

The Internet is the medium which dragged globalisation from the corporate theory whiteboard to the factory shop-floor, livingroom and classroom, creating a virtual community of 1.24 billion people. This is expected to grow to more than 1.5 billion by 2010. The Internet has changed Malta too, with the government, the public administration, organisations, businesses and individuals going out of their way of harness the benefits of information and communication technology in general. The benefits are tangible.

Now the government's vision for 2010 is that Malta will become The Smart Island, one of the top 10 information societies in the world. The application of information and communication technology will be ubiquitous; the Internet will be a social equaliser and the ICT industry will be a main pillar of the economy.

The new national ICT strategy, The Smart Islar is a vision for a country where information and communication technolo not a mere information a communications tool but primary vehicle for puttir

right social inequality, disadvantages and disabilities, while improving the quality of life of those who live here and those who are staying for a short while. Technology is not an end in itself but the unique and timely means to this laudable end. We have already achieved excellent results, but must stop up the gaps in connecting society. Information and communications technology helps us overcome the drawbacks of being a small archipelago with few geographical resources. We are fortunate in that our main natural resource is the high quality of the workforce, and this helps us in a situation where jobs in manufacturing are migrating to those parts of the world where pay is the poorest. We are taking information and communications technology and translating it into better jobs, higher salaries, greater added value - which is a bonus for GDP - and, because increased wealth creates employment across the board, more and more jobs in other fields.

The Smart Island strategy has not been developed in a vacuum. It picks up where the 2004 National ICT Strategy

> left off. It maps out the path to making Maltese society fully Internetsavvy and aware of all ICT options, with neither age nor socio-economic background being a barrier to knowledge and accessibility.





hen the government set in train the 2004-2006 National ICT Strategy, with challenging targets for Malta, a few said that we were too ambitious. Now the results speak for themselves. They are described further along, under the heading State of Play. Wherever the name 'Malta' is used in this document, it is as the name of the country, and not of the main island, and should be taken to include Gozo.

Back then, we reiterated the urgency of avoiding complacency. The world was moving on. Europe was moving on. We shouldn't be moving with it, but ahead of it - and in this, our compact geography and small population could be used as a comparative advantage. Today, there are many countries and regions competing for the descriptions of ICT hub and of ICT centre of excellence. Despite the current impressive economic growth, if we want to maintain our current status in the top league we need to remain relevant, and this demands foresight, ability and visionary leadership.

Now that the basics are more are in place, we can really work towards making information and communication technology a social equaliser. Without a specific plan and a determined effort, it will become a social divider instead. Yet inherent in this technology are all the factors for the very opposite: it is an increasingly effective tool in balancing otherwise irreconcilable social inequalities.

Manufacturing in Western Europe has drawn to its economic close. We have felt the effects here, with down-sizing and factories relocating to places where wages are poor. By turning this country into a vibrant ICT-led economy, we will continue to lead the economic upturn with smarter jobs and better pay. Success depends on the careful nurturing of people, our most precious resource.

This strategy must be considered in the context of the government's vision for 2015: Malta as a regional ICT services hub alongside healthcare, education, financial services, logistics and maritime services.

We will be working flat out to achieve this objective.

# shouldn't moving with the world, but ahead of it"

### **Austin Gatt**

Minister for Investment, Industry and Information Technology





### The information society

When we set up the eMalta Commission in 2001, Malta was a very different place to what it is today. In 2000, only 28% of Maltese people of all ages had a mobile phone. This year, that figure is 87% and rising every day. In 2002, only 38% of Maltese households had even one desktop computer. Now that figure is above 70% and many households are moving to a situation where the personal computer is just that, with more than one per household.

Percentage	Indicator	Source
86.6%	Mobile subscriptions as a percentage of population	NSO, 2007
70.3%	Percentage of households with a PC	NSO/MIIIT, 2007
45.9%	Percentage of individuals (18+) using the computer frequently	NSO/MIIIT, 2007
22	Internet subscriptions per 100 persons, not households	NSO, 2007
63%	Individuals with access to the Internet	NSO/MIIIT, 2007
80% (of 63%)	Individuals with access to the Internet with a broadband connection	NSO/MIIIT, 2007

he most impressive leap was registered in Internet subscriptions. In 2000, the number of Internet subscriptions per 100 persons - it is important to remember that households and organisations contain several individuals, and that one subscription serves an entire household or organisation - stood at 9.4. Most of those were narrow-band connections. This year, the figure is 22, and most of those use broadband connections.

Even those who do not have Internet access at home or at work can still use it. There is now an Internet centre in every local council area, and a WiFi network in the offices of every local council, which can be used by the public. There are eight community technology learning centres which teach people what they need to know. We have used the myWeb programme to introduce more than 11,000 people to the big, wide world of the Internet, with computer laboratories in state schools and by teaching those who did not have the chance to learn about information technology at school. We teamed up with Microsoft to

provide schoolchildren and students in higher education with the latest and most advanced products and technology at extremely low prices. A remarkable 50,000 children, young people and students of all ages took up this offer.

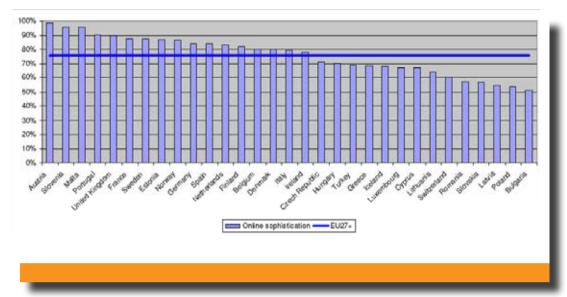
### E-government

E-government is the name given to the manner in which interaction between the public service and the citizen takes place via the Internet. It is a reflection - or otherwise - of the wider use of Internet and information technology in that particular society as a whole. This is one area in which Malta is leading the field in Europe.

The consulting firm
Cap Gemini, when
commenting about
e-government in
Europe in its 2006
report for the EU
Commission, wrote:
"Malta has achieved
the most outstanding
progress ever recorded."

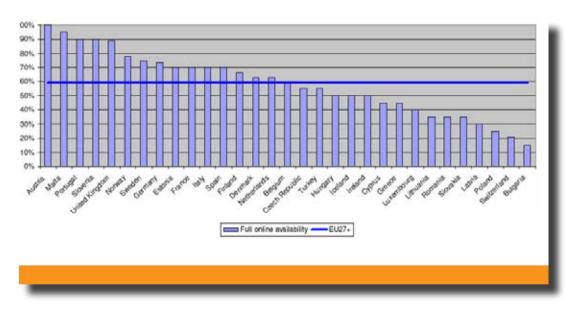




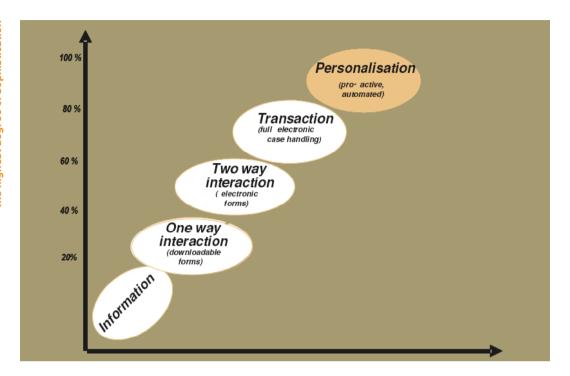


Figures 1 and 2 show that Malta was ranked second among all EU member states in terms of sophistication of e-government services and their availability. The most frequently used administrative public services are now available on-line, including the payment of licences, registration, checking of documents, and so on.





More than 60 such services - 90% of those between government and citizen or government and business - now take place by on-line transaction. This has been made possible by a central electronic identity framework which offers a secure, single sign-on authentication mechanism to every person. The number of transactions over the e-government electronic payment gateway is expected to reach nearly a quarter of a million in 2007.



	2003	2004	2005	2006	2007
Transactions	7,593	15,564	47,955	133,678	249,3121

Table 2: Total number of transactions on e-government payment gateway (MITTS Ltd, 2007)

### ICT education

Huge investments were made in all state schools, to ensure that children from every background are introduced to the use of computers as early in their lives as possible. More than 6,800 ECDL programmes have been provided over three years. We have surpassed our own targets.

	2002/3	2006/7	2007/8
New entrants in ICT programmes	392	1091	1336
ICT programmes graduates	288	607	-
ICT student population	712	1311	2269

Table 3: MCAST and university ICT student statistics (University, MCAST, PTPs, 2007)

Interest in ICT educational programmes has grown enormously. The University of Malta and MCAST are both attracting large numbers of students to these training courses. The myPotential programme is giving extensive rebates on specialised ICT training courses. In its first year alone, 670 people started ICT training at part of the programme.

### The ICT industry

Malta is now a valid destination for foreign direct investment in the ICT industry. Under the Vertical Strategic Alliance (VSA) programme, the Ministry for Investment, Industry and Information Technology joined up with leading global ICT players to promote far-reaching educational and assistance-to-industry programmes. The Maltese government entered into VSAs with Microsoft Corporation, HP, Oracle, IBM, SAP and ESRI, world-leaders in their fields. Alfonso di lanni, Vice President of Oracle Corporation, said: "It is satisfying to have teamed up with

the Maltese government in its journey to be the lighthouse in the Mediterranean, where ICT is concerned. Malta's strategy and vision are a very good foundation for the country to become the ICT regional centre of excellence." The estimated overall value of the investment made by the corporations in these VSAs exceeds £100 million.

In 2006, 36% of the investment projects brought in by Malta Enterprise were in the field of ICT, including the agreement with Tecom Investments for the setting up of the US \$ 300 million SmartCity project, which will generate at least 5,600 jobs and serve as the regional ICT services hub, transforming Malta into a global ICT leader.

### The international scenario

Malta is now recognised as a major player in ICT services, not just in the Mediterranean region, but in the whole of the European Union.

Ranking	Category	Organisation
2nd	On-line sophistication of e-government services	EU/ Cap Gemini
2nd	full availability online of e-government services	EU / Cap Gemini
21st	most technology-ready	World Economic Forum
12th	highest rate of technology use in government	World Economic Forum
23rd	technology use in the country	World Economic Forum
23rd	the government's readiness to use technology	World Economic Forum
2nd	the government success in promoting the use of IT	World Economic Forum
24th	e-readiness index	Economist Intelligence Unit

In 2007, Malta was also accepted as a member of the prestigious International Network of e-Communities (INEC), joining the world's leading ICT locations. The Intelligent Community Forum has also chosen Malta as one of the world's top 20 'smart communities'.

The challenge that now lies ahead is in maintaining the momentum, because information and communications technology is in a constant state of flux and Malta must stay ahead of the game.





As technology becomes cheaper and more affordable, and the rate of innovation grows exponentially, Malta cannot afford to tread water. Foremost among the challenges is the need to identify and pre-empt the new digital divides which will otherwise emerge. Another is the successful application of technology to enhance quality of life. Then there is the pressing need to keep moving to stay ahead and remain an ICT leading player.

### Three landscape determinants

The primary determinant is the EU
Commission's i2010 Action Plan, which
defines the context of the further
development of the information society,
within the framework of the EU's Lisbon
Agenda. The second is Malta's RTDI strategy
which maps out our path towards establishing
the country as an increasingly relevant player
in research, and development, technology
and innovation. The third is Malta's Industrial
Policy, which defines the economic transition
towards greater overall competitiveness.

### SmartCity Malta

SmartCity is not just a business park. It will re-define the relevance of the information economy in Malta, and will ground our status as an ICT services hub, pushing us further into the top league of players.

### A 360-degree approach

The Smart Island strategy was developed through a 360-degree approach, in which the interests and objectives of the wider society have been prioritised. This strategy does not replace others like e-government and e-learning, but will guide them.

