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AUSTRALIA'S MIGRATION POLICY AND SKILLED ICT PROFESSIONALS: THE CASE FOR AN OVERHAUL

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Australia's migration program is currently geared to recruit large numbers of people through both the permanent and temporary migration programs with Information Technology (IT) skills. This is despite relatively high unemployment in the IT industry and large numbers of Australian students soon to graduate in the field. This article explores the dimensions of the problem and possible solutions.

Australia's migration policies are encouraging an increasing flow into the Australian labour market of migrant computer professionals and other ICT workers (Information Communications Technology). This is occurring at a time when demand for computer professionals has been slowing in Australia (as it has globally), unemployment has been rising and when simultaneously, Australian students are being encouraged to take up IT training.

This article investigates the current supply and demand dimensions of the IT labour market and their implications for immigration policy. The analysis concludes that the changed IT labour market environment means migration policy needs to change.

THE DEMAND FOR COMPUTER PROFESSIONALS

'Computer professionals' here refers to the occupational category of that name in the Australian Standard Classification of Occupations or ASCO (see ASCO 2231). This group includes Systems Managers and designers; Software designers; Computer programmers (Applications and Analyst programmers, and Systems programmers); Computer systems auditors; and all other Computer professionals 'Not elsewhere classified'.

'Computer professionals' is the largest single ICT occupation group and a useful proxy for high-level ICT occupations generally. The computer professionals group makes up around 47 per cent of all the main ICT occupations in Australia. Around 85 per cent of all ICT temporary

migrants are classified to this group, and around 70-80 per cent of employed computer science graduates from recent years are working in the occupation.

Between 1996 and 1999, the total number of computer professionals working in Australia grew at around nine per cent per annum on average,[1] and growth associated with the introduction of the new tax system in 2000-01 matched the peak growth in a single year recorded between 1996 and 1999. Since then, there has been a marked slowdown in job growth and unemployment has risen.

- In 2001-02, the total number of persons working as Computer professionals in Australia grew by only two per cent to around 166,000, according to estimates derived from the Australian Bureau of Statistics (ABS) Labour Force Survey (Table 1).
- Between August 1998 and August 2001, the unemployment rate for computer professionals increased threefold from 1.3 per cent to 4.5 per cent, and has averaged 4.7 per cent for the 12 months to February 2002.[2] This represents around 8,000 unemployed computer professionals, more than the number of non-residents working in Australia as computer professionals in September 2001 on 457 temporary visas (6,600, see below).
- The unemployment rate for Australian computer science graduates looking for full-time work increased from 12 per cent in April 2000 to 19 per cent in April 2001, and is now higher than the national average for all university graduates, from all fields of study (17 per cent — see Table 2).
- Some experienced migrant computer professionals are also unemployed, or underemployed. The actual numbers are not available, but one Sydney firm (SMP Skills International) which runs a skilled migrant placement service for the NSW government has hundreds of unemployed migrant IT professionals on its books.[3]

Table 1: Employed computer professionals (ASCO 2231), Australia, selected years

	Employment		
		Increase	
	Number '000s	Number '000s	Increase % p.a.
1996	105.7		
1999	137.1		
1996 to 1999		31.4	9.1
1999-2000	140.6		
2000-2001	162.6	22.0	15.6
2001-2002	166.0	3.4	2.1

Source: *Labour Force, Australia, various issues* (unpublished data), ABS, cat. no. 6203.0 (average annual figures)
South Australian Centre for Economic Studies, *Education and Skill Formation: Unmet Demand for Information and Telecommunications Courses*, DETYA, 2001

Another indicator of falling demand is the ICT Vacancy Index compiled by the Federal Department of Employment and Workplace Relations (DEWR). In April 2002, the Index was 83 per cent down on the Index peak recorded in September

Table 2: Computer science graduates (bachelor degree) seeking full-time employment[(a)] 1998 to 2001, per cent[(b)]

	Computer Science	All graduates	Difference
1998	15.3	20.4	-5.1
1999	13.4	19.2	-5.8
2000	11.8	16.4	-4.6
2001	18.9	16.9	2.0
Change 2000-2001	7.1	0.5	6.6

Source: *Graduate Destination Survey*, Graduate Careers Council of Australia, various years
[(a)] Includes graduates not working at all, and those working part-time or casual, who are seeking full-time work
[(b)] Of all graduates available for full-time work

2000. The Index is based on a weekly count of ICT vacancies on five online sites: Jobnet.com.au; Seek; Fairfax IT Jobs; Employment.com.au; and Monster.com.au.[4] DEWR cautions that the Index is 'a broad indicator' only and includes some duplicated vacancies.

