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CORPORATE FINANCE

Socio-economic impact assessment of the SmartCity (Malta) project

Malta Government Technology Investments Limited

8 March 2007

ADVISORY

AUDIT ▪ TAX ▪ ADVISORY

PL7621

Important information relating to this report

This Socio-economic impact assessment ("Impact Assessment") is based on information compiled by the promoters of the SmartCity (Malta) project in the project Master Plan and on information released to the general public or made available to us by the Ministry for Investment, Industry and Information Technology ("MIIIT" or "the Ministry"). It has been prepared at the commencement of the public discussions on the project, and prior to the submission of a formal application by the project promoters to the Malta Environment and Planning Authority. The information contained in this Impact Assessment is selective and is subject to updating, expansion, revision and amendment and has not been independently verified. KPMG does not make any representation or warranty, expressly or implied, as to the accuracy, reasonableness or completeness of the factual information contained in this Impact Assessment, and expressly disclaims any and all liability for, or based on or relating to, any such information contained in, or errors in or omissions from this Impact Assessment or based on or relating to the recipients' use of the Impact Assessment.

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This Impact Assessment includes certain statements, estimates and projections with respect to the anticipated future developments related to the proposed SmartCity (Malta) project. Such statements, estimates and projections reflect various assumptions made by the promoters of the project, by the Ministry for Investment, Industry and Information Technology, or by KPMG concerning anticipated results, which assumptions may or may not prove to be correct. Actual results are likely to be different from those included in the projections of future outcomes since anticipated events frequently do not occur as expected and the variation could be material. No representation is made as to the accuracy of such statements, estimates and projections.

This document sets out a high level socio-economic impact assessment of the proposed SmartCity (Malta) project. This analysis will need to be updated as the project concept and details evolve to take into account the results of additional information. Such additional analysis may need to be carried out following the clarification of diverse aspects of the proposed project plan.

This Impact Assessment takes into account all the information known and made available to KPMG up to the time of its preparation and is therefore current as at 8 March 2007.

Contents

Glossary of terms

BICC	Building Industry Consultative Council
DIC	Dubai Internet City
DMC	Dubai Media City
ERP	Enterprise Resource Planning
GBA	Gross Built Area
GDP	Gross Domestic Product
GNI	Gross National Income
ICT	Information and Communication Technology
MEPA	Malta Environment and Planning Authority
MIIIT	Ministry for Investment, Industry and Information Technology
NSO	National Statistics Office
USD	United States dollars
WSC	Water Services Corporation

Executive summary

Project background

The SmartCity (Malta) project

- The SmartCity (Malta) project is a concept promoted by Tecom Investments. The promoter's concept envisages a new fully-fledged ICT and Media SmartCity, based on the models established in Dubai Internet City.
- The SmartCity (Malta) project is based on a proposed development on the area today known as Ricasoli Industrial Estate and on land adjacent to that site. The project will entail a development comprising office, residential, hotel, leisure, retail and other commercial, and infrastructural facilities.
- The promoters have made a definitive commitment to develop a minimum of 103,000 square metres of office space within 8 years from project commencement. A minimum of 8,000 square metres Gross Built Area (GBA) of office space will be developed within 18 months from commencement date. This will be accompanied by an early (possibly concurrent) start of residential, commercial and hotel development. The promoters are also proposing to develop a minimum GBA of 63,500 square metres of commercial areas and hotels, together with a minimum of 55,000 square metres GBA of residential development. The project will also provide 5,000 to 6,000 car parking spaces, primarily below street level.
- Government has undertaken to improve the site access, providing a new road network and upgraded junctions, upgrading utilities and infrastructure, to facilitate the development of ICT education, the involvement of the immediate localities in the project, and to initiate a number of heritage initiatives.
- The project involves an investment of at least USD300 million (approximately Lm110 million), where the developers are accepting a contractual obligation to deliver a minimum of 5,600 new jobs, 65% of which will be new jobs in the knowledge industry), within eight years from project commencement. It is deemed more likely that the project will ultimately lead to the creation of around 7,600 direct employment opportunities.
- The development is intended to create a flagship development that is locally inspired and well integrated within its historic and natural context, with landscape and buildings designed to the highest international standards.

Terms of reference

- Government has indicated that the project will be debated in Parliament during March 2007. KPMG have been asked to analyse the existing information about the project and to report on its principal socio-economic impacts.

Sources of information

- Our impact assessment has been based on the Master Plan SmartCity (Malta) Project Description Statement, as well as on publicly-available information, including various press releases issued by Government.
- We have based some of our assumptions on benchmark information, and on other data available in the public domain. We have utilised economic data from a proprietary economic model compiled by Prof Lino Briguglio and Ms Nadia Farrugia, who were engaged to form part of the KPMG engagement team.

