



**Australian Government**

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**Department of Industry, Innovation, Climate Change,  
Science, Research and Tertiary Education**

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## **2014-16 Mission-based Compact**

Between:

The Commonwealth of Australia

and

Swinburne University of Technology

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This compact is between

The Commonwealth of Australia (**Commonwealth**) represented by and acting through:

The Minister for Tertiary Education, Skills, Science and Research

Assisted by the Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education (DIICCSRTE)

ABN 77 599 608 295

Of

Industry House

10 Binara Street

Canberra ACT 2601

And

Swinburne University of Technology (University)

ABN 13 628 586 699

A body corporate under the Swinburne University of Technology Act 2010

Of

John Street

Hawthorn, Victoria 3122

**(University)**

### A. Policy Setting

The Australian Government believes all Australians are entitled to a productive, fair and prosperous life and our higher education system is crucial to achieving this. Universities impart the skills and knowledge Australians need to realise their personal and professional aspirations and contribute to the broad economic and knowledge base of our society including the cultural, health and civic wellbeing of the community.

Over the term of this mission-based compact (compact), Australian universities will confront a range of opportunities and challenges in fulfilling their social and economic remit. These opportunities and challenges include, but are not limited to, changing national and international educational markets, dynamic global financial arrangements including the rise of the Asian Century, new approaches to teaching and learning, rapidly changing information technologies and evolving priorities for research and innovation.

Australia's universities are well equipped to harness the opportunities and meet these challenges that lie ahead. The 2014-16 compact supports this process by articulating the major policy objectives and the diverse approaches and commitments universities will adopt to achieve these strategic goals over the term of the agreement.

### B. The Purpose and Effect of this Compact

This compact is an agreement between the Commonwealth and the University. Entering into a compact is one of the quality and accountability requirements which a higher education provider must meet under the *Higher Education Support Act 2003* (HESA) as a condition of receiving a grant. Specifically, subsection 19-110(1) of HESA requires Table A and Table B providers must, in respect of each year for which a grant is paid to the provider under HESA, enter into a mission based compact with the Commonwealth for a period which includes that year.

The compact demonstrates the Commonwealth and the University have a shared and mutual commitment to provide students with high quality educational experiences and outcomes and to building research and innovation capabilities and international competitiveness.

The compact recognises the University is an autonomous institution with a distinctive mission, operating within a state or territory, national and international higher education environment.

The purpose of this compact is to provide a strategic framework for the relationship between the Commonwealth and the University. It sets out how the University's mission aligns with the Commonwealth's goals for higher education, research, innovation, skills development, engagement and Aboriginal and Torres Strait Islander access and outcomes.

The Commonwealth and the University agree this compact will be published on Commonwealth websites and may be published on the University website.

### C. Establishment of the Compact

The Commonwealth and the University agree the Term of this compact is from 1 January 2014 until 31 December 2016.

### D. The Principles of Commonwealth Funding Support

The Commonwealth articulates its vision for the higher education sector, through *Transforming Australia's Higher Education System* (available at the [DIICCSRTE website](#)), and the role of universities in driving our national innovation system, through *Powering Ideas* (available at the [DIICCSRTE website](#)).

In supporting Australia's universities, the Commonwealth seeks to promote:

- academic freedom and institutional autonomy;
- a diverse and sustainable higher-education sector;
- opportunity for all;
- access to university based on merit;
- world-class teaching and learning that advances the international standing of Australian education;
- world-class research and research training that advances knowledge, critical thinking and Australia's international standing; and
- responsiveness to the economic, social and environmental needs of the community, region, state, nation and the international community through collaborative engagement.

To ensure Australia's higher education system remains robust and of high quality in a globally connected and competitive world, the Australian Government has adopted and implemented a number of system-wide quality measures including establishing the Higher Education Standards Framework, and the Tertiary Education Quality and Standards Agency (TEQSA).

#### **E. The Structure of this Compact**

Part One provides for the Commonwealth's focus for the compact and a description of the University's Mission Statement and Strategic Priorities.

Part Two provides for matters related to improving access and outcomes for Aboriginal and Torres Strait Islander people. It contains Commonwealth objectives, university strategies and performance indicators and targets.

Part Three provides for matters related to innovation, industry and skills and engagement. It also contains Commonwealth objectives, university strategies and performance indicators and targets.

Part Four provides for matters related to teaching and learning including student enrolments, quality, equity and infrastructure. It contains Commonwealth objectives, university strategies and equity targets.

Part Five provides for matters related to research and research training including research performance and research capability. It contains Commonwealth objectives, university strategies, performance indicators and targets.

Part Six provides for general provisions of the compact including compact review, privacy, confidentiality and information sharing, changing the compact and notices.

## PART ONE: FOCUS & MISSION

### The Commonwealth's Focus for this Compact

The Commonwealth's ambitions for higher education include:

- providing opportunities for people from all backgrounds to participate to their full potential and be supported to do so. This includes supporting the aspirations of Aboriginal and Torres Strait Islander people through improved access and support arrangements. The Commonwealth is committed to ensuring the rate of Aboriginal and Torres Strait Islander people participating in undergraduate and higher degrees by research (HDR), as well as staffing and academic representation, reaches population parity;
- providing students with a stimulating and rewarding higher education experience;
- producing graduates with the knowledge, skills and understanding for full participation in society and the economy;
- better aligning higher education and research with the needs of the economy, and building capacity to respond to future changes in skills needs;
- increasing universities' engagement with all parties and linkages between universities and Australian businesses in particular;
- playing a pivotal role in the national research and innovation system through the generation and dissemination of new knowledge and through the education, training and development of world class researchers across a wide range of intellectual disciplines;
- improving knowledge transfer and commercialisation outcomes;
- consistent with the Asian Century policy framework, ensuring education is at the forefront of Australia's engagement with Asia; and
- being amongst the leading Organisation for Economic Co-operation and Development (OECD) countries in terms of participation and performance.

In support of these objectives, the Commonwealth encourages universities to consider the following important measures in their planning and delivery:

- developing partnerships with schools and other organisations to improve the participation of people from disadvantaged backgrounds in higher education;
- working with business, industry and Vocational Education and Training (VET) providers to provide the Australian economy with the graduates it needs;
- the suite of performance measurement tools being developed through the Advancing Quality in Higher Education initiative, work on quality in research training, and a feasibility study on research impact assessment (including the possible implementation of a mechanism, separate from *Excellence in Research for Australia*, to evaluate the wider benefits of publicly funded research);
- applying the principles and procedures required to support a continuous improvement model for intellectual property; and
- the National Research Investment Plan, including the need for a strategic outlook to address Australian Government priorities and principles at a national level.

# 1 THE UNIVERSITY'S MISSION AND STRATEGIC PRIORITIES

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## 1.1 The purpose of the University's Mission

The University's Mission sets out its values and aspirations, what it does and how it can best serve the interests of its students, staff and key stakeholders. The Commonwealth and the University recognise the University's Mission may evolve.

The University and the Commonwealth recognise the University is an autonomous institution which is responsible for the determination of its Mission and for its aspirations and strategies for their achievement.

## 1.2 The University's Mission and Strategic Priorities

Swinburne's vision is to be Australia's leading university of science, technology and innovation by 2020. This vision encompasses our strengths across the sciences, social sciences, health sciences, design and business, and central to it is our determination to remain a focussed, rather than comprehensive, university.

In recent years, Swinburne has progressed to rank as one of the top 400 universities in the world, as assessed by the Academic Ranking of World Universities, and one of the top 100 in the world in physics. Our emphasis is on high-quality, engaged teaching and research in science, technology and innovation – teaching and research that makes a difference in the lives of individuals and contributes to national economic and social objectives.

We work to advance and build our research through partnerships with industry, our communities and other universities within Australia and internationally, to achieve outcomes that are directly relevant to industry and society.

At Swinburne, quality is never confused with elitism: we work to provide educational opportunities to capable students wherever we find them. Both as an early leader in international education and an early adopter of online education, Swinburne is expanding the educational opportunities available to a new generation of learners.

To achieve our vision to be Australia's leading university of science, technology and innovation, we will:

- embrace a University-wide commitment to growth through excellence
- engage our students through quality, personalised education
- produce outstanding research that is relevant and internationally-recognised
- be the partner of choice for the industries and communities that we serve

These four themes – Our Culture, Our Students, Our Research and Our Connections – are central to the University's *2020 Plan* and they are detailed further in what follows.

### **Our Culture**

At Swinburne we aim to continue to grow through ongoing improvement to the quality of our education, our research and our engagement with the industries and communities that we partner and serve. We aim to provide rewarding work environments that foster creative thinking, open communication, accountability and respect. We will attract and retain talented staff by supporting excellence and by providing opportunities to work with outstanding teams within Swinburne and through our national and international partnerships. We recognise that good teams are strengthened by strong individual contributions, and we aim to be an employer of choice for high-performing people: celebrating and enriched by diversity and individual difference, with a focus on trusted performance and continuous development.

