



**Australian Government**

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**Department of Education,  
Science and Training**

**(Vocational Education and Training)**

**Submission to**

**The House of Representatives  
Standing Committee**

**on**

**Economics, Finance and Public Administration**

**Inquiry into the state of Australia's manufactured  
export and import competing base now and beyond  
the resources boom**

**March 2007**

**Department of Education, Science and Training  
(Vocational Education and Training)  
submission to  
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**Inquiry into the state of Australia's manufactured export and import competing base now and beyond the resources boom**

The Australian Government Department of Education, Science and Training (DEST) welcomes the opportunity to provide this submission to the House of Representatives Standing Committee on Economics, Finance and Administration into the state of Australia's manufactured export and import competing base now and beyond the resources boom.

The Australian Government takes a national leadership role in education and training in the schools and vocational education and training (VET) sectors and is solely responsible for funding in the higher education sector. Education and training are funded through partnerships between governments, although states and territories are primarily responsible for the management and delivery of education and training in schools and through VET. In relation to VET, the Australian Government works with the states and territories to ensure high quality outcomes for students and national consistency and coherence in the system.

Manufacturing is a major contributor to Australia's productivity-driven prosperity and has played a crucial role in the diffusion of technical innovations into the wider Australian economy through investment in research and development, early adoption of emerging technologies and the manufacture of technologically innovative products. The availability of adequate skills will be critical to the industry's future performance. Because of the skills profile of the manufacturing workforce, the VET sector is the industry's most important provider of formal training. Traditional trades form the central core of this training, although Training Packages cover a wide range of skills from the production stream to technician and associate professional levels.

Skills development in Australia is delivered through a variety of mechanisms including through the development and implementation of a flexible and quality VET system that is responsive to industry's current and future skills needs. As the VET sector provides vocational training for new labour market entrants and for those seeking further training or a change of career, this submission outlines a number of Australian Government VET programmes and initiatives targeted at, or of value to, the manufacturing industry which will assist the industry to meet its current and future skills needs. The Australian Government's VET programmes and initiatives, such as the Skills for the Future initiative, have the potential to assist the manufacturing industry through an increase in the supply of qualified workers.

The submission is framed by six key themes:

1. The Commonwealth-State/Territory Agreement for Skilling Australia's Workforce
2. The need to train people efficiently to gain required skill sets to meet skill gaps while not compromising the ability to gain full trade qualification
3. DEST's view on the TAFE NSW submission to the manufacturing inquiry which provided evidence of a model of industry-TAFE collaboration in manufacturing
4. The advantages of Australian Technical Colleges
5. The status of the Institute for Trade Skills Excellence
6. VET policy that is likely to nationally push manufacturing forward as a key growth industry.

## 1. Commonwealth-State/Territory Agreement for Skilling Australia's Workforce

### (a) Does the Agreement help to harmonise VET training across Australia?

The 2005-08 Commonwealth-State Agreement for Skilling Australia's Workforce sets out the terms and conditions of the Australian Government funding appropriated under the *Skilling Australia's Workforce Act 2005*. The legislation sets out the national objectives and goals for vocational education and training (VET) and the governance, planning, funding and accountability arrangements.

The Agreement reinforces the commitment of the Australian, state and territory governments to support the implementation of new national training arrangements from 1 July 2005 as identified in *Shaping Our Future*, Australia's National Strategy for Vocational Education and Training 2004-2010.

The Agreement operates on the basis that a shared commitment of the Australian, state and territory governments is essential to maintain an effective national training system that will deliver high quality, nationally consistent training outcomes for industry, communities and individuals.

The Australian, state and territory governments work with industry to provide Australia with a highly skilled, productive and competitive workforce, and to equip individuals with the knowledge and skills they require to actively participate in work and society. The National Priorities for the Agreement are:

- improving the system's responsiveness to rapid changes in demand for skills development and addressing skills shortages, especially in traditional trades and in emerging industries
- delivering improved outcomes for employers, individuals and communities
- improving quality
- increasing participation and upskilling mature age workers
- encouraging greater re-engagement in training by Australians who are not fully participating in the labour market.

### (b) What are the strategic national initiatives to move our manufacturing industry forward?

The Australian Government supports the National Industry Skills Committee and Industry Skills Councils to ensure the national VET system can appropriately support Australian industry with a sound skills base to compete in a global market and move Australian manufacturing industry, and other industries, forward.

#### **National Industry Skills Committee**

A National Industry Skills Committee has been established to provide the Ministerial Council for Vocational and Technical Education with high level, evidence-based advice on key issues to ensure the national VET system is meeting the strategic needs of the Australian economy. Membership of the committee consists of a range of peak employer groups, an employee association and industry representatives.

The Committee engages formally with all relevant stakeholders and plays a key role with the National Senior Officials Committee in advising the Ministerial Council on national research priorities to ensure that the VET system is well positioned to respond to emerging challenges.