Information relevant to this report

- This report has been prepared prior to the submission of an application to MEPA. The information set out herein is selective and is subject to updating, revision and amendment, and has not been independently verified.
- All information in this report is current as at the 8th of March 2007 unless otherwise indicated. This report does not include information, data, analysis or comments about any developments arising or documented after that date.
- This report includes certain projections with respect to anticipated future developments related to the project. Such projections reflect assumptions made by the promoters, by MIIIT, or by us concerning anticipated results, which may or may not prove to be correct. Actual results are likely to be different from those included in the projections since anticipated events frequently do not occur as expected and the variation could be material.
- This report has been prepared solely in connection with the terms of reference for this engagement, as set out in our letter dated 8th of January 2007, and should be used as detailed therein. It should not be distributed, quoted or referred to, in whole or in part, without our prior written consent. Our consent for the whole or part of our report to be copied or disclosed to any third party or otherwise quoted or referred to, in whole or in part, is on the basis that we do not owe such third parties any duty of care as a result of giving such consent.

Main assumptions

Main underlying assumptions

- The fundamental assumption underlying our analysis is that the project will be successfully implemented, including:
  - the construction of the components to the stated design philosophy;
  - the promotion of the project to the identified category of tenants; and
  - the recruitment of the identified number of professional, technical and certified persons to meet the employment objectives.
- Throughout our analysis, we have adopted a conservative approach in our conclusions and in the formulation of their underlying assumptions.
- A basic assumption underlying the results set out in this report is that there will be no supply constraints associated with labour and materials. This assumption is applicable in the evaluation of both the development and the operational phase of the project.
- In the development phase, it is assumed that there would be no supply bottlenecks in the construction sector that would lead to delays or to substantial increases in development costs. This assumption would be realistic to the extent that the project would absorb resources freed from the development of other major projects nearing termination.
- In the operational phase of the project, it is assumed that the supply of labour required to fill the vacancies created would be available at salaries as can be reasonably expected to develop in the ICT and service industries in Malta over the coming years.
- We have been given to understand that Tecom already has a number of clients lined up for the first phase of the project. Other potential clients have been referred to the project promoters, which, if all contracted, would take up the full first two phases of the project.
- This is also supported by reference to the significant 'captive market' to which Tecom already have access through the existing DIC and DMC.
- It goes without saying that the interest in the project would increase exponentially when the international launch takes place. It is therefore assumed that the forecasts for demand for the facilities offered by the project, as evidenced by these indicators, are realistic.
- During the operational phase, average income from employment has been estimated on the basis of market benchmarks for remuneration in the IT sector.
- The expected total turnover during the operational phase has been estimated on the basis of employment wage bill projections used in the analysis.
- Total value added was derived on the basis of profit to wage bill ratios in comparable sectors of economic activity calculated from National Accounts data published by the National Statistics Office.
- It is also assumed that the developers will sell the residential segment of the development to private households with a mark up of 25% of costs.
- This report does not consider the potential external effects of the project during the development and operational phases. Regarding environmental externalities, the project will rehabilitate the area and put it to better use.
- Of more relevance are the potential technological externalities which the operation of the project could engender in Malta as an IT hub, with potential spin-offs to other operators in the sector as well as to higher education and research institutions.
- While potentially very relevant, these effects are, at this stage, impossible to estimate quantitatively with any precision, and will not therefore be included in the estimated effects presented in this report.

Impact assessment framework

- Our analysis differentiates between the impacts arising during two distinct project phases, namely:
  - impacts arising from the development phase of the project (assumed to take place between 2007 and 2018); and
  - impacts arising from the operational phase, which will start in 2008 for the knowledge and IT sector and in 2009 for the other service entities. Two scenarios are set out in this analysis reflecting the potential and the minimum contracted employment levels.

Identified impacts – Development phase

Value added

Initial capital expenditure is projected at Lm110 million and the cumulative value added is projected at Lm68 million.

- Cumulative capital expenditure is being projected at around USD300 million inclusive of expenditure on construction and landscaping during the development period
- After adjusting for an import leakage of around Lm52 million, the incremental value added is projected at some Lm53 million during the development phase. The projected value added is expected to increase gradually until it reaches a peak in 2014, subsequently starting to decline.
- The income multiplier is calculated to be 0.64 in relation to initial expenditure, equating to 1.29 times the initial value added at market prices generated by that expenditure. The cumulative value added during the development phase, including the multiplier effect, is projected at Lm68 million.
- The effects of induced ploughed back profits by commercial entities, and the effect of induced Government spending on the economy as a result of increased tax revenue, would increase the multiplier effect, and are likely to increase the impact on GDP.
- On the negative side, a portion of income generated by the project is likely to leak out of the economy if some of the workers engaged in the development phase are expatriates, and/or if the contracting firms are foreign-owned. This would have an effect on the economy's Gross National Income but not on its Gross Domestic Product.

Employment

The project is expected to generate employment for an average of 410 persons over the development period, of which around 338 jobs are directly generated by the development activity with the remainder being generated through inter-industry linkages and multiplier effects.

- The employment generated during the first year of development is expected to be around 306 as a result of the direct effect and around 65 due to the multiplier effects.
- Employment within the development phase of the project is expected to peak during 2014, when it is estimated that there will be around 630 persons directly working on the development of the project and an additional 140 jobs indirectly generated. Employment arising from the development of the project is expected to decline in successive years, as the project nears completion.
- If the project employment replaces the release of resources currently occupied on other major projects, including the Mater Dei hospital, the construction industry should not be expected to overheat.

Identified impacts – Development phase (continued)

Public finances

The direct and multiplier impact on public finances are projected to result in a net cost of Lm1.5 million during each of the first two years of the project, changing into a cumulative positive impact of Lm6.6 million throughout the entire development phase.

