

# The changing face of VET: a provider-level case study from Victoria

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## Abstract

During June 2002, the Victorian Government's Minister for Education and Training, the Hon. Lynne Kosky, MP, released a statement on future directions for the Victorian VET system. Titled *Knowledge and Skills for the Innovation Economy*, the ministerial emphasized Victoria's need for an innovative training system responsive to the needs of existing and emerging industries, and to community needs.

Each Victorian TAFE institute was invited to respond to *Knowledge and Skills for the Innovation Economy* by documenting its vision, strategic directions and priorities. For the Swinburne University TAFE Division, this provided an opportunity to articulate a comprehensive vision of its future structure and activity based on extensive demographic, industry, labour market, competitor and catchment research, a sound strategic planning framework, strengths and specializations in training provision, the advantages derived from close cooperation between its TAFE and Higher Education divisions, and a willingness to address the Government's parallel 'innovation' and 'caring community' agendas.

The vision involves the development of the Swinburne TAFE Division as a sustainable learning organization with key performance areas in learning & teaching, industry & community partnerships, research, internationalization, intersectoralism, innovation and entrepreneurship. It also includes the establishment of a number of specialist centres, new product developments, and a suite of innovations to address immediate and future needs in curriculum, flexible delivery and research, and the requirements of specific client groups including young, mature age and Indigenous learners. Of particular note are the establishment of:

- an innovation framework and innovation roundtable
- specialist centres for e-business, advanced manufacturing, sustainability, digital design, health & well-being, small business and circus arts
- an Emerging Skills Research Unit
- a distributed network of 'e-learning leaders' to support the Division's e-learning change management strategy
- an Indigenous VET Research Partnership
- a Community Building & Leadership Hub
- an associate degree framework, and a range of curriculum development initiatives in areas including photonics, sustainability, nanotechnology and e-business

Most of these initiatives have the financial backing of the Victorian Government, and all of them are being established during 2003. Collectively, they represent a significant re-focussing of Swinburne's role as a major public sector VET provider, and an exciting example of the changing face of VET in Australia.

## **Introduction**

Swinburne University of Technology is a dual sector university operating across six Melbourne campuses – at Hawthorn and Prahran in the inner eastern suburbs, at Croydon, Lilydale and Wantirna in the outer east, and at Healesville in the semi-rural Shire of Yarra Ranges – as well as at several sites offshore. Swinburne has a strong research profile, and it prides itself on innovation and entrepreneurship. Within the context of the University, the Swinburne TAFE Division is one of Victoria's largest VET providers, delivering approximately 8 million student contact hours of training annually across 15 industry sectors to more than 40,000 enrolled students.

The Swinburne TAFE Division's mission is to provide quality VET programs responsively, flexibly and inclusively for individuals, industry and the wider community, capitalizing on its advantage as part of a university of technology. It seeks to be innovative, and to perform at a high level in seven key performance areas – 'learning & teaching', 'industry & community partnerships', 'research', 'internationalism', 'innovation', 'entrepreneurship' and the 'intersectoral advantage'. Of these, 'learning & teaching' and 'industry & community partnerships' have a level of primacy designed to ensure Swinburne's pre-eminence as a public sector VET provider.

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Each Victorian TAFE institute was invited to respond to *Knowledge and Skills for the Innovation Economy* by documenting its vision, strategic directions and priorities in a 'strategic statement'. For the Swinburne TAFE Division, this provided an opportunity to articulate a comprehensive vision of its future based on extensive industry, labour market, catchment and competitor research. This vision needed to have a horizon of 8 – 10 years, and it had to take account of:

- the Victorian Government's parallel 'innovation' and 'caring community' agendas, and the need for Swinburne to become much more responsive to current and emerging industry and community needs
- the invitation extended through the ministerial statement for TAFE providers to self-nominate to establish 'specialist centres' in order to meet the training needs of specific industry sectors, to seek funding for new product developments, and to redirect government funding from training provision to support well-targeted innovations
- the Swinburne TAFE Division's existing strengths and weaknesses, and the importance of differentiating itself from other Victorian VET providers
- the priority for Swinburne to become a learning organisation, with an emphasis on quality management, continuous improvement and sustainability
- Swinburne's multi-campus operation, and its intersectoral advantage

## **Methods**

The development of the Swinburne TAFE Division's 'strategic statement' in response to *Knowledge and Skills for the Innovation Economy* was led by the Division's Executive Group, with research support provided by the Strategic Planning Services Department. The TAFE Executive Group had already been working on a long-term strategic planning exercise for some months prior to the release of the ministerial statement, with the assistance of a grant provided through the ANTA Reframing the Future scheme.