Demand 2002 to 2006

Some ICT industry leaders claim that future growth will be broadly as strong as before the 'tech wreck' collapse. In January 2002, Gerry Moriaty the then chair of the IT Skills Hub, a joint initiative of the ICT industries and the Federal Government, said:

> The recent Skills Hub survey shows seven to eight per cent growth in jobs over the next couple of years despite the current easing. We want to ensure we provide our children with high value and exciting careers…students need to know that IT is where the action is.[5]

That growth rate for computer professionals would mean an additional 13,000 to over 15,000 jobs each year for next three to four years. On the other hand, annual growth of only three per cent means only around 5,000 additional jobs (Table 3). How realistic is the high growth scenario?

While all projections involve some uncertainty, the high growth scenario looks much less likely in the future and the main reason is the different outlook for business investment in IT. Employment growth rates of nine per cent per year for computer professionals in the late 1990s were associated with very high growth rates in IT investment in Australia. Between 1995-2000, ABS data shows business investment in IT (hardware and software) grew at over 12 per cent per year in nominal dollars, including 20 per cent growth in one year.[6]

But since 2000, business IT spending on hardware and software in Australia fell by about seven per cent in nominal terms in 2001, after reaching a peak of $18 billion in 2000.[7] While business analysts expect a return to healthy long-term growth in IT investment in Australia, a quick return to the very high growth rates in the late 1990s is considered unlikely. One reason is that business is now much more skeptical about the returns on IT investment promised by the IT industry.

ICT skills shortages

There is much less risk of generalized 'skills shortages' in the ICT field, now and in the next few years, given the likelihood of relatively slow growth in demand in the immediate future. In any case, the stock of unemployed computer professionals and recent graduates, combined with projected growth in new graduates from Australian universities, means that the industry has

Table 3: Projected employment of computer professionals (ASCO 2231), Australia

	'000s		'000s	
Actual				
2000-01	162.6		162.6	
2001-02	166.0		166.0	
Projected				
	3 per cent p.a.[(a)]	Increase year on year	8 per cent p.a.[(b)]	Increase year on year
	'000s	'000s	'000s	'000s
2002-03	171.0	5.0	179.3	13.3
2003-04	176.1	5.1	193.6	14.3
2004-05	181.4	5.3	209.1	15.5
2005-06	186.8	5.4	225.8	16.7
2001-02 to 2005-06		20.8		59.8

Source: Table 1 and notes
[(a)] Approximately half the growth rate expected by the IT Skills Hub
[(b)] IT Skills Hub expects growth of 7-8 per cent p.a. in ICT jobs

a pool of skilled labour already at its disposal.

But there is another reason for taking a sceptical view on industry claims of future ICT skills demand and skills shortages. Prominent leaders in the Australian ICT industry have now admitted that the much-publicised 'IT skills crisis' in 1999-2000 was exaggerated. One of these was Neville Roach, Chairman of Fujitsu Australia and formerly Chairman of the Business Advisory Panel for the Department of Immigration and Multicultural Affairs (DIMA). Roach also chaired the Committee which in 1995 recommended liberalising the temporary migration program for skilled workers.[8] As reported in *The Australian* in March 2002:

> Mr Roach admitted that industry had exaggerated the extent of the IT skill shortage in 1999-2000 and that the numbers quoted were 'excessive'. 'But on balance we still have a skill shortage,' Mr Roach said. 'What we are seeing is a dramatic re-adjustment in the marketplace where different skills are coming in shortage and some of the older skills are perhaps in surplus.'[9]

Another industry leader to speak out publically was Vincent Teubler, Managing Director of VTR Consulting and Board member of the Information Technology Contract and Recruitment Association (ITCRA), the national body for IT recruitment agencies. As reported in *The Sydney Morning Herald* in April 2002, Teubler was even more candid:

> For end users, return on investment is everything and they have to justify every cent of their IT spending. A lot of them are doing development offshore in places like India because it's cheaper.
>
> Most jobs these days are advertised on multiple online sites and it doesn't give you a feel for where the market is. Because of this, a number of agencies have gotten away with deliberate attempts to manipulate the market, claiming skills shortages which really don't exist. This sort of misinformation is serious because government agencies, such as the Department of Immigration, rely on it when they review their numbers.[10]

