Digitalisation of the Property Registration Process in Malta

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Perit Michelle Piccinino – Professor Saviour Formosa

ELRN European Land Registry Network Workshop Valletta

CONTENT

- About us and our current tools

- Our Objectives and where we want to go

- Our journey in digitalising the processes

- Where we are now

ABOUT US

The **Land Registration Agency** is responsible for:

- First Registration of a property.
- Dealing/Transfer of whole or part a property.
- A Charge/Hypothec (On a title or an unregistered property).
- Condominium administrators, under the Condominium Act.

Land Registry VS Public Registry

The **Land Registration System registers titles to parcels of land** whereas the **Public Registry registers the public deeds on individuals**.
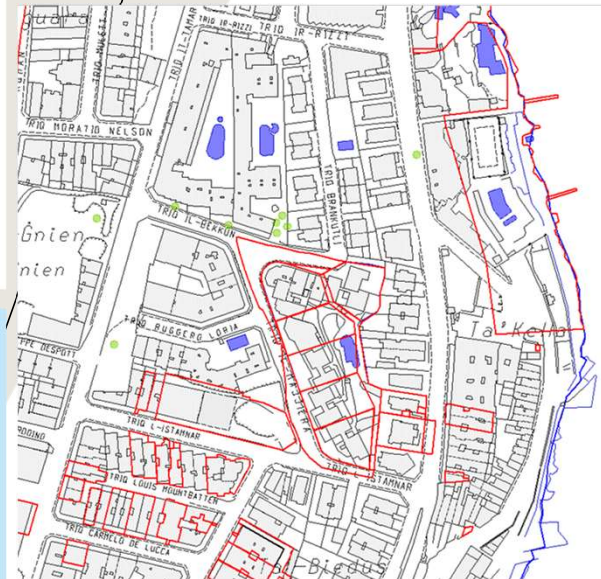
REGISTRATION AREAS

- Currently not all the territory is a Compulsory Registration Area.

- Compulsory Registration Areas are declared by the Minister

- First registrations by third parties are mainly accepted only in Compulsory Registration Areas.

- Government may register anywhere.

- Government Property registered has an immediate Guaranteed Title and renders the area as a Compulsory Registration Area

- A Guaranteed Title for a private property is only provided after the lapse of ten years from registration.
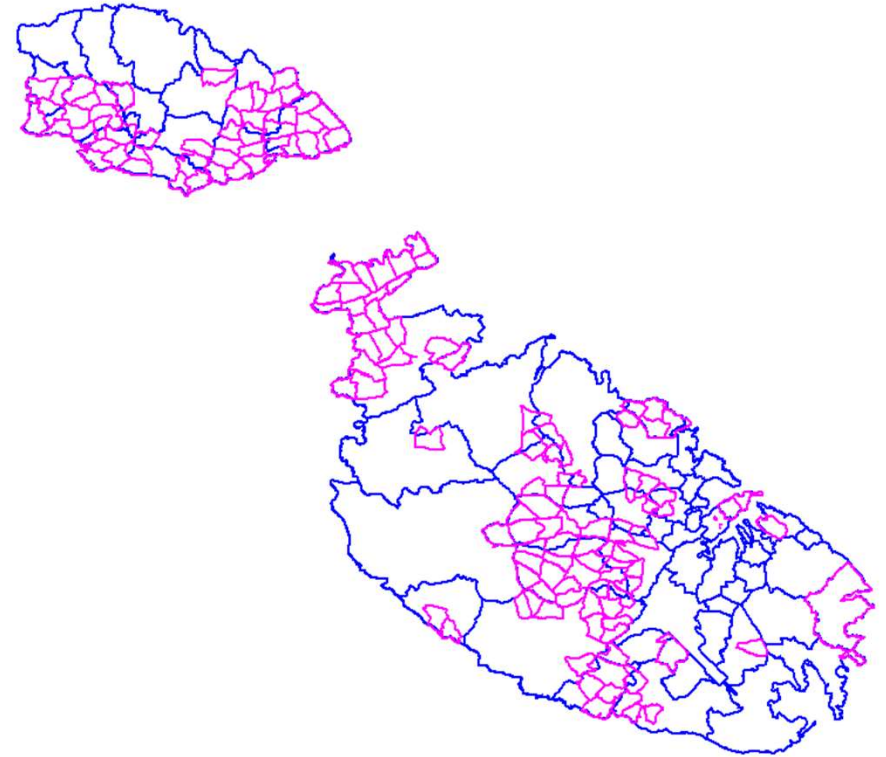
Local Council Boundaries are shown in blue and LR registration Areas (purple boundaries)

CURRENT TOOLS

- Physical submission of applications with related documents

- Outdated Base maps

- LRCS

- First registrations published in Gazette.