### **Our Students**

Swinburne's objective is to engage students through quality, personalised education. We aim to attract and develop students who are creative, motivated by a desire to be innovative and to make a difference. We wish to ensure that they have access to high-quality education that enables them to be life-long learners and innovators, adaptable to change and ready to embark

on successful careers. We create innovative learning environments, led by teachers and researchers that challenge students to achieve their potential and capitalising on global advances in the design and delivery of tertiary education.

### **Our Research**

Swinburne aims to produce outstanding research that is relevant and internationally-recognised. We encourage, support and invest in research and development that aspires to the highest quality, as judged by peers and those who fund and use our research; focuses on outcomes and impact through close engagement with industry and the communities that we serve; informs public debate and policy development; enthuses our students; and ensures the currency of our teaching.

Our research, development and deployment activities are focused in five outcome areas:

- Future manufacturing: integrating materials and manufacturing technologies with design, automation and information technologies to create new business opportunities.
- Sustainable futures: combining the engineering, social and environmental elements that address sustainability issues, inform public debate and influence government policy.
- Digital frontiers: changing the way we work, communicate and socialise through advances in information and communication technologies, business innovation and design.
- Personal and societal wellbeing: improving health and psychological wellbeing, tackling quality of life and social issues, and addressing the needs of socially disadvantaged groups and individuals.
- Inspirational science and technology: capitalising on our strength in fundamental science and astrophysics to ignite the interest of the community and stimulate the next generation of leaders in science and technology.

### **Our Connections**

Swinburne aims to be a partner of choice for industry and the wider community. We exist to serve and inspire our communities, both within Australia and internationally. Our reputation and impact as an engaged university will be amplified by fostering productive, mutually-beneficial relationships that create solutions to challenging problems.

We aim to be public spirited, providing a trusted source of expertise and thought leadership in science, technology and innovation. Our global impact will be enhanced through our international engagement in education and research and through the international mobility of our students and staff. We wish to be known as the most user-friendly and connected university in Australia and one which focuses primarily on the needs of our stakeholders and partners.

Swinburne's *2020 Plan* sets out further detail on our vision, and it is available at: [www.swinburne.edu.au/2020Plan](http://www.swinburne.edu.au/2020Plan)

## PART TWO: ABORIGINAL AND TORRES STRAIT ISLANDER ACCESS AND OUTCOMES

### 2 ABORIGINAL AND TORRES STRAIT ISLANDER ACCESS AND OUTCOMES

Part Two recognises the important role universities play in supporting Aboriginal and Torres Strait Islander people's personal and professional aspirations through the provision of accessible and supportive higher education programs. Increasing Aboriginal and Torres Strait Islander higher education participation and success is important given the direct benefits for Aboriginal and Torres Strait Islander individuals and communities and broader economic and social benefits for all Australians.

Universities are asked to detail their strategies and targets to improve Aboriginal and Torres Strait Islander access and outcomes over the compact period in this section. Principal Performance Indicators are compulsory and institutions may voluntarily nominate Optional Performance Indicators and targets considered reflective of individual institutional goals.

The Commonwealth recognises that universities have diverse missions and, consequently, targets and performance will vary between institutions. Each university should develop performance indicators and targets to reflect its individual performance and strategic direction.

#### 2.1 Commonwealth Objectives

The Commonwealth is committed to enhancing the participation and outcomes for Aboriginal and Torres Strait Islander people in higher education consistent with the Closing the Gap initiative addressing Aboriginal and Torres Strait Islander disadvantage.

In realising this objective, the Commonwealth has set an aspirational national parity target for Aboriginal and Torres Strait Islander students and staff in higher education. The parity target equates to the proportion of the population aged between 15 and 64 years which is currently 2.3%.

To help achieve this aspirational national target, the Commonwealth has introduced a new focus on Aboriginal and Torres Strait Islander reporting in the compact as recommended by the *Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People*. Universities should report high level Aboriginal and Torres Strait Islander student and staffing plans and strategies in this part of the compact including performance targets for student enrolments, completions and numbers of general and academic staff. Universities may also report on Aboriginal and Torres Strait Islander initiatives under the Innovation and Engagement, Teaching and Learning and Research and Research Training parts of the compact.

#### 2.2 University Strategies

Swinburne will make a substantial contribution to improving educational access, participation and outcomes for Aboriginal and Torres Strait Islanders during 2014-16.

Our agenda for Aboriginal and Torres Strait Islander people values:

- diversity, inclusiveness, and pride in Indigenous identity, tradition, knowledge and practice
- educational programs, delivery and support models that meet the expectations and needs of Indigenous individuals and communities
- employment, professional development and career opportunities for Indigenous people
- capacity-building for Indigenous communities

We have committed to the establishment of an Indigenous Education and Research Committee in 2013 and the development of a Reconciliation Action Plan for implementation from 2014. These actions will further formalise our commitment to Indigenous access and outcomes in key areas such as education, research and employment.

We will monitor the participation and performance of Indigenous students in higher education using measures of access, participation, success, retention, completions, and employment and further study outcomes.

### **Learning and Teaching**

Swinburne has traditionally had low Indigenous participation rates in higher education, with 25-40 enrolments each year representing just 0.2-0.3 per cent of the domestic undergraduate cohort. However, strategies introduced recently to address this, particularly having more courses available online, have resulted in significant participation gains.

There will be further improvement throughout 2014-16 through the development of additional pathway and higher education courses, including online and blended delivery options, and especially in fields such as health and education that traditionally achieve good Indigenous participation rates. From 2013, online bachelor-level programs in Early Childhood Education and Primary Education have provided access to Swinburne courses in areas of traditionally high demand by Indigenous students. Current developmental work in health specialisations should also prove to be both relevant and attractive, with online delivery providing outreach to Indigenous students not in a position to relocate to study with Swinburne on-campus.

The University currently offers a minor sequence in Indigenous Studies with enrolments increasing from 152 in 2010 to 255 in 2012. New units with a focus on Indigenous culture have been developed recently by discipline leaders in Indigenous Studies and Sociology, for delivery throughout 2014-16.

For many years, Swinburne TAFE has successfully delivered VET programs for Indigenous cohorts in areas including business, community development, education, youth work, the arts and governance. However, the number of Aboriginal and Torres Strait Islander students moving from VET to higher education has been disappointing in most years. Among the strategies to address this during 2014-16 are the following:

- a 'U2Uni' tertiary transition program, designed to equip VET students with knowledge and skills that will prepare them for higher education study and assessment
- the Swinburne Indigenous Student Network (SISNet) which connects our Indigenous students for mutual support during their tertiary education
- active involvement in Toorong Marnong activities - Toorong Marnong is an initiative of the Victorian Aboriginal Education Association Incorporated (VAEAI) and the Victorian Vice-Chancellors' Committee, aimed at boosting Indigenous participation in higher education
- promotion of the scholarships available for Indigenous students in higher education

An important challenge for us is to attract more Indigenous students into courses in science and technology. These are primary areas of strength at Swinburne, but historically they have had low Indigenous participation rates.

### **Research and Research Training**

We will build on our international reputation for innovative social research during 2014-16.

Examples of ongoing work in this area through engaged activity with Indigenous communities include:

- historical research on relations between Indigenous people and settlers in colonial South Australia
- research on cross-cultural exchange and historical agency in the Roper River basin, with the aid of an AIATSIS grant, and exchange relationships between the Ngarrindjeri people and settlers in southern Australia
- national consultation on the training needs of the Indigenous visual arts industry
- convening the international Historical Justice and Memory Research Network through our Institute for Social Research
- research on the use of digital media in social innovation and on the use of internet services in remote communities and their outstations

- research to determine effective ways to address middle ear infections in Indigenous children, with the support of the Queensland, Northern Territory and West Australian governments.

A particular priority for 2014-16 is to increase the number of Indigenous HDR students. In recognition that these students are often mature-age and have family and community support commitments, Swinburne will offer targeted scholarships for masters and doctoral research degrees at higher rates than normal APAs. We will identify projects of special interest to Indigenous people and their communities and, where possible, incorporate Indigenous knowledge systems in our academic and research student processes. We will seek the support of the Indigenous community in progressing our initiatives, partnering with organisations such as VAEAI and other Victorian universities of similar size to create a viable and supportive indigenous HDR community.

### **Employment**

The objectives of Swinburne's Indigenous Employment Strategy, which is currently under review, include:

- increasing employment opportunities for Indigenous Australians via the provision of on-the-job training and the establishment of a supportive and diverse culture
- increasing the number of Indigenous employees at Swinburne
- increasing postgraduate educational opportunities for Indigenous Australians
- increasing awareness of cross-cultural and Indigenous issues through diversity awareness training

Indigenous employment activities and targets will be included in the University's plans during 2014-16. Strategies include:

- an ongoing partnership with First People HR to identify Indigenous prospects for positions that become vacant and increase Indigenous participation in industry engaged learning likely to boost employability skills and thus enhance the likelihood of employment at Swinburne
- implementation of the Indigenous Cadetship Support scheme to link Indigenous diploma, advanced diploma and undergraduate degree students to Swinburne employment opportunities
- mentoring and support for Indigenous students to undertake sessional teaching as a first step towards pursuing an academic career

## 2.3 Performance Indicators and Targets

The purpose of the Aboriginal and Torres Strait Islander performance indicators and targets is to assist the University and the Commonwealth in monitoring the University's progress against the Commonwealth's objectives particularly its contribution to reaching national parity.

