

### Agenda

- 9.00 Registration
- 9.15 Welcoming (Ashley Hili, PA)
- 9.30 Introduction (Prof. Saviour Formosa)
- 9.45 The Malta NSDI Strategy (M. Bonazountas)
- 10.00 Questions & Replies
- 11.00 Closure

### Presentation

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# Malta NSDI

Spatial Data Infrastructure for the Maltese Islands  
Developing Integrated National Spatial Information Capacity

## INFORMATION DAY

Appeals Boardroom | St. Francis Ravelin, Floriana

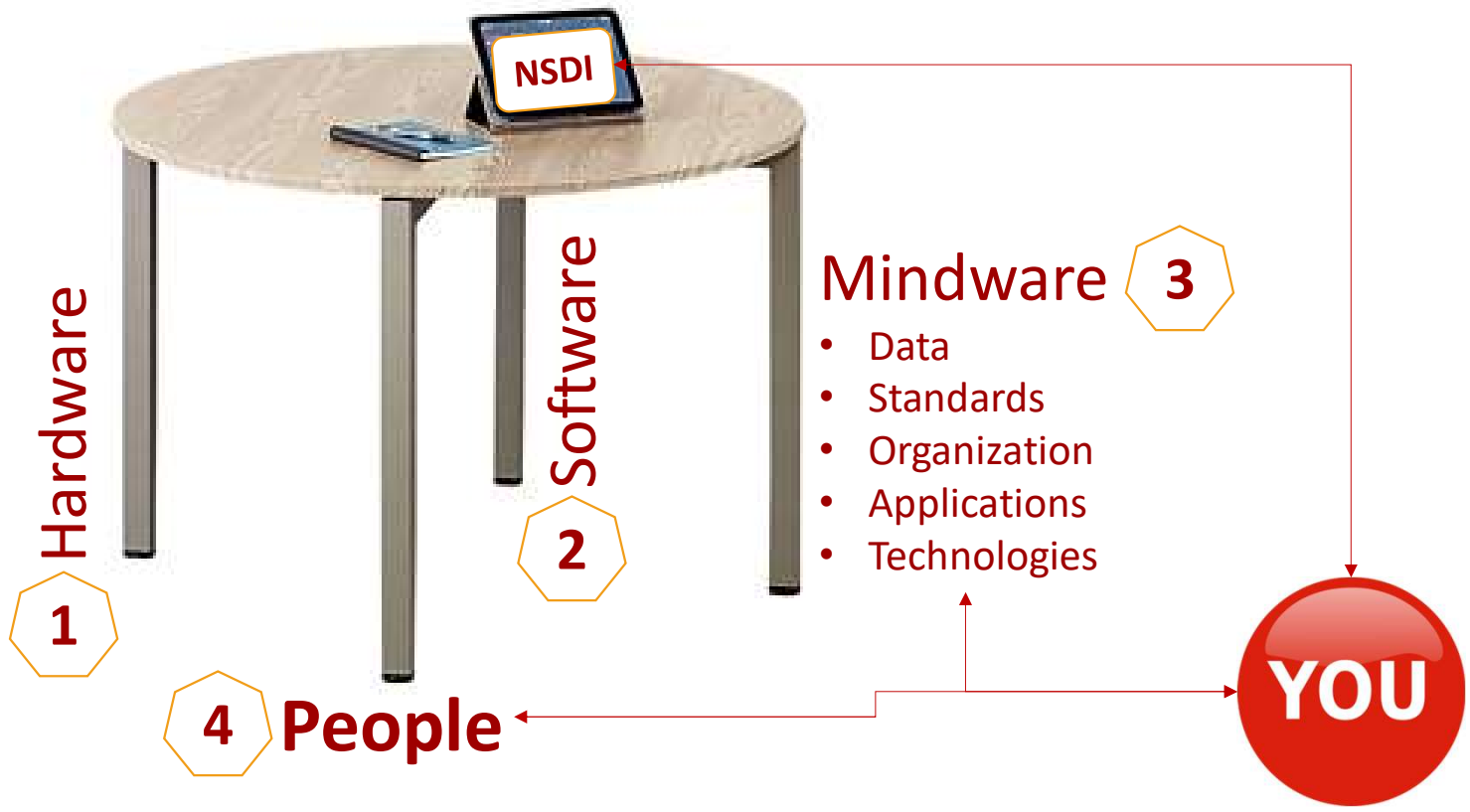
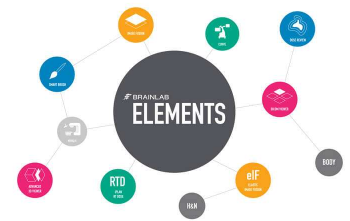
# Overview of this “short” presentation