- Information only accessed at the office.

OUR OBJECTIVE

- Whole territory as Land registration area.

- Contribute towards an efficient property transfer process.

- Certainty in Property Titles.

- More accessible information, governance and transparency.

- Cost effectiveness for property title searches.

- Title boundary verifications.

- Conflict resolutions.

CONCEPTUALISING THE DIGITAL

PRIOR SYSTEM: LRCS

In 2017 the Land Registry undertook an exercise targeting a focus on a GIS-based Strategy and its implementation within the entity. The initiative called the **Eye2Registry** aimed to bring in GI experts, technologists and programmers to enable the conceptualisation of a new modus operandi.

SCOPE:

- To review of the current Land Registry system status, spatial system requirements and to draft an implementation plan
- Map out the current functions – mindmap
- Identify systems issues
- Identify methodological lacunae
- Identify capacity issues
- Identify training issues
- Propose a change dynamic
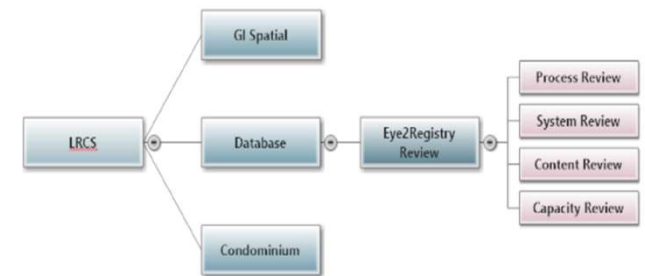
PRIOR SYSTEM: LRCS

Everything must be viewed in **CONTEXT**

 - Digitisation, Digitalisation, Digital Transformation

 - An Analogue to Digital to DLT to AI progress

 - Inter-Agency dynamics and the isolation to integration journey

 - Funding mechanisms

The conceptual phase was based on the W6H principle

　　　　　- What?

　　　　　- Why?

　　　　　- Where?

　　　　　- When?

　　　　　- Who?

　　　　　- How?

　　　　　- Why Not?

