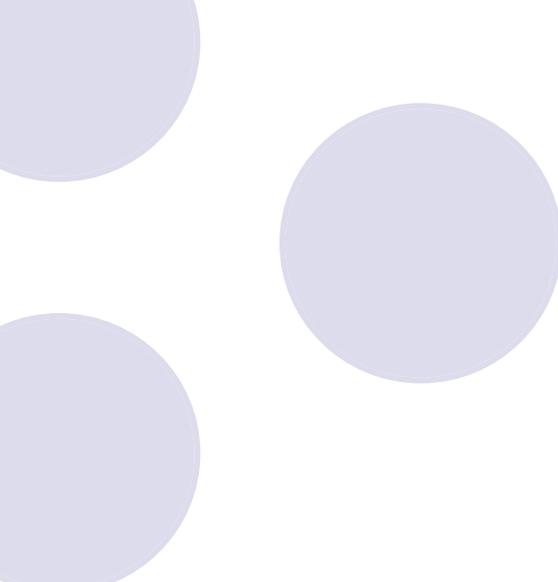




## •• Emerging ICT Market Strategy: South Africa





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Further copies of this document and other information on how the Victorian Government can help local ICT companies can be obtained from:

Multimedia Victoria  
Level 7, 121 Exhibition Street  
Melbourne VIC 3000

E: [queries@mmv.vic.gov.au](mailto:queries@mmv.vic.gov.au)

W: [www.mmv.vic.gov.au](http://www.mmv.vic.gov.au)

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# Minister's Message

I am very pleased to introduce the second major Emerging ICT Market report produced by the Victorian Government in support of Victoria's thriving and innovative ICT industry.

While the first report – *Emerging ICT Market Strategy: China*, - released in 2006, focused on one of the Asian 'tigers', this report highlights one of the world's quiet achievers, South Africa.

*Emerging ICT Market Strategy: South Africa* explores ICT trade and investment opportunities for Victorian ICT companies, and concludes that after almost 15 years of democratic rule South Africa is reaching an exciting and challenging period in its history.

It is now an ideal time to take a serious look at an emerging economy that does not get the attention afforded China and India, but certainly presents opportunities.

The cultural and linguistic similarities to Australia and other Western markets make the potential transition to a South African operation easier than in other developing markets.

Add to that, strong economic growth, a massive government investment in infrastructure and upcoming major events such as the FIFA World Cup in 2010, and the potential for Australian and Victorian ICT expertise is high.

A survey of South African firms undertaken as part of the preparation of this report also indicates strong interest in forming investment and trade relationships with Victorian companies, with respondent firms expressing an interest in meeting potential Victorian partners or investors.

With on-going support from the Victorian Government through focused export programs and provision of market intelligence, Victoria's ICT industry continues to grow, expand and contribute positively to the Victorian economy.

The *Victorian Government ICT Industry Plan 2005-2010* aims to develop the ICT Sector and maximise the economic benefits that a robust industry will deliver. The Victorian ICT industry employs almost 84,000 people – around 34% of the Australian total. Gross annual revenues for Victorian-headquartered companies have reached \$19.9 billion, of which \$1.6 billion comes from overseas operations and exports of ICT equipment and services.

*Emerging ICT Market Strategy: South Africa* is based on research conducted by the Centre for Strategic Economic Studies (CSES), Victoria University and BMI-TechKnowledge Group (BMI-T), Johannesburg. The report indicates that for those companies willing to explore this new frontier, the trends in the South African market have the potential to present opportunities for Victorian ICT companies.

*Emerging ICT Market Strategy: South Africa* is part of the Victorian Government's contribution to help local ICT companies gather market intelligence and to identify strategic opportunities in high-potential overseas markets. I encourage all Victorian ICT companies to read this report and to request a copy of the full research by contacting Multimedia Victoria.



The Hon. Theo Theophanous  
Minister for Information and  
Communication Technology





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# Introduction

The Victorian information and communication technology (ICT) industry is a significant contributor to the economic performance and wealth of Victoria and this is acknowledged in the *Victorian Government ICT Industry Plan 2005-2010*.

A key aim of the Industry Plan is to encourage a more innovative, collaborative, specialised and entrepreneurial ICT industry with global ambitions.

The Industry Plan offers a suite of programs to assist local companies to achieve their global ambitions, including providing support to attend trade fairs, leading trade missions to key international markets and providing assistance for companies planning and executing export strategies.

In addition, the Government is committed through the Industry Plan to “help local ICT companies to gather market intelligence and identify strategic opportunities in high potential overseas markets through a series of Emerging Markets Strategies”.

This document is the second Emerging Market Strategy released and takes as its subject the assessment of South Africa as an ICT producer and consumer and what this means for Victoria, with the target audience being the Victorian ICT Industry.

The research undertaken by the Centre for Strategic Economic Studies (CSES), Victoria University and BMI-TechKnowledge Group (BMI-T) Johannesburg seeks to provide market intelligence to the Victorian ICT industry on South Africa, including:

- characteristics of the South African ICT market;
- characteristics of the South African ICT industry;
- opportunities and challenges; and
- doing business in South Africa.

The CSES and BMI-T research is available exclusively to Victorian ICT companies by contacting Multimedia Victoria at [queries@mmv.vic.gov.au](mailto:queries@mmv.vic.gov.au). For up to date information on opportunities for engagement with the South African ICT market, check the Multimedia Victoria website at [www.mmv.vic.gov.au](http://www.mmv.vic.gov.au).

For information detailing the first *Emerging ICT Market Strategy: China* released in 2006, contact Multimedia Victoria as detailed above.

# 1. South Africa's Place in the Global ICT Market

A new wave of globalisation in the information and communication technology (ICT) industry has brought a sharper focus on international sourcing.

The large emerging economies - "BRICS" – Brazil, Russia, India, China and South Africa - are receiving special attention, both as new growth markets and as low-cost investment and production locations and their emergence brings opportunities and challenges.

While not attracting as much attention as China and India, after almost 15 years of democracy South Africa remains the economic powerhouse of Africa, with a gross domestic product (GDP) close to AUD 285 billion.<sup>1</sup>

South Africa reached its 34th consecutive quarter of uninterrupted growth in the first quarter of 2007, reaching the Government's target growth rate of 6% per annum.

South Africa has relatively well-developed physical infrastructure (e.g. roads, electricity and telecommunications), and the Government's progressive economic policies have led to continued development of its natural and mineral resources and the growth of a high quality manufacturing sector.

The increasing focus of the country's sector-specific policies is aimed at shifting the economy's dependence from low value mineral exports to high value-added knowledge-based production.