The Strategic Planning Services Department provided the TAFE Executive Group with a range of data inputs to inform decision-making. The key data and sources were:

- existing Swinburne University of Technology strategic, master and enabling plans, and the TAFE Division's 2002 – 4 strategic plan
- current, trend and projected demographic data for Victoria and for the Swinburne TAFE Division's main regional catchments, sourced mainly from ABS 2001 census material, and from government publications such as the 2001 and 2002 *Victorian Population Bulletins*
- distributional data for industry in Swinburne's main catchments, by sector, size and number of employees, sourced mainly through ABS and other government publications
- employment projections included within training plans and other publications prepared by national and Victorian industry advisory agencies, and government task forces
- data relating to the size and scope of the Division's training profile in relation to the training profiles of other VET providers in Melbourne and eastern Victoria, sourced mainly through the Victorian Office of Training and Tertiary Education (OTTE)

The data obtained were summarised and tabulated for the TAFE Executive Group, and translated to catchment maps, where appropriate, using the InfoMap software. The maps and tables were then used to inform Executive Group discussions and decision-making at a series of meetings during June – August 2002.

## **Findings and discussion**

There were appreciable differences between campuses in the composition of the student population by age ( $\chi^2 = 1,728$ , d.f. = 15,  $p < 0.001$ ), but not by sex. In particular, the outer suburban campuses (Croydon, Lilydale and Wantirna) accounted for less than half of the TAFE Division's student enrolments at 30 June 2002, but for *c.* 75% of enrolled 14 – 17 year-olds, and *c.* 60% of students aged 45 years or older (Table 1). Conversely, the inner suburban Hawthorn campus accounted for 30% of all TAFE enrolments and nearly 40% of students aged 18 – 24 years, but only *c.* 10% of the 14 – 17 year-olds, and *c.* 20% of students aged 45 years or older. Indigenous enrolments were concentrated at the small Healesville campus, and at inner suburban Prahran.

**Table 1 – Swinburne TAFE enrolments by age and campus at 30 June 2002**

Campus	Student enrolments by age class, 30 June 2002 <sup>1</sup> (n) (% of all enrolments in age class)				Enrolments (n) (% of total)
	14 – 17 years	18 – 24 years	25 – 44 years	45+ years	
Inner metropolitan:					
Hawthorn	174 (10.6)	3,284 (37.3)	2,247 (29.7)	500 (18.8)	6,205 (30.0)
Prahran	201 (12.2)	1,888 (21.4)	1,875 (24.8)	535 (20.1)	4,499 (21.8)
Outer metropolitan:					
Croydon	381 (23.2)	1,244 (14.1)	1,676 (22.1)	763 (28.7)	4,064 (19.7)
Lilydale	337 (20.5)	838 (9.5)	277 (3.7)	142 (5.3)	1,594 (7.7)
Wantirna	516 (31.4)	1,533 (17.4)	1,441 (19.0)	655 (24.7)	4,145 (20.0)
Rural:					
Healesville	33 (2.0)	23 (0.3)	52 (0.7)	61 (2.3)	169 (0.8)
Total:	1,642	8,810	7,568	2,656	20,676

<sup>1</sup> Excludes all 'off-campus' enrolments including work-based, distance and offshore learners, and all fee-for-service short course enrolments.

Data from the 2001 census also revealed clear differences in the demographic make-up of the communities in Swinburne's main catchment LGAs. For example, there are more than twice as many 5 – 14 year-olds in the outer metropolitan Knox and Maroondah LGAs as there are in the inner metropolitan municipalities of Boroondara and Stonnington, but fewer 25 – 34 year-olds, and fewer people aged 35 years or older (Table 2). Thus, the concentration of young learners at the outer eastern campuses is likely to continue for at least some years.