In the migration program, the DEWR determines occupations in national shortage and the government places some or all on the MODL or 'Migration Occupations in Demand List'.[11] In June 2002, all ICT occupations were removed from the MODL except Information Technology Managers and Computer professionals in only 12 specific specializations see Table

Table 4: Computer professionals (ASCO 2231), specialisations on the Migration Occupations Demand List (MODL),[(a)] May 2002

Broad field	Broad field specialisation
Database	Sybase SQL Server
General Application Development/Software	C++
Engineering	Progress
Internet, Networking/LAN/WAN	Firewall/Internet security, Xml, Java (security and electronic commerce)
Client/server applications	SAP, Peoplesoft, Siebel
Communications	Satellite design
E-commerce e.g. business/financial management/analysis/customer service	E-commerce security (non-programming)
Security	CISSP

Source: Department of Immigration and Multicultural and Indigenous Affairs (DIMIA), May 2001
[(a)] MODL guidelines also say that 'computing professionals would normally be expected to have at least 12 months experience in the specialisation for which they have applied for assessment or have been sponsored'.

4. Compared with the MODL gazetted on 9 May 2001, Electronics engineer has been removed, the number of Computing Professionals specializations has been reduced from 26 to 12, and a work experience requirement has been added for the remaining specializations. Computing professionals specialisations removed include Database applications such as Oracle, Microsoft SQL Server, Visual Basic, Lotus Notes, Java and Java Script (in General Application development/ Software Engineering), and Client/server applications such as PeopleSoft and SAP.

Applicants with occupations not on the MODL are disadvantaged when applying for permanent residence because they receive fewer points than those in MODL occupations. But the MODL does not apply to the temporary residence program.

In the 457 temporary residence program, employers in 2002 can continue to sponsor persons in occupations no longer on the MODL and therefore officially assessed as *not* in 'national shortage'. In the ICT area, this means that 457 visas can be (and are) granted for any ICT occupation.

COMPUTER PROFESSIONALS IN THE MIGRATION PROGRAM (PERMANENT AND TEMPORARY)

In terms of numbers, the permanent program will be the more significant in the next few years. But while numbers are smaller in the main temporary program (the class 457 visas), every non-resident sponsored by employers on a 457 visa has a guaranteed job. This is not the case for migrants under the permanent program except in a rarely used component known as the Employer Nomination Scheme. This is an important difference.

Permanent program

In 2002, an estimated 10,500 non-residents will satisfy the preliminary qualification assessment before a formal application under the skilled migration program can be made. The Australian Computer Society (ACS) is the body with authority to certify IT qualifications for potential applicants, including overseas students who have graduated from Australian universities. The 10,500 estimate for 2002 includes other ICT occupations besides computing professionals. Nevertheless, the figure is a reasonable indicator of the potential scale of the permanent program.

Data on the number of arrivals of computer professionals (primary applicants) under the permanent program in 2000-01 is not yet available. Problems with the new DIMIA method for recording all arrivals have delayed production of this data. However, in 1999-2000, 1,011 computer professionals who were principal applicants under the skilled migration program arrived in Australia. Another 767 arrived with visas granted under the various family, humanitarian and New Zealand entry provisions. The number of computer professionals entering under the skilled component of the permanent program in 2000-01 is likely to have been much more than this, and the numbers in 2001-02 will be even higher again.

The reason for this expectation is that applications for accreditation by the ACS have increased *sixfold* since 1999 (see Table 5). The ACS expects around 15,000 to seek certification in 2002, compared to only 2,300 in 1999. The ACS also estimates that:

- Overseas students who graduated with an Australian university qualification in IT comprise around 60 per cent of all candidates in the last few years — an estimated 9,000 in 2002, compared with 6,800 in 2001.[12]
- Around 70 per cent of applications are assessed favourably against current

standards, which means 7,900 non-residents in 2001 and possibly 10,500 in 2002 are potential applicants for PR status.

It remains to be seen how many of these applicants for ACS accreditation will go on to apply for migration, though DIMIA says the number certified has been a good guide to PR visas issued in the past. Some of those trained in Australia seek an Australian professional accreditation because it improves their job prospects back home. A large increase is likely in successful migration applications from computing professionals, but current applicants with ICT qualifications may find selection marginally tougher because of:

- The changes to the 'national shortages list' or MODL outlined above (but most Australian-trained overseas student graduates will qualify without recourse to the MODL).
- The relatively large numbers of overseas student graduates whose only IT qualification is a Graduate Diploma on top of a non-IT qualification — around 30 per cent of all overseas student graduate applicants in the last few years (2,300 to 3,000 graduates), according to the ACS. This group is less likely to have the current IT specializations needed to satisfy the MODL as a computing professional (but may qualify without these bonus points).
- And the May 2002 announcement by the Immigration Minister that the 'pass mark' for all independent skilled applications (received after 7 May 2002) will be raised by five points.[13] This decision will affect future applications, but not the large numbers already in the pipeline.