In line with this, the South African Department of Trade and Industry (DTI) has identified ICT and electronics among 11 priority sectors that have the highest growth and investment potential in South Africa and believes that investment opportunities lie in the development of:

- access control and security systems and equipment;
- automotive electronic subsystems;
- systems and software development in the banking and financial services sector;
- silicon processing for fibre optics; and
- integrated circuits and solar cells.

There are many ICT multinationals already doing business in South Africa, for example IBM, Microsoft and HP. In general they maintain representative distribution outlets for the supply of their goods and services, with little or no local manufacturing, R&D or solutions creation.

The telecommunications sector is dominated by MTN and Vodacom, the two mobile network operators, with a combined turnover of more than AUD 12 billion, and the fixed-line incumbent Telkom (which holds a 50% stake in Vodacom).

There are more than 9,000 ICT firms in the sector, with the top 5 IT firms capturing more than 55% of the IT market.

South Africa's ICT strengths include:

## **Innovative and cost effective problem solving**

South Africans often excel at being innovative, making do with limited resources and facilities and solving problems due in part to pre-democracy sanctions. This is also achieved at a price that is reasonable compared to similar skills from Europe and North America.

As a result, many South African firms have developed innovative solutions through which they service niche requirements. In the communications sector, innovative solutions are driven by mobile operator requirements, and in the electronics sector, most players tend to be small to medium in size and generally have their own intellectual property (IP).

## **ICT skills and the local work ethic**

Not only are South African IT skills affordable, they compare with the best the world has to offer. The South African finance industry boasts advanced IT infrastructure and has long been at the forefront of the adoption of new technologies. South Africans are also known for their willingness and ability to work hard in difficult markets and economies.

1. For the purposes of this document, currency conversion has been calculated at approximately 6 South African Rand to 1 Australian Dollar based on October 2007 exchange rate

## South Africa's dual economy opportunity

South Africa's developing world status and the "dual economy", the mix of developed and developing economy characteristics, has been instrumental in pushing it to develop innovative solutions in a number of areas, including:

- sophisticated software products for the financial services industry;
- prepayment and metering systems for utilities;
- mobile coin-less vending;
- microwave and satellite communications in defence and security-related electronics; and
- infrastructure delivery and management systems, including renewable and alternative energy integration and management technologies.

## Key areas of expertise

The South African IT industry has developed specific expertise concentrated in a number of areas including:

- managed (outsourced) services;
- e-Security;
- biometrics and software development; and
- the ICT product and services value chain.

Despite these competitive advantages and strengths, there are, of course challenges facing South Africa.

High-level skills are in short supply in many areas, there are inevitable social tensions arising from uneven wealth distribution, the presence of high levels of unemployment among the poor and high rates of HIV/AIDS infection.

## Key trends in ICT sector

South African market analysts BMI-T have examined key trends in the South African ICT sector and suggest that:

- offshore providers will continue to market their services locally in South Africa;
- the skills shortage will continue to impact the industry;
- corporate strategy will increasingly dictate ICT spending; and
- there will be increasing competition from other emerging economy players eg India.

Despite these challenges and some uncertainty in relation to presidential succession, growth in South Africa is strong and there are business opportunities to be found.

## 2. Overview of the South African ICT Market

### South Africa: three main ICT clusters

South Africa has nine provinces, three of which have thriving ICT industry clusters:

- Gauteng (Johannesburg and Pretoria), which accounts for 57% of all South African ICT firms;
- Western Cape (Cape Town), which accounts for 17%; and
- KwaZulu Natal (Durban and Pinetown), which accounts for 8% (Figure 1).

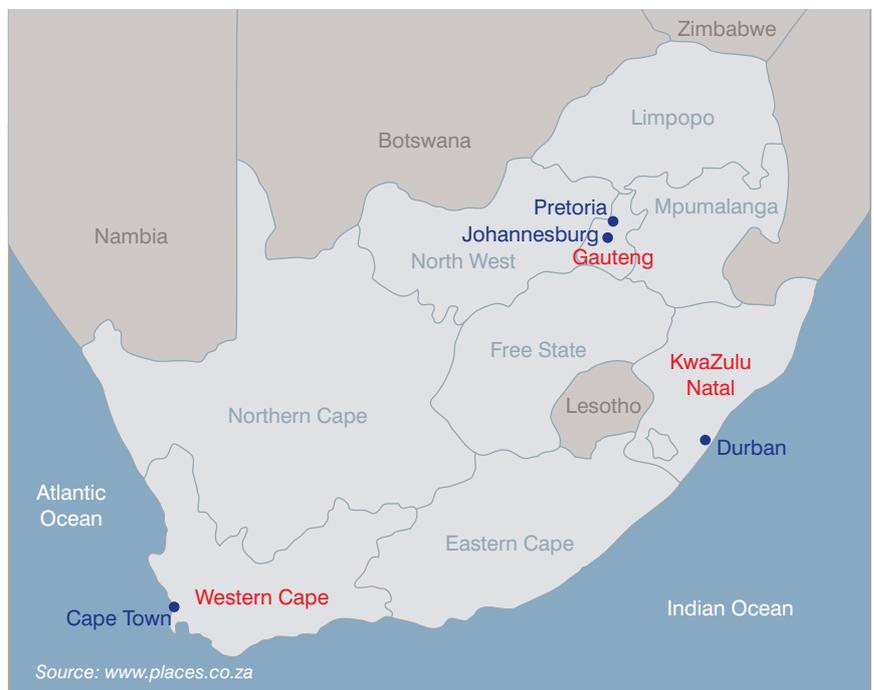
All three are well served by developed infrastructure, with the Gauteng cluster readily accessible from South Africa's gateway international airport in Johannesburg.

The South African market is dynamic, showing a propensity for consuming new technologies and finding creative ways to apply them to the challenges of a developing economy.

South Africa's combined ICT market is the largest on the African continent, with total spending of more than AUD 25 billion in 2006. The IT market was worth almost AUD 8.1 billion, fixed-line communications AUD 6.4 billion, and mobile communications AUD 10.6 billion.

There were around 228,000 skilled ICT employees in South Africa in 2005, of which 130,360 were in the ICT producing sector (excluding manufacturing), and 97,435 in ICT using industries.

The ICT sector as a whole boasts a world-class, skilled workforce of engineers and technicians, although skills shortages do exist in certain areas.



### 2.1 Market Segmentation

South Africa's ICT market is expected to grow by 6.6% a year between 2005 and 2010, with all segments contributing as follows:

- the IT market is expected to grow by 5.8% a year;
- telecommunications by 7.0% per year; and
- Internet revenues by 14.5% a year, driven by strong growth in broadband adoption.