### Leading international practice

The Smart Island strategy has been developed against best international practice in ICT. It does not re-invent the wheel, but adapts leading-edge developments to the Maltese context.

### Driven by results

The Smart Island is not built on textbook strategies or stock processes, but on the experience of the many organisations and stakeholders who have helped us in shaping it. It is driven by the need and desire for results.

For each of these there are top-line targets aimed at setting the expectation for our attainments. The programmes and initiatives listed in this document are not exhaustive, but they are the key ones. In each, there are measures specifically concerned with Gozo, which is ideally positioned for knowledge-based industries.

In all of this, the government is the driver, but the main actors are the national stakeholders. The National Information Society Advisory Council has managed to bring together more than 50 primary and secondary stakeholders with a direct interest in the development of the ICT sector in Malta, and we are able to make best use of this situation.

We are keen to share Malta's achievements with other countries which have just begun to develop their information society, by taking part in Commonwealth programmes and initiatives. This ensures that we give something back and help others achieve progress. I helping others, we continue to learn and grow.

DEVELOPING A WORLD-LEADING ICT INDUSTRY A PAN A STATE OF THE PARTY OF T TAKING CARE OF E-BUSINESS THE SMART ISLAND **A CONNECTED SOCIETY** RE-INVENTING GOVERNMENT RE-INVENTING GOVERNMENT TRANSFORM GOVERNMENT SMART WORK ORCH OR A QUALITY OF LIFE THROUGH ICTS



# STREAM

Malta's infrastructure must be robust enough not just to meet future expectations, but also to exceed them. Legislation must be credible and enforceable, without stifling users who are in good faith, but ensuring that cybercrime continues to be fought aggressively.

The Smart Island strategy aims to provide for Malta a world-class external ICT environment which meets international best-practice standards. It must be predictable, reliable and resilient, and above all, it must adapt to the rapid development of information and communications technology. The crucial nature of this kind of investment may not be immediately obvious to all, and there will have to be incentives to bring people along.

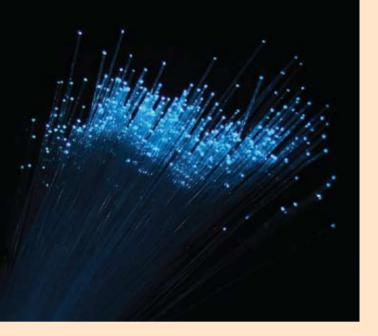
We have to ensure that Malta continues to be among the best-prepared countries in the world, when it comes to the legislative and regulatory framework for information and communications technology. The laws that were avant-garde six years ago are now up for renewal. In a world where the money really comes from innovation and research we must be in a position to promise our investors that in Malta their intellectual property is safe and well protected, that this is the place to manage their digital rights. This will be the new pillar of legislative innovation.



Then there is cyber crime, which becomes increasingly sophisticated as criminals

attempt to evade those who are in hot pursuit of them. More sophisticated education and stronger policing will continue to protect the vulnerable, particularly children.





### **Next-generation e-legislation**

Malta's next-generation e-legislation will build on existing strength and experience, while maintaining the technology-neutral principle. It will respond to the challenges which the rapidly changing ICT world poses to society and the economy. Malta's new electronic legislative framework will be sensitive to the opportunities that new ICT paradigms are presenting to our society and economy.

### **Smarter regulation**

We will strive to make the regulation of telecommunications and electronic services acore strength of Malta's ICT environment. The general rules of the game are drafted in cohesion with the other member states of the European Union, but this regulation will be adapted to the realities of the Maltese context and to the aspirations of our stakeholders. Most importantly we shall ensure that this regulation stimulates and facilitates investment and that it does not stifle it. It should allow us to seize opportunities like novel marketniches faster that our competitors.

### International connectivity

International connectivity is the lifeline of Malta's digital economy. We will work with the telecoms providers to expand international connectivity, with more connections to mainland Europe via routes other than the existing ones, to North Africa and potentially to the Middle East.

# Next-generation high-speed broadband infrastructure

By 2010 our broadband network will become as important as, if not more so than, our road network. We will forge a coalition with the telecoms providers, the Building Industry Consultative Council, the infrastructure authorities and the regulators to upgrade our networks to ubiquitous high-speed broadband serving all households. These networks should be capable of doubling their speed every 12 to 18 months. Broadband is a major economic driver, so we will take it over infrastructure like FTTU into homes wherever they happen to be. The government will bring together the players, using tax to promote and accelerate investment, and fuelling the demand for more services.

# Securing the networks and safeguarding the future

We shall make security our competitive advantage, strengthening security capabilities for publicand private-sector networks, and reinforcing our anti-cyber-crime forces. This will build a high level of trust in Malta as an ICT destination.

# Building, growing and sharing national ICT resources

There are benefits to being a small country, and the sustainability of a world-class ICT environment is one of them, because it provides economies of scale. We will draw up a policy for the development of national ICT resources: these major ICT components will be made accessible to all interested parties, minimising the duplication of investment and maximising the value derived from it.

# Protecting digital intellectual property

The digital industry is rooted in the development and protection of intellectual property. Protecting intellectual property is central to the further development of the industry in Malta, through patents, trademarks, copyright of designs, and the full range of protection options.

### **TARGETS FOR 2010**

- → Malta will have at least four international submarine connections.
- → At least 20% of households will be connected to the next generation network.
- → Malta will be the regional leader in e-law, provision of secure services and IP protection.

# 1.1 Review the current e-legislation and transform it into a next-generation framework

Within the legislative context of the European Union, we will develop a new set of e-laws aimed at establishing a world-class legislative framework. This review will take into account the European Union's prevailing electronic communications regulatory framework. We will draw up legislation that brings together all aspects of mobile and e-authentication, e-identification, e-commerce, biometrics. e-accessibility, electronic signing and electronic voting. We will increase the Criminal Code's provisions against cyber-crime. We will strengthen Malta's data protection legislation. We will develop an e-government legislative framework aimed at closing the gaps, reducing red-tape and making things simpler for users. We will ensure that adequate IT governance frameworks, policies and practices form part of the regulation of publicly-listed companies and financial services operators. We will develop an institute of ICT law.

# 1.2 Give incentives to telecoms providers which invest in international connectivity

Keeping to EU state-aid regulations, we will give fiscal incentives to private telecoms operators which invest in improving Malta's connectivity to the European mainland and North Africa, emphasising connectivity dedicated to research activity.

# 1.3 Increasing the number of data and network operations centres

We will support the setting-up of data centres, co-location facilities and network operation centres.

# 1.4 Championing the development of a next-generation network

The government will partner with telecoms providers, through a public-private-partnership, to develop a next-generation high-speed broadband network, with ubiquitous delivery of no less than 10Mbps of bandwidth, preferably based on a FTTU delivery model, and fixed broadband wireless in areas which are difficult to reach with fibre.

# 1.5 Determining a regulatory framework on the deployment of broadband networks

The government will establish a framework that regulates the activities of the utility service-providers, of the Transport Authority and of the telecoms providers, to ensure that there is a unified approach towards the deployment of broadband networks in Malta.

# 1.6 Establishing a regional information security centre

We will develop a physical hub for information security facilities aimed at housing not just Malta's public and private sensitive infrastructure but also serving as a reputable international hub for information security services.

# 1.7 Setting up an information security strategy agency

We will develop a national information security strategy, bringing together the necessary competences and specialisations. This will help Malta adopt a pro-active, low-risk stance towards national security threats and day-to-day information security concerns. The strategy will be implemented by a national information security agency, which will serve also as a national ICT resource. The agency will work in close liaison with industry and will focus on e-security threats, reflecting the changes in the EU's regulatory framework for electronic communications. The agency will also partner educational institutions, working to ensure that information security is established as a basic buildingblock across all levels of ICT curricula.



# 1.8 Establishing a national information security framework

The agency will develop programmes and initiatives which are aimed at establishing national information security base-lines.

### 1.9 Keeping children safe

With the Commissioner for Children, we will work with other stakeholders to develop awareness, educate and prevent all forms of child abuse via the Internet and other electronic channels.

### 1.10 Introducing school safety packages

The government and its public-private partners will develop a series of school safety packages aimed at educating and equipping children, teachers and parents with the technology they need to protect their on-line environment.

# 1.11 Strengthening the fight against cyber crime

We will strengthen the Malta Police Force's cyber crime unit. We will upgrade cyber crime legislation. We will give people efficient channels through which they can alert the appropriate authorities about cyber crime.

# 1.12 Deploying an e-trust scheme for all electronic services

Together with the private sector and the consumers' representative bodies, we will develop and implement an e-trust scheme by which on-line service providers can certify and self-regulate.

# 1.13 Establishing a world-class IP protection programme

We shall partner with the world's major IP-protection agencies to develop a world-class ICT IP-rights protection strategy, programme and related facilities (including ESCROW), enhancing the attractiveness of Malta as an IP-repository, and contributing towards the permanent establishment here of a wider range of captive IT operations.

### 1.14 Accelerating IPv6 readiness

Together with the core stakeholders, we will promote and assist the acceleration of Malta's readiness for IPv6.

### 1.15 E-id integration for all

We will establish the electronic identity management framework (see Stream 5) and operations of the government as a national ICT resource. This will allow all public and private organisations to use it as their identity management application.

# 1.16 Opening up access to the national GIS base-map and layers

We will use industry standards and practice to establish the national GIS base-map and public layers (see Stream 5) as national ICT resources, giving access to this data to public and private organisations and individuals.

### 1.17 Proliferation of open standards

Through a joint effort with the Malta Standards Authority, we will establish a set of national open standards aimed at promoting a public-private framework through which government and private sector applications can interchange data effectively.

### 1.18 Effectively connecting Gozo

We will ensure that Gozo is served with the necessary ICT infrastructure by giving incentives for investment in more submarine and broadband wireless connections, in bringing Gozo into the next-generation network, and in setting up data centres on the island, including a possible third government administration data centre.



The problems here are similar to those of overcoming the literacy divide. Having overcome the barriers of access and affordability you still have to overcome the greater obstacles of cultural hostility, indifference, fear and lack of confidence. Technology is now affordable by almost everyone, and learning how to use it is easy and cheap - but cost and ease of access were not the only barriers.

The Maltese are among the most ready and willing to use technology in their everyday lives. The success of our HelloIT program is the proof of our willingness and our capacity to deliver on these ambitions. Having a broadband connection at home is not something that might be nice to own, like a widescreen TV or a tumble-dryer. It is becoming as essential as water and electricity.

It is not enough to get people connected. Our efforts must continue to generate interest and enthusiasm, because today computerawareness is as important as literacy.

An important target group during the last six years was the disabled, to whom technology can be a way of overcoming the barriers they face in the physical world. Technology can help other vulnerable members of the community live fuller lives too, including those who are housebound and those who are uncomfortable with or unprepared for formal schooling.

The price of computers has been driven down and will continue to be so, until there no longer remains the question of affordability, and computer ownership reaches the same market penetration as that of mobile telephones and more.





# Strengthening access to ICT in the community

Small and micro communities remain primary allies in our fight against the digital divide. We will capitalise on the successful concept of learning about information technology through community centres and expand this further. We will create a meshed network of community-centred access points for fixed, mobile and wireless connectivity, together with local councils and non-governmental organisations.

### Accessibility for all

Information and communications technology is to be used as an equalising instrument to make easier the integration of the disabled and the disadvantaged.

### Opening the way for older people

Raising awareness among the elderly about the usefulness of having and using a computer will become a greater priority. This is a large but untapped market for ICT-providers, and it is in their interest to partner with the government and with NGOs to help break through the psychological barriers that tend to keep older people away from computers and the Internet.