PRIOR SYSTEM: MindMap
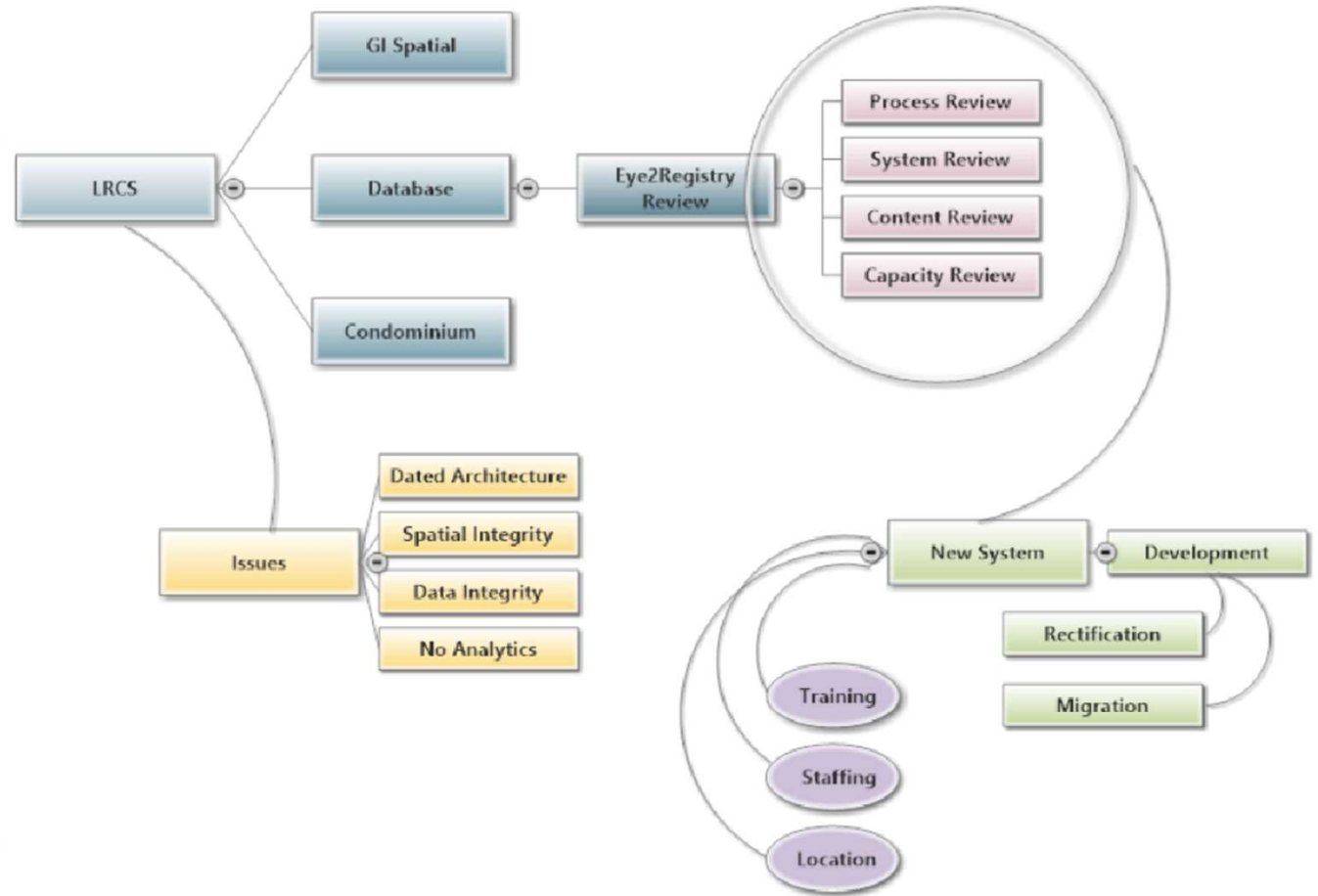
PRIOR SYSTEM: Status

- LRCS was developed in the **mid-90's** using different technologies

- The system might have addressed the **business needs** when it was originally implemented

- A dated solution in terms of technology and business needs that **did not reflect the current systemic approach**, the available technologies and the wider-user based that the Land Registry catered for

- This **lack of investment** in the system to tweak, update or rewrite is having a direct impact on the business processes within the department.

- **High dependency** on 3rd parties to support the systems

- **No integration** exists between systems

- System was **not designed for the current or future capacity component** – users

- This was a classic **squeaking wheel** operation: it worked, but barely…

PRIOR SYSTEM: Status

- In terms of capacity, the procedural knowledge is existent though **real knowledge of the GI component** is not available as the process is a routine input one and is not based on an analytic approach

- **Training Needs Analysis and Skills Assessment** is required,
whilst training needs to cover spatial information skills, analysis and outputs

- In summary, the systems is afflicted by:
  - *Data Integrity* Issues
  - *Outdated* Spatial data sources
  - *Human capacity* Issues
  - *Operational functionality* Issues
  - *Operational costs* Issues

PROPOSED SYSTEM: System

- Develop **Standards and Procedures**
- Setting up an internal GIS/ICT **Department**
- Establish **System Architecture** Hardware/Software Environment
- Improve **Data Content** quality (attribute and spatial)
- Re-develop new LRCS solution to address existing issues and new business needs
- Employ a **Training** strategy
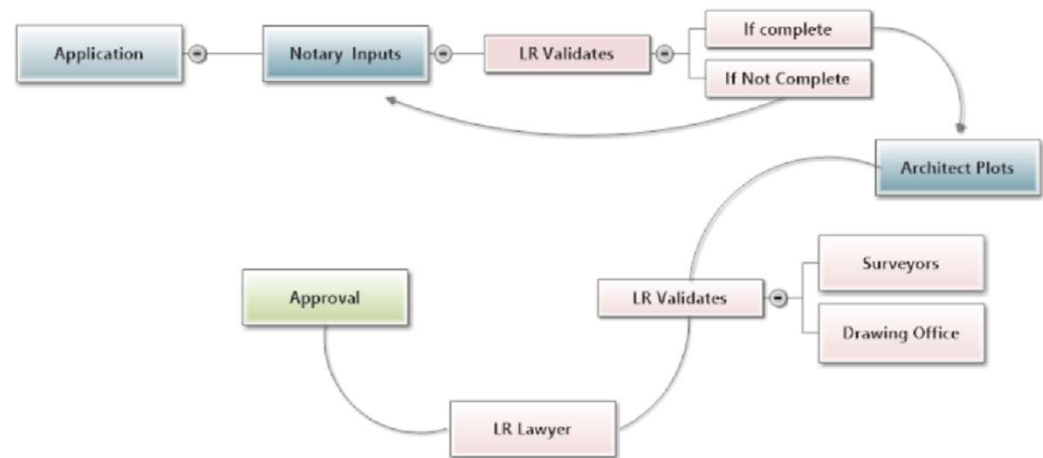
PROPOSED SYSTEM: System