#### 2.1.1 Information Technology

Information Technology market revenue reached almost AUD 7.6 billion in 2005, of which hardware accounted for AUD 3.1 billion, services accounted for AUD 3 billion, and packaged software accounted for AUD 1.5 billion.

Due to the declining cost of hardware, software expenditure will increase its share of IT spending due to stable pricing. Services spending is expected to remain steady as firms attempt to use IT to increase revenues and decrease the cost of operations.

By 2010, it is expected that hardware will account for 38%, services for 40% and packaged software for 22% of the total IT market.

#### Hardware

The total hardware market grew by 4.4% during 2005 to AUD 3 billion. The peripherals market has shown the strongest growth, while strong growth in the IT systems sector during 2004 has turned around, with negative growth of 0.9% during 2005.



### South African IT market, 2005-2010 (ZARm)

	2005	2006	2007	2008	2009	2010	CAGR
<b>Hardware</b>	18,574	20,153	21,539	22,793	23,863	24,589	5.8%
<b>Software</b>	9,042	9,535	10,068	10,808	11,549	12,339	6.4%
<b>Services</b>	18,222	19,212	20,452	21,598	22,786	23,921	5.6%
<b>Total IT</b>	45,838	48,900	52,060	55,200	58,198	60,848	5.8%

Note: 2007 onwards are forecasts. Source: BMI-T, 2007.

In unit terms, desktop sales showed slower growth in 2005, while Notebook demand in the consumer and SME markets remained buoyant.

Networking equipment (LAN and WAN) sales accounted for 5.3% of the total IT spending. BMI-T predicts that Gigabit Ethernet revenues will surpass Fast Ethernet by 2008. All-in-one networking devices are growing in popularity and centralised WLAN architecture (wireless switch/controller and thin access points (APs) has also been rapidly gaining ground.

#### Software and services

The packaged software market grew 3.7% during 2005 to AUD 1.5 billion, and is expected to grow by around 6.4% a year to 2010. The fastest growth is expected in the applications and systems infrastructure segments.

The software market has been driven by cost cutting and complexity elimination, with a shift towards growing new innovative business services and increasing customer value. Integration issues continue to drive expenditure, with the need to solve common integration issues forcing collaboration between software vendors.

The need for information security and storage management software to keep customer information safe will increase as the amount of data proliferates.

The South African IT services market was worth AUD 3 billion in 2005, showing a year-on-year growth of 4.8%. The services market revenue is forecast to grow 5.6% a year to 2010.

Web services will evolve from point applications to a service-oriented architecture (SOA) platform to underly the utility computing movement as hardware then service dimensions are added. Spending will increase only if the IT utility successfully reduces complexity while delivering on the promise of increased flexibility and decreased costs.

Reflecting skills needs, IT education and training expenditure is expected to grow by around 11% a year to 2010.

#### 2.1.2 Telecommunications

Telecommunications market revenue is expected to increase from 2005 to 2010 (AUD 16 billion in 2005) by 7% per year. Revenues from mobile cellular services are expected to increase by 8.1 per cent

by 2010, and revenues from fixed-line and value added services are expected to increase by 5.1 per cent by 2010.

#### Fixed-line communication services

Fixed-line penetration has decreased as mobile substitution continues to erode the customer base. Fixed wireless services that are relatively inexpensive, can create additional market growth for the fixed-line operators where they are deployed as a substitute for fixed-lines. However this trend could be mitigated by the mobile phone operators themselves as they enter the fixed wireless services arena.

In general, the opportunity lies in providing more services (and much higher bandwidth) per line at an attractive price, rather than growing the subscriber base.

The opportunity for fixed-line subscriber growth lies with the ability of operators to roll-out a cost-effective broadband service.

### South African telecommunications revenues, 2005-2010 (ZARm)

	2005	2006	2007	2008	2009	2010	CAGR
<b>Mobile cellular services</b>	57,649	64,118	71,221	76,563	81,046	85,068	8.1%
<b>Fixed-line and value added services</b>	37,322	39,111	41,048	43,064	45,342	47,922	5.1%
<b>Total</b>	<b>94,971</b>	<b>103,229</b>	<b>112,269</b>	<b>119,627</b>	<b>126,388</b>	<b>132,990</b>	<b>7.0%</b>

Note: 2007 onwards are forecasts. Source: BMI-T, 2007.

#### Mobile communication service

The strong growth of mobile services is expected to continue in South Africa, with gross subscriber numbers expected to reach 39 million by the end of 2007.

In 2006, mobile data services contributed almost AUD 795 million and these revenues are forecast to grow with an annual growth rate over the period 2005 to 2010 estimated at 25%, compared with the voice market's 5.3%.

#### Mobile devices and handsets

It is likely that accelerating adoption of 3G and HSDPA technology will continue in South Africa, thus driving a growing segment of 2.5G subscribers to 3G equipment. However South Africa will have fewer converged devices, due to a large proportion of the population being unable to afford the costs associated with the 3G/HSDPA data offerings provided by the network operators.

By 2010, South Africa is expected to have more than 40 million (gross) mobile subscribers, with a large proportion of them having GPRS and EDGE-enabled

phones, many of which will be WCDMA/UMTS enabled. It is also expected that niche and emerging technologies like TD-CDMA, CDMA2000 and WiMAX connectivity will be available via handsets.

#### Broadband Internet access services

Broadband penetration is expected to grow from the 2005 level of 0.2 per 100 to 1.8 per 100 population by 2009, remaining low by international standards. However the Government is pushing the market to increase services which may lead to a higher roll-out and therefore higher penetration.

South African broadband access prices have far exceeded those of most other countries. As new players enter the market, a price reduction is expected as are improved service offerings. As a result South Africa will more closely approach parity with some countries, but will fall short of the most advanced regions.

At the current pace, BMI-T expects nearly a million PC broadband connections by 2009, and more than 2 million by 2011 (including cellular service providers), which make up a substantial proportion of the total.

Internet access revenues are projected to grow by 14.5 per cent from 2005 to 2010, with the largest share of revenue being from DSL, followed by mobile cellular technologies.

Excluding the fully mobile offerings from the mobile cellular operators, ADSL will remain dominant. However by end 2007, 3G cellular broadband access is expected to catch up to, and even overtake ADSL in terms of gross subscriber numbers.

A slightly higher penetration of fixed-wireless access, relative to ADSL and 3G cellular, is also expected in the future.



### Internet access revenues by type (including 3G), 2005-2010 (ZARm)

	2005	2006	2007	2008	2009	2010	CAGR
<b>Total broadband revenue</b>	873	1,669	2,478	3,139	3,914	4,732	40.2%
<b>Total narrowband revenue</b>	2,061	1,920	1,730	1,504	1,261	1,031	-12.9%
<b>Total internet revenue</b>	2,934	3,589	4,208	4,643	5,175	5,763	14.5%

Source: BMI-T, Wireless Access and Broadband report, 2006.