The University will aim to meet the Aboriginal and Torres Strait Islander targets set out in the following tables.

Note: All calendar year references below refer to the previous year's data collection.

Principal Performance Indicators	Baseline 2012	Progressive Target 2013	Progressive Target 2014	Progressive Target 2015	Target 2016
Number of all Aboriginal and Torres Strait Islander student enrolments <sup>1</sup>	32	45	55	65	75
Number of all Aboriginal and Torres Strait Islander student completions <sup>2</sup>	5	7	10	15	20
Number of all Aboriginal and Torres Strait Islander professional/general staff <sup>3</sup>	2	2	3	5	6
Number of all Aboriginal and Torres Strait Islander academic staff <sup>4</sup>	2	2	3	4	5

Optional Performance Indicators	Baseline 2012	Progressive Target 2013	Progressive Target 2014	Progressive Target 2015	Target 2016
Indigenous student participation ratio	0.36	0.40	0.43	0.46	0.50
Number of ATSI students commencing a higher education course with a VET basis of admission	11	15	18	21	25

<sup>1</sup> Refers to total undergraduate, postgraduate and HDR students by headcount

<sup>2</sup> See footnote 1 for definition

<sup>3</sup> Refers to number by headcount

<sup>4</sup> See footnote 3 for definition

### 3 INNOVATION AND ENGAGEMENT

Part Three recognises the important role of universities in our national innovation system, in boosting economic productivity contributions to improved social and environmental outcomes and growth, and in engaging, advancing and inspiring their communities. It also recognises that universities make an important contribution to building connections and partnerships that broaden and deepen Australia's understanding of Asia.

Under three themes: Innovation; Industry and Skills; and Engagement; universities are asked to detail their strategies and targets over the term of this compact. Principal Performance Indicators are compulsory and institutions may voluntarily nominate Optional Performance Indicators and targets considered reflective of individual institutional goals.

The Commonwealth recognises that universities have diverse missions and, consequently, targets and performance will vary between institutions. Each university should develop performance indicators and targets to reflect its individual performance and strategic direction.

#### 3.1 Innovation

##### 3.1.1 Commonwealth objectives

The Commonwealth seeks to build an innovation system that ensures Australia can meet the challenges and grasp the opportunities of the twenty-first century. The Commonwealth encourages innovation by supporting industry-led research, promoting knowledge-transfer activities and the commercialisation of research.

##### 3.1.2 University strategies

As noted in Part 1, Swinburne will focus research, development and deployment activities in five outcome areas:

- Future manufacturing: integrating materials and manufacturing technologies with design, automation and information technologies to create new business opportunities
- Sustainable futures: combining the engineering, social and environmental elements that address sustainability issues, informing public debate and influencing government policy
- Digital frontiers: changing the way people work, communicate and socialise through advances in information and communication technologies, business innovation and design
- Personal and societal well-being: improving health and psychological wellbeing, tackling quality of life and related social issues, and addressing the needs of socially disadvantaged groups and individuals
- Inspirational science and technology: capitalising on the University's strength in fundamental science and astrophysics to ignite the interest of the community and stimulate the next generation of leaders in science and technology

While research capability will remain in faculties and research centres, a focus on outcomes will increase the impact of our research, facilitate knowledge transfer to industry, communities and other end-users, and improve the social and environmental dividend.

In this context, commercialisation is viewed as a pathway from research output to industry and community impact. The effectiveness of this pathway will be enhanced by implementation of the recommendations of an external expert review of our commercialisation activities undertaken in 2012.

We plan to:

- retain the core processes, capabilities and structure of Swinburne Knowledge and our intellectual property trust, Swinburne Ventures Limited (SVL)
- focus Swinburne Knowledge work on core activities: the IP management and commercialisation process, industry engagement, and supporting culture change

- renew our commitment to innovation and entrepreneurship by ensuring that priority is placed on complementary activities such as entrepreneurial education and that Swinburne Knowledge works closely with other parts of the University to achieve its overall objectives.

We are already seeing the benefits of engaging the commercial expertise of the SVL Board in discussions on the potential development and commercialisation pathways for research outputs prior to their formal disclosure as inventions. This has resulted in a more targeted approach to patent filing and early identification of potential licensees and investors.

Programs to develop the innovation culture central to the 2020 Plan and to support a continuous improvement model for IP management include:

- internships offered by Swinburne Knowledge to PhD, MEI, MBA and Masters students on a 3, 6 or 12 month basis
- establishment of the Swinburne Innovation Cup (in conjunction with the existing Swinburne Venture Cup) to raise the profile of commercialisation, develop the University's research staff and increase the potential deal flow
- delivery of an annual innovation program to equip research students and staff with the skills needed to manage and commercialise IP and to engage effectively with the wider community
- linking to relevant incubators, utilising Swinburne Knowledge capital as relevant

As discussed in Part 3.3.2, a key component of our international engagement strategy is to establish strategic partnerships with highly-ranked universities in Asia-Pacific alliances that take advantage of our full education and research capability. The focus of these alliances will be to increase both research intensity and research impact by enhancing and exploiting the development and commercialisation activities of our partners.

### 3.1.3 Performance indicators and targets

The purpose of the innovation performance indicators and targets is to assist the University and the Commonwealth in monitoring the University's progress against the Commonwealth's objectives and the University's strategies for innovation.

The University will report principal performance information and aim to meet the innovation performance indicators and targets set out in the following tables.

*Note: All calendar year references below refer to the previous year's data collection.*

Principal Performance Information <sup>5</sup>	2012		
Number of patent and plant breeder's rights families filed, issued and held	Filed 11	Issued 2	Held 10
Number of all active licences, options or assignments (LOAs) <sup>6</sup> executed and income derived	No. 12	Value(\$) \$232k	
Number and value of research contracts and consultancies executed <sup>7</sup>	No. 111	Value(\$) \$5.46M	
Investment in spin-out companies during the reporting year and nominal value of equity in spin-outs based on last external funding/liquidity event or entry cost	Investment (\$) 0	Value(\$) \$1.48M	

*Note: All calendar year references below refer to the previous year's data collection.*

Principal Performance Indicator	Baseline 2012	Progressive Target 2013	Progressive Target 2014	Progressive Target 2015	Target 2016
Category 4 Income	\$2.6M	\$1.7M	\$3.0M	\$3.2M	\$3.5M

*Note: All calendar year references below refer to the previous year's data collection.*

Optional Performance Indicators	Baseline 2012	Progressive Target 2013	Progressive Target 2014	Progressive Target 2015	Target 2016
Invention disclosures	46	52	55	57	60

<sup>5</sup> This set of performance information does not require targets. Universities will be asked to advise their baseline performance and will report on their future performance in the context of the Institutional Performance Portfolio Information Collection commencing in 2013. Patent and plant breeder right family refers to a group of patent or plant breeder rights applications or grants emanating from a single filing. Note: this question only concerns patent and plant breeder rights families, and is not in reference to families of other forms of registered IP (i.e. trade marks).

<sup>6</sup> A LICENCE agreement formalises the transfer of technology between two parties, where the owner of the technology (licensor) grants rights to the other parties (licensee). An OPTION agreement grants the potential licensee a time period during which it may evaluate the technology and negotiate the terms of a licence agreement. An option agreement is not constituted by an Option clause in a research agreement that grants rights to future inventions, until an actual invention has occurred that is subject to that Option. An ASSIGNMENT agreement conveys all right, title and interest in and to the licensed subject matter to the named assignee.

<sup>7</sup> Please use the definition of contracts and consultancies utilised in the National Survey of Research Commercialisation (NSRC). A copy of the survey is available at this URL: <http://www.innovation.gov.au/Section/Innovation/Pages/TheNationalSurveyofResearchCommercialisation.aspx>

## 3.2 Industry and Skills

### 3.2.1 Commonwealth objectives

The Commonwealth encourages universities and employers to work together so that courses meet the needs of employers, where relevant. This may include integrating work and learning, meeting professional accreditation requirements and involving employers in course development and delivery.

### 3.2.2 University strategies

Swinburne has always been closely connected to industry. Strengthening this engagement through productive, mutually-beneficial relationships is an organisational priority. Such relationships will be key to our agendas in research and innovation, and fundamental to ensuring the ongoing currency of our educational provision.