- The estimates show that during the first three years of development of this project, the direct impact on Government outlays will be higher than revenue received as a result of expenditure on infrastructure and relocation costs.
- However, during successive years, the increase in Government revenues will be greater than the increase in expenditure related to the construction of the project. Indeed, estimates show the increase in annual Government revenues is expected to average around Lm317,000 during the period 2007 to 2018, if only direct impacts are considered, and around Lm550,000 per year if multiplier effects are also taken into account.
- Throughout this report, the projected economic impact on public finances does not take into consideration the unquantified effects of future dividends payable to Government in respect of its 9% equity holding in the project.

Balance of payments

The external balance is projected to reflect a net cumulative outflow of around Lm67.1 million (inclusive of direct and multiplier impacts) throughout the development period.

- During the development phase of the project, the external balance will be directly affected due to the import of goods required for the construction and finishing of the project, and indirectly affected through the marginal propensity to import, that is, the proportion of any new increment of income that is spent on imports, arising from the increase in domestic value added due to the multiplier process.
- On average, the deficit on the external trade balance will be around Lm4.3 million per year if only direct effects are taken into account, and around Lm5.6 million if multiplier effects are also taken into consideration. The external trade deficit is projected to peak at a level of around Lm12 million during 2014.

Identified impacts – Operational phase

Gross Domestic Product

Under the potential scenario, the direct impact on GDP is expected to increase from around Lm10.4 million in 2008, the first year of operation, to almost Lm230 million, at current prices, in 2018. Under the contracted scenario, the direct impact on GDP is expected to increase from almost Lm7.7 million in 2008 to around Lm169 million, at current prices, in 2018.

- The projected direct impact on GDP is derived from gross wages, salaries and profits of commercial entities and from sale of residential property.
- As in the case of the development phase, the multiplier effects were calculated on the basis of a Keynesian type multiplier, which takes into account the marginal consumption, tax and import propensities explained above. The direct and multiplied domestic value added of the operational phase of the project are mainly generated from IT operations.
- The full effects, that is direct and the induced effects, of the project under the potential scenario will increase to around Lm296 million in 2018, at current prices.
- Under the contracted scenario, the full effects, that is direct and the induced effects, of the project will increase to around Lm218 million in 2018, at current prices, Lm78 million less that under the potential scenario.
- As was the case in the Development Phase, the effect of induced ploughed back profits by commercial entities and the effect of induced Government spending on the economy, may lead to a super-multiplier effect. These are not considered in this analysis.

Employment

The direct and multiplier employment impact is projected at a cumulative net increase of over 10,500 jobs by 2018 under the potential scenario, or over 7,700 jobs during the same period under the contracted scenario.

- The project is expected to employ up to 7,600 workers by 2018 under the potential scenario.
- Employment is expected to increase gradually up till 2014, after which it will start to stabilise. In addition to direct employment, there will be an element of indirect job creation, as a result of additional activity generated by the project through the multiplier effects, in the same manner described with regard to the development phase. Thus, in total, the operational phase of the SmartCity (Malta) project is expected to generate or support over 10,500 jobs by 2018 under the potential scenario.
- Under the contracted scenario, the project is expected to employ up to 5,600 workers by 2018, 2,000 less than under the potential scenario. Employment is expected to increase gradually up till 2014, after which it will start to stabilise. If jobs created indirectly are also considered, in total, the operational phase of the project under the contracted scenario is expected to generate or support over 7,700 jobs by 2018.

Identified impacts – Operational phase (continued)

Public finances

Government revenue under the potential scenario, inclusive of direct and multiplier effects, is projected to increase by Lm2.5 million in 2008, rising to an increase of around Lm56.9 million by 2018 at current prices. Under the contracted scenario, the increase in Government revenue is projected at Lm1.9 million in 2008, rising to Lm41.9 million by 2018 at current prices.

- The operational phase of the project will result in increased Government revenue, arising from income tax on the wages and salaries earned by those employed by SmartCity (Malta) commercial establishments and by tax on profits and on local expenditure. Furthermore, Government revenue is expected to be impacted by duty on documents applicable on the sale of the real estate associated with the project. This direct effect under the potential scenario is expected to result in additional Government revenue of about Lm1.5 million in 2008, which is expected to increase gradually to Lm33.5 million by 2018. When the multiplier effects are taken into consideration, the increase in Government revenue is estimated at around Lm2.5 million in 2008 and is expected to increase to around Lm56.9 million by 2018 at current prices.
- Under the contracted scenario, Government revenue is expected to be lower due to less income tax collected on the wages and salaries earned by those employed by SmartCity (Malta) commercial establishments, as well as lower tax collected on profits and on local expenditure. The direct effect is expected to result in additional Government revenue of about Lm1.1 million in 2008, which is expected to increase gradually to Lm24.7 million by 2018. When the multiplier effects are taken into consideration, the increase in Government revenue is estimated at around Lm1.9 million in 2008 and is expected to increase to around Lm42 million by 2018 at current prices.