## 2.2 Key Sector Trends

South Africa's economic and social transformation is a major driver of demand for ICT products and services, with infrastructure development being a major influence on vertical market growth opportunities and ICT spending in many areas.

### 2.2.1 Vertical Market Demand

The industries spending most on IT products and services are the financial services, manufacturing, government and distribution sectors, while the education, government, distribution, business services and healthcare sectors are expected to grow rapidly over the next few years.

Efficiency remains a priority for financial institutions in general, and they are expected to make their IT decisions in pursuit of this objective. The ongoing modernisation process, the need to standardise systems, as well as the move towards collaborative value chains, will drive spending among corporate retailers.

Confidence and the economic environment continue to exert a negative impact on the manufacturing sector. This coupled with elongating replacement cycles as well as increasing complexity, are inhibitors of IT spending in this sector.

However, some IT spending trends are common to all vertical markets. These include:

- making more effective use of existing systems;
- improving control and transparency;
- reducing costs, saving time and resources; and
- the increasing complexity of buying decisions.

There has been a tighter focus on IT budgets and increasing focus on IT/business alignment, and a strong demand for evidence that the investment is worthwhile.

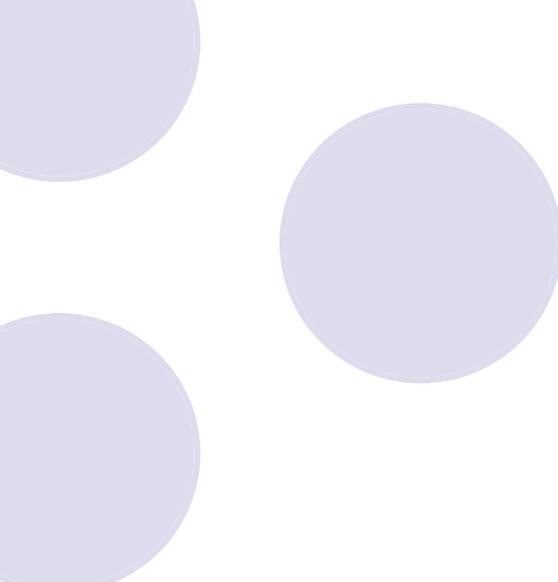
This has driven a shift in IT demand from:

- large scale projects to smaller ones;
- from new implementations whose value is not proven, to optimisation and consolidation of existing infrastructure; and
- dispersed systems to integrated ones, in order to streamline processes and gain efficiency.

### 2.2.2 High Profile Events and Projects

Special, high-profile events and projects, such as the 2010 FIFA World Cup and the Square Kilometre Array (SKA) may offer a range of opportunities.

The 2010 FIFA World Cup will require sophisticated digital capabilities in telecommunications and broadcasting, leading to increased demand on the South African Broadcasting Corporation (SABC) and the national signal distribution firm, Sentech, to upgrade and digitise their infrastructure.



This is expected to drive the need for digital equipment, project management, systems integration, billing, payment and collection systems, as well as construction of related stadiums and transport infrastructure.

If South Africa is successful in attracting the SKA project, a USD 1.6 billion radio telescope considered to be the most sensitive radio instrument ever conceived, there will be further need for specialised and sophisticated ICT support. The final decision on where the SKA will be located will be made in 2008/09.

### 2.2.3 Infrastructure Projects

The South African Government is planning to spend billions on infrastructure in the next few years, making the education, healthcare and construction industries promising targets.

The liberalisation of South African telecommunications will also result in increased consumption of telecommunications and IT equipment, as carriers build their own infrastructure or as first-tier operators increase their capacities to cater for increased demand on their facilities.

The strong demand in the communications and media sector is likely to spill over into other sectors leading to increased ICT spending across the board.

### 2.2.4 Regulatory compliance

In response to national and international government and industry standards and regulations, firms procure and invest in technologies and services that enabled them to achieve compliance. This area will, therefore, contribute to growth in spending on infrastructure, software and services that support the organisations' compliance strategies.

### 2.2.5 Market Drivers

Within technology trends, mobility and convergence are likely to be market drivers.

Voice over Internet Protocol (VoIP) and the adoption of wireless technologies that facilitate mobility will be important market drivers, not only of equipment, software and systems sales, but also of consulting and services engagements that can assist companies in navigating the new technology landscape.

Government departments and organisations in South Africa, at all levels, are major consumers of ICT products and services, and the State Information Technology Agency (SITA)<sup>2</sup> plays a central role in coordinating purchasing and use of ICT at national, provincial and municipal levels.

Consumer, Small Office Home Office (SOHO) and small business spending is also likely to be an ICT driver, with a rapid increase in the number of black South Africans achieving "middle-class" status and first world levels of disposable income. Difficulties with transport infrastructure, sometimes limited public transport and traffic congestion may also be a driver of ICT spending in the SOHO market.

### 2.2.6 Gateway into Africa

South Africa is an important gateway into Africa. With increasing competitive pressure on home soil, many of the larger South African services players have expanded their reach into Africa.

These strategies seem to be paying off, albeit slowly. In most instances, partnerships with foreign firms have smoothed the way, and there is increasing opportunity for Victorian/Australian and other foreign suppliers to participate in these expanding African supply chains.

2. SITA is the South African government's ICT procurement agency

# 3. Victoria & South Africa: Relations & Opportunities

South Africa is closely linked to the Southern African region, with major trading partners in Europe, North America and Asia.

In high-technology goods (including ICT), South Africa's major export markets are dominated by Europe and the US. Australia ranked 14th in 2006 as an export market, taking around AUD 70 million.

China, the United States and Germany are the major suppliers of high-technology imports into South Africa. Australia ranked 22nd among suppliers, sending around AUD 160 million of imports into South Africa.

## 3.1 ICT trade flows between South Africa and Victoria

As reliable data on bilateral trade in software and services are limited, official trade data gives only a partial picture of the flows between countries. In recent years Australia has exported around AUD 24 million worth of ICT equipment to South Africa each year, while imports from South Africa have fluctuated between AUD 20 million and AUD 60 million a year.

### 3.1.1 Victoria's bilateral ICT trade with South Africa

South Africa ranked 11th among Victoria's ICT equipment export markets, taking AUD 8.4 million. Victorian exports to South Africa have fallen 6% per annum between 2000 and 2006 due to declines in exports of communications equipment and, to a lesser extent, components, while strong growth has occurred in audiovisual equipment, software media and other ICT-related equipment.