# Making sure that everyone has broadband connectivity

We will join forces with providers of broadband and Internet, easing the entry cost through special EU- and publicly-funded offerings, and by helping with the cost for disadvantaged groups.

### Making sure it is affordable

We will enter into agreements with suppliers to make computers even more affordable than they are now, for those who are disadvantaged. We will also develop computer refurbishment programmes which serve the dual purpose of being environmentally sound while at the same time helping those most in need. We will work with the banks to redraw financing packages for the purchase of personal computers and digital equipment, and we will devise fiscal measures that are aimed at generating more investment in information technology and training in the workplace.

### Wiping out the digital divide

Earlier successful partnerships with major multi-national vendors will be used as a pattern for similar agreements in the years to come, making products and services affordable to selected groups like students, schoolchildren, or pensioners. The government will use its procurement capacity and purchasing power to gain value for disadvantaged groups.

### **Digital literacy**

A national awareness programme will work to bring in as many people as possible to the fold of digital literacy, focussing not just on personal computers and the Internet, but also on other forms of digital communication.

# Information and communication technology used as a social leveller

Training in this field can improve job opportunities for the unemployed. Technology can also be used to address the problem of illiteracy.

### **TARGETS FOR 2010**

- → 80% of households will have broadband connectivity
- → 75% of the population will be ICT-literate
- → there will be 101 high-speed broadband access centres in local communities

### 2.1 Broadband for all

We will offer broadband connection at a token price to first-time Internet users.

# 2.2 Refurbished computer equipment for disadvantaged groups

Public service computers which can connect to the Internet and operate with normal applications will be refurbished and sold on a token price to people coming from a disadvantaged background. Similar schemes will be encouraged in the private sector.

### 2.3 Fiscal measures to help buy computers

We will devise fiscal incentives to ameliorate the cost of first-time purchase. There will be further incentives for parents with disabled children.

# 2.4 Sustaining community technology learning centres

By partnering with non-governmental organisations and/or local councils, we will develop 10 of these centres, which provide access to computing, broadband, ICT-awareness and basic IT education. We will examine the possibility of using state schools for ICT-training after hours.

### 2.5 Setting up shared computing centres

We will enter into tripartite partnership agreements with private-sector companies and community-based organisations like NGOs, clubs and parish organisations, to work on branded shared computing centres, aimed at providing services similar to those offered at community technology learning centres.

# 2.6 Developing and broadcasting ICT-awareness programmes

By working with production houses, we will

develop and broadcast television programmes aimed at enhancing the public awareness and interest in the use of information and communication technology. These programmes will also be used to convey information on developments in e-learning, e-security and e-business, and other similar measures. Parents will be a target audience, among others, to help them become even more aware of how important computer use is to their children.

### 2.7 The proliferation of free wi-fi

In partnership with wireless broadband players on the Malta market, we will expand free wi-fi access to all public libraries and gardens. Access will be through use of the personal e-identity.

### 2.8 'First steps' call centre

This will be a helpline for first-time users, prospective users and beginners, and will assist with queries, problems and general handholding until a stage of confidence is reached.

### 2.9 Establishing a digital divide response team

We will set up a specialised digital divide response team to deliver intensive, focused and customised ICT awareness and education programmes, improving employment-related skills in underprivileged locations, communities or groups of disadvantaged people.

2.10 Refining myWeb into myWeb2

We will take myWeb to the next step, widening the application of ICTs, the use of e-government services and the adoption of social networking tools. Training will be pitched at the right level to ensure that no one feels excluded.

### 2.11 Starter-training for all who need it

We will partner with the Maltese IT-training industry and with international IT-certification bodies to facilitate the provision of entry-level applicationbased IT-training programmes at a token fee.

### 2.12 Subsidised software for students

We will use the opportunities offered by freeware and open-source software and work to deliver hugely subsidised software schoolchildren and to students.





### 2.13 Learning IT in the workplace

We will develop a business-friendly programme aimed at encouraging employers to join forces with the government to facilitate ICT-education for their staff. Particular attention will be given to workplaces where the employees would otherwise be at risk of long-term unemployment.

### 2.14 Computing for €1 a day

We will partner with banks and with the private sector to make brand-new computers available to the public at the affordable rate of Đ1 per day, through low-cost bank loans.

# 2.15 Strengthening the Foundation for IT Accessibility (FITA)

We will sustain this organisation's operations through MITTS Ltd, and will continue to assist it in its capital projects.

### 2.16 Promoting assistive technology

We will forge an alliance with industry to promote the availability and take-up of technology that helps the disabled. Interoperability standards between assistive and mainstream technology will be put in place.

# 2.17 Improving accessibility in government IT operations

We will issue specific policies and guidelines to regulate accessibility in the government's IT operations. We will enhance the accessibility of all government on-line content and current e-government services, and ensure that new services are more accessible to disabled persons. Accessibility guidelines will be written into public procurement procedures for information technology.

### 2.18 Voluntary programmes for industry

There will be incentives for industry to develop and implement specialised voluntary accessibility programmes.

# 2.19 Enacting legislation and publishing national accessibility standards

The revised information society legislation will include specific provisions that regulate e-accessibility in line with international best practice.

### 2.20 Customised digital literacy

We will develop and distribute, free of charge, innovative awareness and digital literacy programmes that are customised for specific groups like senior citizens, the long-term unemployed, women returning to the workplace and early school-leavers.

### 2.21 Addressing illiteracy

We will partner with global technologyin-education leaders to develop a specific programme aimed at using information and communications technology to address illiteracy and to provide basic writing and reading skills. The programme will be delivered through community technology learning centres.

# 2.22 Implementing Specialised Equaliser Programmes (SEPs)

Jointly with the pedagogical experts, the community and the private IT-training providers, we will carry out a series of specialised equaliser programmes aimed at providing skills that will make a person more employable, better at business and even in life in general - for example, where first-time offenders or those in drug rehabilitation programmes are concerned.

### 2.23 Developing an e-ageing programme

The e-ageing programme is a 3600 set of measures aimed at enhancing the quality of life of older people, through the use of ICT. This will help the elderly in their own home or through community centres, providing ICT training, establishing digital communities for social networking, and providing assisted living environments.

### 2.24 Training for the elderly

A special mobile community technology learning centre with assistive technology, funded through a public-private partnership, will move from one home for the elderly to another (private and state-run), to provide ICT training.

### 2.25 Bridging the gap in Gozo

Besides all the measures described here, a large community technology learning centre will be set up in Gozo to promote the use of state-of-the-art equipment and learning.



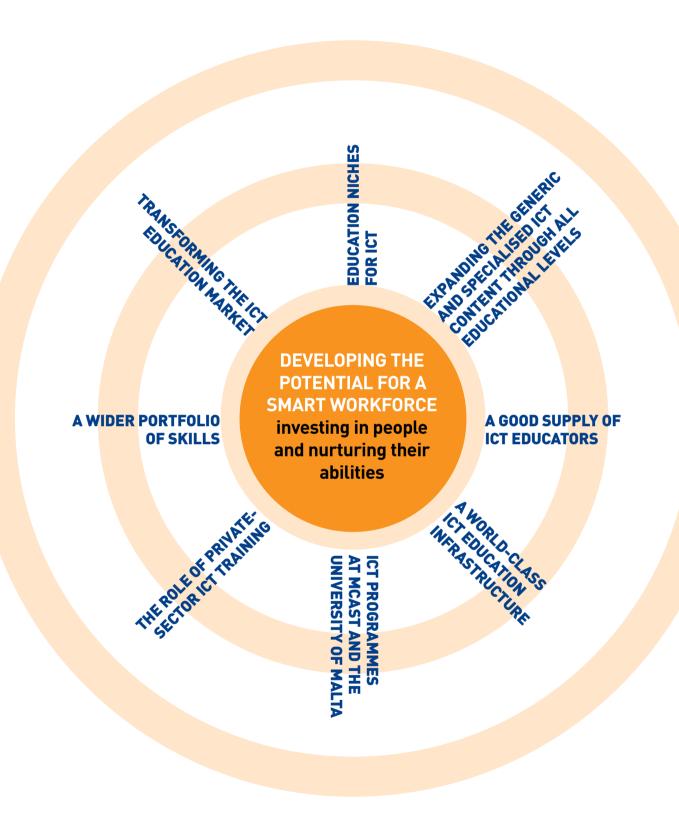
Malta's main asset is its people, who are flexible in work and learning and easily trained. It is not simply a matter of having as many information-technology resources as everyone else. There, we are well and truly ahead of our competitors. Those who are competing against Malta for foreign direct investment in information and communications technology face an acute shortage of trained staff. Companies now have to pay over the odds for staff poached from competitors. Those in turn poach from other companies to make up the shortfall. It's a vicious circle. This kind of Dutch auction drives companies out of business and even out of the country as salaries become unaffordable.

Fortunately, people in Malta have understood that ICT training does not mean just another job, but a smarter job, one that will give them better prospects, better pay, and better job satisfaction. As pupils use technology to learn their letters and numbers, the computer becomes as ordinary as a pencil. Computers have been commonplace in state schools since 1994. The five-year olds who started school then are now adults and they do not remember a time when there was no computer in their life. This is the tech-ready generation. Those who come after them will be even more so. They will be Malta's greatest asset, a highly regarded one. Our human resources are our selling-point on the international market. They are the asset that wins us the deal when speaking to investors.

Our IT-related educational set-up in this sector must be made to grow exponentially, in primary, secondary and tertiary education. This is an area in which the ordinary economic rule that demand generates supply is turned on its head: supply of IT-related education and training generates demand for it. Children and young adults see what it means for them, and they like it. The worldwide shortage of ICT skills is not going to be met anytime soon, which means that while we provide the skills the employers will keep on coming. Basic ICT skills are a good start but more people must climb further up the value chain, becoming sharper and more sophisticated in what they know and what they can deliver. The training we give them must offer broader options.

Attracting women to ICT is another challenge. The training in this field is predominantly taken up by men. We are exploring the reasons why this is happening, and how the obstacles - real or psychological - to women entering the ICT market can be overcome. This field is ideal for women who might wish to change their working patterns as they raise families, because it allows for flexible work models.

Teachers have been given the backing to use technology in teaching a wide variety of subjects. Now we will invest in learn-ware that covers all subjects in the curriculum and can be transferred between home and school.





# Expanding the generic and specialised ICT content through all educational levels

We shall aggressively expand the ICT educational content at all levels of our educational system, increasing its depth and range and providing for specialised IT education in which pupils and students can take up as much or as little as they feel able to.

### A good supply of ICT educators

We shall join forces with the social partners, educational institutions and the private sector to find ways of attracting and retaining excellent ICT trainers and teachers.

# A world-class ICT education infrastructure

We will overhaul the ICT broadband infrastructure, hardware and software in all state educational institutions. State schools will be connected to real broadband, setting the path for the deployment of our next-generation networks. Pupils will use the network through devices that are capable of operating tomorrow's applications, today. Computer laboratories will shift to access on the 'digital school-bench'. The computer laboratories will become mini-research-centres and not glorified Internet cafes.

We shall continue to expand the vocational, under-graduate and post-graduate programmes at the University of Malta and at the ICT Institute at MCAST. By investing in curriculum development and the provision and management of facilities, we wall widen the range of specialisations available to our students. The involvement of the ICT private sector is essential.

### The role of private-sector IT training

Building on the success of myPotential, we will increase the role of the private IT training sector to increase the options available to students. We will team up with Maltese and international training- providers and institutions.

# Transforming the ICT education market

We will use the successful teaching-English-asa-foreign-language school model as a pattern for the development of a similar educational industry in ICT training. This will make Malta a hub for training as well as for working in ICT.