Balance of payments

The direct and multiplier impact on the external trade balance is projected to increase from a net positive impact of Lm6 million in 2008 to Lm133 million in 2018 under the potential scenario. Under the contracted scenario, the beneficial effect projected for 2008 is of Lm4.5 million, rising to Lm98.3 million in 2018 at current prices.

- The direct impact on the external trade balance under the potential scenario is projected to be beneficial, in that this phase is expected to generate more exports than imports. The direct net effect on the external trade balance by the project is expected to be positive and will stand at around Lm9 million in 2008 and increase to around Lm200 million by 2018 at current prices. Taking multiplier effects into consideration, one would expect imports to increase in other sectors of the economy, and thus depress the positive external trade balance. This would imply that in 2008, the net external trade balance would increase by Lm6 million as a result of direct and indirect effects and increase to around Lm133 million in 2018 at current prices.
- Under the contracted scenario, the direct net effect on the external trade balance by the project is expected to stand at around Lm6.7 million in 2008, increasing to around Lm147.2 million by 2018 at current prices. Taking multiplier effects into consideration, the net external trade balance would increase by Lm4.5 million as a result of direct and indirect effects and stand at around Lm98.3 million in 2018 at current prices.

Identified impacts – aggregate of the development and operational phases

Potential scenario

Projected aggregate effect

- The final impact on GDP relative to baseline is also estimated, on the assumption that GDP will have increased by 5.5% per annum at current market prices in the absence of the SmartCity (Malta) project.
- Considering only the direct effects, on the assumption that the multiplier effects would in the absence of the project be generated through other activities, it is estimated that the project will have a strong relative impact on the Maltese economy, starting from 0.2% of GDP in 2007, peaking at 7.1% in 2014 and settling at about 6.5% by 2018.
- In absolute terms the aggregate impact on GDP is projected to increase from around Lm4.3 million in 2007 to around Lm297.1 million in 2018 at current prices.
- The impact on employment is likewise expected to be significant, with the project generating or supporting a peak of 7,659 jobs by way of direct impact by 2018, and a total exceeding 10,600 jobs considering also the multiplier effects. The direct job creation effects are likely to amount between 4.5% and 5% of the entire labour force.
- The project is also expected to have significant positive impacts on Government finances and the external trade balance. The direct effects of the project are expected to peak at 1.0% and 5.6% of GDP respectively by 2018.

Contracted scenario

Projected aggregate effect

- It is estimated that the relative impact of the project on the Maltese economy will start at around 0.2% in 2007, peaking at 5.3% in 2014 and settling at about 4.8% by 2018.
- In absolute terms the aggregate impact on GDP under this scenario is projected to increase from around Lm4.3 million in 2007 to around Lm219.4 million in 2018 at current prices.
- Under the contracted scenario the project is expected to generate a peak of 5,658 jobs by way of direct impact by 2018, and a total exceeding 7,800 jobs considering also the multiplier effects.
- The project is also expected to have significant positive impacts on Government finances and on the external trade balance of the economy. The direct effects of the project in these instances are by 2018 expected to peak at 0.7% and 4.1% of GDP respectively.

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Other benefits and costs

Public open spaces	• Around 33% of the site (ca. 116,800 square metres) shall be open public space, entailing a capital investment of USD10 million, and being accessible to the public, on a 24x7 basis, and free of any charge. • The SmartCity operator shall be responsible for the maintenance and upkeep of the full area (including roads, landscaping, street lighting and waste management) at its own expense. Whilst still unquantified, this annual expense is expected to be material.
Activities of a social nature	• The project developers are proposing to set up a programme of activities targeting the immediate locality that are primarily of a social nature and that will be undertaken jointly with MIIIT. This programme includes: – Educational programmes for drug-rehabilitation clients; – Refurbishment of the Xghajra promenade; – The opening and operation of a state-of-the-art ICT Training Centre in Kalkara to serve the residents of the localities of Cottonera and Xghajra; – The provision of broadband packages at preferential rates to residents of the localities of Xghajra and Kalkara; – The potential partnering with Government in the restoration of Fort St Rocco.
Spill-over effect on surrounding localities	• From a socio-economic perspective, it is noted that the general upgrading of the site is likely to have a spill-over effect onto the surrounding localities, through an increase in traffic and consequent retail opportunities as well as through the possible effects on real estate values.
Environmental consequences during development	• From a negative point of view, it is also noted that the project will entail a significant level of construction activity over a considerable time span. While the developers are taking this factor into consideration in the formulation of a sustainability framework, the inevitable consequences (including traffic, noise and waste disposal) may still be significant.
Branding benefit through international promotion	• We have been given to understand that the brand investment is expected to be highly significant. At a qualitative level, it is reasonable to expect that Malta will gain considerable international exposure through SmartCity's promotion.