"Other ICT-related equipment" (including a range of office machinery, measuring, detection, scanning, navigation and medical equipment), accounted for 70% of Victoria's ICT equipment exports to South Africa in 2006, with the balance made up of audiovisual equipment components and software media and communications and computer equipment.

Victoria imported just over AUD 3.4 million worth of ICT equipment from South Africa during 2006 – 15% of total Australian equipment imports from South Africa. "Other ICT-related equipment" and software media are the categories that have increased over recent years, while there have been substantial falls in imports of components, communications, audiovisual and computer equipment from South Africa.

### 3.1.2 Links and relationships

There are a number of potentially important dimensions that link ICT firms in Victoria (Australia) and South Africa, and forms of trade which are not being captured, or incompletely captured, in official investment and trade statistics. These include:

- personal links
- projects and events where firms from both Victoria (Australia) and South Africa participate in major projects;

- corporate links (non-financial and non-trade) – the sharing of expertise between multinational firms locations through “offshoring” and/or movement of people; and
- communication and virtual links that may result in a direct service, royalty or license payment, but often they will not.

Clearly, such links are important in providing an understanding of the potential for trade and investment in South Africa, and vice-versa, as well as in-depth personal understanding of some of the issues and barriers to doing business in South Africa.

Victorian firms expanding their operation in South Africa are typically IT services providers or software suppliers offering local support services to their South African clients.

Trade linkages are more common for ICT hardware, software and content providers. While varied, there were some clear patterns to the links in terms of products and markets.

Major areas of activity include:

- mining and resources;
- security and surveillance;
- financial services;
- healthcare;
- education;
- compliance and process support;
- tracking, remote monitoring and telemetry; and
- infrastructure development.

In addition, Victorian firms export a wide range of business systems solutions and applications solutions to South Africa.

## 3.2 ICT related opportunities in South Africa

Comparing the strengths and weaknesses of the respective industries in Victoria and South Africa highlights a number of key similarities (and differences) that suggest areas of synergy. For example in Victorian and South African ICT industries there is generally a high regard for technical skills, but there appears to be a scarcity of the business skills needed to enter and grow in global markets.

Among the shared opportunities that exist between Victoria and South Africa are:

- the need for SMEs in the ICT sector to shift from selling time to developing their own intellectual property (IP), which could be used to address both local and export opportunities;
- the difficulty of accessing the early stage and development capital necessary to develop IP and exploit it in global markets;
- the need in many areas for SMEs to partner with multinational firms to successfully address global opportunities; and
- a widely shared view that vertical applications solutions represent a fruitful area of future growth for SMEs in both the local and South African markets.

The opportunity in any emerging economy is growth. In South Africa areas of ICT related opportunities could be summarised as follows:



- **Infrastructure development** – South African governments at all levels are investing heavily in developing local infrastructures to keep pace with the demands of economic development. Key areas include:
  - telecommunications and broadband networks, services and content;
  - transport, including road, rail, port and air transport infrastructure;
  - community infrastructure, including hospitals, schools, clinics, community and residential development; and
  - major events and projects including the 2010 FIFA World Cup and bidding for the Square Kilometre Array. Australia’s recent experience with Olympic and Commonwealth Games, and World Swimming Championships should be advantageous.
- **Skills substitution and development** – South Africa’s skills shortage and its focus on education present a range of opportunities:
  - the supply of high skill-based services;
  - support and automation solutions that can substitute for skills; and
  - education and e-learning.
- **Vertical market opportunities** – In South Africa, the three largest consumers of IT products and services are the three tiers of government, financial institutions and the telecommunications firms.

All these have strong growth requirements:

- the South African government has infrastructure and service delivery growth objectives;
- the banks have compliance and service delivery requirements; and
- the telecommunications network operators’ growth plans, including plans for expansion within Africa, are placing them under pressure to find skilled personnel.

Forecast IT spending growth by vertical market suggests that education, Government, distribution business services, consumer and healthcare represent opportunities.

Combining vertical market size, and forecast growth suggests that government, distribution, and communications and media represent significant IT market opportunities.

- **Meeting challenges** – there are also opportunities to be found in areas that may initially represent as challenges:
  - **Empowerment** - Black empowerment can be seen as an opportunity (not just a compliance issue), with the emergence of a raft of new businesses in need of supportive partners who can bring experience of benefit to the business needs of both parties, and the emergence of a new consumer “middle class”.
  - **Compliance** - There is no doubt that there is a burden of compliance in South Africa, due in part to empowerment initiatives, but that burden also represents an opportunity to provide support and management solutions throughout public and private sectors.

- **Security** - Similarly, there are security problems in South Africa, but they too offer opportunities in a range of areas from physical security through logical security, to security of trade.

Black Empowerment, South Africa’s role as the gateway into Africa, and its “dual economy” add to the potential opportunities.

### 3.3 Partnering and investment opportunities

The level of activity and interest in investment opportunities among a sample of South African ICT firms suggests that, currently, neither ICT trade nor ICT industry investment linkages are as extensive as they might be. Nevertheless, it is clear that interest among South African ICT firms in exploring further trade and investment relations with Australia is high with South African ICT firms of all sizes expressing an interest in an investment relationship with Australia.

An analysis of South African ICT capabilities indicates that demand is strong for business systems solutions, vertical and horizontal applications software, and electronic games, as well as communications services and certain hardware peripherals – all highly prospective areas for further investigation for Australian businesses.

#### Gateway to Africa

South Africa is a gateway into Africa, with deep linkages into the entire region. A South African partner is an African partner, opening a continental rather than simply national market to investors and trade partners.

South Africa is a sophisticated and promising emerging market, offering a

# 4. Approaching the South African Market

unique combination of developed economic infrastructure with a vibrant emerging market economy.

There are few restrictions on the form or extent of foreign investment and a range of tax and industry incentives are available.

In the words of Texan fund manager John Mauldin: "...as I observed South Africa, it was forcefully brought home to me that there is more to the emerging-market story than China, India and Brazil... [South Africa is] an emerging-market country that does not make as much news as it should."

## 4.1 Possible market entry strategies for Victorian ICT firms

This section is informative rather than prescriptive and expert advice should be sought after consideration of each individual firm's business development strategies.

### Government business and projects

The tender process for South African projects is transparent. All government work, including the parastatals such as Eskom, Telkom, SITA, Transnet and SAA, must be tendered for via Requests For Proposals (RFPs). The South African Government tender website has examples - [www.info.gov.za/documents/tenders/index.htm](http://www.info.gov.za/documents/tenders/index.htm).

The State Information Technology Agency (SITA) plays a central role in coordinating purchasing and use of ICT at national, provincial and municipal levels. It may also be worth noting that the South African government has approved the use of Open Source software.

