MINISTRY FOR HEALTH

FMS Foundation for Medical Services

EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA 2007-2013

ERDF 196 Mater Dei Hospital Oncology Centre

Presentation to the EuHPN 2013 Workshop

Budapest - 8th October 2013

Operational Programme I – Cohesion Policy 2007-2013
Investing in Competitiveness for a Better Quality of Life
Project part-financed by the European Union
European Regional Development Fund (ERDF)
Co-financing rate: 85% EU Funds; 15% National Funds

Investing in your future

Project context

INVESTING IN YOUR FUTURE
EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA2007-2013

- **Evidence[1] suggests that, on average, 1400 Maltese residents develop some type or form of cancer annually;**
- **700 deaths, on average, are attributed to cancer.**
- **This is reflective of around 25% of Malta's annual death rate;**
- **The incidence of cancer is set to increase as a consequence of Malta's ageing population;**
- **The life-expectancy of patients living with cancer is equally expected to increase due to earlier and effective diagnosis; improved treatment propositions; and the introduction of contemporary treatment technologies.**

• [1] Source: Dalmas Report

Project context

It is the Government's publicly stated commitment that Malta should make every effort to become a regional reference centre in the treatment of cancer

- **The development of patient-centric services and treatment propositions which are entirely designed around the clinical and non-clinical needs of the patient;**
- **The replacement of existing clinical and non-clinical infrastructure which also includes the replacement of existing outdated equipment with contemporary clinical and non-clinical infrastructure and complimentary technologies;**
- **The implementation of a concerted effort towards apposite capacity building and training of specialised personnel across both the clinical and non-clinical spectrum;**
- **Harmonisation of service-delivery.**

Sir Paul Boffa Hospital

INVESTING IN YOUR FUTURE
EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA2007-2013

- The Department of Oncology at Sir Paul Boffa Hospital is to-date the only facility in Malta providing radiotherapy treatment propositions to patients. This department is equipped with 2 Linear Accelerator machines (LINAC); a single Cobalt Unit; and a single superficial X-Ray (SXR) machine;
- The greater part of chemotherapeutic treatment received by cancer patients in Malta is also administered through this department.

Sir Paul Boffa Hospital

INVESTING IN YOUR FUTURE
EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA 2007-2013

Sir Paul Boffa Hospital

- **Sir Paul Boffa Hospital has 29 oncology beds; and both its building fabric and technology platform are largely outdated. The hospital also hosts GU and Dermatology services;**
- **The construction of the Mater Dei Hospital Oncology Centre shall see the existing Sir Paul Boffa Hospital replaced with a contemporary oncology facility offering more advanced treatment propositions and a more comprehensive care setting.**

Mater Dei Hospital Oncology Centre

INVESTING IN YOUR FUTURE
EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA2007-2013

Concept of 'architecture as medicine' has been applied to the design - the importance of design and architecture to treatment outcomes.

- **An externally attractive impression;**
- **Low-rise care-spaces for maximum ground-contact proximity;**
- **A dignified environment - seclusion and privacy as much as possible;**
- **Comfortable care and treatment spaces in terms of lighting; layout; etc;**
- **Colour and interior design that promotes the healing process (colour is not an afterthought).**

Mater Dei Hospital Oncology Centre

INVESTING IN YOUR FUTURE
EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA2007-2013

Mater Dei Hospital Oncology Centre

INVESTING IN YOUR FUTURE
EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA2007-2013

Mater Dei Hospital Oncology Centre

EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA2007-2013

Mater Dei Hospital Oncology Centre

INVESTING IN YOUR FUTURE
EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA 2007-2013

Mater Dei Hospital Oncology Centre

EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA2007-2013

The Mater Dei Hospital Oncology Centre is designed as an extension to the existing Mater Dei Hospital

- **The underlying design objective is to produce a contemporary, technical & functional layout that in terms of aesthetic massing; architectural grammar; and vocabulary; complements & integrates into the existing architectural character of Mater Dei Hospital (also a development-permit prescription);**