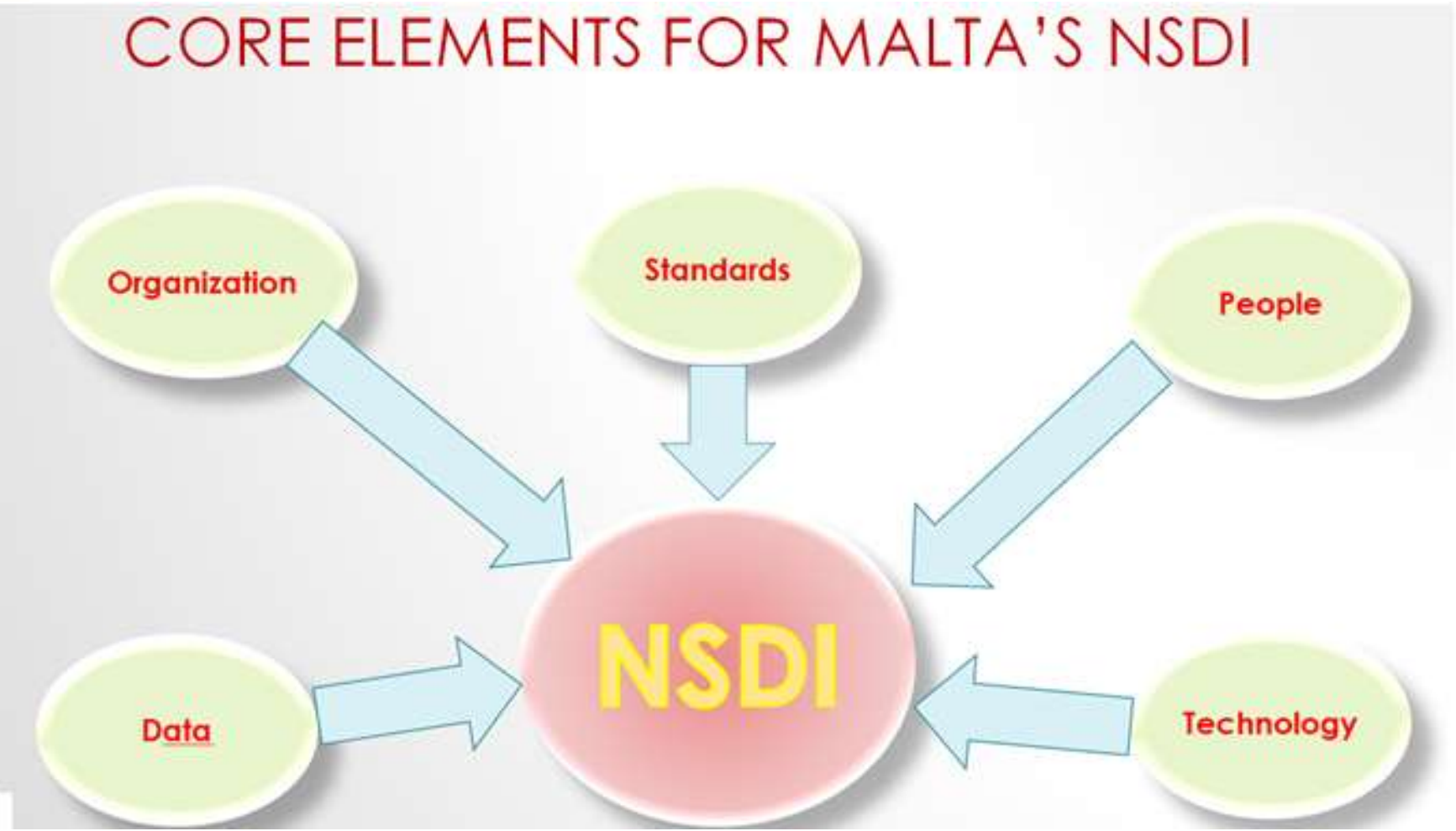
- ❖ Introduction
- ❖ NSDI perception
- ❖ The Malta NSDI
- ❖ Staff & Training
- ❖ Cost of implementation
- ❖ Stakeholders participation
- ❖ Closure with Q/A