### African economic and business development

Foreign ICT firms would benefit from establishing a local office in South Africa, as both the gateway to Africa and the commercial launch pad into the Middle East and Africa region.

Africa is not an homogeneous marketplace - there are several deep-seated differences from country to country. The partnership route is tried and tested, and many have found that it works in most African countries.

### Partnering opportunities related to the 2010 FIFA World Cup

The South African Government approved USD 2 billion for stadiums and transport infrastructure leading up to the 2010 FIFA World Cup, which will have a substantial impact on the ICT industry.

Both the South African economy and foreign ICT firms would benefit from partnering with local firms, especially those foreign ICT firms with prior experience of an international sporting event of the 2010 FIFA World Cup stature (e.g. Australia's recent Olympic and Commonwealth Games).

### Partnering for client service and profit

Apart from local innovation and within the competitive financial market, South African ICT firms continuously endeavour to partner with foreign firms. Local distribution/ value-added re-sellers (VARs) of foreign products represent a major portion of the ICT industry. Partnering amongst South African ICT firms in order to provide integrated solutions to clients is common.

## 4.2 Attitudes to Australian/ Victorian trade and investment

### South African trade and investment survey

A survey was conducted for the Emerging Markets report by BMI-T in South Africa, with e-mail questionnaires being sent out to ICT firms with a firm size distribution close to that of the industry as a whole.

The principal conclusion from the survey was that ICT industry investment and trade relationships between South Africa and Australia are limited, with neither country being "top of mind" as an ICT location for the other.

Relatively few South African ICT firms imported from Australia. Similarly only 4% of responding ICT firms reported exporting to Australia.

However, by ICT industry sector, interest in a trading relationship with Australia was high across the board, with 100% of firms in micro-technology and electronic games expressing interest - highlighting awareness of Australia's and particularly Victoria's strengths in these areas.

A similar pattern was found in respect to investment. When asked if they had an investment relationship with Australia just 2% of the respondents did. By market segment, those with investment relationships were in micro-technology, communications services and business systems solutions.

Again, while reported investment relationships were limited, interest in such a relationship was high. Asked whether they would be interested in meeting potential Australian partners or investors, the response of South African ICT firms was overwhelmingly positive, with 100% of responding firms saying yes.

# 5. Doing Business in South Africa

According to the World Bank's Doing Business 2007 report, South Africa ranks among the top 30 countries in the world for ease of doing business in terms of time, cost and businesses compliance with legal and administrative requirements, operation, trade, taxation and closure.

South Africa was ranked in the top 10 economies in the world for its protection of investors. The country also scored highly in ease of starting a business and obtaining credit.

## 5.1 The South African business environment

The unique combination of a highly developed first-world economic infrastructure and a large emergent market economy in South Africa has given rise to a strong entrepreneurial and dynamic investment environment.

The UNCTAD World Investment Report for 2004 rated South Africa as the most attractive country in Africa for transnational corporations, and foreign direct investment in telecommunications and information technology rivals mining and extraction.

The cost of doing business in South Africa compares favourably with other emerging world markets. South Africa also possesses a large resource base of skilled, semi-skilled and unskilled labour.

## 5.2 South Africa's policy and regulatory environment

The South African government has a number of significant challenges to meet. It has inherited a country of deep racial and economic divisions, and has had to develop policies that address these issues.

Comprehensive information on Government policies can be obtained from the South African Department of Trade and Industry ([www.dti.gov.za](http://www.dti.gov.za)) and professional advisers.

### 5.2.1 Policies and programs

While there are many policies and programs that can affect the ICT industry to varying degrees, the following are among the more important:

#### Black Economic Empowerment

Black Economic Empowerment (BEE) and Broad-Based Black Economic Empowerment (BBBEE) seek to achieve a leveling of the economic playing field by giving opportunities to black people and ensuring that there is a fairer distribution of opportunity amongst South Africans in the future. Governments insist on BEE compliance, making a BEE compliant partner and/or a wholly-owned black firm partner a pre-condition for winning government business.

#### Accelerated and Shared Growth Initiative of South Africa (ASGISA)

The Accelerated and Shared Growth Initiative of South Africa (ASGISA) is designed to halve poverty and unemployment by 2014. This will be made possible by stimulating growth to an average rate of 6% per annum.

The government has also prioritised private-sector investment in business process outsourcing (BPO&O), to remove obstacles and refine incentives to achieve the goal of 100,000 additional direct and indirect jobs by 2009.

#### Joint Initiative for Priority Skills Acquisition (JIPSA)

The Joint Initiative for Priority Skills Acquisition (JIPSA) is an offshoot of ASGISA, with the prime objective of attracting and acquiring much-needed skills from anywhere in the world.<sup>3</sup>

### 5.2.2 Incentives for investors

Several incentives have been created for potential investors in South Africa.

#### Strategic Investment Projects (SIP)

The SIP supports industrial projects investing at least AUD 8.3 million in qualifying industrial assets, and the incentive is accessible to industrial projects participating within: computer and computer related activities, R&D activities and manufacturing.<sup>4</sup>

#### Industrial Development Zones (IDZ)

Industrial Development Zones (IDZ) are an adaptation of the export processing zone concept widely-used internationally, and are designed to encourage international competitiveness in South Africa's manufacturing sector.

3. Deputy President's speech on the launch of JIPSA on March 26, 2007 located at [www.info.gov.za/speeches/2006/06032810451001.htm](http://www.info.gov.za/speeches/2006/06032810451001.htm)

4. Deloitte (2007) Investing in South Africa: 2007 Edition, Deloitte Touche Tomatsu, Johannesburg, Capetown and Durban

### ICT-related sectoral support

The Technology Industry Finance initiative seeks to develop and expand technology intensive businesses in IT, telecommunications, electronic and electrical industries. The focus is on new technology ventures with strong local or foreign technology partners and proven technology.

The BPO&O Training and Skills Support Grant aims to assist with the company's costs for a range of training costs including human, facility and equipment costs.

### R&D support and incentives

R&D tax incentives are available with deductions of 150%. For R&D expenses to qualify they must be undertaken within South Africa, and be performed for the purposes of: the discovery of new, practical and non-obvious information of a scientific or technological nature; or the creation of any invention, design, or computer program, or other similar property of a scientific or technological nature.<sup>5</sup>

The Support Program for Industrial Innovation (SPII) aims to promote technology development within South Africa by providing financial assistance to all South African registered enterprises in manufacturing or software development that engage in the development of innovative, competitive products and/or processes.

The Technology and Human Resources for Industry Program (THRIP) aims to boost South African industry by supporting research and technology development, and by enhancing the quality and quantity of appropriately skilled people.