Table 5: Applicants (non-residents) seeking Australian certification of their IT qualifications by the Australian Computer Society, 1999 to 2002

	Overseas students (graduates)[a]	All others[b]	Total	Estimated number certified[c]
1999	687	1,604	2,291	1,604
2000	1,545	3,604	5,149	3,604
2001	6,773	4,516	11,289	7,902
2002[d]	9,000	6,000	15,000	10,500
Increase 1999 to 2002	8,313	4,396	12,709	8,896

Source: Australian Computer Society (ACS), (unpublished data), May 2002

[a] ACS estimate of number who are overseas students who graduated from an Australian university IT course, including with Graduate Diploma in IT. Includes all graduates from previous years, not just recent graduates.

[b] Includes persons applying offshore and onshore (and IT qualifications obtained outside Australia).

[c] ACS estimates around 70 per cent of applications are currently assessed favourably

[d] ACS estimate, based on activity January to May 2002

The large increase in applications by non-residents for certification of IT qualifications is a direct result of migration policy changes in 1999 and 2001. These changes were driven largely by the ICT industry at the height of the boom. The changes made it much easier for overseas students graduating with an Australian IT tertiary qualification to qualify for Permanent Resident (PR) status. Under the new rules, these graduates could stay on in Australia on completion of their IT course, and apply for and be granted PR status within Australia (previously they were required to be outside Australia when the PR visa was granted).

Applicants trained in Australia can now have their credentials accepted as a computing professional with a Bachelor Degree 'or equivalent' from an Australian

university. The 'equivalent' qualification has been interpreted very generously. In practice, this means not only bachelor degrees and Masters in IT, but Graduate Diplomas in IT. Graduate Diploma courses are generally 12 months but some are only eight months duration. Qualifications which are acceptable (to ACS) include a degree in a non-IT field topped up with a Graduate Diploma in IT, and even non-degree courses (for example, a Technical and Further Education [TAFE] Diploma) topped up with the Graduate Diploma in IT.

For the universities, this means the Graduate Diploma in IT is becoming an attractive revenue stream. However, DIMIA has flagged the possibility of extending the minimum training requirement to meet immigration selection criteria from one year to two years (in a recent discussion paper on regional migration).

In any event, many of these overseas student IT graduates could be in the Australian labour market already. Migration rules give them full work rights while their application for PR status is being assessed.[14] It is clearly in their interests to do so, even though this group is exempted from the requirement to have 12 months experience in the computer specialisations for the MODL. Those in the IT job market will be competing with Australian residents who are also recent graduates from universities, TAFE, and private training providers, other recent new entrants under the permanent program and laid off computer professionals and other IT workers.

The temporary program (457 visas)

Several components of Australia's temporary migration program supply non-resident computer professionals to Australian business. The main focus here is on the business-sponsored[15] component of the temporary program known as the 'Business Long Stay' or 457 visa subclass.

Backgound on the 457 visa program

The 457 visa (or Business Long Stay) is broadly the Australian counterpart to the H1-B visa in the USA for temporary skilled workers sponsored by employers. They are both examples of temporary work visa regimes that are now part of the migration infrastructure of many countries, a trend driven largely by the global ICT industry in the 1990s.

The current Australian regime for temporary entry of business-sponsored skilled foreign workers on 457 visas dates from the August 1995 Report entitled *Business Temporary Entry — Future Directions*. This is widely known as the Roach Report, after Neville Roach, who chaired the committee commissioned to produce the Report. The 1995 Roach Report was accepted by the then Labor Government and later by the Coalition Government elected in 1996.

The new rules were implemented from 1 August 1996 and allowed employers approved as sponsors much more freedom to sponsor foreign workers to Australia, on a temporary basis, to work in specified positions in a business for a specific employer for up to four years.