The National Industry Skills Committee supports the functions of the Ministerial Council by:

- providing high-level, evidence-based advice on workforce planning and future training priorities to ensure the national VET system is meeting the strategic needs of the Australian economy
- providing advice on industry's research priorities
- providing advice on improving training delivery, and usability of and access to the national system
- providing advice on improving training outcomes
- engaging with the National Quality Council, to ensure industry's views inform the quality assurance arrangements for Training Packages, accredited courses and registered training providers

- providing advice on ways that industry can work with Governments to improve outcomes for disadvantaged clients, particularly Indigenous Australians and people with a disability
- nominating industry representatives to Action Groups
- directly interacting with the National Senior Officials Committee on issues of relevance to industry
- providing a considered business and industry perspective on papers presented at Ministerial Council meetings
- providing advice as required by the Ministerial Council
- engaging with DEST and state and territory departments and providing qualitative analysis of industry skills.

### ***Industry Skills Councils***

The Australian Government funded Industry Skills Councils (ISCs) ensure that more cohesive, integrated and high level advice on industry needs underpins the development of national and to training. Their role is to achieve greater engagement with industry, promote the interests of industry in developing nationally consistent Training Packages and skills development initiative, maximise cross-industry collaboration, and produce high quality national training materials.

The Manufacturing Industry Skills Council (trading as Manufacturing Skills Australia), which is one of ten ISCs, provides specific advice to ensure that training courses are relevant to the manufacturing workplace. Manufacturing Skills Australia (MSA) represents over 75,000 manufacturing businesses in the manufacturing sectors of metals and aerospace, process manufacturing, textiles, clothing and footwear, and furnishing. MSA assists industries, enterprises, and their workforces to develop relevant qualifications for industry that are organised through nationally recognised Training Packages.

## **2. The need to train people efficiently to gain required skill sets to meet skill gaps while not compromising the ability to gain full trade qualification**

Australia must maintain and further strengthen the VET sector by building an industry-led system that delivers what Australian businesses, communities and individuals need to build their own, and Australia's collective, economic and social prosperity. If training can be made more responsive to industry needs through more flexible content, such as the introduction of skill sets within Training Packages, and the use of a range of delivery methods, the needs of industry can be more readily met. The significant national reforms to the VET system that have occurred in the last decade have been driven by a need to ensure that VET is responsive to the current and future needs of industry.

For the manufacturing sector, the shift towards the production of more elaborately transformed manufactures has led to shedding of some lower level skills and increased demand for higher level skills to adopt to more complex technology, and produce to higher technical standards. Australian Government programmes and initiatives assist in training people efficiently to gain required skill sets to meet skill gaps. These initiatives, designed to provide flexibility, do not compromise the ability to gain a full trade qualification.

### ***Training Packages***

Industry representation in VET is wide ranging and includes, not only involvement in industry advisory arrangements as mentioned in item 1, but in the development of industry Training Packages which form the basis for all nationally recognised vocational education and training in Australia. Training Packages contribute significantly to the quality of skills development for the manufacturing industry.

The Australian Government funds the development, maintenance and review of Training Packages. Training Packages comprise nationally endorsed competency standards, qualifications and assessment guidelines designed in consultation with employers and industry to ensure consistent training across Australia that meets industry's current and future skills requirements. Funding is provided to Industry Skills Councils (ISCs) to develop Training Packages to meet the identified

training needs of specific industries and industry sectors. The development of a new or reviewed Training Package involves extensive industry and other stakeholder consultation and validation which aims to ensure that the final product will meet industry training needs.

There are 75 Training Packages (including 3 enterprises packages). They cover approximately 80% of the workforce with around 1,400 qualifications and around 15,000 units of competency. Nearly all commencements in Australian Apprenticeships are in qualifications from Training Packages.

Training Packages are designed to provide a flexible and broad framework within which training and assessment can occur, ensuring that they support changing technology, and varied workplace skills needs and practices. Their design provides the flexibility for training providers to customise training to meet specialised needs or to upgrade existing skills for students and their employers.

In February 2006, the Council of Australian Governments (COAG) requested that where ISCs identified an industry demand, national training qualifications are to include identified skill clusters. Skill clusters are now known as 'skill sets'. COAG has agreed that, by 31 December 2008, all national training qualifications will include identified skill clusters, where an ISC identifies a need. This will allow individuals to start and stop their training as their careers and development needs change, and have clusters of skills within or across Training Packages recognised by employers against a full range of nationally-portable qualifications.

### ***Recognition of Prior Learning***

Workers with existing skills but no formal recognition of those skills are often required to undertake unnecessary training to gain a qualification. Unnecessary training is inefficient for both industries and workers, delaying training completion, wasting training funds, and affecting the ability of workers to fill skilled positions in a timely way.