To support effective industry engagement and maximise partnership impact, we will:

- strengthen processes for industry consultation and input into the development and delivery of undergraduate and postgraduate courses
- expand opportunities for work-integrated learning
- focus our research, development and deployment activities in relevant outcome areas (Part 3.1.2) and broaden targeted national and international industry collaborations aligned to the areas of research focus alongside more comprehensive, multi-dimensional partnerships with selected organisations (Part 3.3.2)
- increase the number of interdisciplinary projects conducted collaboratively with industry and with partners ranging from SMEs to large corporates, not-for profit organisations and peak bodies including industry and professional associations
- utilise the Swinburne Design Factory to promote innovative, industry engaged research and provide industry-relevant experience to undergraduate and postgraduate students (Part 3.3.2)

In 2013, we established a senior executive role with responsibility for improving the coordination and increasing the effectiveness of our engagement with industry and the community.

## 3.3 Engagement

### 3.3.1 Commonwealth objectives

As part of its social and economic remit and as an important precursor to innovation, the Commonwealth encourages universities to engage with all levels of government, other universities, businesses, schools, the vocational education and training sector, employers, the professions, research institutions and the wider community including international partners particularly those in the Asian region.

### 3.3.2 University strategies

Swinburne exists to serve and inspire communities, within Australia and internationally. Three recent and contrasting examples of the engagement that this implies are as follows:

- In 2011 – 12, we piloted an 'ICT R&D Accelerator' program, with support from the Victorian Government and National ICT Australia (NICTA). The pilot was successful, the program was subsequently broadened, and in 2012 – 13 we worked with three SMEs facing technology research challenges central to their business operations. We provided three project teams, each consisting of a supervisor and two students, to tackle the relevant problems over ten weeks. In each case, project deliverables included such things as research reports, tools, specifications and software, and the feedback from the participating enterprises was very positive. All indicated that project objectives had been met, and all requested extended R&D engagement with Swinburne. The participating students also benefitted, with two going on to HDR candidature.

- Swinburne has formed a relationship with Camcare, a community service organisation in Melbourne's City of Boroondara. The University's capabilities have been mapped against Camcare's diverse needs and several collaborative projects are in train or development. These include: 1) Master of Communication Design students undertaking a semester-long project (incorporating design anthropology, communication and digital media elements) to support the relocation and rebranding of Camcare's social enterprise in a new retail setting; 2) work by our Brain & Psychological Sciences Group to support Camcare's family and counselling services through student placements, link Camcare to our online psychology clinic, and conduct service outcome and economic evaluation studies; and 3) application of Institute of Social Research findings on family violence.
- OneSteel has worked with Swinburne for more than five years on reducing energy consumption (and thus cost) in steel recycling. The OneSteel recycling plant operates at 1,600 degrees C, making it the biggest single consumer of electricity in Melbourne. Swinburne students used complex mathematical expressions and modelling to identify how furnace processes could be fine-tuned. Their work delivered a 1-2% saving in energy consumption (equivalent to 1.6 GWh per year), faster turn-around recycle times, critical gains in competitiveness and, ultimately, useful collaborations with NASA scientists in the United States.

Our principal objective is always to achieve useful outcomes from our engagement with our community, industry and sector partners. To further this objective we will:

- establish and implement an Industry & Community Engagement Plan, to develop engagement as a strategic capability across the organisation: internally, key outcomes from the successful implementation of the Plan will be greater connections between existing engagement activities to ensure that Swinburne and partners can maximise returns and identify new opportunities, and greater transparency in relationships, information and processes to improve knowledge and facilitate strategic planning
- establish and foster additional strategic alliances that advance Swinburne's standing and that of our partners, locally and globally
- strengthen connections with our alumni and benefactors to increase philanthropy and to engage them as advocates to increase our capacity to support teaching, research and the development of world-class facilities
- expand our reputation as a trustworthy knowledge hub, with staff and students contributing their expertise across multiple disciplines to public commentary and debate
- establish and sustain ongoing relationships with government at all levels based on our reputation as a trusted source of expertise and 'thought leadership': particularly in relation to science, technology and innovation
- strengthen engagement with the secondary school sector in metropolitan Melbourne, particularly in the eastern suburbs and selected areas of regional Victoria
- develop and implement methods to evaluate engagement activity, with a view to continuous improvement

Internationally, the University has developed a 10-year vision for strategic engagement with a focus on research-led partnerships with a small number of similarly-minded, leading universities in Asia, Europe, the Middle East and the Americas. An International Engagement Strategy Committee has been established to implement the new approach. A PVC International Research Engagement has been appointed to lead the research collaboration elements of the strategy and to mentor and assist researchers to form international collaborations. Our new international engagement strategy and framework reflects the 'third wave' of internationalisation and it includes plans for engagement in research, student and staff mobility, educational collaboration and commercial activity.

Under this strategy, revised partner selection criteria have been agreed and implemented, and new partnerships have been established in 2012 and 2013 with: Beijing Institute of Technology, Ocean University of China, Tongji University, Beijing University of Astronautics and Aeronautics,

and IIT Madras, and with the Chinese academies of Engineering, Science, and Social Sciences, the China Scholarship Council and the China Non-Ferrous Metals Industry Association. These partnerships involve partnered PhD arrangements, annual research conferences, and joint research centres and projects.

International industry connections are a key component of our international engagement strategy. These connections will increase the effectiveness of our research by attracting and enabling financial investment in our people and facilities, supporting effective collaboration with global research leaders and providing pathways for the development, deployment and commercialisation of research outcomes.

By way of example, Swinburne researchers and Brisbane-based licensee Henrob, working through the CAST CRC, received funding from the US Automotive Materials Partnership (USAMP) to develop a demonstration facility for the laser-assisted self-piercing riveting technology developed at Swinburne. A robot assembly cell was setup at Henrob Corporation in Livonia, Michigan, USA, where small scale production of prototype magnesium shock absorber mounting assemblies was successfully demonstrated. This represented a major step in the commercialisation of the technology, which is an important enabling agent for the adoption of light-weight metals in automotive applications. Swinburne was extensively engaged with Henrob's US team and the USAMP industry partners, particularly Ford and General Motors in the manufacture of samples, and provided direct assistance in establishing the demonstration facility.

A database of international collaborations is in development to facilitate the evolution of researcher-to-researcher relationships into institution-to-institution relationships. These relationships will give impetus to our standing goal to communicate our research and innovation to the public, nationally and internationally, including through public affairs outreach, the provision of expert comment, and profiling research developments through our Venture magazine.

We also expect to increase cross-campus research collaboration following the launch of the Swinburne Sarawak Centre for Sustainable Technologies in December 2012 at our branch campus in Sarawak, Malaysia. The Centre was established through a joint commitment between Swinburne and the Sarawak State Government with a total of RM40million to be invested in the Centre of a period of seven years. Through the Centre, staff and students will have opportunities to undertake local and regional projects in Asia to address the needs of governments, communities and regional industries. The research outputs and impact of the Centre will be enhanced through the implementation of an internal funding scheme for staff and students, the provision of postgraduate scholarships, cross-campus travel grants, and the appointment of research active staff.

The Swinburne Design Factory (SDF), part of the international Design Factory Network, has also been successful in promoting innovative, industry-engaged research to students, staff and industry. In 2012, in its first year of operation, SDF students participated in six global industry projects, and staff and research exchanges were facilitated through the Design Factory Network. The number of students involved will continue to grow, particularly from 2014 when the SDF will be housed in our Advanced Manufacturing and Design Centre. This will increase the number of interdisciplinary projects conducted collaboratively with partners ranging from SMEs to NFPs, large corporates and government institutions.

As part of the renewed focus on research outcomes, we are keen to participate in the development of measures of research impact. A stocktake of the impact of significant research activities conducted over the past 20 years will inform the development of indicators to measure the impact of this engagement activity.

### 3.3.3 Performance indicators and targets

The purpose of the engagement performance indicators and targets is to assist the University and the Commonwealth in monitoring the University's progress against the Commonwealth's objectives and the University's strategies for engagement.

The University will aim to meet the engagement performance indicators and targets set out in the following table.

*Note: All calendar year references below refer to the previous year's data collection.*

Principal Performance Indicators	Baseline 2012	Progressive Target 2013	Progressive Target 2014	Progressive Target 2015	Target 2016
Number of active collaborations <sup>8</sup> with industry and other partners in Australia	237	250	260	270	280
Number of active collaborations <sup>9</sup> with industry and other partners overseas	38	40	42	44	46
Category 3 Income	\$4.2M	\$4.5M	\$4.8M	\$5.1M	\$5.5M

*Note: All calendar year references below refer to the previous year's data collection.*

Optional Performance Indicators	Baseline 2012	Progressive Target 2013	Progressive Target 2014	Progressive Target 2015	Target 2016
Percentage of undergraduate courses with an embedded industry engaged learning requirement	89.9	90.0	92.0	95.0	97.0
Readership of articles published by Swinburne academics on <i>The Conversation</i> website	n/a	170,000	190,000	210,000	230,000
Visits to the <i>Australian Policy Online</i> database website	800,000	800,000	815,000	830,000	845,000

<sup>8</sup> Collaboration involves active joint participation with other organisations, by contributing resources such as intellectual property, knowledge, money, personnel or equipment, with the aim of obtaining a shared goal or objective. Straight fee-for-service arrangements, such as contracts and consultancies, are deemed not to be collaborative and are therefore excluded. Collaboration with Cooperative Research Centres (CRCs) is also to be excluded. This definition is in line with the ABS and OECD definitions of collaboration.