The total number of 457 visas issued for 'business-sponsored' temporary migrants has grown strongly. In 2000-2001, there was a 19 per cent increase over the previous year in these 457 visas grants to 37,000 (primary applicants and dependents) from 31,000 in 1999-2000. Computer professionals (and other ICT workers) made up some 30 per cent of these, with managers, nurses and accountants the other major occupational groups.[16]

The occupational composition of approved 457 visa nominations for all primary applicants in 2000-01 is shown in

Table 6: The 447 visa nominations approved in 2000-2001 (primary applicants), occupational composition

Occupation (ASCO groups)	Number	Per cent
Manager and Administrators	4,671	19.6
Professionals	13,305	55.9
Associate Professionals	2,348	9.9
Tradespersons and related workers	1,373	5.8
Advanced clerical and service workers	94	0.4
Intermediate clerical, sales and service workers	647	2.7
Intermediate production and transport workers	138	0.6
Elementary clerical, sales and service workers	146	0.6
Labourers and related workers	278	1.2
Not stated/not known	790	3.3
Total	23,790	100
Total ICT occupations[a]	6,749	28.4

Source: DIMIA, unpublished data, 2002
[a] See Table 7 for details

Table 6. The overall program was dom inated by Managers, Administrators and Professionals who make up 80 per cent of total visas issued. Table 7 shows the ICT occupations, which were dominated by Computer professionals as well as a more detailed breakdown of this group.

Stock of computer professionals on 457 visas

The stock of 457s is a better guide to their significance than the number of 457 visas issued in any one year. Stock data here is a count of the number of individual visa holders (primary applicants) in Australia at a point in time. This measure controls for variations in the length of stay in Australia by 457 visa holders, and also for double counting of individuals in the 457 visas-issued data (see below).

At 30 September 2001, there were an estimated 7,900 ICT workers in Australia on 457 visas with an estimated 6,600 working as computer professionals. Those 6,600 computer professionals on 457 visas represent around four per cent of all employed computer professionals in Australia in 2001-02 (166,000). The number on 457 visas has probably fallen to about 4,500 in June 2002, but still remains high. These are primary applicants only.

This is only an estimate because the DIMIA stocks data system does not allow the number of 457 visa holders in Australia to be identified by occupation (unlike data on visas issued). Unpublished DIMIA data shows that the total stock of 457 visa holders (primary applicants) in September 2001 was 27,691 in all occupations. The estimates here assume that ICT workers and computer professionals' share in the total stock of 457s is the same as their share of total 457 visas issued in 2000-01 (Tables 6 and 7). DIMIA agreed this was the best basis for estimating the occupational composition of the stock of 457 visa holders.

The number of 457 visas approved for ICT occupations in July- December 2001 was down 32 per cent on the same period in 2000 (primary applicants only). That implies the stock of these 457 visa holders in Australia is also falling. If the stock also fell by 32 per cent, there would still be around 4,500 computer professionals working in Australia on 457 visas.

Has the 457 visa program affected work opportunities and market rates for Australian computer professionals?

The fact that an estimated 4,500 to 6,600 computer professionals are working on 457 visas in Australia in 2002 when there are around 8,000 unemployed residents in that occupation *prima facie* suggests displacement of Australian computer

professionals on a significant scale.

It is possible that computer professionals working on 457 visas have different skill sets and are in different IT specializations to unemployed residents. Some of the 457 visa holders would possess enterprise specific knowledge. However, there is no independent data on the skill sets of both groups. Surprisingly, given the large rise in residents unemployed, there has been no effort made to collect reliable data on the skill sets, educational qualifications or experience of the 457 visa holders or of unemployed resident computer professionals. The 457 data system has some serious limitations here: over 40 per cent of 457 visa holders in 2000-01 were classified to the dump group 'Computer professionals not elsewhere classified' (see Table 7).

Table 7: ICT occupations, 457 visa nominations approved in 2000-2001, (primary applicants)

ASCO	Occupation title	Number	Per cent
122411	Information technology manager	688	10.2
212513	Electronics engineer	271	4.0
212815	Electrical or electronic engineering technologist	30	0.4
2231	Computer professionals*	5,639	83.6
312411	Electronic engineering associate	19	0.3
312413	Electronic engineering technician	27	0.4
329411	Computer support technician	75	1.1
Total		6,749	100
** 2231*	*Computer professionals*		
223111	System manager	494	8.8
223113	System designer	179	3.2
223115	Software designer	604	10.7
223117	Applications & analyst programmers	1,465	26.0
223119	Systems programmer	453	8.0
223121	Computing systems auditors	19	0.3
223179	Computing professionals not elsewhere classified	2,425	43.0
Total 2231	Computer professionals	5,639	100

Source: DIMIA, unpublished data, 2002

There are features of the 457 program that suggest it has much potential to adversely affect work opportunities for Australian resident computer professionals.

