CODEx Discovery phase

aspects, and contractual limitations	
Make your technology sustainable To meet point 12 of the Technology Code of Practice, your plans should include how you aim to increase the sustainability of your technology project or programme by meeting the outcomes defined in the Greening Government ICT and Digital Services Strategy.	Our approach is to remain compatible with the Arelle open-source viewer, both to encourage uptake of the CODEx viewer and to delegate overall responsibility for longer term maintenance to the wider open-source community. We've given due consideration to ongoing costs i.e. hosting and compute power and the approach proposed aims to strike a balance which will keep ongoing costs manageable.
Meet the Service Standard If you're building a service as part of your technology project or programme you will also need to meet the Service Standard	Whilst not being formally assessed, we have followed the principles of the Service Standard throughout the project.