



**Expression of Interest
for External Resources to work with MITA**

20th June, 2022

Background on Initiative

- Through this Expression of Interest, MITA is researching the market to determine how it can augment its resource capacity, particularly with regards to the efforts being made towards modernizing numerous Government Systems and Platforms
- A number of external resources may be sourced, depending on the particular requirement. The number, role and desirable skills will vary according each requirement
- Resources will be sourced through a Contract for Service with the Economic Operator (which can be a natural or legal person), and not through a Contract of Service (employment agreement)
- More information available online from the MITA Procurement Website

<https://procurement.mita.gov.mt/events/eoi-externalresources/>

Is this a Call for Tenders?

- This is an Expression of Interest (EOI) with the purpose of gathering information on how can MITA's requirements be met. Responding to this will not entail any obligation on the part of MITA to enter into any negotiations or contract with any of the respondents
- Through the information received, MITA reserves the right to:
 - Formulate terms of reference and requirements that seem to be commonly available/acceptable and issue an open call for tenders with MITA's contractual terms and conditions
 - Further explore the possibility of negotiating terms and conditions with one or more economic operators on the basis of the availability and skills of the proposed resources, and any terms and conditions deemed favorable or acceptable, and conclude contracts on the basis of a negotiated procedure in line with the Public Procurement Regulations
 - One option will not necessarily preclude another

How to submit your EOI

- There are no particular documentation requirements, nor conditions which respondents need to fill in or agree to
- Respondents are to provide:
 - An overview of the Economic Operator
 - Contact details
 - Information on staffing capacities including number of resources, their respective roles and mobilization/onboarding timeframes
 - Information on staffing costs (on the basis of a rate per hour excluding VAT) for each role proposed, and any other associated costs for the rendering of the services
 - Any applicable terms and conditions proposed for the rendering of the service including the provision of a Master Service Agreement

Deadline for Submissions

- Submissions are to be sent to the Manager (Contracts and Legal) MITA on the email address cmd.mita@gov.mt
- Mail size limit is 20mb
- Deadline for submission is **Friday 15 July 2022** (end of business) unless otherwise extended (as eventually advertised on <https://procurement.mita.gov.mt/events/eoi-externalresources/>)

NDA for further technical information

- MITA would like to provide further technical information about the Taxation and Social Security IT systems and their modernization, and organize a second (technical) information session on **4 July 2022 at 10:00 CEST**
- Interested EOs who'd like to attend this session need to enter into a Non Disclosure Agreement (NDA)
- For participation to the technical information session of the 4th of July, signed NDAs by EOs need to reach MITA on cmd.mita@gov.mt by not later than the **30 June 2022**

Programme Management Department (PMD)

Strategic goals & Focus Areas

- Deliver transformational eGovernment/Digital services organized around customer/citizens and businesses
- Modernise Core Information Systems
- Augment our added value through technology and innovation
- Upskill our resources and nurture talent management