- 457 visas are approved for computer professionals and all ICT occupations without the need for employers to establish that no residents are available who could do the work; that is, 'labour market testing'. (In July 2001, labour market testing was completely removed from the 457 program, for all occupations. This important change to the 457 program was not publicly announced by the Minister in July 2001 when two associated changes (establishing a minimum skill and salary 'threshold', — see below) were introduced.[17]
- 457 visas can be issued for occupations and specializations where there is no 'national shortage', as noted above. This means employers can sponsor any kind of computer professional for 457 visas including those not in short supply, without having to first offer the work to Australian residents.
- Computer professionals sponsored for 457 visas are not required to have their IT qualifications certified by the ACS, unlike those applying under the permanent program.
- 457 visa holders in practice can change employers and are more or less free to search out alternative em-

ployers, with few real penalties for 'employer shopping'. This makes them participants and competitors in the Australian labour market to an extent not envisaged by the original 457 visa rules and philosophy. In the original rules, the 457 visa holder was sponsored by a specific employer for a specific position, and no other.

- 457 program rules allow recruitment and employment agencies to sponsor non-resident computer professionals on 457 visas, and hire them out to Australian businesses. This group of workers is competing directly with resident IT contractors and displaced employees. Under the 457 rules, the agency is considered the 'direct employer' of the non-resident IT workers, and the client company where the IT work is being done has no 457 employer obligations. DIMIA has no data on the number of IT professionals on 457 visa holders working for these agencies. But if agencies were as significant here as in the overall computer professionals market, then nearly 25 per cent of all 457 visa holders in this occupation (1,100 to 1,700) would be working through an agency.[18]
- The 457 program is now predominantly an *onshore* visa issue program. Some 60 per cent of all *new* visas (all occupations) are going to persons already in Australia on temporary migrant visas of various kinds, some already working for the sponsoring employer or agency. This means the cost to Australian employers of recruiting 457 visa holders is now much less than offshore recruitment, and this alters the relative cost of recruiting non-residents compared to resident computer professionals.

The only upfront costs to some sponsors already employing non-residents (on other temporary visas) are the 457 filing fees to DIMIA. There are no new employee recruitment or induction costs such as lower initial productivity (as possibly with newly hired Australian residents). In 2000-01, employers successfully sponsored onshore some 12,600 non-residents for 457 visas in all occupations, as primary applicants 3,700 of whom were in Australia on various business visas and a further 3,200 on working holiday maker visas. The number sponsored as computer professionals on 457s is not available in the DIMIA information system, but they could be substantial.

The actual number of 457 visa holders who change employers in Australia is not known, but may also be quite large. Some 18 per cent of all 457 visas issued to primary applicants are now granted to persons who *already held a 457 visa* (3,700 in 2000-01).[19] This includes persons changing employers or extending the duration of their visa. But not all 457s who change employers are issued with a new 457 visa, so this may understate the extent to which 457s are free to change employers. DIMIA advises this policy is to change in 2002, and that all 457s changing employers will be issued a new visa and identified separately.

(Note that total visas data thus involves some 'double counting' of individuals and in this sense overstates activity. The total number of 457 visas issued is no longer be the best guide to activity and growth under the program.)

Salaries paid to 457s

A key issue is whether actual salaries paid to computer professionals on 457 visas are in line with local market rates. But there is simply no publicly available information on actual salaries paid to 457s in Australia.

Nor is there a formal requirement in Australia for employers sponsoring 457 visa holders to pay *market rates* — unlike the UK and US versions of the temporary work visa. The 457 visa rules require only that 'sponsors sign an undertaking to comply with Australian levels of remuneration and conditions of employment, commensurate with any relevant awards and standards'.[20] This means that employers can lawfully pay 457 visa holders *below market rates* for the type of work in question, because Australian industrial awards generally establish a minimum salary standard (rather than a market rate).

However, from 1 July 2001, a new migration regulation set a 'minimum salary' for the 457 scheme as a whole of $34,075p.a. — or average weekly earnings, full-time and part-time employees combined in all occupations (including labourers). This muddied the waters further, because employers for a time post-July 2001 were simply nominating a 457 salary as 'above $34,075' and the visa nomination would be approved.

The salaries *actually* paid to 457 visa holders are not known because an adequate compliance monitoring system was not in place in 2000/01, but has been greatly enhanced recently. However, some IT contractors and IT company executives interviewed in the course of preparing this article claimed that programmers on 457s have been openly promoted to prospective clients at below market rates by agencies.