### A wider portfolio of skills

The days of IT generalists are gone. The demand now is for highly specific skills. We plan to set up a certification base for students who are not able or willing to undergo the full undergraduate training programme in IT. This will create alternatives for those with aptitude and interest in the field.

### **Education niches for ICT**

We shall develop ICT educational programmes and curricula aimed at satisfying the demand for specialised cluster resources in research and development, and in industry.

### **TARGETS FOR 2010**

- → Each pupil will have access to real broadband in the classroom
- → There will be 1500 ICT graduates every year coming out of MCAST and the University of Malta
- → There will be 1000 vendor-driven certifications every year
- → 500 students will find industry places every year
- → Malta will be a globally-significant ICT hub

### 3.1 World-class ICT in schools

We will deliver true broadband to all state schools. We will realise the plan for the 'digital school benech' hrough the innovative system of PC-leasing.

### 3.2 Third-generation myPotential

We will expand this successful publicprivate partnership into a new generation of certified ICT specialisations, by widening the range of programmes available, linking the intensity of tax rebates to the forecasted industry requirements, and laying myPotential-driven career paths.

### 3.3 Wider growth for MCAST

MCAST will remain the mainstay of ICT vocational training. By partnering with industry, we will nurture and support the growth of the ICT Institute at MCAST with increased physical space, better infrastructure and technology. This will help us to achieve growth targets in the sector. There will be a wider range of training programmes at this ICT Institute.



# 3.5 Sustainability of the ICT Faculty at the University of Malta

EU, public and private investment will be channelled into the ICT Faculty at the University of Malta. The development of research programmes will further the growth of the postgraduate sector.

### 3.6 Student placement opportunities

The student-placement programme that allows students to gain experience of the sector while they are studying, on an internship basis, will be expanded in Malta, and also be made to include overseas internships for greater experience still. Post-graduate students will have the basis to carry out industry-based applied research.

### 3.7 An ICT stream in secondary schools

We will establish an ICT stream in state secondary schools, aimed at preparing students for the development of the skills, aptitudes and capabilities for enhanced technical training at vocational or post-secondary levels. We will set up an ICT careers guidance centre to encourage children and their parents, and young school-leavers, to opt for a career in ICT.

### 3.8 myPotential in secondary schools

We will provide accelerated paths for the take-up of ECDL (or an equivalent certification) by secondary-school pupils, who will be offered a customised myPotential programme. Through this, there will be a capped fiscal benefit for the child's parents on certain entry-level certifications, allowing the child to acquire more ICT skills before leaving secondary school.

### 3.9 Engaging non-state schools

We will build a strong link with non-state schools, so that they are engaged in the government's mainstream ICT education efforts, programmes and initiatives.

### 3.10 E-learning as an educational driver

We will use ICT to demonstrate that learning is fun. E-learning will be the primary vehicle for ICT education across all sectors and levels. We will develop content, tools and Web 2.0 applications to allow ICT education to be aggressively disseminated through our e-learning platform.

### 3.11 Awareness campaign about ICT careers

In partnership with the educational authorities, industry and private IT training providers, we will develop and run a continuous innovative marketing campaign aimed at attracting young students to careers in ICT.

### 3.12 Standardisation of ICT certification

We will link Maltese certification to leading international skills and position profiles, to ensure that ICT specialisations are synchronised with the global requirements of the ICT industry. These certifications will be brought in to the national vocational qualifications system to give them greater recognition.

## 3.13 Investment aid for private training-providers

There will be fiscal incentives for privatesector IT training-providers who invest in and develop their services in Malta, leading to more students being trained in a wider variety of ICT-related skills.



### 3.14 An incentive programme for long-term ICT

A special and innovative incentive programme will be developed for ICT educators, jointly financed with industry. This will be aimed at those who want to take up a long-term career in ICT education, training others. 3.15 myPotential incentive for ICT educators We will help ICT trainers acquire further training skills by guaranteeing and subsidising loans they take out to pay for this training, through the myPotential programme.

### 3.16 Attracting ICT educators from outside Malta

When there are not enough trainers, we will allow for a fast-track process and fiscal incentives so that ICT educators can work in Malta and train others.

### 3.17 Specialisation multiplier contribution

Companies that obtain work permits for ICT specialists will have the permit fees waived in lieu of 40 hours of training in a state school or educational institution.

### 3.18 A global ICT campus

A global ICT campus will be built on public land. This will be developed to attract trainers and trainees from all over the world, increasing Malta's status in the international ICT scenario.

### 3.19 A strategic partnership with Dubai Knowledge Village

We will use the SmartCity joint venture with Tecom Investments to establish a strategic partnership with the ICT educational institutions that operate in the Dubai Knowledge Village.

### 3.20 Synergy with TEFL

By partnering with the major TEFL schools in Malta, we will develop joint innovative marketing and commercial programmes for ICT and English-language educational packages.

### 3.21 Bringing overseas students to Malta

We will create innovative programmes aimed at attracting overseas students to study ICT in Malta, and to encourage third-generation Maltese from immigrant communities to train and work in Malta.

# 3.22 Icons - ICT conversion programmes for graduates

Together with public and private ICT trainingproviders, we will develop innovative ICT conversion programmes (ICons) aimed at attracting non-ICT university graduates towards a career in ICT, which is vertically integrated with their original specialisation e.g. training accountants as ERP specialists.

### 3.23 Applied ICT briefing programmes

We will create a series of applied ICT briefing programmes aimed at providing sector-centric ICT training to students in disciplines other than ICT. The first briefing programmes will be for students of commerce, economics, management, accountancy, tourism and hospitality.

### 3.24 Bringing women into ICT

There will be focussed career guidance at secondary school and the development of world-class dedicated ICT training programmes that are more attractive to women than those being offered today. Not enough women are entering the world of ICT.

### 3.25 Programmes for disabled persons

We will bring together KNPD, industry, educational authorities and leading experts in the field to develop educational programmes aimed at providing the necessary ICT-industry employability skills for disabled people.

### 3.26 Extending First Steps

Building on the success of the first wave of training, we will extend the First Steps programme by customising its curriculum and teaching for the needs of those at risk of long-term unemployment. The programme will become mainstream training for all employees in the low-end manufacturing industry, enabling them to acquire basic ICT skills while they are still at work.

### 3.27 Monitoring the supply and demand of e-skills

Through a virtual collaboration mechanism which brings together the ETC, NSO, public and private educational institutions and industry, we will develop an ICT skills supply and demand monitor aimed at providing timely statistics.

### 3.28 Setting up vendor-driven training programmes

We will develop a centrally-funded programme for vendor-specific training. Through this, ICT companies can provide custom-built training with the followthrough of an employment contract for trainees.

### 3.29 Induction programmes for employees

We will develop 'service science' curricula at the University of Malta, MCAST and Malta-based private training providers. These will be complemented by short intensive training programmes in basic business skills, so that graduates and trainees can adapt with ease to the dynamics of a commercial environment.

### 3.30 E-skills career space

Together with industry, we will develop and maintain an e-skills careers portal that gives employers and those in search of a new job all the information they need to make the right choices.

### 3.31 PPPs for ICT educational programmes

We will enter into public-private partnerships to set up specific ICT educational programmes for vertical and niche sectors of the ICT markets. The first academic programmes to be rolled out under this framework will be on gaming, computer graphics and process outsourcing.

### 3.32 Cluster-based educational programmes

We will develop educational programmes which are vertically integrated with the four core clusters aimed at supporting the development of human resources.

### 3.33 An ICT training centre for Gozo

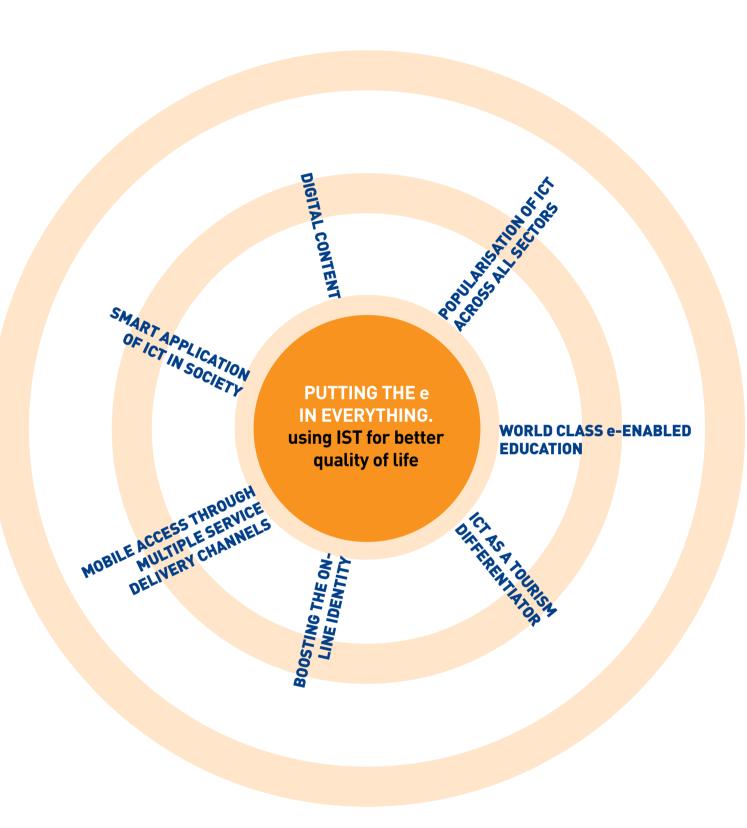
We will develop a public-private ICT training centre aimed in Gozo, and provide incentives to the private sector to set up training programmes there.



We will put in place incentives to suppliers of services and products so that more and more begin using electronic services that improve their clients' life and cut down on waiting time. The government is already leading the field with the provision of administrative services on line. The same approach will now be used with state healthcare, so that patients have instant access to their medical history and can share it with any doctor without loss of vital information. Similarly, technology will be used to help the elderly and those who cannot get around easily, so that their needs are met within their community. In education, the e-learning revolution will change the idea of school as a building and make it the total learning experience during childhood. Technology is already being used, through booking and promotional portals, to bring tourists to Malta. This concept can be expanded to give potential visitors a wider idea of what Malta offers.

Technology can help people distribute the time between business and pleasure more carefully and less wastefully. It can let them leave their office desks but remain in touch. It can let them work while they take care of their children or their elderly relatives. Teleworking in the public sector will become more widespread, and the private sector will be encouraged to follow suit.





### World class e-enabled education

We will put in place an e-learning platform that takes ICT in the classroom to a new dimension. Parents, pupils and teachers will be brought together in this virtual space.

### ICT as a tourism differentiator

ICT will become one of the reasons why visitors choose Malta over other destinations. With excellent fixed and wireless networks, keeping connected in Malta will be a lot easier. ICT can be used to offer more information to tourists planning their holidays.

# Boosting the on-line national identity

ICT can be used to boost and bolster the sense of national identity. The use of Maltese on-line is to be encouraged, with incentives and marketing. The government will help drive the creation of relevant and interesting Maltese content.

### **Smart application of ICT in society**

We will use multiple electronic devices and customised application and content to make ICT part of daily life, including for the enhancement of healthcare services.

### **Digital Content**

We will partner with the IT industry and content providers to develop a system that encourages the creation of Malta-relevant content. We will partner with publishers, broadcasters and digital media operators to help them play a more central role in the national content development efforts.

# Popularisation of ICT across all sectors

We will reach out to those who still do not see value in technology, and invest more effort in ensuring that every person is familiar with the benefits of technology in everyday life.



### **TARGETS FOR 2010**

- → Every child will have a personalised e-learning space at school and at home
- → 75% of the population will be using Internet regularly
- → Malta-relevant content on the worldwide web will increase by 200%

### 4.1 National e-learning strategy and action plan

We will publish a national e-learning strategy aimed at tightly integrating the use of ICT in teaching and learning. An interministerial e-learning unit will be set up to drive the project, which will have three critical components: infrastructure, content and skills.