**Table 2 – Population demographics in Swinburne's main catchment LGAs**

LGAs and campuses	Approximate population, by age bracket (ABS 2001 census data)			
	5 – 14 years	15 – 24 years	25 – 34 years	35+ years
Inner metropolitan: Boroondara & Stonnington LGAs Hawthorn and Prahran campuses	19,000	35,000	43,000	115,000
Outer metropolitan: Knox & Maroondah LGAs Wantirna & Croydon campuses	41,500	41,000	36,500	97,000
Outer metropolitan/rural: Shire of Yarra Ranges Lilydale & Healesville campuses	27,000	23,500	26,500	62,000

The outer eastern municipalities of Knox and Maroondah were identified as important centres for engineering and manufacturing, while inner suburban Boroondara and Stonnington were relatively strong in the art & design and recreation sectors (Table 3). Hospitality and tourism enterprises were concentrated in the inner east and the Yarra Valley wine-growing district, while businesses in health & community services and

finance & insurance were distributed more equitably across the Swinburne catchments. Furthermore, an analysis of ABS and other data for these industry sectors and selected sub-sectors within them revealed at least a loose correlation between enterprise numbers and total employee numbers.

**Table 3 – Businesses in selected industry sectors in Swinburne’s main catchment LGAs**

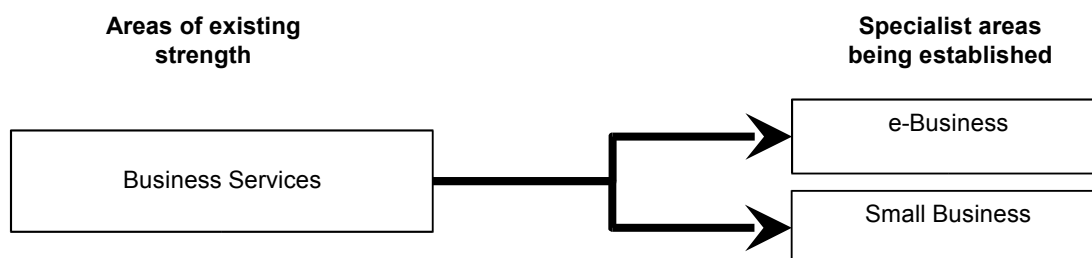
LGAs and campuses	Approximate number of businesses, by industry sector <sup>1</sup>				
	Art/design	Recreation	Engineering & Manufacturing	Health & Community Services	Finance & Insurance
Inner metropolitan: Boroondara & Stonnington LGAs Hawthorn & Prahran campuses	65	275	200	1,400	1,550
Outer metropolitan: Knox & Maroondah LGAs Wantirna & Croydon campuses	40	120	1,950	1,050	1,400
Outer metropolitan/rural: Yarra Ranges LGA Lilydale & Healesville campuses	15	75	450	160	300

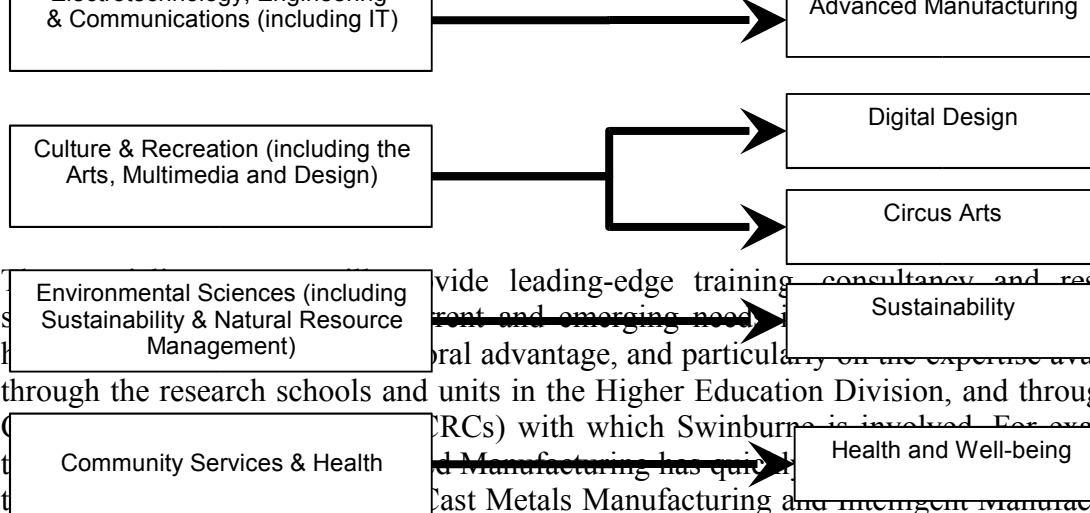
<sup>1</sup> Estimates based on ABS data, supplemented by additional information from local government and area consultative committee sources.