# Introduction

- ❖ The SIntegraM programme
- ❖ The Stakeholders Interviews
- ❖ Mission of the MT-NSDI
- ❖ Strategy for a MT-SDI
- ❖ The Malta NSDI components
- ❖ The outcome & benefits of the MT-NSDI
- ❖ The next step for the Stakeholders (to make it happen)

# NSDI pillars for success





# NSDI in Malta ... ?

## The Needs....

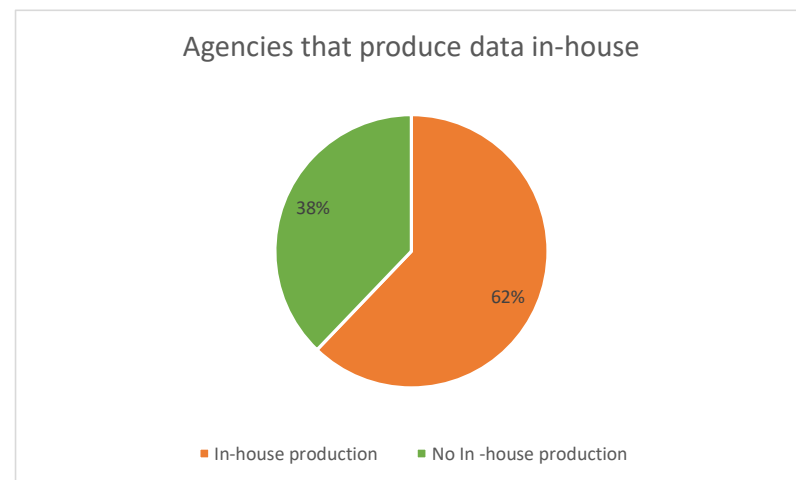
- **Basic reference map**
- **Better information** needed for policies and decision making
- **Improvement** of existing information flows
- Revision of approach to **reporting and monitoring**, moving to the concept of **sharing of information**

## ...The Situation

- **Policy restrictions** (pricing, copyright, access rights, licensing)
- **Lack of co-ordination** across borders and between levels of government
- **Lack of standards** (incompatible information and information systems)
- **Existing data not re-usable**, (fragmentation, redundancy, inability to integrate)

# The Stakeholders' Interviews

- ❖ 37 personal Interviews with 80+ people
- ❖ Statistical Analysis of info received
- ❖ On Data use, production and linkage
- ❖ Key interviews results
  - SIntegraM is a “Must”
  - Geodetic Reference System of Malta
  - Stakeholders business as usual
  - New Authority
  - Training Centre & assistance
  - Applications needed
  - INSPIRE compatibility
  - Web-technology
  - Common GIS software architecture
  - MITA as repository



# NSDI perception (based on the interviews)

- ❖ On geodata
- ❖ On NSDI and NSS (National Spatial Strategy)
- ❖ Goals of an NSDI (based on the interviews)
  1. Effectiveness
  2. Capabilities
  3. Leadership
  4. New entity & Legal issues
  5. Legal issues related to Spatial Data
  6. Technology issues