- **Significant benefit would be had by patients through availability of clinical adjacencies i.e., for the reconstitution of chemotherapeutic treatment; for medical-imaging; medical-investigation purposes; pathology services; pharmacy services; AND engineering adjacencies i.e., electrical services.**

Mater Dei Hospital

INVESTING IN YOUR FUTURE
EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA2007-2013

Mater Dei Hospital Oncology Centre

EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA 2007-2013

The development shall emulate existing design features of Mater Dei Hospital

- **Approximately 24,000 SQM in floor-area;**
- **Internal layout(s) focus around four (4) primary functional spaces:**
  - **In-patient areas e.g., wards and patient circulation spaces;**
  - **Out-patient areas e.g., daycare spaces;**
  - **Diagnostic & treatment areas e.g., radiotherapy; treatment-planning; etc; and**
  - **Support-services e.g., plant & equipment.**

Mater Dei Hospital Oncology Centre

INVESTING IN YOUR FUTURE
EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA 2007-2013

Bed capacity - 113 patient spaces

- 82 Inpatient spaces distributed as follows: 33 oncology beds (2 x wards) 16 palliative- care beds; 10 paediatric & adolescent oncology beds; 21 haematology beds; 2 radioisotope;
- 31 Day Care / Outpatient beds / Paediatric Daycare

82 inpatient beds (up from the existing 29 at SPBH) shall accommodate the projected increase in patients due to the increasing incidence of cancer; demographic factors; operational factors and changes in medical practice.

Mater Dei Hospital Oncology Centre

INVESTING IN YOUR FUTURE
EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA2007-2013

Inpatient and treatment spaces shall house

- **Acute oncology services;**
- **Radiotherapy;**
- **Chemotherapy;**
- **Palliative care;**
- **Haematology; and**
- **Paediatric oncology.**

Outpatient & Day Care spaces shall house

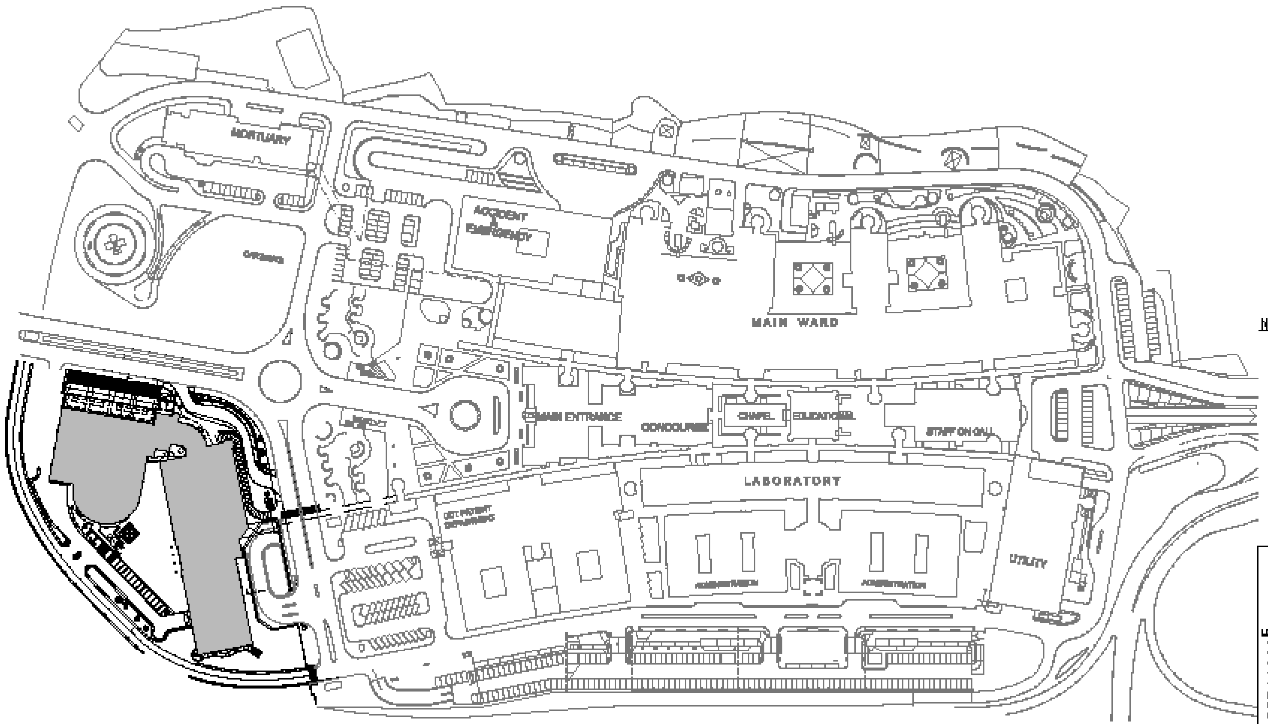
- **Consultation services;**
- **Treatment planning facilities;**
- **Psychosocial / support care services;**
- **Patient and carer facilities;**
- **Staff facilities;**
- **Interdisciplinary spaces; etc.**