Objectives definition

Background and terms of reference

Background

- Dubai Internet City
  - The Dubai Internet City (DIC) houses some 850 firms, including global firms like GE, Intel, Samsung and Huawei, who mainly use it as a marketing and sales hub for the Middle East, Africa and South Asia. A small amount of software development also takes place there. DIC is also looking at setting up similar smart cities in other countries after its success in Dubai.
  - DIC highlights include:
    - World class technical infrastructure: high bandwidth, low cost telecom infrastructure and secure, high speed support infrastructure;
    - State-of-the-art urban infrastructure: cost competitive, flexible office space and world class housing, medical and education facilities;
    - Access to talent pool: large pool of high skill, low cost knowledge workers;
    - Straight-forward laws and regulations: easy and fast company registration laws, simple immigration process and straight-forward legal procedures;
    - Supportive environment: Government backed e-business initiatives, business incubators, venture capital funds and e-education programmes;
    - Gateway to markets: access to regional markets in Middle East, North Africa, Indian Subcontinent and Confederation of Independent States (C.I.S.).
  - Demand for space at Dubai Internet City is apparently brisk, as companies within the city were expanding and new companies wanted to join. Demand reportedly exceeds supply by an average of 120,000 square feet a year. Future additions to office space in Dubai Internet City, in which nearly USD800 million have been invested, will be carried out by independent national developers, who will then hand over the buildings to DIC to lease and manage (Gulf News Business Section, August 09, 2006).
- SmartCity (Malta)
  - During March 2006, Government announced that the framework discussions with Tecom Investments of Dubai on the setting up a new 'SmartCity (Malta)' in the area today known as the Ricasoli Industrial Estate and in land adjacent to that site, were in an advanced stage. More recently (21 January 2007), the Ministry (MIIIT) confirmed the successful conclusion of negotiations with Tecom Investments on the project.
  - 'SmartCity (Malta)' is projected to be the largest ever ICT private sector and foreign direct investment project as well as the largest ever new source of knowledge-based jobs to be secured by Malta. Tecom's agreement with the Maltese Government to establish SmartCity (Malta) reportedly implies an investment of approximately USD300 million over an 8 year period.
  - The project will include a new full-fledged ICT and Media Smart City based on the models developed by the same organisation in Dubai. This project will be accompanied by state-of-the-art use of the site, with the development of hotel and other commercial and support activities to help attract knowledge-based operations to the site. This is expected to create a cluster environment to service tenants in the site in a cost-effective and efficient manner.
  - Over an eight-year period, 'SmartCity (Malta)' is contractually bound to create a minimum of 5,600 new jobs, around 65% of which will be new jobs in Malta's knowledge-industry. The remaining jobs will be created in areas such as administration, hospitality, retail, maintenance, security and logistics. Based on information made available to MIIIT by the project promoters, the projected employment may amount to 7,600 new jobs, of which around 5,600 positions will be taken up by ICT professionals.

Terms of reference

- Government has indicated that the final agreement on the SmartCity (Malta) project is expected to be debated in Parliament in February 2007. In preparation for these discussions, the Ministry has asked us to assess and amplify on the project's social and economic implications.

Structure of this report

Scope of the study

- We have been engaged, through our letter of engagement dated 8 January 2007, to carry out a socio-economic impact assessment of the SmartCity (Malta) project. More specifically, the tasks which you required us to undertake in this assignment are as set out below:
  - to compile an impact assessment report, emphasising the socio-economic dimension of the SmartCity (Malta) project;
  - to compile an executive summary of the impact assessment report; and
  - to organise and deliver a presentation to representatives of the local press setting out the main findings of the impact assessment report.
- This report covers the first two tasks as outlined above.

Sources of information

- This socio-economic impact assessment has been based on information compiled from the following sources:
  - Master Plan SmartCity (Malta), Project Description Statement;
  - publicly available information on the SmartCity (Malta) project, including various press releases issued by the Ministry;
  - relevant benchmark data for the assessment of the socio and economic impacts;
  - any other relevant data available in the public domain; and
  - economic analysis, based on a proprietary economic model, carried out by Prof Lino Briguglio and Ms Nadia Farrugia who were engaged, as set out in our letter of engagement, to form part of our engagement team.

Reporting date

- All information in this report is current as at the 8th of March 2007 unless otherwise indicated. This report does not include information, data, analysis or comments about any developments arising or documented after that date.

Use of our deliverables

- This report has been prepared solely in connection with the terms of reference for this engagement, as set out in our letter dated 8 January 2007, and should be used as detailed above. It should not be distributed, quoted or referred to, in whole or in part, without our prior written consent. Our consent for the whole or part of our report to be copied or disclosed to any third party or otherwise quoted or referred to, in whole or in part, is on the basis that we do not owe such third parties any duty of care as a result of giving such consent.

Structure of this report

- As agreed in our terms of reference for this engagement, the structure of this report is based on the "Guidance on the methodology for carrying out the Cost-Benefit Analysis – Working Document No 4" as prepared for the Directorate General Regional Policy of the European Commission for the programming period 2007 – 2013. The main focus of the following chapters of this report is as follows:
  - a brief summary of the overall project objectives;
  - an overview of the main trends that may reflect on the direction of the project and its overall feasibility;
  - a socio-economic analysis of the project, identifying socio-economic benefits versus socio-economic costs;
  - an overall sensitivity and risk analysis of the economic and financial feasibility study to externalities and uncertainties; and
  - a conclusion summarising the main impacts.

Final report

- This report constitutes our deliverable within the context of the terms of our engagement. No reliance should be placed on any draft reports or other documents and on any previous verbal representations as such documentation and representations do not constitute our definitive opinions and conclusions.