<sup>9</sup> See footnote 8 for a definition of collaboration.

### 4 TEACHING AND LEARNING

#### 4.1 Student enrolments

##### 4.1.1 Commonwealth objectives

The Commonwealth is committed to expanding higher education to provide high quality opportunities for people of all backgrounds to participate to their full potential. An expanded higher education system will educate the graduates needed for Australia's future economy, which will be based on knowledge, skills and innovation.

The main objectives of the Commonwealth are to ensure that:

- by 2025, 40 per cent of all 25 to 34 year olds will hold a qualification at bachelor level or above;
- by 2020, 20 per cent of undergraduate enrolments should be students from low socio-economic backgrounds;
- national parity for Aboriginal and Torres Strait Islander students and staff is achieved over time; and
- universities are producing graduates that meet the nation's skills needs.

These objectives are supported through the Commonwealth Grant Scheme and, in particular, the demand driven funding of students in bachelor level courses.

##### 4.1.2 University strategies

Over recent years, Swinburne has contributed significantly to Commonwealth Government goals for participation and equity in higher education. Enrolments of 18-22 year old domestic undergraduates increased from 6,978 in 2010 to 8,404 in 2012, while low-SES enrolments increased from 1,050 to 1,563 over the same period. This growth has been achieved without compromising student achievement or graduate outcomes and, subject to continuing growth in demand for the courses that we offer, we intend to continue on a path of steady growth during the 2014 - 16 triennium.

Current targets are to increase domestic undergraduate load onshore by approximately 30 per cent from approximately 12,650 EFTSL in 2013 to 16,475 EFTSL in 2016 (not including OUA load). Small increases in Victorian secondary school enrolments and year 12 completions will contribute to this growth, but the major factors will be a modest broadening of the University's undergraduate course provision, mainly in the sciences, health, engineering and design, and continued growth in student demand for programs delivered online. We expect that both will improve Swinburne's market share relative to other Victorian universities (and other Australian universities in the case of those programs that are available online).

Domestic postgraduate load onshore is also projected to increase by approximately 30 per cent from approximately 1,700 EFTSL in 2013 to 2,200 EFTSL in 2016 (CGS and full fee, not including OUA load). Much of the growth at postgraduate level will come from broadening our range of postgraduate courses, with a focus on new offerings in science, health and education, and closer alignment between undergraduate and postgraduate provision resulting in more students progressing to further study. Again, it is anticipated that these changes will improve Swinburne's market share of student load in the disciplines concerned.

While there is some uncertainty surrounding the climate for international student recruitment during 2014-16, we plan to grow on-campus international student load from approximately 4,900 EFTSL in 2013 to 5,850 EFTSL in 2016. Revision of current offerings and the introduction of new courses at undergraduate and postgraduate level will be the principal drivers of growth, particularly in the Health, Natural & Physical Sciences, Society & Culture and Management & Commerce broad fields of education.

While course provision will expand during 2014-16 to meet student demand and to increase our market share relative to other Victorian universities, some course rationalisation will also occur as we seek to streamline offerings in line with our 2020 vision and to build on our key areas of strength. No further campus closures are envisaged, beyond the closure of the Lilydale campus in mid-2013 and the closure of the Prahran campus in 2014.

### **Sub-bachelor planning**

Sub-bachelor level courses have long been a feature of our tertiary education provision, with Swinburne TAFE delivering a wide range of courses at AQF 4- 6 and Swinburne College offering pathway courses: exclusively for international students until 2012, but for both domestic and international students from 2013. In 2012, students with a VET basis of admission represented 24 per cent of our domestic undergraduate intake, with approximately half of these students articulating from Swinburne TAFE courses. These students have generally performed well in their higher education study, with above average retention and completion rates contributing to the achievement of national targets.

We have recently completed a review of our pathways to bachelor level courses, and the outcomes of this review will be implemented during 2014-16. Implementation of review outcomes will ensure that students can tailor their studies to suit their educational background and circumstances, then pathway successfully from sub-bachelor courses to undergraduate degree study. We are implementing revised transition support processes between sub-bachelor and bachelor courses with a view to further boosting academic achievement in higher education. In addition to the vocational courses offered at sub-bachelor level, various types of enabling and pathway courses will be available through Swinburne College to both international and domestic students, subject to the availability of CGS sub-bachelor places in the case of the latter. These courses will cater for students who wish to undertake undergraduate study but for whom preliminary study at sub-bachelor level is advised, and they will include:

- enabling courses, similar to the foundation courses currently delivered successfully for international students
- generalist higher education diploma courses, preparing pathway students for undergraduate study in a range of higher education disciplines
- associate degree courses in a small number of niche areas for students who have clear intentions in regard to the degree course that they wish to pursue, but for whom preparatory study at AQF 6 will appreciably increase the prospect of ultimate academic success at AQF 7
- embedded degrees (e.g. diploma/bachelor) in a limited number of disciplines

Appropriate pedagogy will continue to characterise the Swinburne College approach to the delivery of enabling and pathway courses, including fundamental features of the delivery framework (small class sizes, investment in face-to-face hours, and teachers with formal education qualifications) and innovations introduced more recently at the University. These innovations include:

- development of language and academic literacies embedded into curriculum and assessment
- improved approaches to assessing English language levels, diagnosing individual needs and delivering targeted tuition based on international frameworks, including the European Common Framework of Reference for Languages
- transition programs that focus on the specific requirements of higher education study
- web-based study support materials and student-teacher and student-student communication facilities.

### **Bachelor degree planning**

As noted, we intend to continue increasing domestic and international undergraduate enrolments during 2014 - 16. Existing areas of strength targeted for growth include:

- Engineering – Civil, Biomedical, Electrical & Electronic, Mechanical, Product Design and Robotics & Mechatronics
- Aviation – Piloting, Management

- ICT – Computer Science and Information Systems
- Digital Media – Computer Graphics and Computer Engineering
- Design – Graphic, Industrial, Interior and Communication Design
- Natural & Physical Sciences – Chemistry and Biochemistry
- Behavioural Sciences – Psychology (including through online delivery)
- Health – Community Health
- Business – Accounting, Management, Finance, HRM, Marketing and International Business (including through Swinburne Online and OUA)
- Media & Communications – Media Studies, Audio Visual, Journalism and Written Communication (including through Swinburne Online and OUA)
- Arts & Social Sciences – International Studies and Human Society

Additional areas targeted for growth in undergraduate enrolments include:

- Natural & Physical Sciences – Physics (as a major study sequence), Biotechnology, Biomolecular Science, Psychophysiology, Mental Health (as a Psychology major study sequence), Neuroscience and Applied Mathematics.
- Health – Allied Health including Physiotherapy, Occupational Therapy, Nutrition and Social Work
- Arts – Social Media
- Media & Communications – Science Journalism and Animation
- Education (Early Childhood and Primary)

### **Postgraduate planning**

We intend to increase both domestic and international postgraduate enrolments during 2014 - 16, in existing areas of strength and in some additional areas. Existing areas of strength targeted for growth include:

- Engineering – Manufacturing & Technology, Civil Engineering, Construction Engineering, Electrical & Electronics Engineering and Engineering Management
- Aviation – Human Factors and Management
- ICT – Computer Science, Information Systems and Communication Technologies
- Digital Media – Computer Graphics, Design, Multimedia
- Design – Graphic, Industrial, Interior and Communication Design
- Science/Mathematics – Chemical Sciences, Biochemistry, Astronomy (particularly online) and Statistics
- Behavioural Sciences (Psychology: Clinical, Counselling)
- Business – Accounting, Management, HRM, International Business, Marketing, Banking & Finance and Logistics (including through Swinburne Online)
- Media & Communication – Writing, Communication and Media Studies (including through Swinburne Online)
- Arts & Social Sciences – Human Society

Additional areas targeted for growth in postgraduate enrolments and load are:

- Health Sciences – Social Work, Dietetics, Speech Pathology, Mental Health in Schools, and Nursing specialisations (Geriatric Nursing, Mental Health Nursing and Nurse Practitioner)
- ICT – eForensics and Cybersecurity
- Education (including secondary)

Of all Australian universities, Swinburne currently has the lowest number of CGS places available for postgraduate courses (c.80 EFTSL in 2013) and this has severely restricted growth at these AQF levels. We intend to seek a broadening of the postgraduate courses for which CGS places are available in key areas of workforce need which are aligned with Commonwealth priorities. For example, information and communications technology is a key area highlighted by the Australian Government as requiring urgent intervention to lift the number of Australian graduates who can meet a range of skill shortages.