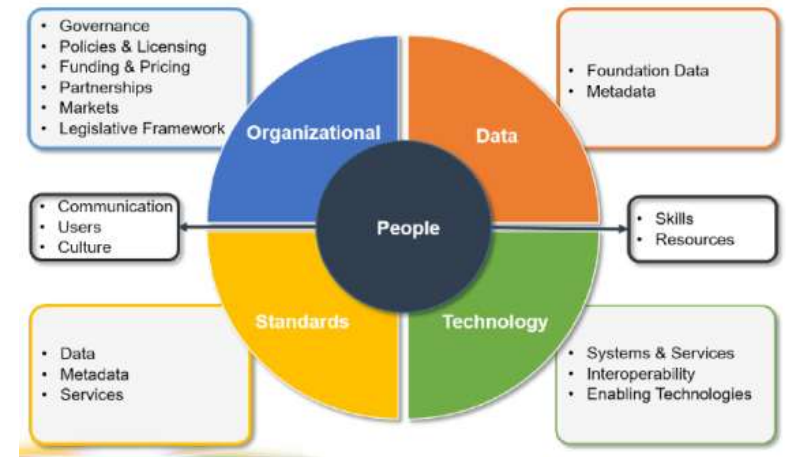


# Technology, Legal, Lessons learnt

- ❖ Trends & considerations
- ❖ Integration of existing data 2D and 3D
- ❖ Vector, raster data (Copernicus, UAV, aerial), other
- ❖ Alignment of information with geodetic systems
- ❖ Alignment of thematic layers to a common reference system
- ❖ Use of geo-standards (e.g. INSPIRE, OGC, ISO)
- ❖ Legal framework & infrastructure
- ❖ Well known EU NSDIs
- ❖ Lessons learnt

# The Malta NSDI

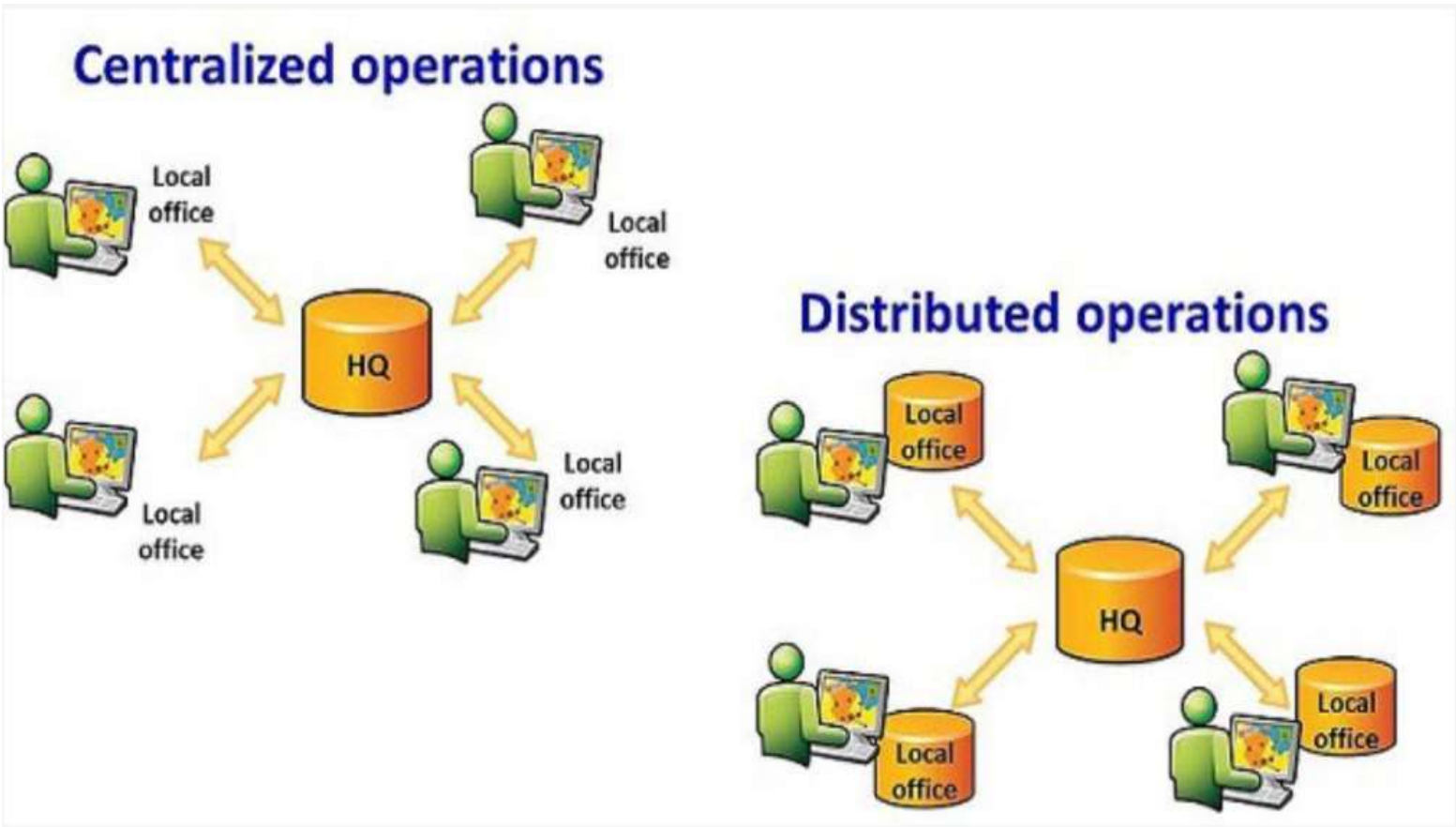
- ❖ **Methodology**
  - Interviews
  - Approach – Strategic Components Model
- ❖ **Components analysis**
  - Four structures analysed
  - One structure proposed
- ❖ **Structure proposed**
  - Independent Authority
  - Under the MTIP (Ministry of Transport, Infrastructure and Capital Projects)
    - Board of Directors
    - Steering Committee
    - Secretariat Office
    - Technical Departments
    - Legal Department
    - Financial Services Dept