- Transposition of Current Database:
  - Issues were related to the **Spatial** Component
  - ***Options reviewed:***
    - A) automated realignment
    - B) semi-automated – semi-manual realignment
    - C) manual recreation

  - ***Option A and B require an entire realignment of the data layers*** to remove overlaps and self-intersections – over 60,000 from a layer of 100,000 entities **PRIOR** to any realignment

  - Option A is **NOT** deemed feasible as there is no unique direction towards which the misalignments are evident: the polygon entities are spatially mismatched in any direction (ex some to the North, others to the East, others to Southwest…). Any automated realignment will cause more correction issues and hence Option B suffers the same fate since intra-polygon there are also alignment issues that relate to snapping and node placement *(a rectangle has 4 nodes, a 10-sided polygon would have 10 nodes that may require repositioning)*

  - **Option C** is deemed feasible as it enables the usage of the current LRCS as a base review layer and it enables the recreation of all the polygons as aligned to the new MapMalta basemap that was due in Q4 2018. Will take less time than Options A or B

- Process
  - Was awaiting the SIntegraM new Basemap entitled MapMalta
    - Pilot Delivery – est. June/July 2018
    - Final Delivery – December 2018
  - ***Training of staff/interns***
    - Training/Testing Initiated – Q1/Q2 (Training), Q3-Q4 2018 (Testing)
  - ***Deliveries***
    - Process – Q1/Q2 2019 – Q4 2020

PROPOSED SYSTEM: System

- Scenarios depicting the following potential outcomes:

    - Business as Usual –> **System Collapse**

    - Amendments to the current system – squeaking wheel that **might have yet served the LR a few more months.**
        - would not have been able to handle the new registration areas under consideration as evidenced by the load placed through the plotting of current instances where applications fall outside of registration areas
        - Data integrity issues still not addressed

    - This also entailed the **re-visiting of all files** in order to clean the errors generated by the spatial data creation such as self intersections, subdivisions anomalies, overlaps and spatial data timestamp

    - Re-design and develop the **entire system whilst ensuring validated data migration and integration**.

    - The files revisiting would have been carried out in **parallel to the creation** of the new system, though preferably before it was launched

A NUMBERS GAME: Nation-wide zone

Scenario 1:	All Potential Plots are built 1:1				

	Registered Area Gozo	Registered Area Malta	NonRegistered_Area Gozo	NonRegistered_Area Malta	Total
Current Units in Database	15,755	23,167	1,914	19,891	**60,727**
Potential Units	3,998	5,717	6,694	7,189	**23,597**
Built Units in Dev Zone	3,057	13,728	6,668	79,250	**102,703**
Rural Areas			10,720	49,044	**59,764**
Total	**22,810**	**42,612**	**25,996**	**155,374**	**246,791**

Scenario 2:	Potential Plots are built 1:1 (50%) and 50% at 1:4				

	Registered Area Gozo	Registered Area Malta	NonRegistered_Area Gozo	NonRegistered_Area Malta	Total
Current Units in Database	15,755	23,167	1,914	19,891	**60,727**
Potential Units	9,995	14,292	16,734	17,972	**58,992**
Built Units in Dev Zone	3,057	13,728	6,668	79,250	**102,703**
Rural Areas			10,720	49,044	**59,764**
Total	**28,807**	**51,187**	**36,036**	**166,157**	**282,186**

Scenario 3:	All Potential Plots are built at 1:4				

	Registered Area Gozo	Registered Area Malta	NonRegistered_Area Gozo	NonRegistered_Area Malta	Total
Current Units in Database	15,755	23,167	1,914	19,891	**60,727**
Potential Units	15,992	22,866	26,775	28,755	**94,388**
Built Units in Dev Zone	3,057	13,728	6,668	79,250	**102,703**
Rural Areas			10,720	49,044	**59,764**
Total	**34,804**	**59,761**	**46,077**	**176,940**	**317,582**

A NUMBERS GAME: Internal Capacities?