Recognising the skills and experience of workers is an important priority for the Australian Government, with recognition of prior learning (RPL) a key strategy to facilitate this. RPL is the process by which a person's existing skills and knowledge, regardless of how they have been acquired, are assessed and credited towards the achievement of units of competency.

Formally recognising a person's established, job-relevant skills and learning will enable them to upgrade their skills more easily and remain in or re-enter the workforce more readily. RPL is beneficial to the employer, employee and the industry in minimising the time and money spent on skills training, when the required skills are already in place. RPL will also help enterprises expand their pool of quality trained workers and increase productivity.

In February 2006, COAG agreed to key initiatives to improve the practice and take up of RPL. The Australian Government has been working closely with the states and territories in implementing the initiatives.

The first initiative is the introduction of a contractual obligation for all Registered Training Organisations (RTOs) and assessment centres in receipt of public funding, from 1 January 2007, to offer a quick and simple process to recognise the existing skills of all workers entering training. This initiative will benefit workers as they will no longer need to undertake unnecessary training to gain a qualification, thus improving their employment prospects.

The second initiative is the establishment of a joint three year Australian Government, state and territory programme from 1 July 2006 to build the training system's capacity to deliver quality RPL and drive good practice. This RPL programme will assist RTOs to offer streamlined and simplified recognition processes and assist individuals and employers to be better informed about RPL.

The Australian Government has allocated \$11.1 million over the three years, 2006-2007 to 2008-2009, to the RPL programme. This funding allocation is being matched by state and territory Governments.

### ***Australian Apprenticeships***

The Australian Government is working in conjunction with the states and territories to streamline and fast-track traditional trade Australian Apprenticeships by moving away from the time-based training structure to a purely competency-based system.

The competency based training system allows for the Australian Apprenticeship to be completed once the Australian Apprentice has been assessed by an RTO as having attained all the required competencies, where early completion is supported by their employer. In many cases this may result in traditional trade Australian Apprenticeships being completed earlier than the “nominal duration” which is developed by the state/territory as a guide only.

At the February 2006 COAG meeting it was agreed that by December 2006 all Governments will have put in place arrangements that allow Australian Apprentices to be certified and work as qualified tradespeople where they have demonstrated competencies to industry standards, without having to adhere to a set timeframe or make a special application to have the length of their training reduced. All jurisdictions met their commitment, often by amending training legislation and administrative procedures to delete references to fixed durations. Where early sign-off, based on achievement of all competencies, was prevented by state industrial award conditions, these conditions have been removed.

In addition to removing barriers to early completion, many states have acted independently to reduce the nominal duration of specific Australian Apprenticeships where employers and industry accepted that training standards could be maintained without the longer, often four year, training periods being imposed. In some cases, the nominal duration of specific Australian Apprenticeships has been reduced by over 20%.

### ***Strategic National Initiative Project – Skilling the Existing Workforce***

The Skilling the Existing Workforce Project is a tripartite (industry-government-individual) approach to addressing the need to upskill and reskill existing workers in industries experiencing skills needs, including manufacturing. The project aims to address the large proportion of Australia's adult population that does not hold post-school qualifications. The project is funding under the Strategic National Initiatives, Commonwealth State Skills Shortages Strategy Initiative.

Expected outcomes from the project include best practice training models for existing workers that include adult learning strategies, blended formal and informal learning; benefits for industry, governments and individuals; and recommendations on how the national training system can support adoption of better models of training.

The project is being led by the Australian Industry Group (Ai Group), under the direction of a Project Steering Committee that is jointly chaired by the Ai Group and DEST and includes representatives from employers, RTOs, a State Training Authority, and the National Centre for Vocational Education Research (NCVER).

### **3. DEST's view on the TAFE NSW submission to the manufacturing inquiry which provided evidence of a model of industry-TAFE collaboration in manufacturing (TAFE assessing training needs at the place of business rather than business sending students to TAFE for a pre-determined course).**

#### **(a) How does DEST view this sort of VET model?**

DEST supports a focus on the use of workforce development approaches to address skill needs. The concept of workforce development includes not only training solutions but also skills development outside of formal training, upskilling, reskilling, multiskilling and workforce planning. This more comprehensive approach can lead to a better understanding of the manufacturing industry and its needs.

RTOs have much to gain from a closer relationship with industry especially with respect to broadening their markets and keeping abreast of technology and other changes in the workplace. If

training can be made more responsive to industry needs through more flexible content and the use of a range of delivery methods, the competitiveness of RTOs can be improved and the needs of industry better met. RTOs are encouraged to offer more flexible training: eg, through training in the workplace, in an attempt to meet industry needs.

Workforce development requires collaboration between government, industry and the VET sector. Communication between the parties and developing an understanding of each others' needs are essential foundation steps to ensuring training meets industry needs.