The Innovation Fund (IF) aims to promote technological innovation within the research community and cross-sector collaboration, and to support protection of and commercialisation of innovations emanating from South African enterprises.

### 5.2.3 Regulations

A wide range of generic business, labour, taxation and related regulations affect any business operating in South Africa. Further information on business compliance can be sought from the South African Department of Trade and Industry ([www.dti.gov.za](http://www.dti.gov.za)) and professional advisers.

#### Telecommunications reform

In 1990 after Telkom was incorporated, a study was initiated to examine the policy options for restructuring the industry. The Telecommunications Act of 1996 incorporates most of the elements of the study's recommendations.

In 2006, to deal with market issues raised by the move to convergence, the South African government enacted the Electronic Communications Act providing a licensing and regulatory framework for a converged telecommunications, broadcasting and information technology industry.

#### The ICASA Amendment Act

The objective of the Act is to establish an independent authority to regulate broadcasting and electronic communications (and postal matters) in the public interest, including type approval for communications equipment.

### The Competition Act

This Act regulates competition in telecommunications. The Competition Commission regulates and investigates mergers and anti-competitive behaviour, defines markets, "harm" and barriers to entry; while the Independent Communications Authority of South Africa (ICASA) deals with core market structures in the telecommunications industry.

#### Intellectual property protection

South African intellectual property law has been amended and consolidated in accordance with the World Trade Organisation (WTO) "TRIPS" requirements and the International Convention for the Protection of Performers, Products of Phonograms and Broadcasting Organisations.<sup>6</sup> More information can be obtained from the Companies and Intellectual Property Registration Office of South Africa (CIPRO) ([www.cipro.co.za](http://www.cipro.co.za)).

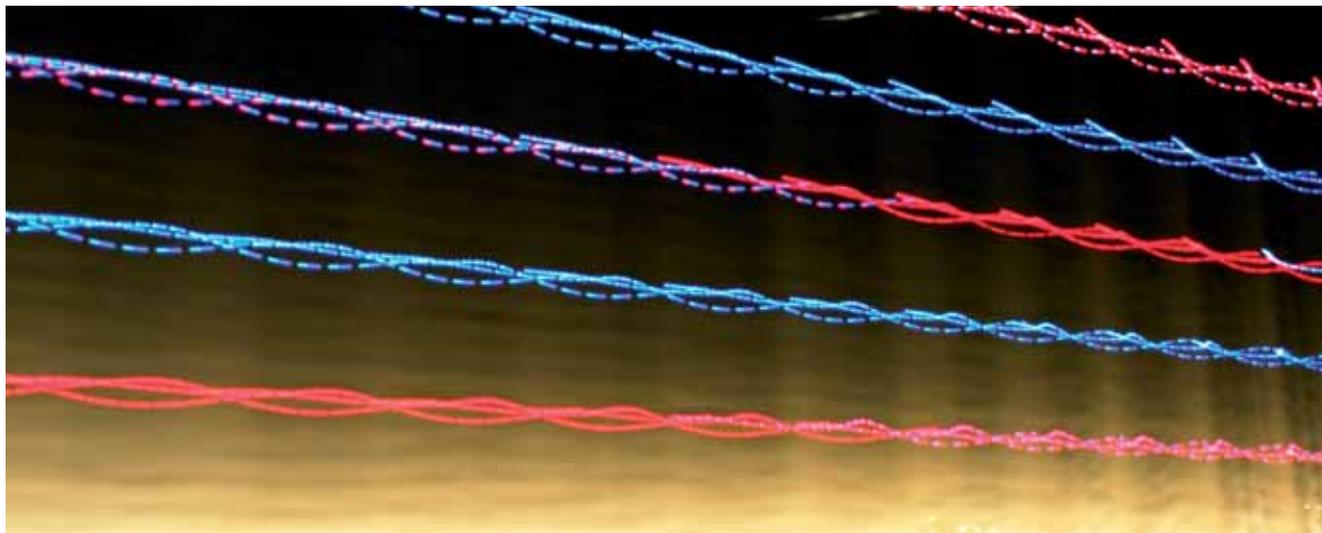
#### Electronic Communications and Transactions Act

The Electronic Communications and Transactions Act No.25, 2002 complements the Copyright Act, by focusing on protection from fraudulent activities carried out using electronic means. In this Act, cyber-crime was specifically criminalised for the first time.

Further information can be obtained from the South African Department of Trade and Industry ([www.dti.gov.za](http://www.dti.gov.za)) and professional advisers.

5. Deloitte (2007) Investing in South Africa: 2007 Edition, Deloitte Touche Tomatsu, Johannesburg, Capetown and Durban

6. Department of Trade and Industry (2006) Investors Handbook: South Africa – Alive with Possibilities, Department of Trade and Industry, Pretoria



## Guides to doing business in South Africa

Department of Trade and Industry (2006) Investors Handbook: South Africa – Alive with Possibilities, Department of Trade and Industry, Pretoria. ([www.dti.gov.za](http://www.dti.gov.za)).

Department of Trade and Industry (2006) Business Guidebook: South Africa, Department of Trade and Industry, Pretoria. ([www.dti.gov.za](http://www.dti.gov.za)).

Deloitte (2006) Investing in South Africa: 2007 Edition, Deloitte Touche Tomatsu, Johannesburg, Cape Town and Durban. ([www.deloitte.com/dtt/brief/0,1003,cid=159739,00.html](http://www.deloitte.com/dtt/brief/0,1003,cid=159739,00.html)).

GCIS (2005) Pocket Guide to South Africa, STE Publishers, Pretoria. ([www.gcis.gov.za/docs/publications/pocketguide06.htm](http://www.gcis.gov.za/docs/publications/pocketguide06.htm)).

## Hardcat

Hardcat, a world-class company specialising in the provision of asset management solutions recently worked with a local partner to undertake a major project in South Africa. The assignment was a full audit of Government assets for the Treasury of the Province of Kwazulu-Natal, encompassing 17 Departments including the Office of the Premier.

Kwazulu-Natal is the home of the Zulu nation and the Premier, Mr S'bu Ndebele is responsible for local government issues affecting the population of ten million in the eastern province. Working with a local partner, Hardcat's work, whilst challenging, went smoothly and the audit and reconciliation of assets was rapidly completed.

Reflecting on the experience, Hardcat Executive, Vice President International Operations, Scott Longden recommends that companies operating in South Africa seek a local partner and build a relationship of trust. In this way, companies become aware of the nuances of South African business in achieving their commercial objectives. There is no substitute for on-the-ground-intelligence to facilitate smooth project management in this rapidly growing market.