Scenario 1: Personnel   Case Officers   All Potential Plots are built 1:1

BASED on Potential Capacity	Registered Area Gozo	Registered Area Malta	NonRegistered_Area Gozo	NonRegistered_Area Malta	Total
Current Units in Database	4	6	1	5	16
Potential Units	1	2	2	2	6
Built Units in Dev Zone	1	4	2	21	27
Rural Areas			3	13	16
Total	6	11	7	41	66
Other Staff					27
Total inc Potential Staff	6	11	7	41	93

Capacity as IS		
Dependable persons	17 to manage	30000
Required for monitoring of new potentials and survey work		
Current average annual files per person		1765
Files per day		9

Scenario 2:   Personnel   Potential Plots are built 1:1 (50%) and 50% at 1:4

BASED on Potential Capacity	Registered Area Gozo	Registered Area Malta	NonRegistered_Area Gozo	NonRegistered_Area Malta	Total
Current Units in Database	4	6	1	5	34
Potential Units	3	4	4	5	16
Built Units in Dev Zone	1	4	2	21	27
Rural Areas			3	13	16
Total	8	14	10	44	75
Other Staff					27
Total inc Potential Staff	8	14	10	44	102

Potential Capacity		
Dependable persons	8 to manage	30000
Required for monitoring of new potentials and survey work		
Average annual files per person to validate and clean older datasets		3750
Files per day		19

Other Staff	
Surveyors (3 teams of 1 for field data validation)	3
Field Assistants	3
Programmers and IT specialists	6
Admin (CEO, HR, Accounts, Finance, Procurement)	11
Customer Care and minor staff	4
Total	27

Scenario 3:   Personnel   All Potential Plots are built at 1:4

BASED on Potential Capacity	Registered Area Gozo	Registered Area Malta	NonRegistered_Area Gozo	NonRegistered_Area Malta	Total
Current Units in Database	4	6	1	5	34
Potential Units	4	6	7	8	25
Built Units in Dev Zone	1	4	2	21	27
Rural Areas			3	13	16
Total	9	16	12	47	85
Other Staff					27
Total inc Potential Staff	9	16	12	47	112

Personnel increase will happen gradually through employment as follows:			
Based on 1:1 Scenario 1			
Personnel	Year 1	Year 2	Year 3
Admin	11	11	11
Customer Care	4	4	4
Surveyors and Field Assistants		2	6
Programmers and IT Specialists - Option 1	4	6	6
Programmers and IT Specialists - Option 2	6	7	7
Case Officers	35	50	66
Total Option 1	54	73	93
Total Option 2	56	74	94

PRIOR SYSTEM: Reality Check

Again reviewing all this in **CONTEXT**

- Required lateral thinking

The conceptual phase pushed towards innovation

- **What** if the stakeholders become the owners?

- **Why** does the LRA need to be retentive?

- **Where** can we start from - spatio?

- **When** do we need to deliver - temporal?

- **Who** are the main stakeholders

- **How** can we affect change in quite a conservative arena?