**(b) Do you have data on the number of state and territory TAFE systems which collaborate with manufacturers at their premises ie, assessing requirements and undertaking research and training on business premises?**

DEST does not collect data, or is aware of any data, on the number of TAFEs that carry out training at the workplace. However, as noted above, collaboration with industry is encouraged.

#### **4. What are the advantages of Australian Technical Colleges**

There are many valid pathways to undertaking an apprenticeship of which the Australian Technical Colleges are one. Other pathways, such as entering an apprenticeship after secondary education, are still valid for many people. Australian Technical Colleges do not replace or are better than other apprenticeship pathways; they offer an alternative pathway.

**(a) Australian Technical Colleges**

The Australian Government has announced funding for 25 Australian Technical Colleges in 24 regions across Australia where there are skills needs, a high youth population and a strong industry base. Australian Technical Colleges are designed to meet local industry needs and build on existing local infrastructure.

The Colleges differ from current schools and TAFEs in that they provide students with the opportunity to commence an Australian School-based Apprenticeship at Certificate III level whilst simultaneously undertaking their Year 12 Certificate. Under these arrangements, a student at an Australian Technical College is considered a full-time student and a part-time employee, with the same employment and training requirements as for other Australian Apprenticeships. The Colleges work with, rather than duplicate, existing institutions at the school and TAFE level.

Australian Technical Colleges provide an incentive for more students to stay on at school and encourage more students to pursue a trade qualification. They expand student choice by providing another pathway to a career involving trades. Facilities and educational services offered by the Colleges are high quality, establishing them as centres of excellence in trade training, thereby raising the profile of vocational education and training in schools and strengthening the training system as a whole. The Colleges play an important role in expanding Australian School-based Apprenticeships, particularly in the traditional trades areas.

Young people have a unique opportunity to study in an industry-led environment where partnerships with local business and industry ensure curriculum is relevant and meets regional labour market needs. Industry plays a pivotal role in both leading and supporting Australian Technical Colleges, particularly through the governance and the employment of the students as Australian School-based Apprentices. The Australian Technical Colleges operate autonomously, with a governing body chaired by a local business or industry representative and involving local communities.

Australian Technical Colleges also provide substantial support for students. Students are supported through both their academic and trade training, with close mentoring and career advice. The teaching of enterprise education, small business and employability skills also ensure that students

acquire the skills and knowledge needed to feel comfortable entering the workplace and succeed in a competitive business environment.

To ensure that Australia's pressing trade skill needs are widely addressed, each Australian Technical College offers trade training from one of the five priority industries including:

- metal and engineering (e.g. machinists, fabricators, toolmakers, welders, sheet metal workers)
- automotive (mechanics, auto electricians, panel beaters, vehicle painters)
- building and construction (bricklayers, plumbers, carpenters)
- electro-technology (including refrigeration, air-conditioning and electricians)
- commercial cookery.

The actual mix of trade skills depends on those determined by local industry and economic demands and future growth.

By offering high quality training facilities and instruction linked to workplace requirements, the Colleges will raise the profile and status of vocational pathways in schools and demonstrate that these vocational courses are a genuine career path for students which should be at least as valued as going to university. The Colleges provide opportunities for young people to build a career for themselves in traditional trades.

This builds on the Australian Government's achievements in promoting vocational education and training in secondary school. Over 90 per cent of Australian high schools offer some form of vocational training, through VET in Schools courses and Australian School-based Apprenticeships, to secondary students.

The Australian Technical Colleges link with other initiatives of the Australian Government to increase the up-take in trade careers, such as Trade Learning Scholarships for Apprentices and Trainees, access to Youth Allowance, tool kits for Apprentices and Trainees in skill needs trades, the Career Advice Australia initiative, and additional incentives for employers of Australian School-based Apprentices.

## **(b) The difference between 'New Apprenticeships' and 'Australian Apprenticeships'?**

Australian Apprenticeships is the new name for the scheme formerly known as 'New Apprenticeships'. Under the scheme, the Australian Government incentives and personal benefits programme are still the same.

Australian Apprenticeships still encompass all apprenticeships and traineeships. They combine time at work with training and can be full-time, part-time or school-based. Australian Apprenticeships are a key element of the Australian Government's approach to maintaining a skilled, flexible and internationally competitive workforce.

A number of Australian Government VET initiatives revolve around Australian Apprenticeships including *Tools for Your Trade* which provides employers with vouchers to purchase tool kits worth up to \$800 for Australian Apprentices in trades experiencing skills needs. Eligible trades include metal fitter, metal machinist, toolmaker, metal fabricator, welder, and sheetmetal worker.

## **5. Status of the Institute for Trade Skills Excellence.**

The Australian Government has committed over \$22 million between 2005-06 and 2008-09 for the Institute for Trade Skills Excellence (the Institute).