Until July 2001, the DIMIA monitoring system for the 457 program was the 'light touch' model for employer regulation recommended in the Roach Report. In July 2001, DIMIA introduced a policy of monitoring at least 10 per cent of all employers approved as sponsors under the 457 scheme.

But significantly, in November 2001, DIMIA completely abandoned the 'light touch' model and moved to a program of monitoring 100 per cent of employers approved as 457 sponsors within 12 months of sponsorship approval.

Like the July 2001 decision to abandon labour market testing in the 457 program, the November 2001 decision to upgrade 457 compliance monitoring was not publicly announced. The enhanced monitoring program aims to validate employer compliance with sponsorship undertakings including the salary paid to the 457 visa holder, specific work undertaken, and commitments to training Australians. The program involves employer site visits or a paper-based investigation or a combination of both for employers in higher risk categories for non-compliance.

There are two further grounds for concern that some computer professionals on 457 visas are paid below market rates. The first is that DIMIA acknowledges that one of the main non-compliance issues notified to DIMIA by 457 visa holders (or their co-workers) is that 457s are not being paid at market rates, or at the salary nominated by their sponsor. DIMIA says this is often a key factor in decisions to allow 457 visa holders to change employers, for example, to move from an employment agency to a mainstream business.

Secondly, unpublished data on 457 salaries nominated by employers and approved by DIMIA in 2000-01 also gives some cause for concern. Table 8 shows that:

- DIMIA approved some 457 visas for computer professionals where the salaries nominated were below even the median starting salaries for computer science graduates in their first full-time job ($40,000), though in a small minority only (five per cent).

Table 8: Computer professionals (ASCO 2231) on 457 visas, salaries nominated by employers in approved nominations, 2000-2001

Salary $	Number[a]	Per cent
30,000-40,000[b]	301	5.4
41,000-50,000	743	13.3
51,000-60,000	1,288	23.1
61,000-70,000	726	13.0
71,000-80,000	576	10.3
81,000-100,000	901	16.2
101,000-150,000	806	14.5
151,000-200,000	162	2.9
200,000 or more	66	1.2
Total	5,569	100
Medium salary, 457 visa		
All computer professionals	$75,600	
Applications and analyst programmers[c]	$60,000	
Median salary, 2001 Australian computer science graduates[d]	$40,000	

Source: DIMIA 457 visa nominations data (unpublished), 2002, Graduate Destination Survey, April, 2001
[a] All 457 visas issued to primary applicants in 2000-2001. Some 18 per cent of these were new 457 visas issued to persons already holding a 457 visa issued in prior years (see text for explanation). If the original 457 visa was also issued in 2000-2001 (no data available on this), then some double counting will be involved.
[b] Includes some 14 cases where approved salary was recorded as less than $30,000
[c] Median for Australia and Sydney; 90 per cent of all approved nominations were in Sydney
[d] Bachelor degree graduates, in first full-time job and aged less than 25 years, in April 2001

- around 90 per cent of 457 visas approved for Applications and analyst programmers (the largest identifiable subgroup) were in Sydney. But compared to Sydney market rates in May 2001, the 457 median of $60,000 for this group was $15,000 (20 per cent) below the 'typical' rate of $75,000 for a Programmer/Analyst and at the bottom end of the range ($60-80,000)[21]

Impact on graduate salaries and student demand for IT courses

A key area of concern is the potential impact on salaries for graduates and other new entrants to an already depressed IT job market. In 2001, there were an estimated 3,000 new bachelor degree graduates in computer science in Australia (Australian residents). With local graduate output likely to grow by possibly around 20 per cent per annum over the next few years (based on past commencements), that means around 3,600 to 4,300 new graduates in computer science alone in 2002 and 2003 respectively.

But as shown earlier in this paper, on current policy these graduates will be competing with an increased number of IT workers from the permanent migration program, possibly up to 10,500. Many will be overseas students graduating from Australian universities. An increase in supply on this scale will not only increase competition for entry level IT jobs, but will almost certainly depress growth in salaries for new graduates and new entrants generally.

If this occurs, it is likely that student demand (from Australian residents) for IT courses will also continue to fall away, as it has between 2001 and 2002. Student demand for IT courses at Australian universities declined by 11 per cent between 2001 and 2002 while total demand for all courses grew by six per cent. The number of local students classified as eligible applicants for undergraduate courses in Information Technology fell by 1,600, from 14,642 in 2001 to 13,030 in 2002. These are students who gave IT courses as their first or second preference.[22] Whether this translated into reduced enrolments in 2002 is not known, because data is not yet available. A new system of course classification was introduced in 2001

which makes comparison with earlier years difficult.