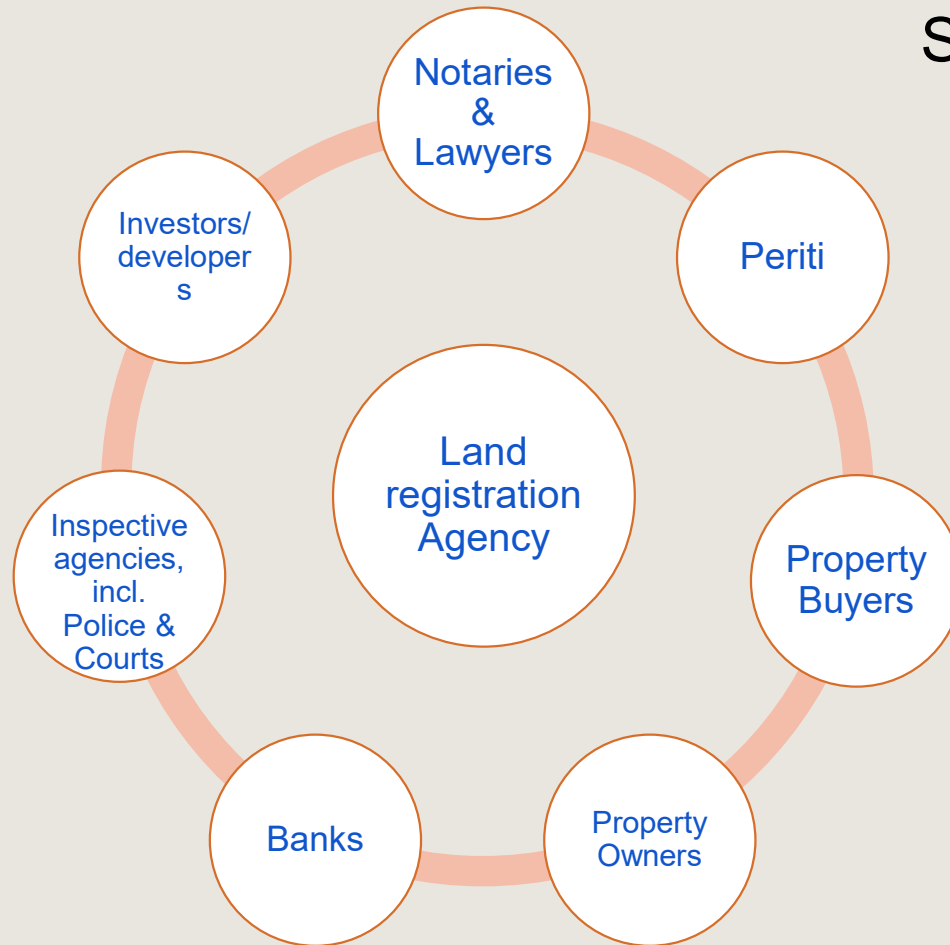- **Why Not?** ERDF was incoming…….

MORPHING THE DIGITAL

NEW SYSTEM: pLotteR

The Land Registry was able to commit funds under the **ERDF 02.35 CONvErGE Programme** with the project pLotteR.

OBJECTIVES:

- Provide an online platform, shift to a paperless process.
- More accurate and up to date records.
- Enshrine principles of good governance.
- Render information accessible to all stakeholders.
- Facilitate data sharing across the organisation.
- Reduce response time periods.
- Improve the rate of first-time resolution issues.
- Facilitate searches and acquisition of titles.
- Facilitate quick access to critical information.

STAKEHOLDERS

Notaries & Lawyers
Periti
Property Buyers
Property Owners
Banks
Inspective agencies, incl. Police & Courts
Investors/developers
Land registration Agency

The success of the proposed transformation of the Land Registry and the Agency requires that all **stakeholders are involved and kept abreast of the aims and goals of the process** being embarked upon for a more reliable and accessible register of titles that will facilitate dealings on immovable properties.

NEW SYSTEM: pLotteR

- Empower stakeholders to own the system.

- Facilitate the professions to input the required polygons and information online

  - **Applicant – Notary**

    - Custodian of the applications for registration, responsible from registering the property within the time period allowed by law, responsible from the basis for registration.

  - **Architect**

    - Is responsible from the delineation of the property boundary and any corrections and changes including consolidation or subdivisions.

  - **Land Registration Agency**

    - Validates property boundaries before Notaries proceed with the submissions of registration requests, validate and review applications once submitted and proceed to Land Registrar for decision.