## 4.2 Quality

### 4.2.1 Commonwealth objectives

A focus on teaching and learning quality underpins the Commonwealth's vision for Australia to be one of the most highly educated and skilled nations in the world.

The Commonwealth has made a commitment to provide more autonomy to universities through the removal of funding caps on Commonwealth supported bachelor level places. In turn, the Commonwealth requires the University to participate in the higher education quality arrangements which are overseen by the Tertiary Education Quality and Standards Agency. The arrangements are designed to support academic autonomy while ensuring that the achievement of standards can be demonstrated and that there is a strong focus on enhancing the quality of teaching and learning while expansion of the higher education system meets national participation ambitions.

The Commonwealth's commitment to quality is demonstrated through initiatives such as the Office for Learning and Teaching, which provides a suite of grants, awards and fellowships to recognise quality and promote innovations in learning and teaching.

The University also has obligations under the quality and accountability requirements in Division 19 of HESA. This compact does not change those obligations.

### 4.2.2 University strategies

For many years, Swinburne has adopted an ADRI (Approach; Deploy; Results; Improve) approach to quality management, with a strong focus on stakeholder priorities and evidence-based continuous improvement. In the area of teaching and learning, this means the ongoing improvement of courses, teaching and other delivery practices, the ICT infrastructure, facilities, equipment, learning materials, learner support, and the recruitment, induction and professional development of teaching personnel.

Robust policies and procedures ensure that our course accreditation and re-accreditation processes are appropriate, and we use a range of complementary policies, procedures and measures to monitor and benchmark the effectiveness of teaching and learning. These are implemented by teaching, managerial and professional staff, and this implementation is overseen by the University's Academic Senate and its committees, including its Courses Committee, Academic Regulation & Policy Committee and Academic Quality & Standards Committee.

The procedures and measures used to assure the quality of learning and teaching, and ongoing compliance with all requirements of the national quality framework, focus on 'inputs' into teaching practices and student learning, and on learning 'outcomes'. Together, these quality procedures and measures provide the evidence base used to inform planning and drive continuous improvement. Data are collected and benchmarked, internally and externally as applicable, for different student cohorts on such things as:

- employment, further study and career outcomes (through the national Graduate Destination Survey and Beyond Graduation Survey)
- student and graduate satisfaction (through national surveys such as the University Experience Survey, Course Experience Questionnaire and Postgraduate Research Experience Questionnaire)
- aspects of student engagement and experience (through the University Experience Survey and various internal surveys), and student and graduate perceptions of teaching quality and the acquisition of generic skills (through the Course Experience Questionnaire and the University's internal Student Feedback Survey which informs unit improvement and teaching practice)
- academic achievement, using measures of attrition, retention, success (progression) and grade point average, and including the academic performance of different student cohorts (for example, international, low SES, Indigenous, regional and NESB students)

- course and subject performance, through a wide range of demand, load, academic achievement, satisfaction, industry-engaged learning and graduate outcome measures

In 2012, Swinburne commenced a comprehensive project (the Quality@Swinburne Project) as part of the continuous improvement process and to ensure that all relevant policies and procedures meet recent changes to external regulatory requirements. Related activities include the following, most of which will result in initiatives ready to be fully implemented in 2014:

- a review of all academic policies and procedures
- development of user-friendly manuals for teaching staff, support staff and students
- improvement of online induction processes for teaching staff and students, with a number of 'special-purpose' modules (for example, for industry-based learning students to facilitate their transition to the workplace)
- development and launch of an improved approach to implementing student surveys online, with the aim of increasing participation and improving the quality, comprehensiveness and timeliness of reporting
- a revised process to benchmark course learning outcomes with those of other universities, to complement and enhance existing professional accreditation arrangements
- strengthening the approach to managing collaborative education with other providers
- an integration of our approach to the provision of English language support for both domestic and international students

We have a strong focus on developing staff capacity and capability in learning and teaching, with an emphasis on digital approaches to complement our traditional strengths that enable staff to design and deliver effectively using technology to enhance student engagement and learning.

The University also sponsors a range of recognition and reward activities for good teaching practice. Three examples are:

- Swinburne's annual Vice-Chancellor's Awards for Teaching Excellence
- an emphasis on teaching excellence in academic promotion rounds and career progression
- a performance and development process that values teaching excellence and provides professional development opportunities aligned to University priorities.

Note: All calendar year references below relate to projects and awards in that calendar year.

Principal Performance Indicators	Baseline 2012	Progressive Target 2013	Progressive Target 2014	Progressive Target 2015	Target 2016
Number of active learning and teaching projects supported by the PELTHE10 program where the University is the lead institution	2	2	3	3	3
Number of active learning and teaching projects supported by the PELTHE11 where the University is a partner institution	2	1	2	2	3
Number of citations for outstanding contributions to student learning	6	6	6	6	6
Number of awards for teaching excellence	0	1	2	2	2
Number of awards for programs that enhance excellence	0	1	2	2	3

### 4.3 Equity

#### 4.3.1 Commonwealth objectives

The Commonwealth is committed to a fair and equitable higher education system that provides equal opportunity for people of all backgrounds to participate to their full potential and the support to do so.

In particular, the Commonwealth has an ambition that by 2020, 20 per cent of higher education enrolments at the undergraduate level will be people from low socio-economic status (SES) backgrounds.

The Commonwealth expects all universities to play a part in meeting the Commonwealth's higher education participation ambitions, consistent with the objectives and regulatory requirements of Commonwealth funding.

The Commonwealth funds a range of programs to encourage and support access to and participation in higher education by people from low SES backgrounds and other under-represented groups, including the Higher Education Loan Program and Student Income Support.

The Commonwealth will monitor the University's equity performance through the reporting requirements and evaluations of programs and initiatives. The University's performance in meeting equity objectives will also be linked with teaching and learning Performance Funding targets.

Universities have obligations under the fairness requirements in Division 19 of HESA. This compact does not change those obligations.

<sup>10</sup> Promotion of Learning and Teaching in Higher Education - the program provides learning and teaching grants, awards and fellowships and is administered by the Office for Learning and Teaching.

<sup>11</sup> See footnote 10 for definition.

### 4.3.2 University strategies

During 2014 - 16, Swinburne will continue to make a substantial contribution to the Commonwealth's equity agenda, and particularly to the national goals that relate to increased participation in tertiary education by presently under-represented groups. Principally, this will be through activity described in our 2011 - 2015 Social Inclusion Action Plan, which sets out goals and priorities for improving access for students from under-represented groups, retaining those students and supporting their achievement.

One important Action Plan objective is to boost participation and success for students from low SES backgrounds, in both VET and higher education. Historically, low SES students have accounted for just 10 - 11 per cent of our domestic undergraduate cohort, but this representation increased appreciably during 2011 and again in 2012.

A complementary objective has been to increase enrolments for students from regional areas. This group has also been under-represented at Swinburne (close to 9 per cent of domestic undergraduates in most years) but online delivery and other initiatives have resulted in marked increases in regional student participation in 2011 and 2012.

Significant among these initiatives was the development of a Guaranteed Entry Scheme (GES) which included the establishment of new pathways between TAFE and higher education. As a dual-sector university, we have always provided various pathways to higher education for VET students, and the GES enhanced the range of options available.

A parallel initiative to the GES was the introduction in 2012 of a tertiary transition program known as 'U2Uni' following a successful pilot the previous year. U2Uni has involved the design and development of content, delivery strategies and web- and print-based materials aimed at assisting TAFE articulators, school leavers and others to succeed in a higher education learning environment. Based on its success to date (528 enrolments in 2012), the program will continue to be delivered, monitored and improved throughout 2014-16.

As noted, online delivery has contributed to increased levels of participation for both low SES and regional students, and the range of courses offered online will expand in 2014 - 16.

Other initiatives introduced recently to boost participation and achievement for students from regional areas, low SES backgrounds and/or other equity groups, or planned for introduction during 2014 - 16 include:

- some broadening of our educational provision (Section 4.1.2)
- development and delivery of new higher education diplomas and associate degrees as pathways to undergraduate study
- establishment of closer links and pathway arrangements with selected secondary and senior secondary schools that draw from predominantly from low SES catchments at Melbourne's south-eastern and eastern fringe
- forging closer links, pathways and on-site delivery arrangements with selected TAFE providers that draw from predominantly low SES catchments in rural Victoria
- bursaries for low SES students in selected Victorian secondary schools
- active participation in regional Tertiary Information Service and Career Group events
- expansion of the University's Regional Student Ambassador Program
- expansion of the Experience Swinburne grant scheme to increase the attendance of regional students at our annual Open Day
- grants and scholarships to assist low SES undergraduates with living and study costs and educational support (HEPPP funding)
- regional roadshows and parent information evenings
- enhanced support for relocation, coupled with advice (and sometimes support) in relation to accommodation and living expenses

### 4.3.3 Participation and Social Inclusion Targets

#### Proportion of domestic undergraduates who are from a low SES background

Baseline for improvement target: **To be determined**

Principal Performance Indicators	2014 Reward Payment (target for 2013 students)	2015 Reward Payment (target for 2014 students)	2016 Progress target (target for 2015 students)
Excellence Target	To be determined	To be determined	To be determined
Improvement Target	To be determined	To be determined	To be determined
Outcome	-	-	-

#### Proportion of domestic undergraduates who are from another underrepresented group

Baseline for improvement target: x% (Either 2009 or average of 2008 and 2009 data)

Principal Performance Indicators	2014 Reward Payment (target for 2013 students)	2015 Reward Payment (target for 2014 students)	2016 Progress target (target for 2015 students)
Improvement Target	To be determined	To be determined	To be determined
Outcome	-	-	-

## 4.4 Teaching and Learning Infrastructure

### 4.4.1 Commonwealth objectives

The Commonwealth is committed to the development of world class higher education infrastructure. A contemporary, technology rich, well designed and equipped campus environment has a positive influence on staff and student performance and satisfaction.