The Australian Government is funding the Institute to promote and advance learning, teaching and training in Australian trades education and elevate the status of traditional trades and trades education as career choices by:

- developing strategies to improve the profile and status of trades and encourage the recognition of the importance of trades in the general community



- recognising high performing RTOs with preferred provider status
- fostering and recognising excellent standards and teaching in trades education and training in areas of skill shortage represented by eight Industry Reference Groups.

The Institute's three stakeholders are the Australian Chamber of Commerce and Industry, the Ai Group and the National Farmers Federation.

Dr John Keniry, AM, has been selected by the three stakeholders as the Independent Chair of the Institute.

The Institute was officially registered as a company on 21 August 2006. The company's constitution is publicly available from the Australian Security and Investments Commission website.

All Industry Reference Groups (IRGs) have been established. The IRGs contribute to the development of the Institute's strategies, including the provision of sector specific advice. The IRGs represent the following sectors:

- metals and engineering
- manufacturing
- automotive
- electrical
- building and construction
- hospitality and personal services
- rural
- mineral resources.

The Institute's Board of Directors are employers in key areas of skill shortage. The Board of Directors is made up of the Independent Chair, the three stakeholder nominees and the Chairs of the IRGs. The Board of Directors have met monthly (except January) since first meeting on 21 June 2006.

The Institute will work in harmony with existing arrangements such as the Australian Quality Training Framework, and other Australian Government initiatives aimed at increasing employer involvement in and take up of VET, and increasing the profile of Australian Apprenticeships as rewarding career options.

## **6. VET policy that is likely to nationally push manufacturing forward as a key growth industry.**

Supply and demand for skills and the ability to nationally push manufacturing forward as a key growth industry are influenced by a range of factors. Employees in the manufacturing industry will increasingly need a combination of contextualised skills and the ability to keep abreast of state-of-the-art technology. Higher level skills for tradespersons, such as additional modules of formal training in Certificate IV or at diploma levels, is an ongoing trend. The Australian Government has a range of VET programmes and initiatives that work towards ensuring an adequate supply of appropriately skilled workers to equip the manufacturing industry with a solid competitive base.

In recognition of skills shortages evident in parts of the Australian economy, COAG agreed, at its 10 February 2006 meeting, to a package of measures designed to underpin a genuinely national approach to apprenticeships, training and skills recognition to alleviate skills shortages. This commitment was restated at the 14 July 2006 COAG meeting.

The COAG package includes:

- mutual recognition of licensed trades between states and territories
- shortening the duration of apprenticeships once competence has been demonstrated
- removing barriers to school-based apprenticeships
- improving RPL for existing workers
- streamlining recognition, assessment and licensing for those with overseas qualifications
- establishing a new Commonwealth regional programme to address the supply of skilled labour to the regions and industry
- a report examining directions for the next stages of VET reform.

DEST is currently in the final stages of producing the **Manufacturing Industry Skills Report**. This report has been written to assist industry, training providers and policy makers plan for the skills needs of the manufacturing industry. The report provides an overall picture of current skills in the industry and investigates the factors that will impact future skills needs over the next three to five years. The implications for skills development and vocational education and training are discussed and a range of strategies for developing skills and meeting the training needs of the industry are outlined in the report.

### **Skills for the Future**

Skills for the Future is a set of major new initiatives, announced by the Prime Minister on 12 October 2006. These initiatives, worth \$837 million over five years, will focus on the need for continuous upgrading of skills over the course of an individual's working life and help build a more highly skilled and responsive workforce to support Australia's long-term economic growth.

The primary focus of the package is on raising the skills of Australia's adult workforce. It responds to demands from employers for a higher level of skills, a broader range of skills and more frequent updating of skills. It helps more Australians wanting to take up a trade apprenticeship in mid-career, as well as assisting apprentices to acquire the necessary skills to run their own businesses.

The package provides:

- vouchers for people 25 years and older to complete year 12 or a vocational Certificate II (and literacy and numeracy as required)
- support for workers/employers to encourage apprenticeships for workers 30 years and older
- business skills vouchers for apprentices and those who have recently completed apprenticeships
- incentives for employers with apprentices undertaking Diploma and Advanced Diploma qualifications.

The initiatives funded under Skills for the Future are particularly well suited to the manufacturing industry. For example:

- Upskilling is a major issue for some production workers. Vouchers for skills upgrading up to Certificate II (or year 12 and literacy and numeracy) provided by Skills for the Future could see major take-up among this group.
- The additional support for apprenticeships for workers 30 years and older could be used to allow production workers to move to the trades stream, or for those working in the trades stream without qualifications to formalise their status. Since workers taking advantage of this would already have substantial industry experience, it should be possible for them to use RPL to significantly shorten their Australian Apprenticeship.
- Employer incentives for Diploma and Advanced Diploma qualifications allow workers in the technical stream of manufacturing to be trained under the Australian Apprenticeship system. As such they will get job context and work experience at the same time as their qualification. Skills for the Future changes the funding mechanism for Australian Apprenticeships to allow employers to receive funding for a Diploma/Advanced Diploma level apprentice even if the person has already completed a Certificate III/IV apprenticeship. This could encourage employers to invest in upgrading of trades stream workers to the technical stream.