### 4.2 Promoting digital libraries

We will set in train a programme to establish national, regional and local public libraries into digital nodes, providing not only content but also access to the full suite of digital services.

### 4.3 Malta-relevant content programme

Together with publishers, broadcasters, the ICT sector and content-providers, we will work to increase the quantity and quality of Malta-relevant content. We will also work with NGOs to help them set up an interactive on-line presence.

### 4.4 National digital archives project

We will set up a digital archives framework as a virtual platform for the storage, tagging, presentation and discussion of Malta's archives, including those of the National Library, the Department of Information and Public Broadcasting Services Ltd. This will be extended to provide other cultural and heritage archival services.

### 4.5 On-line government in Maltese

All government on-line services will be available in the Maltese language as well as English.

### 4.6 Enhancing trust in ICT

Building on the success of the e-trust scheme, we will join forces with regulators, banks and the private sector to accelerate the principle of on-line self-regulation and to deploy specific measures aimed at instilling more trust in ICT.

### 4.7 ICT in the street

With the transport authority and law enforcement agencies, we will pursue our efforts to enhance the application of ICT in our streets, with the aim of improving road safety, security and ease traffic congestion.

### 4.8 GIS mapping and services

Building on the GIS national infrastructure, we will partner with mobile operators, mapping-service providers and applications developers to provide excellent navigation and linked location-based services.

### 4.9 Smart ID card

The deployment of the Smart ID service will be entrusted to the private sector, enabling efficient distribution across the whole of society.

### 4.10 Smart wallet

Through Smart ID, we will partner with the banks and financial services providers to create the set-up by which the card is used for micro-payments. The regulatory framework will be simplified to make this possible.

### 4.11 IT awareness programmes

We shall engage in a long-term ICT awareness campaign, using multiple media channels, aimed at demystifying the complexities of ICT and portraying its benefits to all.

### 4.12 Digital television applications

In direct partnership with digital television operators, we will establish digital television as a primary delivery channel for government services and for digital content. The services will be deployed in a fashion which is open to all digital television operators and clients with adequate set-top boxes that allow for interactive applications.

### 4.13 Mobile applications for tourist services

Together with the mobile operators we will develop a suite of mobile services, applications and content aimed specifically at enhancing the tourist experience in Malta.

### 4.14 Remote working

We will develop national guidelines and incentives to make easier the adoption and promotion of teleworking for employees.

### 4.15 Maltese-language tools

With the University of Malta and researchers we will develop an open set of tools, resources and applications aimed at the promotion of correct Maltese usage. These tools will include a dictionary, thesaurus, localisation packages for mainstream software and also applications for mobile telephones.

### 4.16 Transport and travel portals

We will establish Malta as a leading country in the application of ICT for on-line end-to-end travel and transportation services.

### 4.17 ICT destination programme

Together with the Malta Tourism Authority and the Malta Hotels and Restaurants
Association, we will create a long-term programme that will include, among others, incentives for major global ICT players, international research groups and others to hold major conferences and events in Malta.

### 4.18 Energy conservation IT programmes

We will promote, with incentives, the use of energy management software for businesses and consumers aimed at reducing the electrical consumption of computing equipment.

### 4.19 MT on-line community

We will promote the development of applications aimed at creating Maltese on-line communities for Malta and for immigrant communities overseas. We will emphasise the use of Web 2.0 technology to improve social networking in these sites.





### 4.20 Re-use of public sector information

We will introduce programmes to make it easier and cheaper for Maltese content-provider companies to gain access to public sector information held by government departments and organisations.

### 4.21 Support of thematic news portals

We will develop an incentive framework aimed at encouraging Maltese content-provider companies in developing and operating theme-based news portals.

### 4.22 National e-health strategy and action plan

Together with the Ministry for Health, the Elderly and Community Care we will develop an e-health strategy which encompasses the extensive use and application of ICT in the public and private healthcare system across Malta. The strategy will set the path of establishing ICT not only as a tool but also as a primary contributor to the continuous improvement of the healthcare system.

### 4.23 Access to health information

Through a multi-stakeholder alliance we will work towards enhanced access to health information, primarily through the application of web 2.0 technology, to create applications like medical blogs and wikis, aimed at improving people's health-related knowledge.

### 4.24 Portable clinic record

Through the investment we are making in our integrated health information systems and the Smart ID card, we will partner with private health care providers and general practitioners to provide patients with the benefit of a portable clinical record, offering access to patient data from multiple points.

### 4.25 Gozo portal

We will develop a worldclass portal to integrate and merge all public and tourist services, applications, e-commerce products and content related to Gozo in one single on-line space.







TRANSFORMATION PLAYER
POSITION AS THE CORE A TOTAL ICT CAPACITY FRAMEWORK REALISATION OF NATIONAL HEALTH INFORMATION **RE-INVENTING GOVERNMENT.** transforming public **E-GOVERNMENT 2.0** service delivery and enhancing NATIONAL IDENTITY MANAGEMENT governance. ROBUST CORE
INFORMATION CLUSTERS ICT AS THE NEXT DRIVER
OF CHANGE IN THE
PUBLIC SERVICE

### E-government 2.0

We will make a generational leap into a totally new e-government built around www.mygov.mt. We will create a new user experience in a personalised environment with self-service for citizens. E-government 2.0 will be at the global forefront of electronic service innovation, combining the highest standards of on-line simplicity, sophistication, privacy and security. www.mygov.mt will not be just a portal but a platform that sets out a radically new way of public service delivery.

### Robust core information clusters

We will implement a new generation of core information clusters for the government's major business functions and to enable e-government 2.0 operations. These core information systems will be the backbone of the government's next steps in on-line operations.

### ICT as the next driver of change in the public service

ICT was a primary tool in the public service reform programme of the 1990s. It will be the driver for a further improved public service, within the framework of the Public Service Act. ICT will be a vehicle for a major cultural overhaul, in which services are delivered through trusted third parties serving as service-delivery agents and brokers.

### ICT to enhance democracy and citizen emppowerment

The Smart Island will take the notion of citizen participation to a new dimension through the development of an information society and e-Government 2.0. E-voting (should it be required) is only one of the areas we will actively look into as a novel means through which we can augment citizen participation in decision-making processes, with the minimum of inconvenience. Through www.mygov.mt, we will work on measures that empower the citizen and encourage online participation in the shaping of legislation, policy and governance. The adoption of Web 2.0 technology will make this possible. Technology will make it possible for people to gain easier and cheaper access to public sector information.

### **National identity management**

Digital certificates and electronic signatures within a consolidated national framework will enable the government to deliver management products like Smart ID cards and e-passports, and services like contract signing and electronic filing of sensitive documents.

### **National health information**

The National Health Information Cluster (NHIC) will be the flag-bearer of the government's ICT operations and of the realisation of e-government 2.0. The NHIC will lead the public sector by example, paving the way for the needed cultural shift in the approach towards ICT adoption. If it can be delivered in the healthcare sector, then it can be delivered in any other area. We will continue to develop the integrated health information system in Mater Dei Hospital, so that it is accessible at all levels of patient care. Our primary objective is to deliver a marked improvement in health care delivery with benefits for the patients, the professionals and the employees in the healthcare sector.

### Positioning MITTS as the core transformation player

MITTS will be made responsible for all ICT operations in the public service and the wider public sector. It will become one of the top five government-serving IT firms in the European Union.

### A total ICT capacity framework

Decentralisation will take place under the leadership of permanent secretaries within government ministries, and under the operational management of the chief information officers. ICT business plans will become an integral component of each ministry's business plans and of the performance plans of senior management.

### Realisation of the benefits

We will realise efficiency gains, enhance client support services, and improve fraud prevention and resource allocation.

### **TARGETS FOR 2010**

- → All government services will be placed on-line in real time.
- → E-filing of documents will be the principal channel of communication with the government.
- → As far as possible, government services will be channelled through e-agents.
- → At least 500 FTEs will be released from administrative tasks to deliver further front-line operations.
- → MITTS will be one of the top five government-serving IT firms in the EU.

### 5.1 E-government 2.0

www.mygov.mt will become the primary platform through which the government interacts with citizens and businesses. We will create an entirely custom-built, user-defined environment to deliver electronic services in a faster, securer and simpler fashion. All services will be available online and through a single sign-on facility.

### 5.2 E-government shared services (eGSS)

The first eGSS will be a unified content management system for the government;: myAlerts (a notification platform), myForms (an online form processing repository), and myBills (a single bill settlement web service for all entities).

### 5.3 Rich public web space

The government websites will be transformed from static and dull online versions of government files into dynamic spaces of useful and relevant information, which are primarily aimed at offering consistent interaction, and attractive rich media to enhance public awareness and education about government's activities. This transformation shall be supplemented by a strong content management framework, with websites routinely updated.

### 5.4 Private sector integration into www.mygov.mt

Electronic services from trusted private third parties will be integrated into www.mygov. mt to enhance the government portal.

### 5.5 E-government take-up programme

Through the adoption of international best practice, we will develop user-oriented incentives to encourage the use of e-government services. These will include fiscal incentives, service fee rebates and third-party offerings.

### 5.6 Marketing and commercialisation

We will conduct an intensive continuous marketing campaign promoting e-government usage and take-up. The campaign will be financed by revenue generated from the integration of private sector electronic services and from the sale of online advertising space.

### 5.7 Deploying e-agents

Together with the enactment of the Public Administration Act, this will be the 'next big thing' in the modernisation of public administration. We will use our e-government framework to engage trusted third parties, including local councils, NGOs, professionals, employers and retailers, to deliver agent-driven e-government services to their clients.

### 5.8 First-class interoperability framework

We will upscale our interoperability framework in terms of technology, policies, guidelines, measures, standards and practices, so that it serves as a platform for Maltese and pan-European interoperability.

### 5.9 Deploying a national identity management system (NIDMS)

All the current identity handling databases will be drawn together into a single national identity management system serving all public and private sector requirements for physical and virtual identity registration, authentication and verification.

### 5.10 Dissemination of e-passports and Smart ID cards

We will implement systems that enable the government to produce and disseminate biometric passports (e-passports) and Smart ID cards. We will install hundreds of public Smart ID card readers across Malta to allow wider access to e-government 2.0 services. 5.11 Deploying nationwide e-ID profiling We will develop the e-ID platform to allow for e-ID profiling, through which citizens can adopt multiple user profiles through the same unique electronic identity.

### 5.12 Core information systems investment plan

We will develop a rolling three-year core information systems (CIS) investment plan to gradually replace and/or upgrade the incumbent strategic and legacy systems, ensuring that they are appropriate for the fulfilment of the government's ICT operations. CIS will be implemented around thematic clusters (e.g. revenue, healthcare, security) to maximise benefits.

### 5.13 Deploying IHIS and the electronic patient record

We will accelerate the implementation of the integrated health information system in Mater Dei Hospital and rapidly follow it by deploying it in all public hospitals, clinics and healthcare delivery organisations. Through the IHIS, we will also deliver unified electronic patient records to everyone.

### 5.14 Extending IHIS into NHIC

Through a public-private alliance between all the core stakeholders, we will take IHIS into the next dimension and develop it, together with other applications, into a national health information cluster, through which electronic patient records will be accessible.

### 5.15 Deploying an e-court platform

With the judiciary and professional chambers, we will improve the court information systems to create an e-court platform, including the electronic filing of judicial acts, enhanced case scheduling, management and tracking, electronic document management and a payment gateway for court fees.

### 5.16 Empowering citizens through e-participation

Through the aggressive adoption of web 2.0, we will deploy on www.mygov.mt thematic blogs, wikis, on-line polls, discussion forums and online communities to set up an open two-way consultation and feedback-generation channel between the government and people.