Yet some IT industry leaders downplay the potential adverse effects of oversupply, including Roach who recently said:

> You've got to have a long-term strategy. If we cut back when we've got a slight increase in unemployment and only bring in people when we've got a shortage of jobs, we will be doing things very expensively and we will not get the people here quickly when we need them.[23]

CONCLUSION

The analysis in this paper shows that changes are needed to current migration policies in both the temporary and permanent programs. The first priority should be to fix the temporary 457 visa program because non-residents sponsored under this program already have an IT job in Australia guaranteed to them. While the numbers in this program are falling and are probably now more than 30 per cent down on last year's, the onus should be on the government and the ICT industry to justify why this 457 visa program should not be wound down even more rapidly.

Two changes suggest themselves. First, the 457 visa program should be made subject to the MODL; that is 457 visas should only be issued for computing skills which are in shortage in Australia and not for those in balance or oversupply.

Second, even after the 457 program is made subject to the MODL, employers should not be able to sponsor non-residents for 457 work visas in ICT jobs without 'labour market testing'. It should be a requirement to show that there are no Australian residents available in the local labour market who can do the work. This is the policy in most other countries. In the past, some forms of labour market testing have been little more than a farce. The challenge for bureaucrats and stakeholders in the ICT industry is to develop some practical measures that really do work.

A third issue is whether there should be changes to current policies that allow employers such easy access to 457 visas onshore. A strong case can be made that Australian residents, especially recent graduates with no experience, are disadvantaged if employers can access 457 visas for computer professionals already in Australia especially those working for them on other temporary visas.

In relation to the permanent migration program, the key issue is how to improve the way the current points system takes account of changes in the IT labour market situation in Australia. The numbers coming through this program should be at levels which do not disadvantage Australian residents, especially graduates and other new entrants. It is not clear that the current points system will achieve this outcome in 2002-03 and later years. The 2001 decision to allow overseas students graduating from an Australian university course in ICT to apply onshore for PR status needs to be reviewed, and the numbers reduced to levels that the IT labour market can reasonably absorb. There is a strong case for the migration program to give preference to those trained in Australia, but the numbers need to be geared to labour market realities.

These reforms should be underpinned by an independent assessment of the ICT situation in Australia. The Federal government should commission urgently an independent study that investigates two issues: the real nature and extent of ICT

skills shortages (with 8,000 computer professionals now unemployed) and future requirements, with industry input but independent of the ICT industry (which has now admitted exaggerating the IT skills shortages); and the total migration program impact on jobs, careers and earnings for Australians working or trying to work in the ICT field. On all issues, the views of IT professionals themselves should be sought and taken into account.

This review should also address what more the Australian ICT industry and government should be doing to enhance job and career opportunities for Australian residents. This includes the young Australians currently being encouraged to invest in their own ICT education and training by the promotional campaigns of the ICT industry and governments, and recent migrants encouraged here with the same promises of unbounded opportunity. The Federal government and the ICT industry in 2001 committed $10 million to the IT Skills Hub, a joint initiative to promote IT careers.

One key issue is how people can get actual work experience and keep their ICT skills up-to-date, in a market that demands this more than most and rejects those with no experience. In April 1999, no fewer than four Federal Ministers announced the government would 'support an industry funded training and internship scheme… to assist with increased promotion of work experience by the industry to graduates and other new entrants, providing pathways to higher skills'.[24]

Astonishingly, no practical initiatives at all have actually been developed here in the three years since that announcement. Serious action on this issue is required. If it does not occur, increased demand for experienced IT professionals could see even more calls from the ICT industry for more migrants with experience as even larger numbers of IT professionals are unemployed in Australia.

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13 P. Ruddock, Minster for Immigration and Multicultural and Indigenous Affairs, 'Minister announces 2002-03 Migration (Non-humanitarian) Program', 7 May 2002, MPS 30/2002

[14] These graduates are given a bridging visa while their application is being assessed, and have the same unrestricted work rights as overseas students in university vacation periods.

[15] The 457 visa is also issued to some persons who are not business-sponsored but are classified as 'Independent Executives' establishing their own business. These 'Independent Executives' are excluded from data on 457 visas in this paper, unless otherwise indicated.

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