Taxation

Social Security

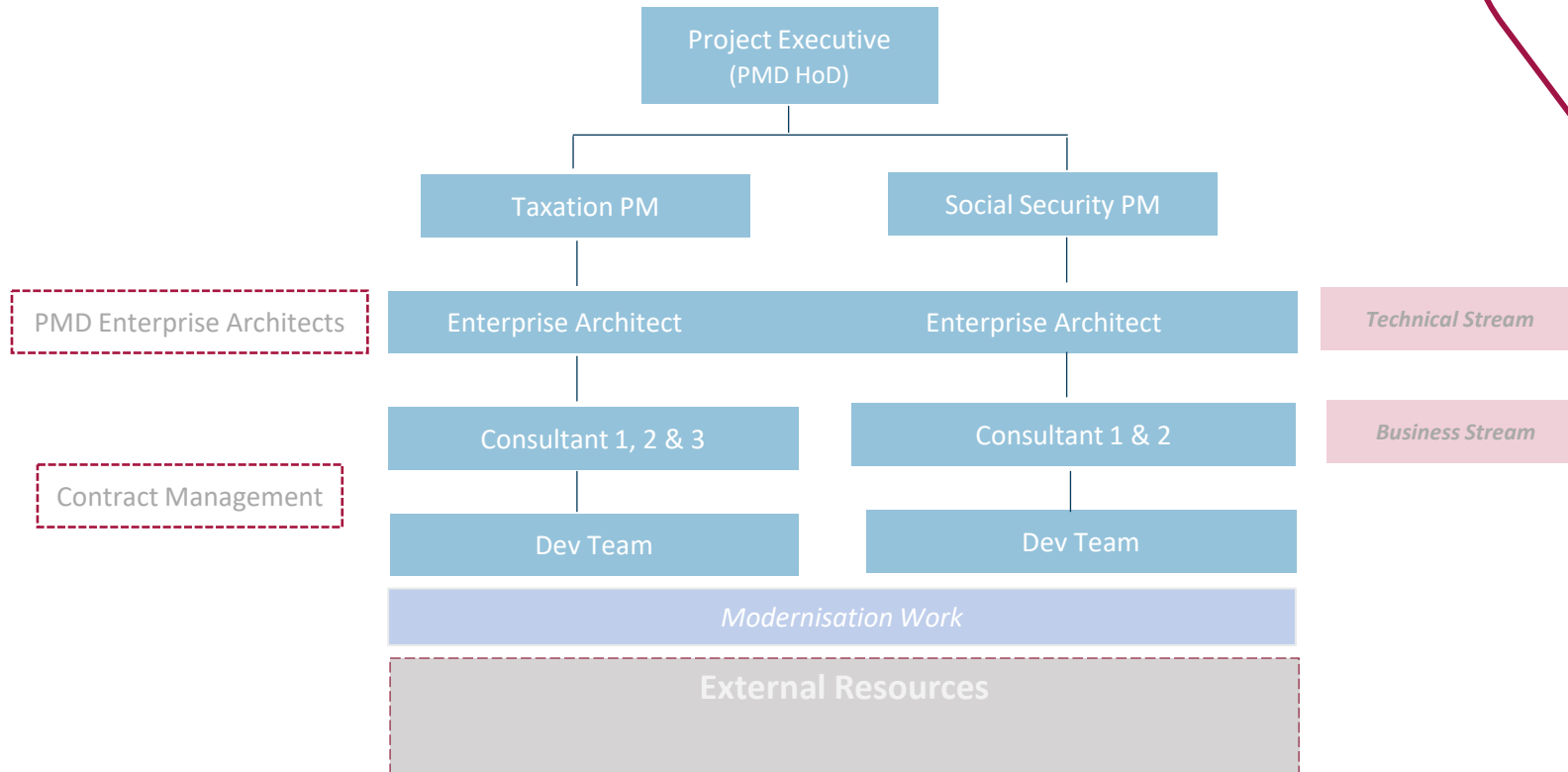
Customs

Health

Funding

Police/Visa

PMD Supporting Structure put in place to deliver the works needed for the modernisation of IT core solutions