Identification of the project

Background to the project

The economic context

- "Malta's attractiveness as a competitive economy and a country with a high standard of living and quality of life is determined by the 'status quo' in a number of sectors, notably transport, E-Society, the environment, energy and urban regeneration. Malta's human resource development is critical to its competitiveness given that human resources are the country's only resource. The extent to which economic progress contributes effectively to social cohesion will have a deep impact on competitiveness and sustainable growth in the long term." (Source: National Strategic Reference Framework – Malta 2007-2013)
- The Maltese economy has, over past decades, experienced significant restructuring. The composition of Gross Domestic Product (GDP) has moved away from a dominating reliance on manufacturing activity to highlight the increasing importance of service activities. Moreover, Malta's dependence on the tourism industry is being diversified through the growth of financial services and other knowledge industries.
- Malta's national strategic direction for Information and Communication Technology (ICT) builds upon the concept of developing ICT into a major pillar of Maltese economic activity. Malta's ICT strategy for 2003-2006 already placed among its strategic objectives the twin goals of promoting Malta into a regional centre of excellence in ICT and of Internationalising the Maltese ICT industry to compete in the global environment.
- The ICT sector in Malta has been described as one of the fastest-growing sectors at the moment.
- The Ministry for Investment, Industry and Information Technology has been supporting the emergence and growth of the local ICT economy through a number of initiatives. One such initiative is a public-private partnership (myPotential) which is providing training on internationally renowned ICT-industry certifications including those from CISCO, Microsoft and Oracle to increase the number of ICT graduates and meet the demand from industry.

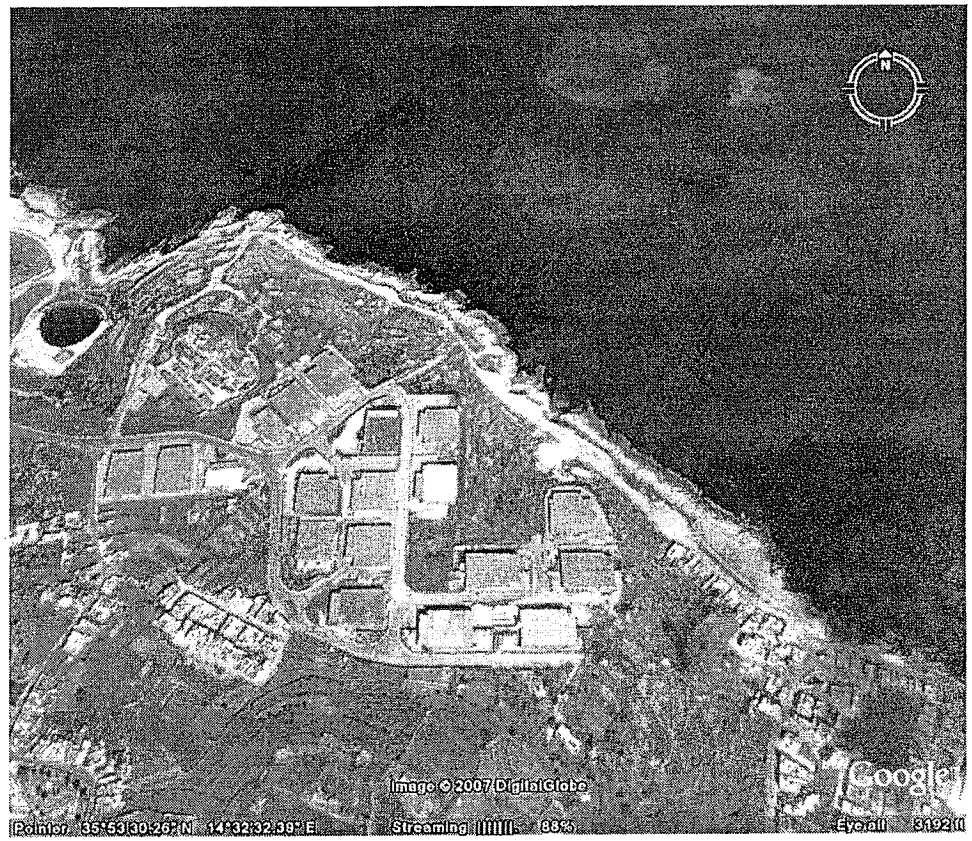
Background to the project promoters

- Seven years ago the Maltese Government launched its vision to transform Malta into an ICT Centre of Excellence for the region. MIIIT today considers the SmartCity@ Malta project to be an important step in firmly establishing Malta on the international map in this industry.
- The SmartCity project was initiated by Government with the aim of capitalising on Malta's ICT strengths and on the international respect Malta already commands in this sector. The Maltese Government has argued that the long-term investment required by the project aims to leverage the economic transformation of Malta.
- In April 2006, the Government of Malta signed the Heads of Agreement with the project promoters to set up SmartCity (Malta).
- The project is a concept promoted by Tecom Investments, a subsidiary of Dubai holding. Tecom Investments develops and manages businesses that support the growth of knowledge based industries. Tecom brands include Dubai Internet City (Oct 2000), Dubai Media City (Jan 2001), and Knowledge Village (Oct 2003). Tecom's strategy is to become a preferred business campus provider to IT companies internationally and to provide an ideal environment and infrastructure that contributes to the development of IT/ITES in these markets.