### 5.17 Public access to information

In preparation for the enactment of the Freedom of Information Act, we will introduce measures to enable the streamlined digitalisation of public sector information.

### 5.18 Electronic communications channel

We will set up a legislative framework through which people will have the right to communicate with the government electronically.

### 5.19 Nurturing the e-government alliance

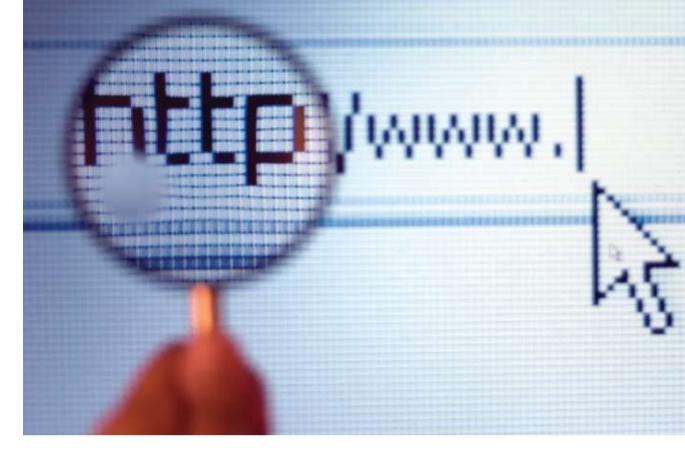
We will nurture the e-government alliance by attracting the participation of more Maltese and international software developers.

### 5.20 E-work in the public service

We will promote the take-up of teleworking in the public sector where possible.

### 5.21 Mobile and digital television service delivery

All e-government services will be delivered over smart mobile devices and digital TV, once this is deployed.



### 5.22 Delivering on e-procurement

We will deploy a complete e-procurement framework and G2B online exchange to improve the government's procurement function, attracting more suppliers, bettering processes, and maximising purchasing power.

### 5.23 Enacting e-government legislation

We will enact an e-government legislative framework to provide a concrete legal footing for electronic filing of documents, accessibility by disabled persons, security, the regulation of the use of Smart ID cards, and so on.

### 5.24 E-government R & D

Together with MITTS, MCAST, the University of Malta, EuroMediti and the private sector, we will set up an e-government research and development cluster, which we will gradually extend into a European centre of excellence on the deployment of e-government in small jurisdictions.

### 5.25 Deploying a pan-European e-government initiative

We will take the lead in the promotion of the development and implementation of seamless pan-European e-government services, through which common core public services are delivered across many EU member states.

### 5.26 Anti-fraud programme

Together with the National Audit Office and the Internal Audit and Investigation Department, we will embark on an intelligence programme to prevent and detect fraudulent activities, particularly in social security and benefits claims.

### 5.27 Realisation of the benefits

In line with the government's declared objective of changing the public deficit to a surplus by 2010, we will deploy a far-reaching and financially-driven programme aimed at deriving financial benefits through revenue generation and cost-saving, by using ICT in government.

### 5.28 Sourcing strategy

In implementing the CIS, we will deploy a sound sourcing strategy aimed at more efficient procurement. We will introduce a build-operate-transfer model for the major information systems, so that they are deployed and operated by the contractors and handed over to the government within three years at most.

### 5.28 Implementing a business intelligence layer across CIS

We will deploy a business-intelligence (BI) layer across all the CIS, empowering the government to use information to improve its decision-making. MITTS will serve as the government's BI agent and enabler.



### 5.29 Government GIS framework

By bringing all the primary stakeholders together, and in partnership with industry, we will set up a GIS competence centre aimed at consolidating all the GIS resources into one adequately-funded organisation. Through the establishment of the national GIS base-map as a national ICT resource, we will promote the development and maintenance of multiple relevant spatial datasets and converge all layers into a single coherent framework, enabling access and extraction of business intelligence.

### 5.30 Building competencies in line ministries

Permanent secretaries and chief information officers in government ministries will be equipped with adequate organisational capacity to ensure that they can take up a central role in the fulfilment of the government's ICT operations. In line with the enactment of the Public Administration Act and the establishment of the Centre for Research and Training, we will create a holistic wide-ranging ICT training and development programme offering multiple paths of training for different categories of public officers and of public-sector employees.

### 5.31 Infrastructure investment

Through MITTS, we will accelerate investment in our ICT infrastructure across all of government, for speed, security and efficiency. We will fast-track the consolidation process, covering the entire pubic sector and those local councils which ask to join the system. The development of a new high-capacity state-of-the-art data centre will be an integral part of the investment. In fulfilling the security requirements, we will pursue alignment with the prevailing ISO standards (such as ISO27001/2 for information security and ISO 25999 for business continuity).

### 5.32 Upscaling MITTS

MITTS Ltd will become one of the top five government-serving ICT firms in the EU.

MITTS will drive the deployment of the ICT infrastructure and its security, the accelerated consolidation efforts, the development of CIS, the enabling of e-government 2.0, and project

and programme management. MITTS will move from low-end IT operations into high-value IS-oriented operations, focusing on high business impact sectors with significant benefits to the government.

### 5.33 Strengthening corporate ICT governance

So as to sustain the expected growth and expansion of ICT in government, we will strengthen corporate ICT governance by introducing a self-regulation framework (CIG-SRF) for line departments and public sector entities, so that they adhere to base-line compliance standards in the key compliance areas denoted by the government, through MITTS, from time to time. The responsibility for corporate ICT governance will be taken over eventually by the MITA.

### 5.34 G2B virtual centre

We will set up a government-to-business online virtual centre to promote and facilitate the application of ICT for simpler and smoother interaction between government and businesses. The centre will offer guidelines, assistance and a repository of technological components and of web services to enable interoperability and data interchange facilities.

### 5.35 Unified collaborative and messaging system

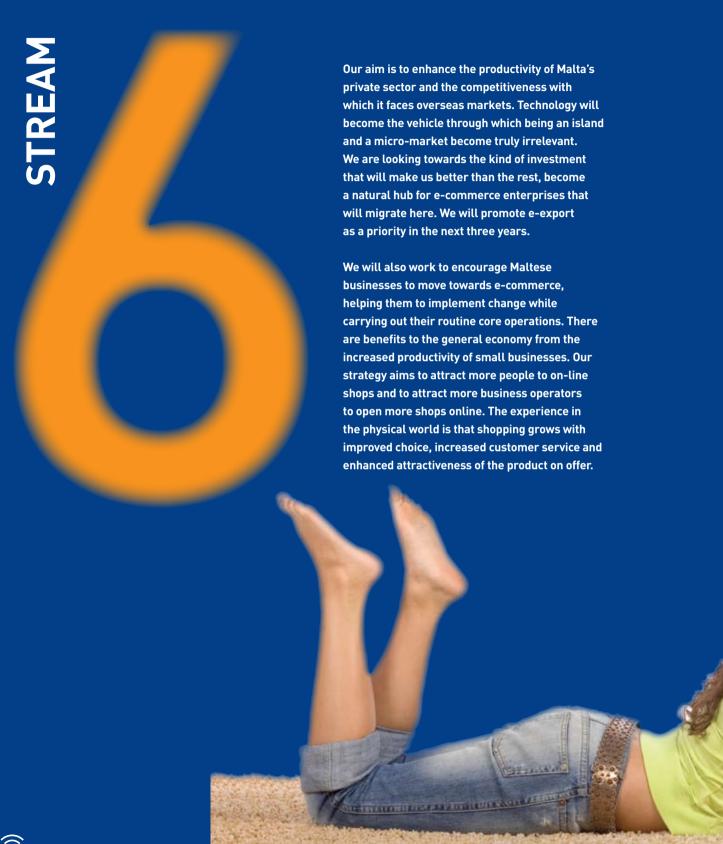
We will deploy a completely unified collaborative and messaging system across the public service and the public sector, to enhance productivity and reduce telecommunications and transport costs.

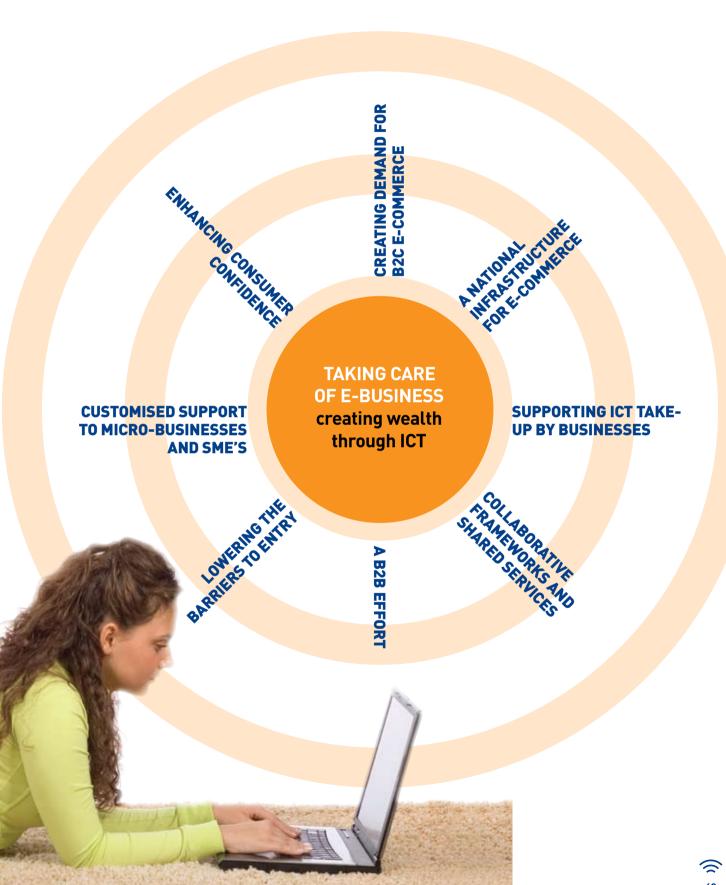
### 5.36 Common and shared document management

A common and shared document management framework and electronic records management platform will gradually replace the current paper-based structures of the government.

### 5.37 A national contact centre in Gozo

By adopting a central unified messaging system, we will learn from the experience of the Social Policy Information Centre (SPIC) and set up a National Contact Centre (NCC) for the delivery of e-government services over conventional or mobile telephony. The NCC will be set up in Gozo and will serve the whole of the country and Malta's overseas missions.





### Supporting ICT takeup by businesses

We will promote and support the development and take-up of ICT by businesses of all sizes and types in Malta, using fiscal incentives and publicly funded e-commerce frameworks.

### Collaborative frameworks and shared services

The strength of e-commerce and e-business rests in the capability of ICT to group diverse and geographically distant markets into one virtual marketplace, accessible from anywhere at any time. We will provide common and interoperable platforms and e-commerce chains, to enable low-cost and fast-track access to the on-line markets for Maltese businesses.

### Customised support to microbusinesses and SMEs

Larger players have the resources to explore e-commerce, but micro-businesses and SMEs may face a steep learning and organisational curve in finding their path through the digital marketplace. We will address this by thinking small in our e-commerce endeavours and developing programmes geared towards exposing of micro-businesses and SMEs to the electronic business environment.

### Lowering the barriers to entry

We will partner with public stakeholders and the private sector to lower the barriers to entry to the national e-commerce marketplace. We will tackle the real and perceived fiscal, legislative and regulatory barriers, the banking requirements, the educational process and the e-commerce supply chain integration necessary for successful e-commerce operations.

### A B2B effort

B2B remains a primary driver of e-commerce activity and e-business deployments. We will lead a concerted national effort to promote Maltese and international B2B activity by Maltese merchants. B2B can mean improved savings and revenue if efficiently used.