Where are the External Resources needed

Objective: Exit from the Legacy software and re-build by modernising

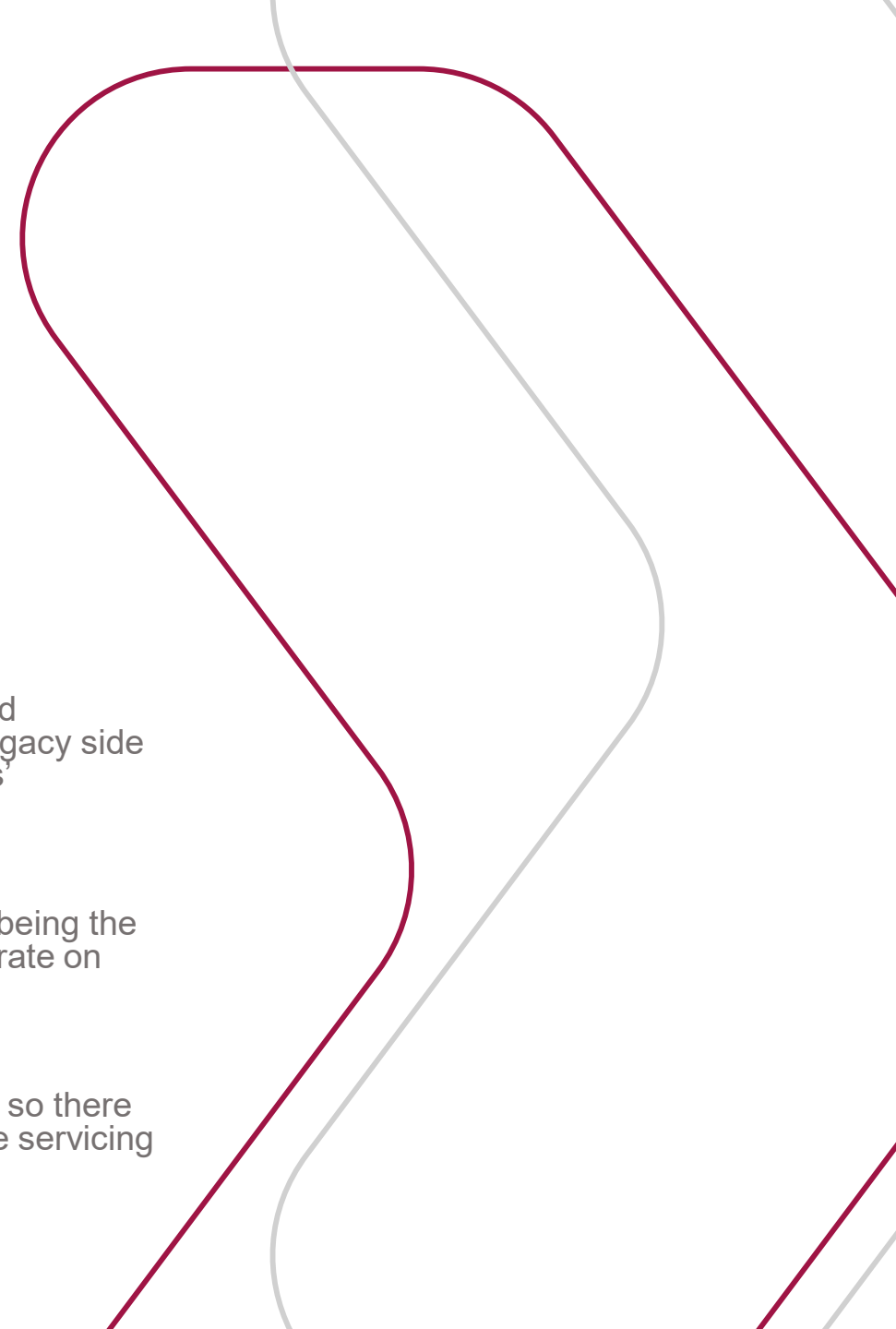
We see the requested work to fall in 3 different streams:

- **Stream 1: Modernisation**
- **Stream 2: Modernisation & Legacy**
- **Stream 3: Legacy**

To modernise, existing code has to be analysed (for the extraction of detailed logic and validation rules); so who will be modernising will inevitably become familiar with the legacy side of the solutions and would be capable to assist with minor changes to keep the clients' operations going.

Modernisation will not happen over-night and we are moving in phases. For the time being the DBMS will be kept as-is in Informix until we modernise the code; then we will concentrate on migrating the DBMS.

Modernised and legacy code have to co-exist until we exit completely from the legacy so there may be some changes that have to be done on the legacy part of the code to continue servicing our Clients, citizens and businesses.



Agility Enablers

Domain Driven Development

- Identification of bounded contexts (Modernisation FW)
- Ensure core domain components are built to reflect domain concepts

Adoption of clean code practices to:

- Make the code easy to understand and maintain

Test Driven Development

- Encourages “clean code”
- Quality Assurance from an engineering perspective

Behaviour Driven Development

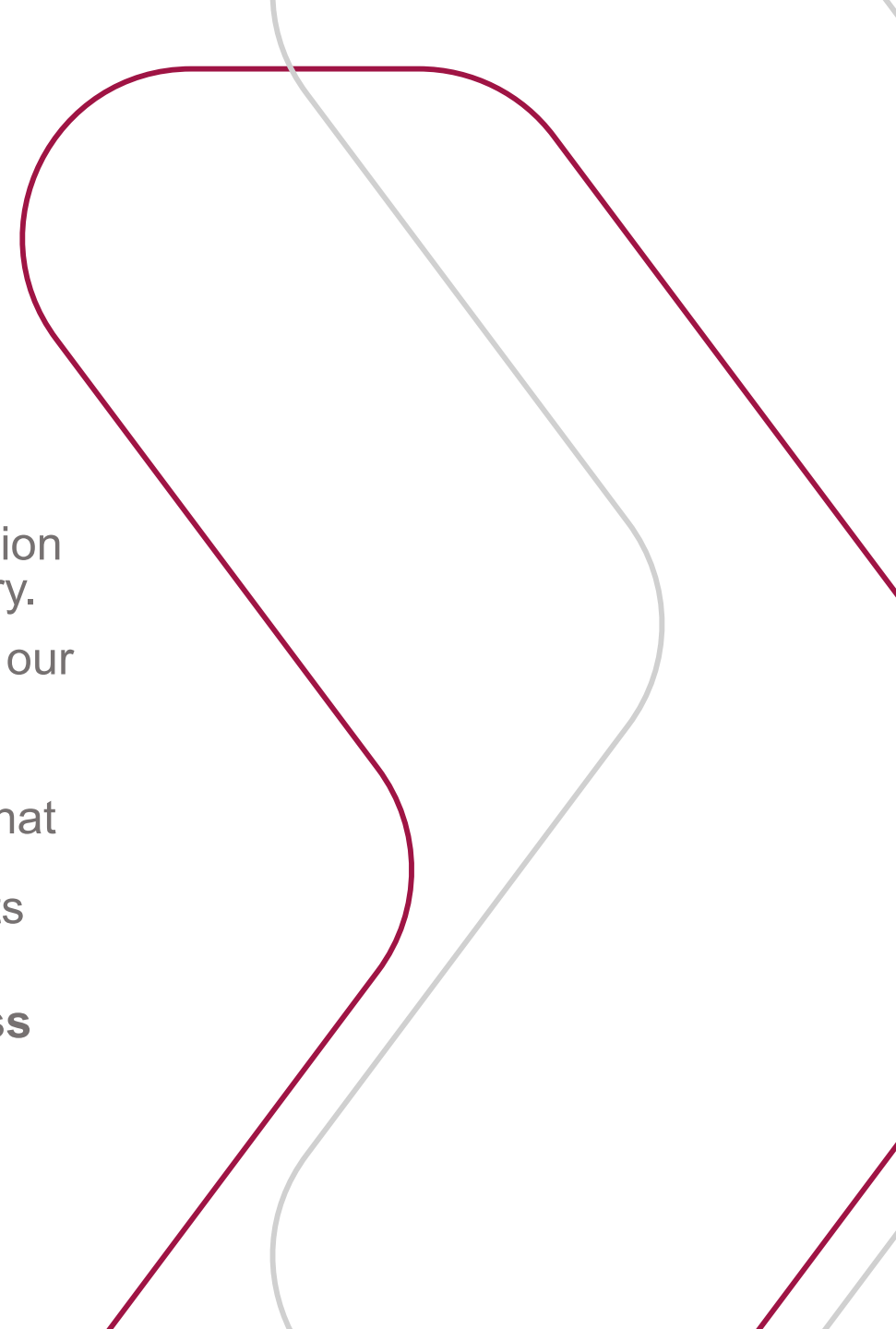
- Living documentation
- Automated Acceptance Tests to ensure quality from a requirements perspective

“The only way to go fast, is to go well”