OTTE data revealed the Swinburne TAFE Division, in comparison with other Victorian VET providers, to have major strength in training provision in a number of these industry sectors. In particular, in 2001 Swinburne had more than 10% of the government-funded VET market in Victoria (range 11.5% - 18.9%) in business services, community services and health, electrotechnology and communications, and culture and recreation. Moreover, OTTE data indicated Swinburne to be one of Victoria’s top three providers of training for a range of important industry subsectors, including IT, health, community services, sustainability/environmental science, recreation and entertainment.

Growth rates in the Swinburne TAFE Division’s share of VET provision have also been strong in these industry sectors and subsectors. During 1994 – 2001, for example, the Division’s share of the government-funded VET market in Victoria increased in business services (by 19%), community services and health (by 18%), culture and recreation (by 99%), and electrotechnology and communications (by 27%).

On the basis of its comparative strength in training provision, the current and emerging skill and training needs identified in training plans and other industry reports, the distribution of businesses and employees in different industry sectors across Melbourne, and the Victorian Government’s strategic priorities identified in *Knowledge and Skills for the Innovation Economy*, the Swinburne TAFE Division determined to establish seven specialist centres (Figure 1).





provide leading-edge training, consultancy and research front and emerging needs, draw through the research schools and units in the Higher Education Division, and through the (CRCs) with which Swinburne is involved. For example, Health and Well-being with Systems & Technologies, and the Specialist Centre for e-Business will draw heavily on the expertise available through the Higher Education Division's School of Business and the Australian Graduate School of Entrepreneurship at Swinburne's Hawthorn campus.

To date, OTTE funding in excess of \$1 million has been provided to seed the establishment of the specialist centres for advanced manufacturing and sustainability. The other centres have been established with funding provided from within Swinburne's own resources, but several of them will be the subject of funding submissions to government later in 2003.

To support the work of the specialist centres, and to identify an important gap in the planning data, Swinburne also decided to establish an Emerging Skills Research Unit within its Strategic Planning Services Department. Established with government funding redirected from training provision, this Unit will work closely with research centres in Swinburne's Higher Education Division, and with CRCs. It will also liaise with national and state industry advisory bodies in ongoing environmental scanning, and undertake focused research projects to identify and address emerging skill and training needs in the industry sectors and subsectors served by the new specialist centres.

Specialist centre activity will also be assisted by a range of curriculum and new product development initiatives. For example, staff at the e-Business Specialist Centre are currently working on the development of an interactive multimedia 'virtual e-business supply chain', and the Centre for Advanced Manufacturing is developing new curriculum at the associate degree level in photonics and nanotechnology. These initiatives are currently supported by OTTE funding in excess of \$350,000.

Two further outcomes from the analysis of the industry and demographic data were the desirability of: 1) consolidating the training provision at each campus, in order to meet local and regional needs and create a 'critical mass' of specialist teaching and support staff to support this provision; and 2) introducing a suite of innovations to address other specific local and regional needs. Once again, these innovations have been supported by an OTTE-approved redirection of funding from training provision, and they include:

- a virtual centre for mature learners and workers, supported by new vocationally-oriented short courses, and the implementation of a staff professional development program on the needs and preferences of mature age learners
- a "Curriculum for the Future" project, to develop curriculum including accredited short courses for emerging, converging and rapidly changing industries linked to

Swinburne’s specialist centres, and to design and customise curriculum and learning strategies responsive to the needs of specific client groups

- a “Community Building & Leadership Hub” at the Healesville campus, building on community links that are already strong to develop accredited and non-accredited programs in community building, leadership and strengthening, and to develop appropriate statewide delivery models and consultancy services
- a “Partnership for Indigenous Training & Research”, again based at the Healesville campus, to undertake research on Indigenous VET provision within Australia and overseas, identify current and emerging training needs of Indigenous students, workers and communities, and develop culturally-appropriate curriculum and delivery models
- a “Youth Gateway” at the Croydon campus, to provide a single access point for career and course information, advice and support for young people and their carers in Melbourne’s outer east, as well as literacy and numeracy assessment, youth pathway planning, youth support services, and links to the established youth development programs, community agencies and work opportunities
- a “Passport to Employment and Future Education”, to identify generic employability skills, map those skills against course content and delivery strategies, and provide learners with relevant ‘passport’ documentation
- a fund to create capability through the leveraging of new opportunities, providing Swinburne with increased capacity to meet industry partnership arrangements, and to facilitate industry contribution to the cost of training in targeted industry sectors