# 6. Market Lessons

## 6.1 Feedback from Victorian ICT firms with links to South Africa

As part of the research for this report, Australian firms with recent trade and/or investment links with South Africa were identified of which around 60% were Victorian-based.

### Victorian trade and investment linkages

The Victorian firms expanding their operation in South Africa were typically IT services providers or software suppliers offering local support services to their South African clients.

Around 20 Victorian IT services suppliers reported export sales in South Africa, as did around a dozen equipment suppliers, and around 30 software and solutions suppliers.

Major areas of activity include:

- mining and resources;
- security and surveillance;
- financial services;
- healthcare;
- education;
- compliance and process support;
- tracking, remote monitoring and telemetry; and
- infrastructure development.

In addition, Victorian firms export a wide range of business systems solutions and applications solutions to South Africa.

### Victorian experiences and feedback

Limited and targeted consultations with government and industry in Victoria brought to light both specific and general information. Qualitative, anecdotal and impressionistic information included:

- a lack of knowledge about ICT market opportunities in South Africa, although those doing business there had some strong impressions;
- a widespread sense that South Africa is not high on the agenda as an export or investment opportunity for ICT firms in Victoria (Australia);
- impressionistic concerns about the political and social stability of South Africa leading to a reluctance to travel there and/or send employees, and some concern about the impacts of a change of leadership; and
- impressionistic concern about the difficulty of doing business in South Africa, relating to complex and changing regulations, social and racial conventions and practices.

Nevertheless, from generic comments it is clear that:

- there is a lot of goodwill towards Australia in South Africa.
- the banking systems works well, and despite exchange controls it is easy to use, efficient and predicable.

- the legal framework in South Africa, being a mixture of English and Dutch law is familiar and functional.
- urban infrastructure is generally of developed world standard, although anecdotal comments about the public and general transport system indicated some issues.
- despite obvious problems with violent crime and a number of high profile cases, some reported spending years in South Africa without an incident.
- comments about emerging and new opportunities that match Victorian ICT industry strengths included:
  - communications being a major opportunity now that South Africa is moving on competition and broadband;
  - open source being an emerging area of opportunity, especially in governments in South Africa, at all levels, and beyond in the African continent as a whole; and
  - offshoring IT and business processing services to South Africa also represents an opportunity.
- Many people noted specific opportunities in the areas of development in South Africa (e.g. infrastructure development), and in areas of need (e.g. security, compliance support, management and decision support systems in the face of skills shortages).



## 6.2 Important factors to consider

Prior to entering any new market, an investing firm must first decide on a set of clear and measurable business objectives to be achieved within specific timeframes.

When considering South Africa these objectives could include one or more of the following:

- market entry and growth for Australian products;
- investment in a South African firm for the purpose of taking control of that firm, with a view to channeling Australian products through that firm;
- a strategic investment to secure an influential role in the direction of the firm; and/or
- a strategic stake to secure product supply for Australasian markets.

Secondly, a firm needs to consider the market segments it seeks to pursue.

The importance of the public sector in South Africa makes it virtually imperative that the firm be “empowered” (i.e. BEE compliant). BEE is not necessarily a burden. A BEE partner must demonstrate clear value addition, and must be measured against clear and tangible, pre-agreed targets. The investing firm should also work to clearly defined targets.

Finally, South Africa is alive with opportunities and for Australian companies willing to explore this new frontier and it provides a potentially fertile environment for export expansion.

## Aconex in South Africa

Founded in Melbourne in 2000, Aconex is the world’s largest provider of online collaboration services for construction and engineering projects. Aconex provides a web-based system for managing the large volume of information generated on construction projects, with customer projects valued in excess of US\$180 billion. Since its foundation, the company has doubled in size each year.

As part of a world growth strategy, Aconex opened an office in Johannesburg in 2005 and the South African venture is enjoying great success. The company now manages the project information for nearly 200 South African organizations in infrastructure, commercial and property developments in Johannesburg, Durban and East London.

Two major South African projects for Aconex are the construction of the King Shaka International Airport and a sports stadium in Durban which will be completed for the coming 2010 FIFA World Cup. The US\$313 million airport development will feature a 3,700 metre single runway and the stadium will boast a 70,000 fan capacity in Durban’s King Park sporting precinct.

# 7. Connecting Victorian ICT with South Africa

The *Victorian Government ICT Industry Plan 2005-2010*, launched in December 2005, identified the need for the State's ICT sector to be more globally focused in order to grow and prosper.

The Government has undertaken to assist the sector in meeting this need by providing support for companies planning and executing export strategies including:

- expanding in-market support for local companies enable better access to information from the market; and
- providing assistance for companies to achieve results from overseas visits.

This will be achieved through the implementation of two major initiatives:

- the Emerging Market Strategies Program; and
- ICT Trade Events and Export Assistance Program.

## 7.1 Emerging Markets Strategies

Emerging Market Strategies are designed to assist local ICT companies to gather market intelligence and to identify strategic opportunities in high potential overseas markets.

South Africa is the focus of the second of these Strategies and the current document, as well as the report to Multimedia Victoria "Analysis of the South African ICT Market, Opportunities and Challenges for Victoria", are outcomes of the Government's research. Building on this foundation, Government will work with industry to implement a support package that addresses South Africa

specific investment and trade opportunities including:

- a commitment of resources to pursue South African opportunities;
- a selection of services to assist South African companies looking to establish a presence in Victoria;
- understanding the needs of South African investors and easing access to them; and
- assisting South African companies in accessing Victorian market information.

## 7.2 ICT Trade Events and Export Assistance Program

The ICT Trade Events and Export Assistance Program provides financial support for Victorian ICT companies to undertake international networking, exhibiting and exporting.

Eligible companies are now able to receive funding of up to \$10,000 and includes a First Time Sole Exhibitor category.

From 2004-05 to date, more than 680 grants were provided to Victorian ICT companies through this program, enabling them to attend international trade fairs, conference and missions, resulting in approximately \$900 million in projected exports for the Victorian ICT sector.

For more information visit the MMV website at [www.mmv.vic.gov.au/TradeEventsandExportsProgram](http://www.mmv.vic.gov.au/TradeEventsandExportsProgram).





To find out more about what opportunities South Africa can present for you as a Victorian ICT company, access the CSES, Victoria University and BMI-T, Johannesburg research by contacting Multimedia Victoria on [queries@mmv.vic.gov.au](mailto:queries@mmv.vic.gov.au)

This research is available exclusively to Victorian ICT companies.

For up to date information on opportunities for engagement with the South African ICT market, check the Multimedia Victoria website at [www.mmv.vic.gov.au](http://www.mmv.vic.gov.au)



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