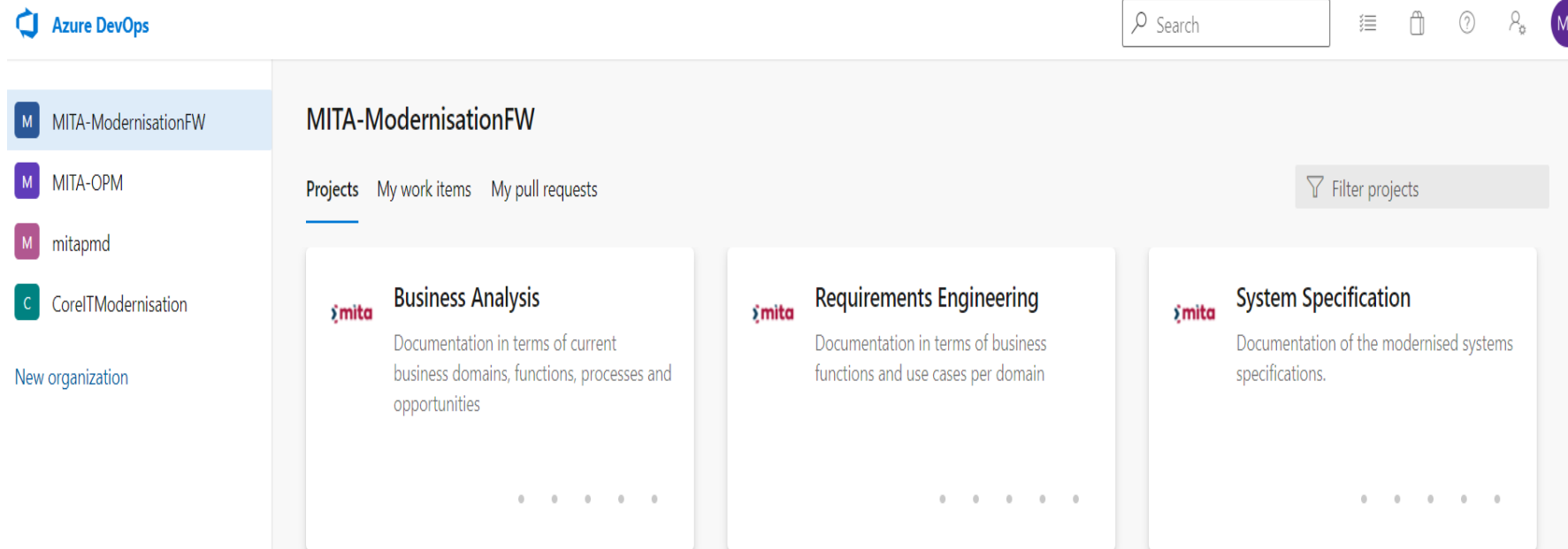
Background

- MITA is responsible to lead the re-architecture and modernisation of core information systems to align to Government strategic concepts and principles to achieve increased values.
- A number of products have to be built under the modernisation initiative for which MITA is responsible for the overall delivery.
- External Resources shall augment the resource capacity of our internal project teams and will assist in the design, development and implementation of these products.
- For some of the products, MITA has a number of artefacts that can be used as a foundation for building the products (with modifications anticipated during the build); for other products these artefacts have to be built from scratch.
- Artefacts range from a **Reference Architecture** to **Business Process Models** in BPMN format, **Business Process Descriptions**, **Use Cases**, **Strategic Entity Models** and **Domain Designs** (Modularisation Views) amongst others.



What we have in place ...1

- A **Reference Architecture** acting as a blueprint upon which to develop the modernised products.
- A **Modernisation Azure DevOps Framework** that holds 3 streams related to **Business Analysis**, **Requirements Engineering** and **System Specifications**.