Objectives

Project objectives

- The Ministry for Investment, Industry and Information Technology has identified, during negotiations of the Smart City project, four main visionary objectives:
  - To create a world class ICT / Media park providing a self-contained environment for the knowledge-based community, including residential, retail, entertainment, education and associated essential services. SmartCity Malta will transform the current Ricasoli Industrial Estate into a state of the art ICT and Media City based on the models of Dubai Internet City and Dubai Media City devised, owned and operated by Tecom Investments. Through, this development, the project provides the opportunity to regenerate a manifestly derelict site.
  - To develop the international brand identity of SmartCity in Europe by utilising the locational advantages of Malta with the support of the Maltese Government and by providing world class infrastructure to meet the requirements of global and emerging local companies. The Malta facility is expected to be the first European outpost for Dubai Internet City and Dubai Media City and is expected that global ICT and media players will be able to focus their European operations and business through SmartCity(Malta). Furthermore, through this project the Maltese Government aims to earn a sharper image of partnership with private investment particularly, but not exclusively, in the knowledge sector.
  - To directly contribute to the transformation of the Maltese economy into a knowledge-based economy by developing ICT and media sectors in Malta. In fact, this is the largest foreign investment initiative to be undertaken in Malta generating a guaranteed minimum of 5,600 jobs, 65% of which are concentrated in the private sector in the knowledge-based environment. On the other hand, the remaining jobs (35%) will be created in areas such as administration, hospitality, retail, maintenance, security and logistics. Thus, the project will indirectly bring about a substantial boost to Malta's construction, hospitality, maritime, services and retail activities.



Source: Google Earth

  - To create a flagship development, that is locally inspired and well integrated within its historic and natural context with landscape and buildings designed to the highest international standards of commercial development.

Characteristics

Project uses

- The Project Description Statement of the SmartCity (Malta) Master Plan states that the project will be comprised of the following complementary uses:
  - ICT and media business park office space;
  - open spaces to be enjoyed by the wider community;
  - hotels and related short stay facilities;
  - retail and associated commercial floor space;
  - residential facilities (apartments and villas);
  - resort-based leisure facilities (swimming pools, tennis courts, gymnasium / fitness facilities);
  - services, utilities, roads, access ways and parking related to the above.

Project characteristics

- Most of the planned site development is focussed around a lagoon located in the natural lowest point of the site. The lagoon is envisaged to be the public heart of the project, the focal point of a concentric and radial street organisation.
- The key components of the identity and orientation of SmartCity comprise:
  - a landscaped boulevard linking SmartCity to Malta International Airport, Valletta and other key locations which will be designed and delivered by the Government of Malta;
  - a landscaped arrival gateway;
  - urban open spaces within the development;
  - new links to the surrounding areas of Zabbar, Xghajra, Kalkara and Fort St. Ricasoli;
  - a new coastal path;
  - a lagoon surrounded by apartments, hotels, retail and leisure activities;
  - underground parking, along with on-street parking for occasional use.
- All buildings in the project are expected to be medium or low rise, not exceeding 10 storeys.
- The area surrounding Fort St. Rocco will comprise:
  - business hotel and conference centre;
  - private attached dwellings on two floors;
  - individual villas.
- The Business quarter will comprise office space developments of an average height of 6 storeys.
- The Xghajra-side residential area is envisaged to be characterised by the following features:
  - buildings hidden in the landscape;
  - main access from Triq San Leonard;
  - a winding, slow and pedestrian friendly road to link areas of San Pietru / Xghajra to SmartCity;
  - a community centre, with shops and leisure facilities;
  - private semi-detached villas on two floors;
  - detached villas.
- The public spaces will comprise 33% of the overall project land allocation and will include:
  - the principle boulevards, avenues, pedestrian axis and squares;
  - the central lagoon;
  - the coastal route and the vista points at the end of the cliff;

- a belt of open land surrounding Fort St. Rocco;
- a green route linking the southern residential area and exiting settlements with SmartCity.

- The common spaces and landscape are generally envisaged to be free from road traffic and parking, to be landscaped and open to common use.

Sustainability framework

- The proposals for SmartCity aim to achieve self-containment thereby minimising the need to travel both internationally and within Malta, using space efficiently, and creating a balanced community. The following principles will be adopted:
  - Energy:
    - the application of renewable energy sources such as solar heating and photovoltaic panels;
    - energy-efficient buildings with green roofs and green facades;
    - maximising the use of natural light and natural ventilation;
  - Building materials:
    - use of locally sourced materials, including sandstone recycled from demolition within the site;
    - reuse of existing road bases and foundations, and reuse of local rocks and rubble;
    - use of renewable sources and materials that can easily be replenished such as wood, clay and sand;
  - Water:
    - sustainable methods to source drinking water and water for irrigation;
    - run-off water harvesting and treating of grey water for irrigation;
    - reducing water consumption through use of low-flow fittings;
  - Transportation:
    - A mixture of project uses to reduce the need to travel;
    - A green travel plan to manage traffic;
    - Maximising the opportunities for walking, cycling and use of public transport;
  - Local context:
    - Development form in relation to the characteristics of the surrounding area
      - Sensitive to the setting of local heritage;
      - Sensitive to areas of scientific importance and areas of ecological/geological importance;
      - Creation of new habitats, including wildlife corridors;
  - Social:
    - Creation of new community infrastructure on site, including health, education and recreational facilities;
    - Create good access to nearby communities such as Kalkara, Xghajra and the integration with Fort St. Rocco;
  - Economic:
    - Creation of a substantial number of jobs;
    - Provide business start-up facilities, facilitating local business enterprise and investment;
    - Creation of a new "hub" for media and high-tech industries.