Many of the manufacturing industry Training Packages are currently having additional qualifications at Certificate IV and above added to them in response to Skills for the Future and the identified need for courses and skills at this level to take Australian industry into the future.

### **Recognition of Prior Learning**

The COAG Recognition of Prior Learning Programme, which is jointly funded by the Australian Government and states and territories, aims to build the training system's capacity to deliver quality RPL and drive good practice. This programme includes the development and management of projects by the states and territories to address the barriers to achieving improved practice and take up of RPL.

The RPL projects include the formation of strong industry partnerships to provide models for improved RPL delivery within targeted industries, particularly those where there are identified skills shortages. One of the industries covered in these partnerships is the manufacturing industry.

For example, the NSW Skills Express Industry Partnerships RPL Strategy project has two sub-projects designed to model good RPL practices and streamlined RPL processes in the manufacturing industry sector. These are:

- Manufacturing and engineering sector RPL

This sub-project aims to improve qualification and employment outcomes for existing workers and mature aged jobseekers in the manufacturing and engineering sectors. It will develop partnerships between a lead RTO and a number of manufacturing and engineering enterprises to devise collaborative and supportive RPL and gap-training options for RPL candidates.

The sub-project is expected to commence in August- September 2007 and completed in May 2008.

- Advanced technology (elaborately transformed manufacturing) sector

This project will implement a partnership recognition model targeted to optimise the recognition and gap-training process for existing workers and prospective mature entrants in advanced technology manufacturing sectors (elaborately transformed manufactures producers) such as electronics, defence/aerospace, medical technologies, machinery and pharmaceuticals. The development of closely-collaborative partnership arrangements between RTOs and companies will foster knowledge development and improved RPL practices and improve the available skills base whilst enhancing employment outcomes.

The sub-project is expected to commence in July-August 2008 and completed in March 2009.

### ***National Skills Shortage Strategy***

Since 1999, the Australian Government has been working with industry to investigate and develop solutions to current and future industry skills needs. Building on this experience, the Government announced the National Skills Shortages Strategy (NSSS) in 2004, to trial approaches to address skills issues with a view to skilling up a labour force more effectively and efficiently.

The NSSS supports innovative and strategic industry-led projects to research, trial and recommend VET strategies for attracting, training, retaining and upskilling workers. Work to date through the Strategy has discovered many common themes between industries and tackled many of the significant disincentives which can turn young people away from choosing a trade as a career, such as the perception that jobs in the industries are dirty, dangerous and difficult.

Current NSSS projects that relate to, or could assist, the manufacturing industry include:

- Building electrotechnology apprenticeships through flexible delivery

The aims and objectives of this project are to provide the electrical contracting community in Queensland with a flexible and relevant service for planning and delivery of training apprentices in the electrotechnology industry by providing more “on-the-job” training and less “off-the-job” training, while not altering the Systems Electrician syllabus or the amount of training time currently being given.

The project is expected to be completed in April 2007.

- Australian Chamber of Commerce & Industry: Extending the automotive fast track apprenticeship model across the retail motor industry 2006

This project aims to develop a new approach in sourcing mature aged participants with existing skills that can be transferred to the retail sector of the automotive industry. Vehicle painter and body repairers are the trade areas being tested.

The project is expected to be completed in March 2008.

- Shorter and more flexible apprenticeships targeting non-traditional entrants

This project aims to trial ways of attracting non-traditional entrants to the skilled workforce and into trade occupations. The project will improve apprenticeship pathways by developing and trialling shorter and more flexible Australian Apprenticeships through implementation of an accelerated apprenticeship model for the manufacturing industries.

In addition, the project will develop regional initiatives to broaden the range of skills available in specified regional areas of Queensland.

The project is expected to be completed in September 2007.

- Regional skill shortages project Northern Territory

This project is to assist businesses in the Darwin region address skills needs.

The project has been completed and the final report is being considered by the Department.

- Townsville region skills project 2007

This project contains three concurrent activities:

- plan and conduct the Northern Queensland Job Shop 2007
- support employers in any industries listed on the Queensland Skills in Demand list to upskill mature aged workers
- assist employers to effectively engage with the training system to attract and upskill specific client groups:
  - Indigenous Australians
  - people with a disability
  - parents returning to the workforce
  - the long-term unemployed client groups.

The project is due for completion in January 2008.