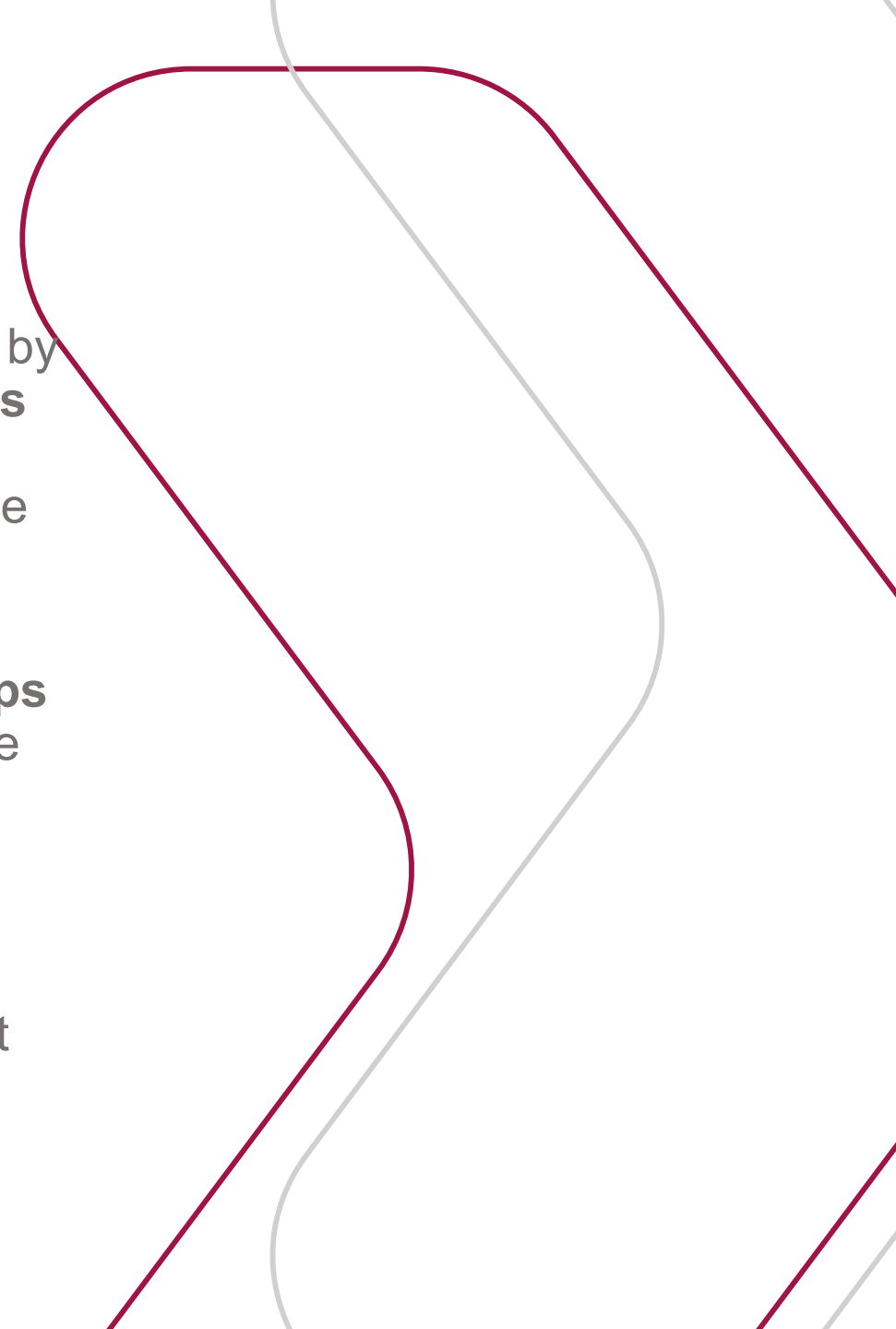


The screenshot displays the Azure DevOps web interface for the 'MITA-ModernisationFW' organization. The left sidebar shows a list of organizations: MITA-ModernisationFW (selected), MITA-OPM, mitapmd, and CoreITModernisation. The main content area is titled 'MITA-ModernisationFW' and includes navigation tabs for 'Projects', 'My work items', and 'My pull requests'. A search bar and utility icons are located at the top right. Below the navigation, there is a 'Filter projects' button and three project cards, each featuring the 'mita' logo and a description:

- Business Analysis**: Documentation in terms of current business domains, functions, processes and opportunities.
- Requirements Engineering**: Documentation in terms of business functions and use cases per domain.
- System Specification**: Documentation of the modernised systems specifications.

What we have in place ...2

- The current business process background can be gained by reviewing material available under the **Business Analysis stream** under the **Modernisation Azure DevOps Framework** or other documentation made available by the project team.
- **Use Cases** identified under the **Requirements Engineering stream** of the **Modernisation Azure DevOps Framework** or other documentation are available to refine the design for further discovery through **event storming sessions** (or other requirements elicitation techniques).
- Domain designs and different types of components are available under the **System Specifications** stream; new domain designs have to be produced where these are not available.



How we work

- MITA project teams work using **agile methodology adopting Scrum framework**
 - ❑ **Microsoft Azure DevOps** is the tool being used for product and sprint backlogs including source code repositories and pipelines.
- The Government of Malta has a **Hybrid Cloud Infrastructure** (cloud and on-premise) upon which solutions are hosted.
- External Resources will be provided **access to Azure DevOps**.
- External Resources will be part of the **Scrum Dev Team**.
- As part of the Dev Team, External Resources will participate in the ceremonies of **Sprint Planning, Daily Scrum, Sprint Review** and **Sprint Retrospective**.