### **Enhancing consumer confidence**

We will strive to improve consumer confidence in the Internet and e-commerce activity in general. We will partner with regulators, e-commerce service providers, ISPs, banks and customer associations to promote the protection of customer rights in the on-line market space. This will be addressed by diffusing real and perceived threats through the deployment of a string of inter-related measures that address the security of transaction information, scam-avoidance, fraud prevention, privacy of customer data, enhancement of customer trust and quality of services provided.

### Creating demand for B2C e-commerce

We will stimulate demand for B2C e-commerce for physical goods, services and digital content. We will base our efforts on the regular collection of market intelligence so that we can bridge the gaps.

### A national infrastructure for e-commerce

We will develop a national e-commerce infrastructure to serve as a complete supply chain for Malta-based e-commerce providers and for international operators conducting e-commerce activity through Malta. Through this infrastructure, we will ensure that Malta establishes itself as top e-commerce location with competitive advantages over other destinations in terms of regulatory, fiscal, operational and cost-base standpoints. This infrastructure will include multiple payment platforms, a critical mass of e-commerce service and support providers, and a strong distribution and logistics framework.



### **TARGETS FOR 2010**

- → A Malta e-mall with 500 on-line merchants
- → 300 Maltese e-commerce sites with trust-mark label
- → Five thematic market-places to be operational

### 6.1 A framework for a national e-commerce supply-chain

Together with the regulators, intermediaries, distribution and logistics operators and the commercial banks, we will create a national e-commerce supply chain to serve as a national ICT resource. It will be built on commonly agreed policies, quidelines and service levels.

### 6.2 An enhanced legislative and regulatory framework

Through global expert assistance and in partnership with the regulators, we will strive to address the challenges to e-commerce activity, through an enhanced legislative framework.

### 6.3 Malta e-mall (MEM)

We will enter into a public-private partnership aimed at deploying the Malta e-mall, a low-cost on-line mall that will allow microbusinesses to use e-commerce to trade.

## 6.4 Thematic electronic market-places We will partner with industry and the sector-leaders to create a series of themed electronic market-places bringing together information, suppliers and buyers in a themed group, e.g. crafts, publishing and educational services.

### 6.5 Fiscal incentives for e-business

We will develop a scheme by which businesses are given fiscal and other incentives to set up in e-business. The incentives will cover hardware, software, training and advisory services to a fixed figure. Those who join the scheme must have the trust-mark label.

### 6.6 Promoting the set-up of an e-tailing community

We will support the development of e-tailing, based on the export of goods and services from Malta.

### 6.7 Expanding the e-trust scheme

We will expand the e-trust scheme, introducing different tiers of trust levels with the corresponding trust-mark labels. Together with industry and the regulators we will also draw up e-commerce best practice guidelines to promote customer rights and quality e-commerce services.

### 6.8 Digital business awareness and education

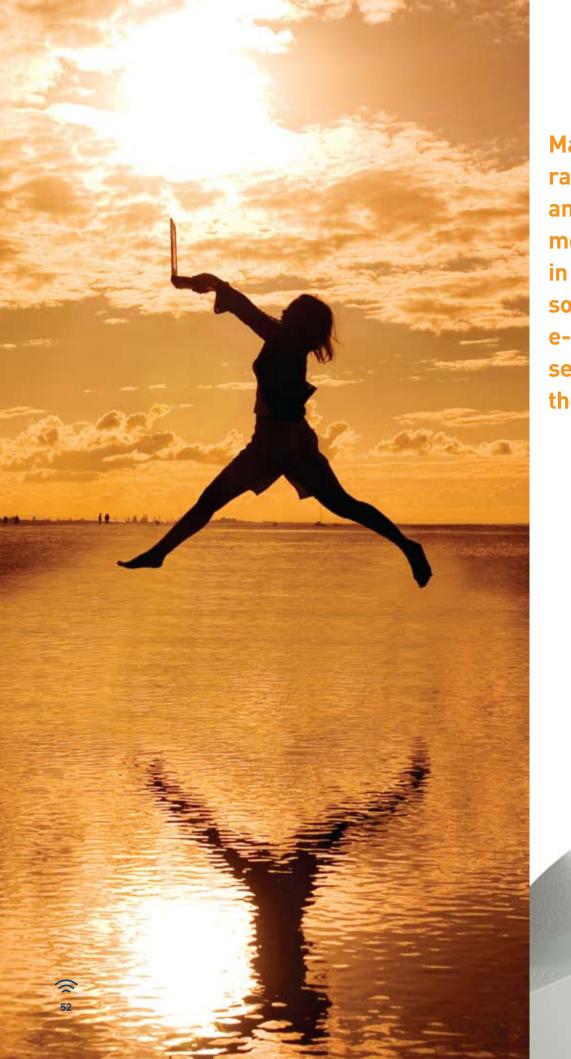
Together with the MCA, industry and the banks, we will promote the benefits of e-business and e-commerce to traditional businesses. The campaign will address the security aspects of e-business and how they should be handled.

### 6.9 Widespread e-banking take-up

We will support those banks which offer e-banking services, to ensure that there is wider take-up. We will link e-banking services with e-government and the Malta e-Mall to ensure that the medium gains more relevance as an alternative payment mechanism.

### 6.10 Integrating G2B into www.mygov.mt

In line with our e-government 2.0 aspirations, we will deploy a framework through which government-to-business (G2B) activity can be effectively merged into the www. mygov.mt environment, allowing all business-oriented government services to be delivered in a self-service fashion through a corporate space on the portal.



Malta has been ranked second among all EU member states in terms of sophistication of e-government services and their availability.



### 6.11 SME e-business advisory framework

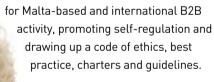
We will develop a customised SME e-business advisory framework aimed at providing customised advice on e-business planning to new e-business entrants. This framework will be made up of three primary components: training in e-business strategy formation and planning; advisory services aimed at e-business plan validation; and on-line community applications built on web 2.0 technology.

### 6.12 Facilitating mobile payments

We will address the outstanding regulatory and fiscal issues related to the growth of mobile commerce in Malta and the use of mobile devices as an alternative cost-effective payment mechanism. In parallel, we will deploy the necessary infrastructure to enable the use of e-wallets that make possible micro-payments in the public and retail sectors in Malta.

### 6.13 B2B institute

Together with the key stakeholders, we will promote and support the setting up of a business-to-business (B2B) institute, aimed at bringing together all the key B2B players





Under the auspices of the B2B Institute, we shall support the development of a virtual collaborative structure through a local B2B platform to establish common technology protocols and B2B and G2B interoperability frameworks, National e-Invoicing platform and related electronic clearing house to allow cost-effective and simpler activity between online businesses.

### 6.15 ERP and CRM

Jointly with the constituted bodies representing the private sector and the interested leading software vendors, we shall set-up an Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM) systems show-case with the aim of explaining to business the benefits of such systems and assisting them in evaluating the various technological alternatives in a laboratory environment.

### 6.16 Broadband for e-business

Together with the broadband and content service providers, we will develop a series of path-finding projects to exploit broadband for e-business and e-commerce activities.

### 6.17 Support to e-commerce service providers

To promote the ICT industry and enable the growth of e-commerce, we will support the creation and nurturing of an indigenous e-commerce service provision community, offering competitive and innovative products to on-line merchants. Apart from technology providers, this community will include accounting, auditing, advisory, legal and other professional services.

### 6.18 International e-auctioning framework

We will partner with private industry to develop an international e-auctioning framework, offering a secure, reliable and complete e-auctioning solution and supporting components, to attract international e-auctions.

### 6.19 E-commerce in Gozo

We will work towards a complete on-line solution for holiday-making in Gozo, a thematic e-marketplace for Gozo's cottage industries, and a set of fiscal incentives for e-commerce operators based in Gozo.





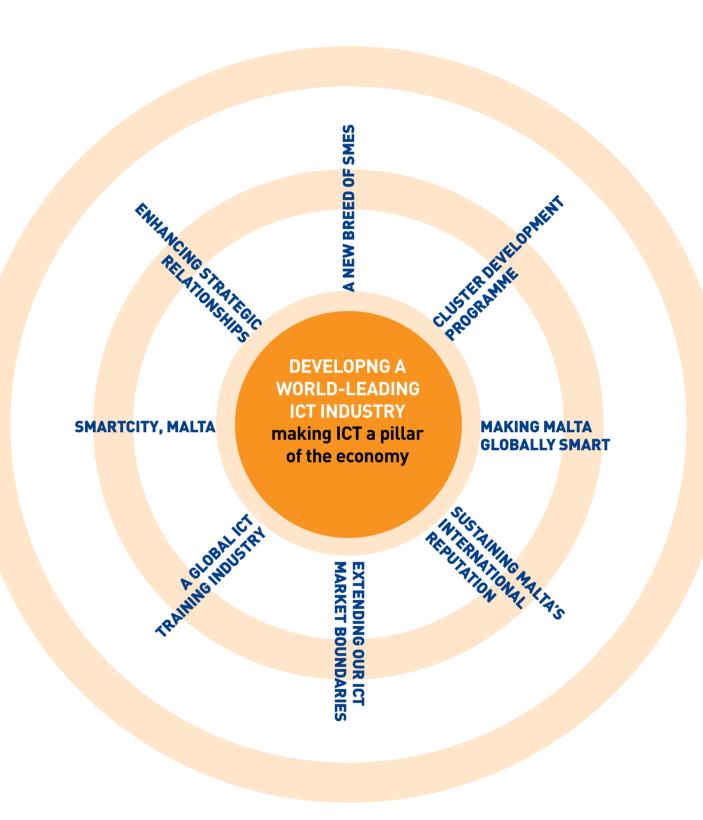
### STREAM

Already ICT stands alongside manufacturing, tourism and financial services as a main pillar of our economy. It is a major source of jobs, wealth and growth. It also helps the other three economic pillars to grow. This sector is growing around us at exponential rates. By 2010 the North American ICT market will have grown by a further 6.3% reaching the staggering figure of US \$341 billion. The Western European market will be following closely, growing by 4.8% by 2010 to US 256 billion. Most of that growth will be in software and in process management. When investors consider the options of where to set up we want Malta to be on every shortlist in every boardroom.

We will establish our reputation on the global scene, focussing on business process outsourcing, shared services, the provision of software support, training and relocating sales and logistics units. Once we are well established, we will take the bold step of targeting the North American and Indian markets. Malta will become The Smart Island: the place from which ICT services and products are delivered in a holistic and integrated fashion, with all the right training, research and development.

All this will come together in SmartCity. There our effort to offer Malta as investment destination will be matched by the reputation, the credibility and the existing client-base of one of the most respected ICT brands in the world: Dubai Internet City.





### Making Malta globally smart

We will work to attract ICT specialists from outside Malta, who will bring their skills to our market, expanding exponentially the skills base here.

### Sustaining Malta's international reputation

We will continue to strengthen our international reputation as a regional ICT leader by continuously improving on our unique selling proposition and by i pursuing the top spots in the most challenging and ambitious ICT rankings. We will continue to attract bluechip global players as their presence does not only create jobs and wealth, but is a vote of confidence that attracts others.

### Extending our ICT market boundaries

Our primary market will be Western Europe, with a particular focus on the United Kingdom, Italy and France. We will build commercial highways to emerging North African states and support them in their pursuit of information society technology application in their countries. We will also extend our boundaries by seeking to tap the huge US \$ 341 billion North American market, particularly the ever-growing software support and process management sectors, using our captive sector capabilities and the fact that we are one of the only three English-speaking nations in the EU. We will seek to attract major Indian software and global sourcing operators to establish a cost- effective European outpost in Malta, to provide customer-driven integration and services for their Western European client-base.