On the basis of the research described, the Swinburne TAFE Division will consolidate its program delivery and specialist centre activity so as to meet regional business and community needs. This consolidation will also capitalise on Swinburne’s intersectoral advantage, particularly in regard to the development of new single-campus pathway options and research linkages. Examples will include a consolidation of the provision of:

- various streams within the new Victorian Certificate of Applied Learning (VCAL) framework at the Croydon campus, to address the needs of young learners in Melbourne’s outer east – particularly those disengaged or at risk of disengagement from education and employment
- tourism and hospitality training at the Prahran and Lilydale campuses, to address the skill and training needs of inner city and Yarra Valley businesses in these sectors
- manufacturing and engineering training, together with advanced manufacturing specialist centre activity, at the Hawthorn and Wantirna campuses – to maximise intersectoral links to Swinburne researchers and to service the needs of SMEs engaged in increasingly high technology manufacturing in Melbourne’s outer east
- training in multimedia, digital design, and digital film/television production and post-production at Prahran – again to capitalise on intersectoral links, and to meet the needs of film, television, game development and multimedia businesses in the inner east
- sustainability training at the Wantirna and Hawthorn campuses, in areas including renewable energy, triple bottom line reporting and cleaner production, to meet current and emerging needs for a diverse range of SMEs and ‘second tier’ businesses across Melbourne’s inner and outer eastern suburbs

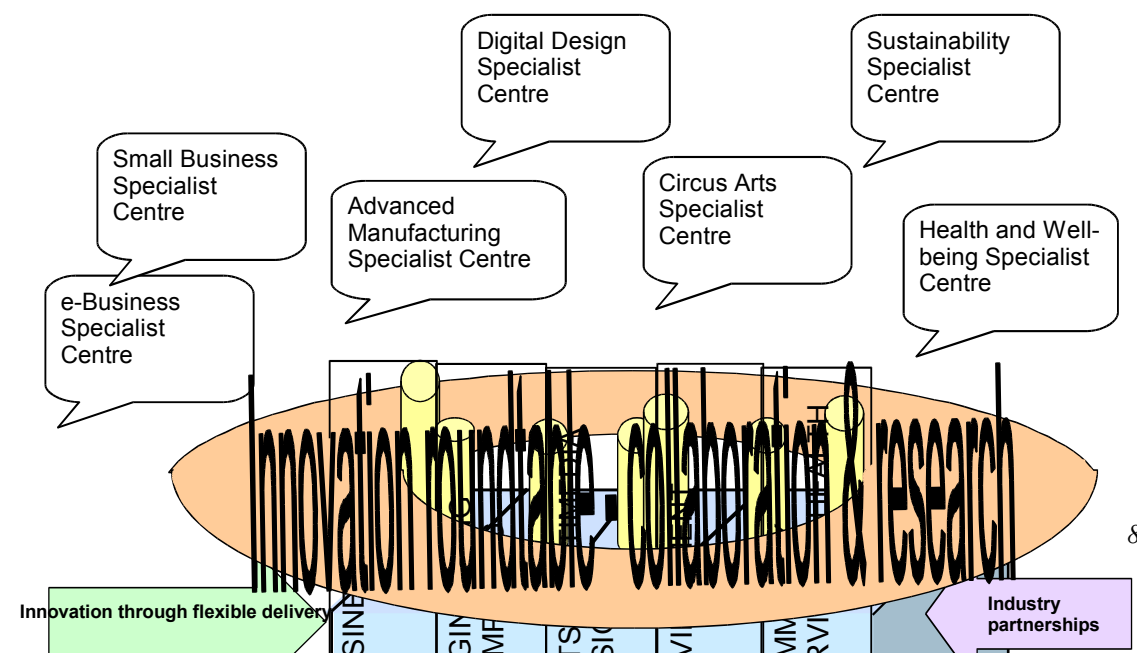
- training provision and specialist centre activity in health, community services and recreation at the Prahran, Hawthorn and Croydon campuses, reflecting local concentrations of businesses and employment opportunities