Environmental considerations

- Energy recovery on the fresh air ventilation system;
- Photovoltaic Panels - a total of 1,200 SQM flat roof area shall be made available for the installation of PV cells. This is projected to save approximately 140 tons of carbon dioxide per year;
- Rain water collection (white water);
- Collection and treatment of grey waste water;

Environmental considerations

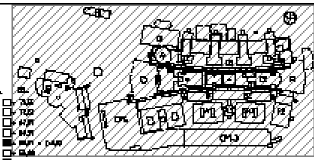
- **Artificial lighting system: making use of day lighting where possible with high efficiency luminaries and control gear;**
- **Controlled ventilation: closed window policy thus limiting air infiltration;**
- **Use of motor speed drives: use shall be made of variable speed drives to be able to set the correct air flows in the air handling units and correct water flow in the systems to minimise duct and pipe transmission losses;**
- **Lifts shall use regenerative braking on all the seven lifts;**
- **Building Management System dedicated BMS together with a Power Network Control System (PNNC) to control all mechanical and electrical systems.**



NOTE

[illegible]

Level 10 = Ground Floor = FFL [illegible]



REV.	NO.	DESCRIPTION	BY	DATE

STATUS

DESIGN DEVELOPMENT & BUILD TENDER

MATER DEI HOSPITAL
ONCOLOGY CENTRE

CLIENTS

MINISTRY OF HEALTH, THE ELDERLY & COMMUNITY CARE

GENERAL LAYOUT
PLAN
LEVEL 10, MODEL

SCALE A1	SCALE A3 1:2000	DATE SEPTEMBER	ONC_10_02 / 303

INVESTING IN YOUR FUTURE
EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA2007-2013

Front elevation

INVESTING IN YOUR FUTURE
EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA2007-2013

Rear elevation

Construction detail

INVESTING IN YOUR FUTURE
EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA2007-2013

Construction detail

INVESTING IN YOUR FUTURE
EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA2007-2013

MINISTRY FOR HEALTH

FMS Foundation for Medical Services

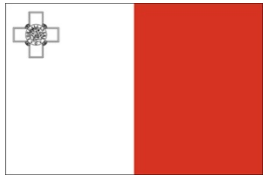
INVESTING IN YOUR FUTURE

EUROPEAN REGIONAL DEVELOPMENT FUND
MALTA2007-2013

Thank you

brian.st-john@gov.mt

www.fms.gov.mt



Operational Programme I – Cohesion Policy 2007-2013
Investing in Competitiveness for a Better Quality of Life
Project part-financed by the European Union
European Regional Development Fund (ERDF)
Co-financing rate: 85% EU Funds; 15% National Funds

Investing in your future