While the responsibility for capital infrastructure development and maintenance rests with the University, the Commonwealth's commitment is demonstrated through programs such as the Education Investment Fund. Universities also utilise Commonwealth Grant Scheme funding for capital works and maintenance.

The Commonwealth will monitor the University's infrastructure performance, through the Institutional Performance Portfolio/CAMS.

### 4.4.2 University strategies

Swinburne is one of the most densely populated universities in Australia, with 8.1 sqm gross floor area (GFA) per EFTSL compared with a national sector average of 13.0 sqm GFA per EFTSL reported as part of the TEFMA 2011 benchmarking cycle. As a result, we have a carefully considered strategy to ensure effective and efficient use of capital assets. Some of the key components of this strategy are as follows:

- At the end of each semester, utilisation reports are run for each teaching space to determine an overall average utilisation and to facilitate discussion around usage for rooms which fall below a threshold frequency level. The discussion looks to resolve the financial viability of courses/units of study which have specialist space demands, and it leads to better utilisation as rooms become more multi-purpose.
- Since 2011, we have conducted an extensive annual teaching space audit, comparing timetabled usage rates against actual usage rates. Where a significant disparity is observed it is addressed with the relevant faculty deans and TAFE executive directors.
- From the overall University funding model perspective, space costs including those associated with cleaning, security, electricity, repairs and maintenance are funded by the users of the space; hence there are incentives for users to improve the utilisation of teaching

space and office accommodation. As well, the University has a detailed Space Management Policy, which provides clear direction on office sizes and entitlements.

- We also have a carefully considered strategy for major capital development. Swinburne's Master Plan is available at:  
[http://www.swinburne.edu.au/corporate/facserv/master\\_plan.pdf](http://www.swinburne.edu.au/corporate/facserv/master_plan.pdf)
- The academic calendars for TAFE and Higher Education have been aligned to allow for multiple enrolment entry points that should maximise utilisation outside the core teaching semesters during 2014 - 16.

We are also committed to providing cutting edge spaces to enhance the teaching and learning experience. The traditional 'rows and columns' classrooms are giving way to 'pods and clusters' to facilitate collaborative learning in a formal setting, and we have also invested significantly in informal learning spaces. These allow students to meet and work in groups outside class-time to enhance the collaborative learning process. The Advanced Manufacturing & Design Centre under construction at Hawthorn (partly funded via the EIF) has several large informal spaces for student interaction. The furniture design and layout will be selected by students to encourage ownership and contribute to maximising usage.

Swinburne also has a very low backlog maintenance liability. In part, this is a benefit that derives from having a well-planned strategic asset management plan.

### 5 RESEARCH AND RESEARCH TRAINING

A range of research and research training performance indicators and targets are proposed in this section. Principal Performance Indicators are compulsory and institutions may voluntarily nominate optional performance indicators and targets considered reflective of individual institutional goals.

The Commonwealth recognises universities have diverse missions and, consequently, targets and performance will vary between institutions. Each university should develop performance indicators and targets to reflect its individual performance and strategic direction.

#### 5.1 Research performance and research capability

##### 5.1.1 Commonwealth objectives

The Commonwealth encourages excellence in research performance and the strengthening of research capability. Particular objectives are to:

- progressively increase the number of research groups performing at world class levels, as measured by international performance benchmarks; and
- promote collaboration, amongst universities, across sectors, between researchers and industry Australia and internationally.

The Commonwealth, through the Australian Research Council (ARC), conducts the Excellence in Research for Australia (ERA) which evaluates the quality of research undertaken at Australian universities by discipline against international benchmarks. ERA is used to assist in determining funding in the Sustainable Research Excellence in Universities program administered by the Commonwealth.

##### 5.1.2 University strategies

Building from existing areas of strength, and as noted previously, Swinburne continues to support and invest in engaged research and development that:

- aspires to the highest quality, as judged by peers and those who fund and use our research findings
- focuses on outcomes and impact through close engagement with industry and the communities that we serve
- informs public debate and policy development
- enthuses our students and ensures the currency of our teaching

To achieve these objectives we shall:

- attract high-quality research students and staff, and support them within a vibrant intellectual community
- provide outstanding research infrastructure that supports high-impact projects
- pursue strategic domestic and international partnerships that increase both our capability and our impact

Recognition of our research quality has continued to increase, and in 2012 we were ranked in the top 400 research-intensive universities (and in the top 100 in the field of physics) in the Academic Ranking of World Universities, and as a top 500 university in the QS World University Rankings.

This success can be attributed to a focused approach to research, an approach that will be enhanced by the development of a sustainable model for resourcing our designated research centres; by new investment in infrastructure through, for example, the Advanced Technologies Centre and the Advanced Manufacturing & Design Centre; and through access to high quality research facilities such as the Keck Observatory in Hawaii.

In the 2012 Excellence in Research for Australia (ERA) assessment, more than 71 per cent of Swinburne's research was assessed to be at or above world standard, a significant improvement since the 2010 ERA assessment.

In broad terms, our strategies for increasing research quality align with the ERA approach to assessing and rating fields of research. Research areas are regarded as 'strengths' (ERA ratings 4 and 5), 'neutral' (3) or 'weaknesses' (1 and 2). We will leverage off the strengths and convert neutrals to strengths, while weaknesses are re-assessed. If considered important for our overall positioning, additional resources will be made available to build capacity in the neutral and weak areas.

The ERA process has encouraged a focus on improving the quality of research outputs and it provides data that we can use to assess the return on investment in research capacity. It allows us to promote with confidence specific research fields such as maritime engineering and astronomy in which we rank as well above world class and disciplines such as software engineering, materials, psychology, media and communication studies where our "above world standard" ranking was newly affirmed in the 2012 ERA. This provides new opportunities for recruiting high calibre research students and collaborations with other high-performing research organisations. In addition, we are committed to improving our performance in disciplines that are strategically important to meeting our 2020 vision to be Australia's leading university in science, technology and innovation: such as civil engineering, design and business which were ranked as below world class in 2012. Several research-oriented metrics, including those for publications, HDR completions and research income, will be monitored to give an indication on improvement ahead of the 2015 assessment.

Our priorities are to:

- build our research capacity via strategies that will enhance the impact of established research groups and centres; increase scale and focus in emerging research areas; and develop and attract high-performing researchers to strengthen the research talent pipeline
- forge domestic and international research linkages that will increase the effectiveness of our research by: attracting financial investment in people and facilities; supporting effective collaboration with global research leaders; and providing pathways for development, deployment and commercialisation of research outcomes
- mentor and support researchers across the University, especially those in mid-career, to improve the quality of postgraduate and postdoctoral supervision

Late in 2012 Swinburne appointed a PVC Research Capacity who is leading initiatives to build both capacity and quality. These include measures to support and enhance the research output of the key contributors to each field of research assessed by ERA in 2012, and the establishment and use of benchmarks to encourage level D and E academics to grasp research leadership opportunities commensurate with their role.

A range of issues affect participation of Indigenous people in education, particularly at postgraduate level. These include access to educational institutions, financial constraints and community expectations. An academic scholarship scheme at Swinburne will support Indigenous Australians to overcome some of these barriers and enable them to undertake postgraduate study. Current students will be encouraged to apply. Further support and mentoring will be offered to enable scholarship holders to undertake sessional teaching and research work with a view to developing the necessary skills to undertake an academic career at Swinburne on completion. Additional information on strategies to build Indigenous HDR candidature is provided in Part 2.2.

### 5.1.3 Performance indicators and targets

The purpose of the research performance and the research capability performance indicators and targets is to assist the University and the Commonwealth in monitoring the University's progress against the Commonwealth's objectives and the University's strategies for research performance and research capability.

The University will aim to meet the research performance and research capability performance indicators and targets set out in the following table.