- Illawarra, Shoalhaven and Southern Highlands new apprenticeship regional project

This project aims to assist addressing skill shortages in industries including, but not limited to, the engineering, construction and automotive sectors, to raise the profile of the opportunities available to young people in terms of apprenticeships and re-engage more of the region's small and medium employers about the importance of training the next generation of tradespeople.

The project is completed with a final report due in March 2007.

- A model for upskilling existing workers in the plastics and chemicals industries (Skills gap project)

This project is piloting five different models to identify the skills gaps and determine the best practice approaches to upskill employees to the levels required by the businesses within the sector.

The project is due for completion in July 2007.

- Vocational science careers project

The aim of this project is to identify and record industry perceptions of skill needs and jobs available to those with science-based vocational qualifications and career pathways in science, engineering and technology fields; those vocational qualifications that recognise science and maths skills and enrolment trends in courses leading to those qualifications; and the need for careers information that highlights opportunities in vocational science-based careers.

The project is due for completion in July 2007.

- Building a training culture and career pathways for the marine industry

This project is to provide a comprehensive review of training in the marine industry across Australia and develop a model that will provide processes, guidelines and strategies for the industry.

The project is due for completion in August 2007.

- Australasian Railway Association human capital strategy

This project is to identify and implement skills needs solutions for the rail industry by developing partnerships with RTOs and implementing competency based training and upskilling of existing workers.

The expected completion date for this project is March 2008.

- A pilot programme to address the skills shortages in the metal roofing industry

This project seeks to attract young people into apprenticeships in the metal roofing industry and to work with the metal roofing industry businesses and training providers to develop a better learning and training environment for apprentices.

The project is due to be completed in June 2007.

### ***Targeting Skills Needs in Regions Projects***

In response to an agreement at the Council of Australian Governments meeting in February 2006 to address regional skills needs, the Australian Government developed the Targeting Skills Needs in Regions (TSNR) programme in collaboration with the States and Territories. This programme will help increase the supply of skilled labour in industries and regions of strategic economic importance.

The Australian Government has allocated \$10 million for funding projects under the TSNR programme from 2006-2007 to 2009-2010. The states and territories are supplementing Australian Government funding with in-kind or cash contributions.

In 2006-2007 thirteen projects were approved for funding and announced in November 2006. All of the projects, aimed at enhancing skills capacity in target regions across Australia, have industry involvement and support. The duration of these projects varies between one to four years.

The manufacturing industry is one of the industries in regions across Australia that has been targeted by four projects in 2006-2007. These projects are:

- Specialist technology training in advanced manufacturing

This project will provide innovative training and skills in advanced manufacturing technologies in the Geelong and Western Metropolitan regions. Training will be provided primarily for existing workers in the targeted regions, many of whom will be mature aged workers and of non-English speaking background. The industry areas targeted by the project are automotive design, precision engineering and bio-manufacturing.

The project commenced in February 2007 and is expected to be completed in November 2007.

- Upskilling the expansion of regional welding personnel and industries

This project takes an integrated approach to addressing the skill shortages in welding technology across key manufacturing areas of NSW. It aims to upgrade the skills of trainers in RTOs, provide expert input into course design, provide workshops for upskilling the current workforce and provide connections between qualified individuals and business in need of particular skill sets. The project will include workshops with business to enhance capacity to innovate.

The project commenced in February 2007 and is expected to be completed in April 2008.

- Illawarra virtual work experience project

This project will develop a virtual work-based programme for Higher School Certificate students that combines vocational subjects with interactive learning in work teams with business people. The project will also provide the students with increased capability and enthusiasm for engineering related

careers, while strengthening the links between school leavers and high technology businesses in information and communications technology, manufacturing and engineering.

The project commenced in February 2007 and is expected to be completed in November 2007.

- Developing skills pathways into trades and engineering based technology careers

This project will set up a series of design and technology hubs between schools and industry across four strategic manufacturing regions in NSW (Greater Western Sydney, the Hunter, Mid North Coast and Orana). Using the advanced software and expertise of Dassault, Re-engineering Australia and Telstra, students will develop skills and enthusiasm for engineering. The students will design a simulated model F1 racing car using modern design and manufacturing technology. Partnership with industry will help support career pathways.

The project commenced in February 2007 and is expected to be completed in June 2010.

### ***Industry Training Strategies Programme***

The Industry Training Strategies Programme (ITSP) supports the Australian Government's VET agenda by providing outcomes against several key workforce skills development strategies. ITSP facilitates better industry engagement and access to the national training system, particularly a wider utilisation by employers of the flexibilities available under nationally endorsed Training Packages and a greater take up of Australian Apprenticeships. It also supports improved training outcomes for Indigenous Australians and other disadvantaged groups.

ITSP supports four streams of activity:

- Indigenous Regional Projects
- Industry Pathfinders Projects
- Education and Training Advisers
- Integrated Information Service.

