



1. Name of Governmental Department or Agency

Office of the Revenue Commissioners

2. Title of the Project

Tax & Customs Technology options

3. Description of the Project

This project will analyse and research one or all of the subject areas below in the context of implementation in a Tax & Customs administration. Revenue has a lot of existing technology solutions in place including legacy systems and as a public body is somewhat constrained by procurement, budgets and IT skills availability, while at the same time requiring very secure, highly available, reliable and performant 24x7 systems.

4. Project Scope

The following technical products/areas are of interest to Revenue. At a general level, we would like to understand the implications of adopting these technologies from a number of perspectives including – best practice, implementation issues, pros & cons, availability of skills, training implications, operation models, security & availability.

- Revenue have started to adopt a microservices approach to how we design and build some of our systems over the last number of years. We are keen to understand if the approaches we have taken to date are appropriate and how they can be improved as we increase adoption. What is industry best practice in this area and how do we measure up? If we start to move our own services to the cloud or consume cloud services provided by others, what concerns or challenges will need to be addressed and what options do we have?
- The Apache Hadoop software library forms part of our IT landscape for certain use
 cases. As we look to modernise various elements of our technology architecture, we are
 keen to understand whether Hadoop and its extended ecosystem should be adopted for
 other use cases, potentially replacing some or all of our existing relational database
 technologies for critical systems. If we are to increase adoption, the technology and other
 implications on our IT organisation need to be fully understood including a potential move
 to cloud.
- Revenue have implemented technologies in support of DevOps. We are keen to
 understand the technology, people and process elements of how we might build upon the
 work to date and increase its adoption across the ICT organisation.
- Revenue have already launched some pilot services that leverage AI. As we look at how
 we interact with our customers we believe that AI has an increasing role to play and we
 need to research the technology, people, process and policy implications around its
 adoption into the organisation.





5. Skills/Expertise Required

- Information and Communication Technology expertise
- Very good and a realistic understanding of the potential of key, modern technologies.
- An appreciation of the operational environment of a public body including things like procurement, budgets, staff recruitment/retention and skills acquisition.
- Strong research skills and ability to critically analyse options and approaches.
- Good oral and written communication skills.
- Some basic Tax knowledge and/or background in legislation would be of benefit.

6. Expected Outputs of Project

Briefing paper(s) addressing the key areas identified as part of the project scope

7. Working Arrangements

The researcher will be based in Revenue IT Offices in either Dublin City Centre and /or St John's Road. Flexible and remote working arrangements would be accommodated.

8. Expected Timeline

Revenue are looking to make progress in the aforementioned areas in the next 12 -18 months. It would be proposed that this project should initiate as soon as possible. The likely duration of the placement is 6 months full-time or 12 months part-time.