Principal Performance Indicators	ERA 2010	ERA 2012	ERA 2015 Target
Number of disciplines, as defined by two-digit Fields of Research (FoR), performing at world standard or above (3, 4 or 5)	5	8	9
Number of disciplines, as defined by four-digit FoR, performing at world standards or above (3, 4 or 5)	8	15	18

Disciplines the University commits to demonstrating substantial improvement in as defined by two-digit FoR and/or four-digit FoR	Disciplines nominated in 2011–13 Compact	Disciplines nominated in 2014–16 Compact
Two-digit and 4-digit FoR codes	09 0905 0907 1606 1608	0905 1203 15 1503 1505

*Note: All calendar year references below refer to the previous year's data collection.*

Principal Performance Indicators	Baseline 2012	Progressive Target 2013	Progressive Target 2014	Progressive Target 2015	Target 2016
Category 1 income	\$10,200,000	\$10.8M	\$11.3M	\$11.9M	\$12.4M
Category 2 Income	\$2.5M	\$2.7M	\$2.9M	\$3.1M	\$3.4M
Number of joint research grants in Australia	260	295	315	335	350
Number of joint research grants overseas	43	27	30	33	36
Number of jointly supervised PhD students in Australia <sup>12</sup>	67	69	71	73	75
Number of jointly supervised PhD students overseas <sup>13</sup>	20	21	22	23	24

*Note: All calendar year references below refer to the previous year's data collection.*

Optional Performance Indicators	Baseline 2012	Progressive Target 2013	Progressive Target 2014	Progressive Target 2015	Target 2016
No. of SCI-E and SSCI publications	653	655	675	695	715

<sup>12</sup> Please provide the number by headcount of jointly supervised HDR students enrolled in your institution who have a supervisor from an external organisation in Australia (examples include someone from a government organisation, hospital or another university).

<sup>13</sup> Please provide the number by headcount of jointly supervised HDR students enrolled in your institution who have a supervisor from an external overseas organisation (examples include someone from a government organisation, hospital or another university).

## 5.2 Research training

### 5.2.1 Commonwealth objectives

The Commonwealth encourages excellence in the provision of research training. Particular objectives are to:

- support research excellence and develop an internationally competitive research workforce in Australia through high quality research training;
- develop an internationally competitive research workforce in Australia through high quality research training; and
- significantly increase the number of students completing higher degrees by research over the next decade.

### 5.2.2 University strategies

Swinburne's HDR enrolment figures have increased over recent years, from 687 in 2009 to 769 in 2010 and 829 in 2011 (as reported in 2012). Our aim is to continue this growth, so student recruitment is a strong focus. We currently attract more HDR applications than can be accommodated in every research scholarship round, and scholarship advertising is targeted at recruiting high-performing domestic and international applicants across all disciplines, using industry-relevant and academic publications and copy geared to attracting quality students. Other strategies include:

- conducting two rounds of research scholarships each year
- offering tuition fee waivers for international students
- running schemes for supervisor development, registration and accreditation
- delivery of a Student Research Training Program
- an HDR student publication support scheme
- provision of designated workspaces for HDR students

At Swinburne we recognise that research students are the driving force that energises knowledge creation. Therefore, we support research students in all facets of their candidature by providing induction programs, training and administrative support. Specific strategies being implemented to improve the HDR experience, as well as the quality and timeliness of completions, include the following:

- development of an annual Research Training Calendar and a complementary 'doctoral pathway' that includes a visual representation of significant events and imperatives for HDR students and their supervisors
- enhancements to our Postgraduate Researcher Enhancement Program (PREP), Quantitative Research Program (QRP) and Qualitative Research Group Network (QRGN) such as: the development of concepts, behaviours and rhetorical practices to support productive writing and publication; discipline-specific modules on writing literature reviews; a renewed focus on research commercialisation; and establishment of a comprehensive in-house statistics course
- a University-wide mini-conference on supervision practice
- comprehensive research on the doctoral experience at Swinburne, including a full analysis of research examination outcomes
- formative trial/evaluation of research literacy modules, in conjunction with ATN universities

In 2011, as reported in 2012, we had 82 doctoral completions, and the average time to completion was 4.3 years: an improvement on 2011 when the average completion time was 4.9 years. Continued improvement in this regard will be a challenge given the significantly increased number of HDR students in the pipeline, but it is a challenge that will be met through an increased emphasis on improving the quality of assessment, supervision and support.

Particular emphasis will be placed on career planning and development, with HDR students preparing and revising career plans throughout their candidature. Increased opportunities will be provided for industry internships, professional placements and other career-relevant experiences. Emulating what we have achieved through our doctorates in Psychology and Design, we will recruit graduates in science, engineering and business that can combine the high-level research skills learnt through undertaking a PhD with knowledge and experience in business innovation, project management, commercialisation and entrepreneurship.

### 5.3 Performance indicators and targets

The purpose of the research training performance indicators and targets is to assist the University and the Commonwealth in monitoring the University's progress against the Commonwealth's objectives and the University's strategies for research training.

The University will aim to meet the research training performance indicators and targets set out in the following table.

*Note: All calendar year references below refer to the previous year's data collection.*

Principal Performance Indicators	Baseline 2012	Progressive Target 2013	Progressive Target 2014	Progressive Target 2015	Target 2016
HDR student load	679	725	760	800	840
HDR student completions by masters	6	16	5	5	5
HDR student completions by doctorates	85	100	125	135	150

*Note: All calendar year references below refer to the previous year's data collection.*

Optional Performance Indicators	Baseline 2012	Progressive Target 2013	Progressive Target 2014	Progressive Target 2015	Target 2016
Mean time to PhD completion (years)	4.3	4.3	4.3	4.3	4.3
Number of externally-funded international HDR commencements	10	20	25	30	35

## PART SIX: GENERAL PROVISIONS

### 6 GENERAL PROVISIONS

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#### 6.1 Compact Review

**6.1.1** The Commonwealth and the University will review the compact annually. This review will be a mechanism for considering progress made towards agreed goals outlined in this compact. Compact review will aim to ensure that the Commonwealth and the University will continue to focus on key objectives and strategies and will be an opportunity to consider developments that may impact on the compact or trigger a need to change the compact.

**6.1.2** To facilitate this review the Commonwealth will produce an annual Institutional Performance Portfolio and the University agrees to contribute to the annual Institutional Performance Portfolio Information Collection (IPPIC). The Commonwealth will consult with the higher education sector on the information collection requirements and any issues arising from the IPPIC process.

#### 6.2 Privacy and information sharing

**6.2.1** Subject to clause 6.2.2 below, the University acknowledges and agrees that any information it provides to the Department for the purposes of this compact, may be accessible under the *Freedom of Information Act 1982* and may also be:

- published by the Commonwealth in any manner in accordance with any legislative requirement;
- used by the Department for any purpose of the Commonwealth, including dealings with other Commonwealth or State or territory agencies;
- used in reporting to or answering questions from a Minister of State of the Commonwealth or a House or Committee of the Parliament of the Commonwealth; or
- disclosed where the Commonwealth is required or permitted by law to do so.

**6.2.2** The Commonwealth and the University agree to carry out their roles under this compact in accordance with any obligations they have under the *Privacy Act 1988* or any state or territory law relating to the protection of personal information.

#### 6.3 Changing the Compact

**6.3.1** Either party may propose changes to this compact at any time. Any variation to this compact is to be in writing and signed by the University's, and the Commonwealth's Representatives.

#### 6.4 Notices

**6.4.1** A party wishing to give notice under a provision of this compact:

- a. must do so by sending it to the other Representative set out in clause 6.4.2; and
- b. must, if a response is required to the notice, set out the time in which the response is to be given;

**6.4.2** The Representatives are:

- a. University Representative  
Professor Linda Kristjanson  
Vice-Chancellor and President  
Swinburne University of Technology  
John Street  
Hawthorn Victoria 3122

b. DIICCSRTE Representative  
Division Head  
Higher Education Group  
Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education  
GPO Box 9839  
Canberra ACT 2601

OR

[compacts@innovation.gov.au](mailto:compacts@innovation.gov.au)

## 6.5 Dictionary

In this compact, unless the contrary intention appears:

‘Department’ means the Commonwealth Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education or any successor.

‘HESA’ means *the Higher Education Support Act 2003* and includes any subordinate legislation or Ministerial determination made under that Act.

‘Institutional Performance Portfolio’ (IPP) is a report which provides an historical record of a university's performance based on information provided by the University and an analysis of the Higher Education Data Collections. An IPP will be prepared by the Commonwealth for the University annually using the latest available data.

‘Institutional Performance Portfolio Information Collection’ (IPPIC) is a set of Commonwealth instructions requesting that universities provide a submission to the Commonwealth, endorsed by the University's chief executive, that includes student, staff, financial and research information needed for the preparation of an Institutional Performance Portfolio for that university.

‘Minister’ means the Minister for Tertiary Education, Skills, Science and Research.

‘Mission’ means the University's Mission set out at Part One of this compact as amended in accordance with the variation provisions in this compact from time to time.

‘TEQSA’ means the Tertiary Education Quality and Standards Agency.

‘Term of this compact’ means the period set out in Part B of the Context of this compact.

‘University’ means Swinburne University of Technology, ABN 13 628 586 699