# Organisational needs

- ❖ Strategy
- ❖ Legal Framework
- ❖ Financial model
- ❖ Monitoring – Audit
- ❖ Data component important (which first)
- ❖ Rules
- ❖ Standards (geo-spatial, other)
- ❖ Agreements
- ❖ Technology | Architecture
- ❖ Human Resources

# Technology operations



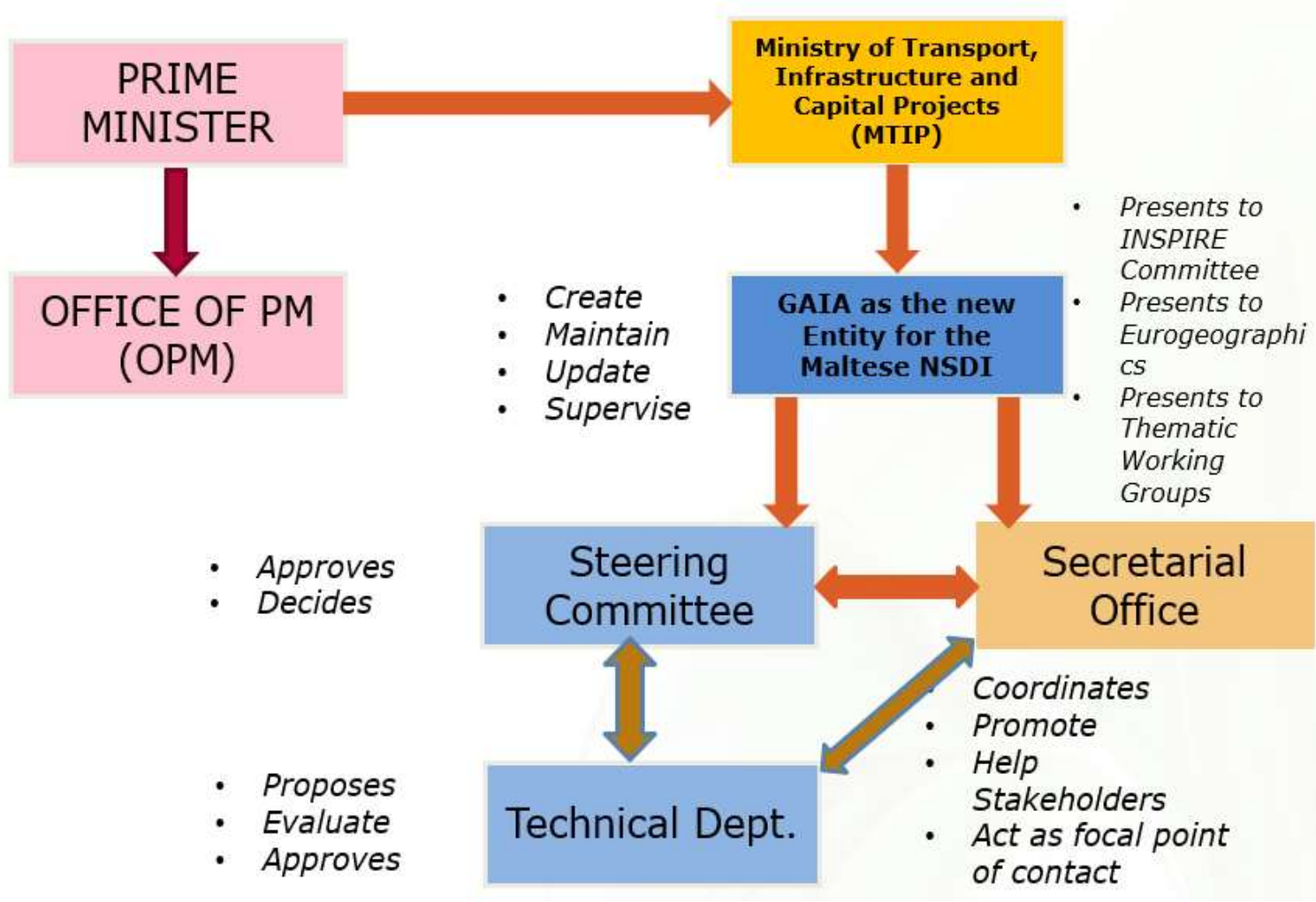
# Technologies Involved/Needed

- ❖ Datum & Projection System (WGS84/UTM)
- ❖ The National “Hub” – GeoPortal
- ❖ The H/W and S/W
- ❖ The Datasets & Standards (INSPIRE, ISO), transformation, validation, cost
- ❖ New Datasets Guidelines by the Authority
- ❖ The Data Repository
- ❖ The Metadata
- ❖ The Training activities
- ❖ The Agreements
- ❖ The linkage between Stakeholders and data interoperability and conformance (technical, syntactic, semantic)

# Tangible Benefits

- ❖ Minimisation of cost (single basemap)
- ❖ Reduction of duplication
- ❖ INSPIRE compatibility
- ❖ Best handling of geodata
- ❖ Added value products (e.g., emergency)
- ❖ Policy assistance
- ❖ Coop of Stakeholders
- ❖ Easy EU Reporting (e.g., SEIS)