How we wish to work with potentially external resources

- The External Resources will:
 - **participate** in focused **event storming sessions** (or other requirements elicitation techniques as applicable) led by the project team with the Client possibly involved depending on the product being built
 - refer to, review / refine or create **Use Cases**, under the **Requirements Engineering stream** of the **Modernisation Azure DevOps Framework** (TO-BE state).
 - **produce new or refine components / domain designs across the different layers** (under the **System Specifications** stream), using:
 - The outcome from the event storming sessions
 - The current Strategic Entity Model (where and as applicable)
 - The current Modularisation View (where and as applicable)
 - Business rules and logic extracted after code analysis
 - **develop clean code that is unit testable in line with modernised architecture principles, Reference Architecture and Domain Designs produced.**

External Resources

Work to be carried out in summary

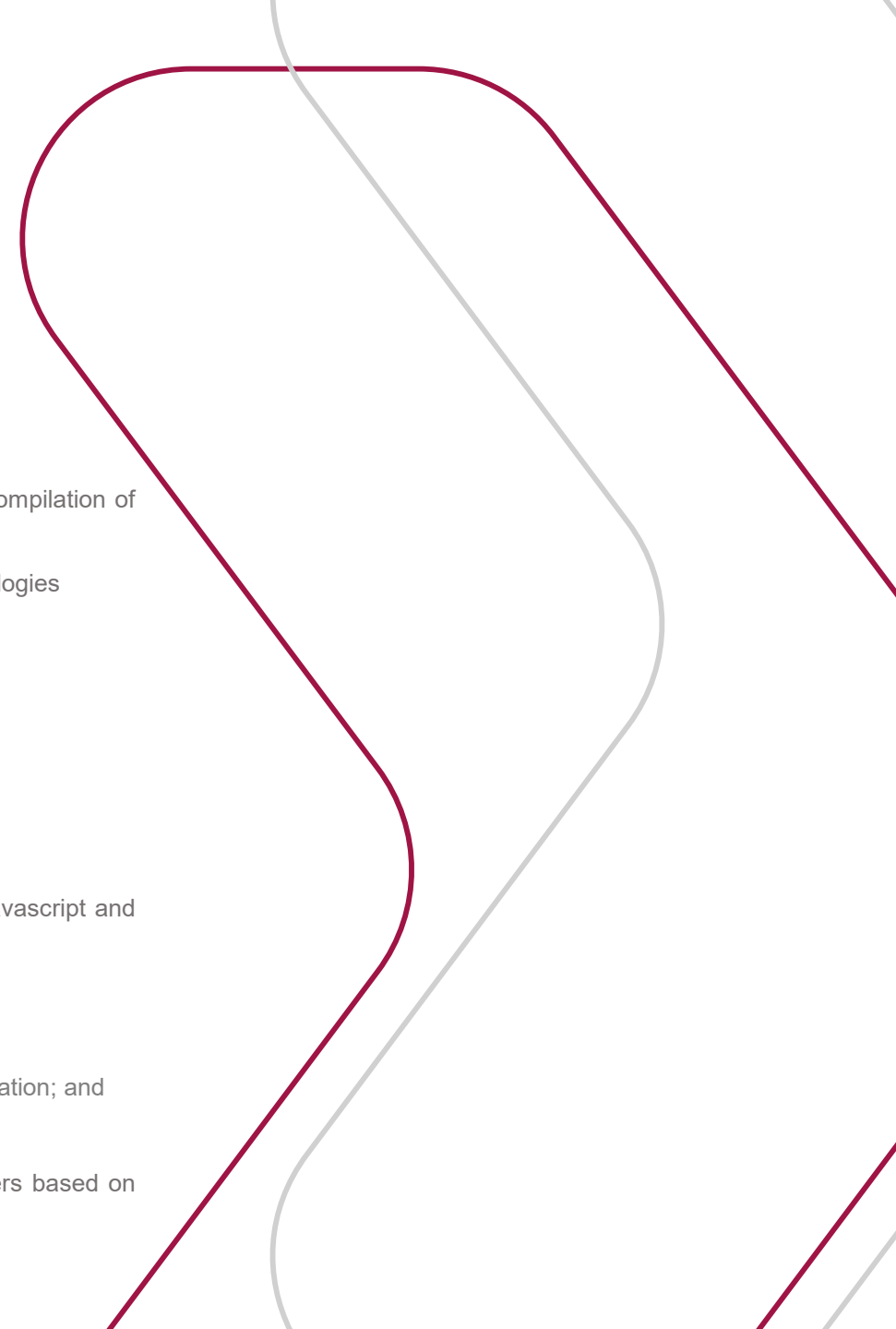
- **Understand and Learn** (part of the onboarding process focused on current systems, infrastructure, architecture, business, code, documentation, etc)
- **Design** (involving Code Analysis and Design Specification)
- **Development and Testing** (UI Design, UI development, Microservices development, development of domain entities, Aggregates and data ACL, Unit testing, Integration testing)
- **Quality Assurance** (acceptance testing, vulnerabilities resolution)
- **Compliance and Legacy exit** (security review, code review)
- **Other** (documentation, reporting, etc)