### A global ICT training industry

In line with our strategic target of establish Malta as a global ICT training hub, we will transform Malta's ICT industry into a globally relevant player in the ICT training and human resource development fields. The ICT training industry will be the 'next big thing'. We will encourage, support and assist Malta-based ICT training service providers

in investing for grow. We will build further on this strong indigenous base by attracting global players to set up training centres in Malta.

### **SmartCity, Malta**

We will sustain our high-profile role and pro-active involvement in the development of SmartCity Malta, in terms of public administration side and from a joint-venture standpoint. We will tackle the challenges and grasp the opportunities to make sure that the project translates itself into a real national success. We will strive to establish SmartCity Malta as the leading European ICT destination, making it the primary vehicle for the realisation of the government's vision for the ICT industry. We shall put our global network at the disposal of the project and position all our diplomatic and commercial channels as project relay nodes. We shall also serve as a bridge between SmartCity Malta and Malta's ICT industry to the benefit of all concerned.

### **Enhancing strategic relationships**

We will continue our commitment towards the formation of strategic alliances and partnerships with major global ICT players, for the delivery of value-added programmes and initiatives. We will review the current vertical strategic alliances with a view to extending the relationships. We will seek to enter into further alliances and partnerships with a wider variety of technology, including open-source players. The focus areas of the new wave of alliances will be the propagation of ICT-education and specialisations, and assistance to Maltese SMEs in acquiring knowledge, research and marketing networks and support services.

### A new breed of SMEs

We will work towards the creation of a new kind of SME in Malta: the knowledge-based SME, particularly in the ICT sector. We will help Maltese ICT SMEs to grow from retailers into value-added service providers, focusing on specialised but high-value services to the Maltese commercial community.

### **Cluster development programme**

In line with the national RTDI strategy, we will develop a cluster framework and infrastructure



aimed at the creation of our own national niche competences, which will serve as the international flag-bearers and leading sectors of Malta's ICT industry. Through the framework and infrastructure, we will create specialised educational and training programmes, research initiatives and public-private collaboration initiatives, and we will set up research and competence centres with global reach. We will develop five global clusters in hospitality, financial services, maritime, e-government and digital media. This will allow us to augment our RTDI capability and to transform ICT in Malta sector into a nerve centre for a series of inter-linked specialisations that will enable us to tap into EU and international research and development programmes and initiatives.

### **TARGETS FOR 2010**

- → The creation of 4000 new jobs in ICT
- → 200 new ICT companies will set up in Malta
- → 15 new vertical strategic alliances
- → 250 new ICT jobs in Gozo

### 7.1 New vertical ICT markets in Malta

We will support the creation of a critical mass of players in emerging Maltese vertical ICT markets: ICT for ageing, e- commerce service provision and e-government technology.

### 7.2 Structuring and maintaining a leading unique selling proposition

We will continuously review the composites of our value proposition to ensure that the ICT landscape in Malta will always have a unique selling proposition that sets it apart from other ICT destinations.

### 7.3 Supporting the reality of SmartCity

We will support the realisation of SmartCity Malta through joint endeavours to attract blue-chip players; offering touch-down and incubation facilities to Maltese ICT start-ups; customising investment aid solutions for international players that relocate their operations to SmartCity.

### 7.4 A red-carpet programme

Using the expertise of the Government Services Unit in SmartCity, we will facilitate the process of setting up in Malta, for knowledge-based companies.

### 7.5 Reaching the North American IT services market

We will pull together the diplomatic, economic and commercial stakeholders to establish a strong business link between the ICT industry in North America and in Malta. We will build the necessary interfaces, structures and marketing vehicles to attract further ICT investment to Malta from North America, particularly in the fields of process management and software/technical support.

### 7.6 A European node for ICT India

We will work with the Malta Chamber of Commerce to open up channels of communication with ICT players in India, to encourage them to set up a European base here in Malta.

### 7.7 Partnership with international IT chambers and clusters

We will promote the establishment of three-way partnerships between the government, the Malta Chamber of Commerce and ICT chambers of commerce and cluster organisations the world over, including CRITA (US), NASSCOM, the Competitiveness Clusters (France), Dubai Internet City and AlTech-Assinform (Italy).

### 7.8 A digital content and media industry

We will capitalise on the strength and growth of Malta's ICT industry, the film-making industry, and the media sector of SmartCity Malta, to create a vibrant digital media sector based on the convergence of these three factors. We will create a customised programme to target digital publishers, broadcasters, CGI operators, content management services, digital rights management, media and marketing services, web design, interactive services, computergaming and multimedia software development.

### 7.9 A thriving ICT training industry

We will promote, support and give fiscal incentives for the growth of the private ICT training business in Malta, helping them reach international markets. We will work towards building an ICT training system based on the model of TEFL schools in Malta.

### 7.10 A programme to facilitate and attract IT specialists from overseas

Building on the EU Blue Card, we will develop a programme that will make it simple for non-Maltese IT specialists to relocate to Malta, within the immigration regulatory framework. The Smart Island will become a lifestyle destination of choice for the brightest and smartest IT specialists.

### 7.11 Creating business space

The government will work to bring together e-businesses with shared interests in a single space.

### 7.12 Shared services and BPO programme

We will develop a customised programme to promote, attract, facilitate and aid major ICT players, though not exclusively, to set up their process management and BPO service operations in Malta.

### 7.13 Fiscal incentives for ICT investment

We will devise innovative fiscal incentive schemes aimed at encouraging investors to set up highvalue sustainable ICT operations in Malta.

### 7.14 Nurturing ICT entrepreneurial activity

Together with organisations that promote entrepreneurship and represent entrepreneurs, we will promote ICT entrepreneurship - to encourage start-ups and investment in all these new opportunities.

### 7.15 ICT start-up aid programmes

We will develop a holistic framework to help ICT start-ups begin with low costs and overheads. This assistance will include fiscal incentives, legal assistance, escrow services, intellectual property advice, touch-down business space and training assistance.

### 7.16 Public procurement as a driver for investment

We will use the government's role as a client and heavy consumer of ICT products and services to build long-term strategic partnerships.

### 7.17 Sustaining vertical strategic alliances

We will review and upgrade current vertical strategic alliances to attune them to the objectives of The Smart Island, focussing mainly on ICT education, technical support to SMEs in ICT, and engenderment of the information society. We will create new vertical strategic alliances with blue-chip players.

### 7.18 Creating a national clusters framework

Together with industry leaders, educational institutions and research institutes, we will develop a national cluster framework to serve as a first-class environment that allows for the development of vertically integrated specialised clusters in a range of niche areas. The clusters will serve as regional competence centres, taking the lead in active participation in EU- and industry-funded research projects.

### 7.19 Developing five Malta clusters

We will develop five distinct clusters, bringing together leading players in industry, academia and research in e-government and e-governance implementation, hospital and tourism solutions, integrated systems for financial services, ICT solutions for the maritime industry, and digital media.

### 7.20 Targeting the Commonwealth for growth

Building on our Commonwealth heritage, we will extend the competence, knowledge and services of our clusters as a driver for industry growth and wider market reach.

### 7.21 A global test-bed facility

We will invest in the setting up of a physical centre in a central location to serve as a global test-bed facility for major global players to demonstrate their innovations at a fractional cost. The facility will be supported by an international marketing programme and an ancillary reference site virtual expo.

### 7.22 Marketing IT in Malta

We will work on an international marketing campaign, on-line and via conventional channels, portraying Malta as a value proposition, showcasing SmartCity Malta and the abilities of our workforce.

### 7.23 ICT intelligence players in Malta

We will work on attracting the major ICT research, intelligence and data monitoring organisations, such as Gartner, IDC, JupiterResearch, Forrester, Meta and Dataquest to the setting up of a regional operations centre in Malta.

### 7.24 International benchmarking and publications

We will participate in all the major international benchmarking surveys carried out by leading organisations in ICT. We will feature in major ICT international publications, journals and newsletters to highlight Malta's value as an ICT destination, and to disseminate our success stories worldwide.

### 7.25 A workforce preparation programme

Demand for resources will definitely exceed supply, so we shall strive to attract as many Maltese people as possible to the ICT industry. We will design educational programmes and use innovative marketing to attract students to ICT. We will invest in a free-of-charge programme, aimed at equipping new employees in the industry with the right attitude, culture and drive to excellence.

### 7.26 An ICT professional body

Together with the Computer Society of Malta, the British Computer Society Malta Section, the ISACA Malta Chapter and the ICT industry, we will work to set up an ICT professional body, establishing codes of conduct, strong professional governance and self-regulatory guidelines for ICT professionals. This organisation will build a national register of Maltese ICT professionals, not just graduates but those who have worked in the sector for some time. This organisation will have input into the restructuring of ICT education.

### 7.27 Gozo - a hub for ICT support services

In Gozo, we will create a business park for 25 operations, set up a mini-Government Services Unit for knowledge-based operations, and set up and operate a dedicated global sourcing academy.

## BEINGQUICK&

The success registered to date in this sector was due in great part to the ability and willingness of the team at the Ministry of Investment, Industry and Information Technology to work with a wide range of players and stakeholders for a series of common goals. We will continue to be agile and focused, bringing in more excellent, dynamic and enthusiastic individuals to form part of our team and inculcating in them passion for the field and pursuit of excellence. The objectives outlined in The Smart Island will be achieved through the following.



# AMINISTRYFOR

IT will retain its political relevance on a national scale. It will continue to play a key role in a ministerial portfolio.

### The Malta Information Technology Agency (MITA)

We will set up the MITA to consolidate the various ICT departments and agencies into one streamlined organisation. The MITA will be responsible for the implementation of this overall strategy. MITTS Ltd will retain its identity, but direction and governance will fall under the MITA. The Core ICT Advisory Committee, Information Society Secretariat, the ICT in Government Unit and Malta Government Technology Investments Limited will be integrated with the MITA. The MITA will be responsible for the entire ICT policy and planning functions of the government, including the major information systems in the public sector. It will manage the public ICT budget and will be the means through which the government determines its ICT priorities.

The MITA will develop and maintain the Master ICT Investment Plan for core information systems, and will set up a dedicated programme and project support unit to assist line ministries in the management of this portfolio of projects. This unit will be responsible too for the programme management of horizontal core systems such as GIS, document management and unified collaborative systems. The PPSU will bring together a small team of excellent resources to enable permanent secretaries and chief information officers to realise their vision and handle their programmes and also to provide input to the ICT governance process from an information systems standpoint.

Another core responsibility of the MITA will be the management of an ICT governance framework, primarily through the establishment of self-regulation frameworks for line departments and entities. The responsibility for the actual development and management of technical policies, standards and quidelines will rest with MITTS, under the guidance of MITA.

A strong research and intelligence unit will be set up at the MITA, to provide a continuous flow of information for ICT decision-makers. This unit will also lead the definition and establishment of ICT as an economic sector across all government functions, ensuring that proper statistics and information are adequately registered and published on an on-going basis.

Any structures or units required for programme implementation arising from The Smart Island strategy will be organised within the MITA for the sake of coordination and coherence, cost-effectiveness collaboration.

The MITA will be led by a Board of Governors reporting to the minister responsible for information technology. The private sector will be invited to nominate a representative to the board.

### **NISCO**

We will build on the success NISCO has registered over recent years, and we will create permanent thematic sub-groups to follow through with the principal strategy developments. These subgroups will be backed by the research unit at the MITA.

### **MITTS Ltd**

MITTS Ltd will become one of the top five government-serving ICT firms in the EU. The role of MITTS will be significantly up-scaled to take up high-value IS-oriented operations, focusing on high-business-impact sectors, with significant benefits to the government. MITTS Ltd will attract the smartest ICT resources in Malta and will sustain its prestigious centre-of-excellence role.