Organigram



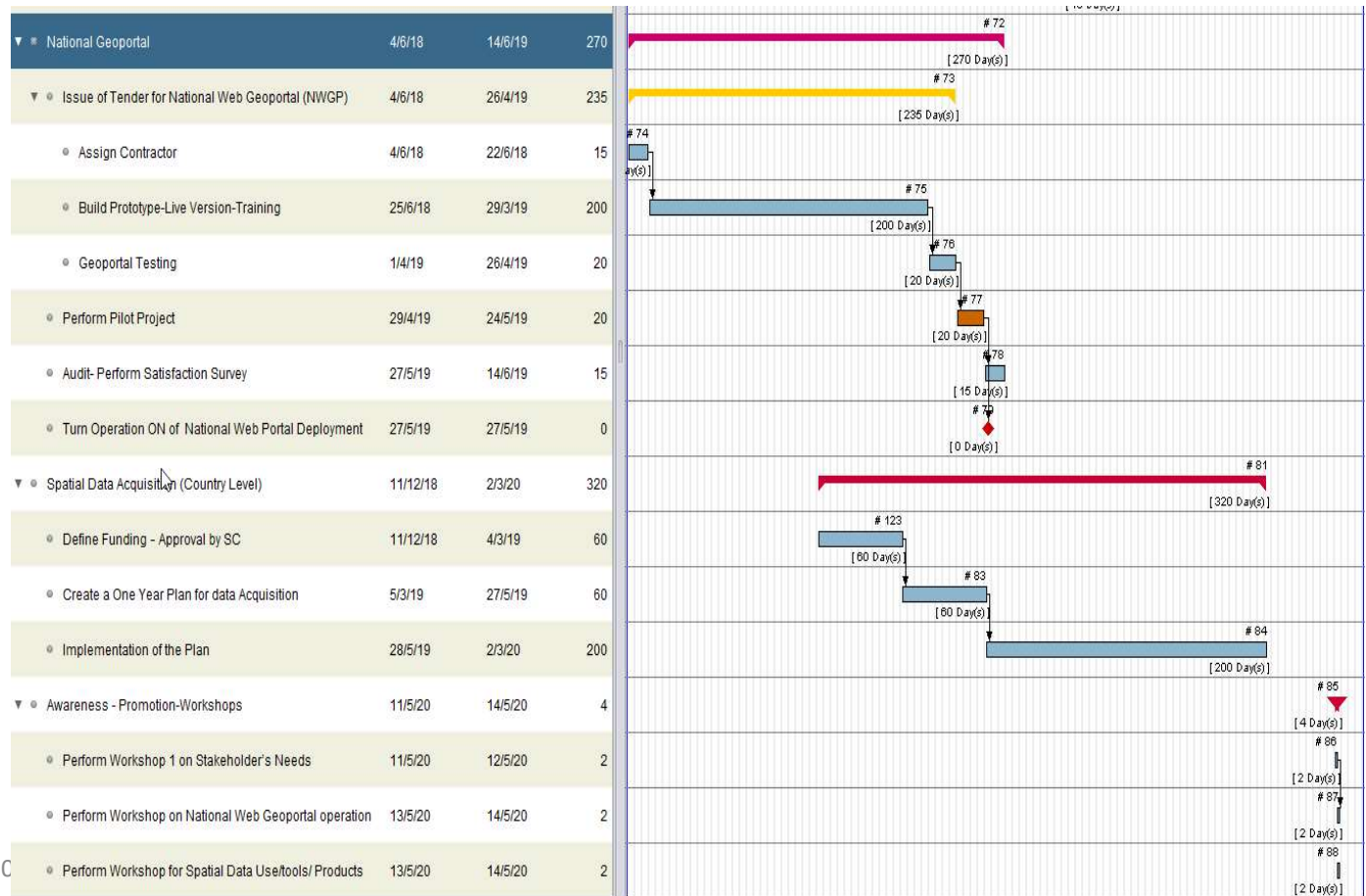
# Cost

- Capital Cost (6,14 + 2,5 hw/sw = €8,64 million)
- Operating & Maintenance Cost = 20% = €1,5 m
- Annual Revenue = €1,1 – 5,1 million

Action	Action Description	Cost (thousands of Euros)
1	Governance – Initial Activities	900
2	Stakeholders	400
3	Legal- Policy Framework	1300
4	Quality – Security	200
5	National Interoperability Framework (NIF)	350
6	Maltese Foundation Spatial Data	500
7	Education – Training - Awareness	250
8	Spatial Data Framework	1100
9	National Geoportal (in procurement via SIntegraM)	600
10	Spatial Data Acquisition (Country Level)	250
11	Awareness - Promotion	300
	TOTAL	6.140



# Time Table (36 months overall, e.g. Education)



# Upcoming Steps

- ❖ [www.malta-nsdi.eu](http://www.malta-nsdi.eu)
- ❖ National Reference Coordinate System contract
- ❖ SIntegraM Dissemination Portal contract
- ❖ Aerial Photography contract
- ❖ UAV extraction data contract
- ❖ Authority Establishment
- ❖ Training
- ❖ Pilot projects/modules contract INSPIRE based (model. Prototype, simulate)
- ❖ .....





Ashley Hili | Prof. Saviour Formosa | Prof. Marc Bonazountas