During 2006-07, **Industry Pathfinders** projects will complement and facilitate the piloting of initiatives announced by COAG on 10 February 2006 to address barriers across the national VET system. The projects aim to:

- shorten the duration of Australian Apprenticeships where competencies are demonstrated;
- and that enable school-based apprenticeships;
- ensure maximum flexibility in training for employers and apprentices;
- allow intermediate or specialised qualifications as well as full Australian Apprenticeships; and
- address the skills shortages of particular industries and regions.

Industry Pathfinders projects will achieve these aims by working collaboratively with industry to continue to promote the Government's workforce development policy agenda. Projects will address workforce skills development needs within the five priority industries targeted by the Australian Technical Colleges, which include metal and engineering and automotive.

Projects will be industry based and focus on developing support materials to assist employers to develop their understanding of the role and services provided by Australian Apprenticeship Centres and RTOs. Projects should lead to an understanding of the take-up of Australian Apprenticeships, the use of Training Packages and the flexibilities available within the national training system.

The **Education and Training Advisers (ETAs)** component of the ITSP provides funding to peak industry bodies – the Australian Chamber of Commerce and Industry, the Ai Group and the National Farmers' Federation – to support the appointment of a national network of ETAs. The peak bodies may also be funded annually for additional work that will be undertaken by the organisations through their ETAs, based on proposals sent to DEST.

The key function of the ETAs is to work through their respective industry peak bodies to increase their members' understanding of education and training issues, particularly the national training

system, Australian Apprenticeships and Training Packages. The ultimate goal is to improve employer take up of Australian Apprenticeships.

ETAs provide information, intervention and advocacy services to members, making use of their knowledge of industry and the different elements of the training system. ETAs help employers achieve their training goals and assist in providing industry advice to Government on VET issues affecting their membership.

The peak industry bodies are highly appreciative of the investment provided by the Government to support their work and inform their members about the national training system, and the benefits and opportunities available to them when addressing their workforce development needs through the VET system.

### ***Skill Ecosystem National Project***

The Skill Ecosystem National Project is a VET project established to encourage a new and innovative approach to skills and training.

Currently, the National Project is considering six proposals for further funding to implement Skill Ecosystem approaches in a range of industry sectors. A decision as to whether this proposal progresses to the next stage and receives additional funding for implementation within the Skill Ecosystem National Project, will be made within the next month.

### ***Rationalising Training Packages***

To be flexible and responsive to industry needs, Training Packages require ongoing review. Industry informs the VET sector of specific skills needs and new occupations emerging from technological development. Training Packages are then modified and/or rationalised where appropriate to assist industries in areas of skills needs with suitably qualified workers. Industry Skills Councils (ISCs) are an essential underpinning element of Australia's national VET system, as the bodies that develop Training Packages (also refer to item 2).

Manufacturing Skills Australia has identified the development of higher level skills and qualifications, particularly at the high technical end, to support industry as Australian manufacturing moves into a global marketplace. MSA is currently reviewing or extending seven of its nine Training Packages to incorporate emerging skills and new occupations. Much work has been undertaken with licensing and regulatory bodies, such as the Civil Aviation Safety Authority (CASA), to align packages with new and emerging regulatory environments. MSA continues to demonstrate strong relationships with all of its key stakeholders and its strategic approach to establishing skills development as a competitive solution.

Development is underway for a new aircraft manufacture qualification to support production of key components for the new generation *Boeing 787 Dreamliner*. The flow through benefit to the Australian economy from sales is estimated by Boeing to be in the order of \$2 billion.

MSA continues to work with the new *Australian Aerospace Industry Forum* to implement strategies from the Aerospace Action Agenda. Development of higher level qualifications in sustainability, polymer technology and metallurgy are extensions to its *Technology Cadetship* initiative.

## **Conclusion**

This submission seeks to highlight elements of DEST programmes and initiatives that can assist the manufacturing industry's competing base now and in the future. Full details of DEST policies and programmes can be found at [www.dest.gov.au](http://www.dest.gov.au).

## **Glossary**

<b>Ai Group</b>	Australian Industry Group
<b>COAG</b>	Council of Australian Governments
<b>DEST</b>	Department of Education, Science and Training
<b>ETAs</b>	Education and Training Advisers
<b>ISCs</b>	Industry Skills Councils
<b>ITSP</b>	Industry Training Strategies Programme
<b>MSA</b>	Manufacturing Skills Australia (Manufacturing Industry Skills Council)
<b>NCVER</b>	National Centre for Vocational Education Research
<b>NISC</b>	National Industry Skills Committee
<b>NSSS</b>	National Skills Shortages Strategy
<b>RPL</b>	Recognition of Prior Learning
<b>RTO</b>	Registered Training Organisation
<b>TSNR</b>	Targeting Skills Needs in Regions
<b>VET</b>	Vocational Education and Training