The research data also suggest a need for the Swinburne TAFE Division to increase the creativity, quantity and quality of its flexible VET provision, particularly to address the training needs of its industry-based and rural learners. While the Division is already in the vanguard of flexible delivery, the aim is to offer more and better choices through responsive learning and teaching strategies including:

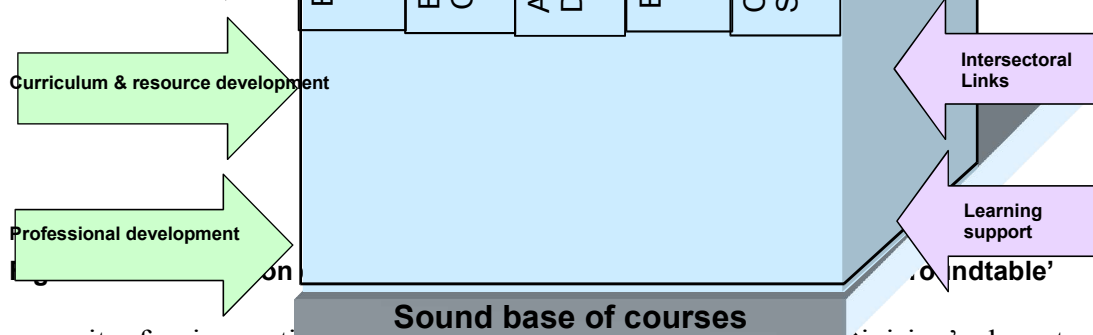
- ‘blended’ delivery options that incorporate the use of web-based technologies and face-to-face sessions, on and off-campus
- structured action learning, with an emphasis on team-based project work
- mentor, ‘buddy’ and ‘critical friend’ arrangements
- web-based learning guides with links to electronic learning resource libraries and other materials including interactive multimedia learning resources
- virtual ‘classes’ and individual coaching supported by online and print materials

To facilitate the rapid development and uptake of high quality flexible delivery options, Swinburne has adopted an ‘e-learning change management strategy’ supported by a comprehensive professional development plan. This plan is based around another government-funded innovation – a network of ‘e-learning leaders’ operating across all of the teaching departments and delivery support units. Together with specialist centre activity, the e-learning leader network will provide an ongoing foundation for innovation across the TAFE Division.

In this context, the Division also established an ‘innovation roundtable’ within an ‘institutional innovation framework’. Facilitated by an innovations expert and linking the specialist centres to leaders in research, entrepreneurship, industry, government and education, the roundtable forum should allow a flow of new opportunities to springboard from its multi-disciplinary membership (Figure 2).







The capacity for innovation is central to the Swinburne TAFE Division's long-term sustainability, and sustainability itself is becoming central to all of the Division's operations. Through the Specialist Centre for Sustainability, Swinburne is moving towards the achievement of 'triple bottom line' outcomes to ensure healthy growth, sound environmental outcomes and community responsibility, and towards establishing an ISO14001 Environmental Management Framework (EMF). Starting with an environmental review of the Hawthorn campus, and involving both staff and students, the Swinburne EMF Project is determining the most appropriate direction for the delivery of a full Environmental Management System (EMS) at each campus by 2004 – 5.

The Swinburne TAFE Division is also emphasising the development of client-focussed business management systems that allow for the efficient and effective management of its operations. The vision is for a much more holistic and integrated approach to service and systems delivery. This will see learners able to study at their own pace, place and time, managing multiple relationships with the organisation through one gateway, and the evolving development of student portals is one way in which this integrated access to information and services is being delivered.

The Division is moving away from Enterprise Resource Planning (ERP) systems that are complex and expensive to implement, support and maintain, towards systems integration. Here, the business drivers will continue to be:

- improved accuracy and timeliness of information flows
- improved management and effectiveness of different relationships, and the need to build lifelong relationships with students
- web-based delivery of student services, education and administration activities
- improved access to information through multiple channels
- improved integration of activities between different business units, and improved ability to access and relate information from different sources
- improvement of inefficient business processes

The major challenge in this for the Division will be business process improvement and re-engineering, leading to a fully integrated e-business operation. This will mean new ways of doing business and a commensurate mind shift. It will also require a significant investment of time and effort, with ICT as the enabler, but not the driver, and the effective management of security and information privacy.