THE NEW SYSTEM

THE NEW SYSTEM
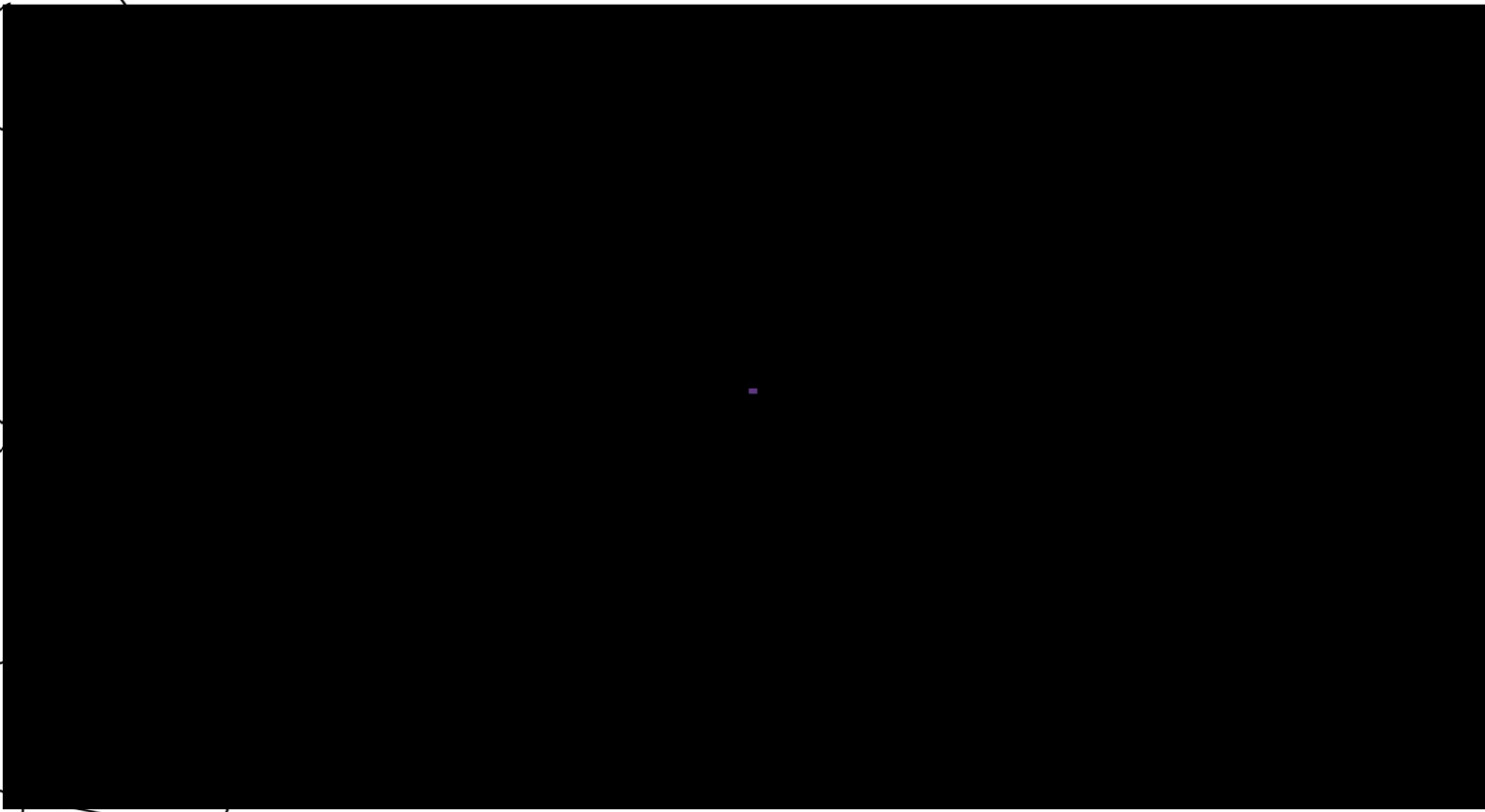
MILESTONES

DEPLOYMENT of SYSTEM IN PHASES

By end of Summer updating of the Site plan service with the latest National Base map. Online request for Searches.

MIGRATION OF DATA

Confidence in data available on the new system is imperative to induce a sense of **trust in the titles generated.**

DIGITAL ARCHIVE OF THE HISTORIC DATA

Agency is currently in the process of scanning all paper documentation, historical and current to be organized in a Document Management System, which will provide secure and easy access to documents. Possible integration with other systems.

LEGAL FRAMEWORK

UPDATE OF THE LAW

Land Registration Chapter 296

Land Registration is governed with The Land Registration Act, enacted in 1981 with very limited amendments in recent years.

In view of the commitment to go digital, the current legal framework would need an overhaul. The amendments would amongst other changes include:

- Allow the use of electronic means for the submission of applications and information, communication of findings and the certificates.

- Acknowledge technology that will provide more accurate mapping of registered parcels.

- Provide for transitional periods including for the validation of the current registered parcels.

- Process to reflect the proposed new Land Registration Information System.

- Provide for access to information and improve Access to Justice.

We'd love to hear your thoughts!

- Any ideas how we can improve our process?"
- From your experience what obstacles we should address to achieve our project goals?"

THANK YOU

saviour.formosa@um.edu.mt

michelle.piccinino.3@gov.mt