Project components

The project promoters have specified the following components of the SmartCity (Malta) project in the Project Description Statement of the project Master Plan:

- Office development (ICT and Media)
  - The promoters have made a definitive commitment to develop a minimum of 103,000 square metres of office space within 8 years from the project commencement date.
- Open space
  - This component comprises the central lagoon, the boulevards, avenues, pedestrian axis and squares, the coastal route, a belt of open land surrounding Fort St. Rocco, and a green route linking the southern residential area and exiting settlements with SmartCity
- Commercial development
  - Hospitality and serviced apartments. This segment of the project may comprise up to four hotels and a number of serviced apartments for rent.
    - The larger hotel is envisaged to be a high quality facility supported by a full range of business and conference facilities, leisure and bars and restaurants. This hotel is intended mainly to target business users but may also target leisure users building on cultural assets within the site.
    - A second hotel, overlooking the sea, will be a small scale "boutique hotel", primarily aimed at the upper end of the business users.
    - Up to two other hotels may be developed and incorporated within the "Commercial" segment of the project.
  - Retail facilities, cafes and restaurants, and community facilities.
  - Utility plants for power, water, and telecommunication installations and switch-gear.
  - Car parking (approximately 4,500 spaces) is primarily provided for below street level. The Master Plan also makes provision for a limited amount of on-street parking.
- Residential development
  - The Master Plan envisages a variety (type and size) of residential developments in response to market needs.
- The proposed project land use can therefore be summarised as follows:

Land use	Minimum Gross Built Area (GBA)		Maximum Gross Built Area (GBA)	
	%	Sq. m.	%	Sq. m.
ICT / Media business park	46.5%	103,000	46.8%	156,500
Public spaces	-	-	-	-
Commercial	28.7%	63,500	26.9%	90,000
Lodging	24.8%	55,000	26.3%	88,000
Total	100.0%	221,500	100.0%	334,500

Land use	Land allocation		Maximum coverage
	%	Sq. m.	%
ICT / Media business park	19.3%	68,595	75.0%
Public spaces	32.8%	116,802	-
Commercial	27.7%	98,563	50.0%
Lodging	20.3%	72,268	50.0%
Total	100.0%	356,228	

- Approximately 75% of the proposed project GBA will be used for employment-generating activities.

Project phasing

Implementation (Indicative Phasing)

- The project Master Plan sets out the following schedules, illustrating the proposed indicative phasing of the project implementation plan:

Offices (ICT/Media)	Development at end of each stage		Construction Mobilisation	Construction Period
Phase	**Min GBA**	**Max GBA**	**months from agreement**	**months**
Phase 1	8,000	10,400	0 - 18	18
Phase 2	12,000	15,600	6 - 36	30
Phase 3	20,000	25,000	24 - 54	30
Phase 4	20,000	25,000	36 - 66	30
Phase 5	20,000	25,000	54 - 84	30
Phase 6	20,000	25,000	66 - 96	30
Phase 7	3,000*	30,500	84 - 168	84
Total	103,000	156,500		

** to be completed in 84-96 months from agreement.*

Commercial and Hotels	Development at end of each stage		Construction Mobilisation	Construction Period
Phase	**Min GBA**	**Max GBA**	**months from agreement**	**months**
Phase 1	15,875	22,500	24 - 84	60
Phase 2	15,875	22,500	48 - 108	60
Phase 3	15,875	22,500	60 - 120	60
Phase 4	15,875	22,500	84 - 144	60
Total	63,500	90,000		

Residential	Development at end of each stage		Construction Mobilisation	Construction Period
Phase	**Min GBA**	**Max GBA**	**months from agreement**	**months**
Phase 1	8,250	17,600	0 - 48	48
Phase 2	8,250	17,600	24 - 84	60
Phase 3	8,250	17,600	48 - 108	60
Phase 4	30,250	35,200	72 - 132	60
Total	55,000	88,000		

Phasing commitments

- The developers' commitments with regard to the project phasing, as extracted from the project Master Plan, are set out below:
  - Initial Phases
    - To develop at least 8,000 sq.m. GBA of office space within the ICT and Media business area by no later than 18 months from the commencement date. This development will be to the South East of the site and will be temporarily served by the coastal road from Xghajra.
    - Concurrent with this development will be the creation of a square fronting the building and delivery of adequate utility services.
    - Mixed use development will be brought forward providing the opportunity to create flexible working and living space, as well as a range of unit sizes as investment momentum, social programmes and office support facilities can be provided. These will be delivered through an early (possibly concurrent start) of residential and commercial and hotel phases.
  - Later Phases
    - To bring forward at least an additional 95,000 sq.m. GBA of offices (ICT and Media) by not later than 96 months from the commencement date. Further and additional office development will be completed within 14 years of the commencement date.