External Resources

Solution Architect

- Holds an undergraduate degree in an IT-related field (Malta Qualifications Framework level 6 or equivalent)
- Holds at least three (3) years of work experience in solution architecture and design
- Proficient in verbal and written English language (ideally supported by a certificate)
- Possesses good knowledge of UML standards to enable completion of modelling and visualizations during the compilation of Requirements Analysis and Design of software/system artefacts
- Possesses knowledge and skills in the extraction of business logic from existing software written in different technologies
- Possesses knowledge and skills in the use of Git or any other source code versioning tool
- Possesses knowledge and skills in the use of Azure Components: App Services and Azure Storage
- Possesses knowledge of Azure Components: Azure Service Bus and Azure Application Insights
- Proficient to write REST APIs
- Possesses knowledge of the CQRS pattern
- Possesses knowledge and skills in the use of ASP.NET Core or later version, C#, JSON, OpenXML, HTML5, Javascript and CSS
- Proficient in Object-Oriented Design
- Possesses knowledge and skills to:
 - Write anti-corruption layers and other seams to prevent legacy code from influencing new parts of the application; and
 - Write unit tests that are de-coupled from the system under test.
- Possesses knowledge and skills in the use of Entity Framework Core and is proficient to write data-access layers based on Entity Framework Code-First and the repository pattern.



External Resources

Software Developer (Front-end)

- Holds an undergraduate degree in an IT-related field (Malta Qualifications Framework level 6 or equivalent)
- Holds at least three (3) years of work experience in software development and systems analysis
- Proficient in verbal and written English language (ideally supported by a certificate)
- Possesses good knowledge of UML standards to enable completion of modelling and visualizations during the compilation of Requirements Analysis and Design of software/system artefacts
- Possesses knowledge and skills in the extraction of business logic from existing software written in different technologies
- Possesses knowledge and skills in the use of Git or any other source code versioning tool
- Possesses knowledge and skills in the design of prototypes
- Proficient in the use of ASP.NET CORE MVC, JQuery, HTML5 and Bootstrap
- Possesses knowledge of C# and front-end frameworks (Angular or Blazor)

External Resources

Software Developer (Back-end)

- Holds an undergraduate degree in an IT-related field (Malta Qualifications Framework level 6 or equivalent)
- Holds at least three (3) years of work experience in software development and systems analysis
- Proficient in verbal and written English language (ideally supported by a certificate)
- Possesses good knowledge of UML standards to enable completion of modelling and visualizations during the compilation of Requirements Analysis and Design of software/system artefacts
- Possesses knowledge and skills in the extraction of business logic from existing software written in different technologies
- Possesses knowledge and skills in the use of Git or any other source code versioning tool
- Possesses knowledge and skills in the use of ASP.NET Core, REST API, C#, JSON, and OpenXML
- Proficient in Object-Oriented Design
- Possesses knowledge and skills to:
 - Write anti-corruption layers and other seams to prevent legacy code from influencing new parts of the application; and
 - Write unit tests that are de-coupled from the system under test.
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 **mita**

Thank you

