film Inquiry
Submission No. 77



## Australian Capital Territory

## Submission to The House of Representatives Standing Committee on Communications, Information Technology and the Arts

## Inquiry into

# The future opportunities for Australia's film, animation, special effects and electronic games industries

June 2003

## INTRODUCTION

The ACT Government welcomes this opportunity to provide a submission to the Committee's inquiry. This submission describes the scope and size of the ACT film, animation, special effects and electronic games industry and outlines a number of constraints to growth and development which the local industry have identified.

Because these industries are as a whole relatively new, there is very little data available to assess the relative scale and impact that they have on the Australian economy. A recent UK Department of Trade and Industry study<sup>1</sup> of the games industry cited a lack of data as a serious concern, particularly data relating to the historic development of the industry, turnover, profitability, employment, labour costs, comparative analysis and consumer behaviour surveys.

## **RESPONSES TO THE TERMS OF REFERENCE**

## The current size and scale of Australia's film, animation, special effects and electronic games industries

A recent scoping study by the University of Canberra into the ACT Film, Television, Video and Digital Effects industry including computer games development and 3D animation has estimated the size of the ACT industry in salaries alone to be almost \$30m. The economic impact of the industry was broadly estimated at around \$170m.

#### Games

The UK Department of Trade and Industry has estimated the world games market at around \$52 billion.<sup>2</sup> Canberra is a small centre for the development of computer games and 3D animation with the key players having international clients and being recognised as producing games and 3D animation to international standards.

Two companies that have significant international links are Micro Forté and Irrational Games Australia. They are examples of how Canberra's industry is capitalising on the significant broadband infrastructure, labour market expertise and lifestyle benefits available within the ACT.

Micro Forté was founded in 1985 with the purpose of developing world-class AAA computer games. The company is one of Australia's leading game developers with development studios in Sydney and Canberra. Micro Forté develops innovative, quality technology and computer games with high design and production values.

<sup>&</sup>lt;sup>1</sup> From exuberant youth to sustainable maturity, Competitiveness analysis of the UK games software sector, Department of Trade and Industry, UK, 2003

<sup>&</sup>lt;sup>2</sup> Ibid, p10.

Micro Forté has recently secured a partnership deal with Microsoft. This is a significant milestone for the Canberra based company as it is rare for Microsoft to form 'partnerships' in gaming technology and content. Microsoft has developed a Massively Multiplayer Online Gaming (MMOG) platform. The technology enables a large number of people to play an electronic game online. Micro Forté's award winning *BigWorld*<sup>™</sup> *Technology* represents the most scalable, fault-tolerant and customisable MMOG middleware available anywhere in the world. Micro Forte, utilising its *BigWorld*<sup>™</sup> *Technology*, will be working to develop content for the game platform that will run on Microsoft's highly popular X-box game consoles.

In 2002 Micro Forté was the Australian winner of the *The Asia Pacific Information and Communications Technology Award (APICTA)*, in the *Creative Digital Industries category*, for its BigWorld<sup>™</sup> Technology. Micro Forté also won the *Cisco Systems Innovation Category of the 2001 Telstra and ACT Government Small Business Awards* for its outstanding technology.

Irrational Games Australia is the award winning developer of System Shock 2. Irrational Games has studios in Boston, USA and Canberra. It employs about 30 designers, programmers, artists and business facilitators in the ACT and similar numbers in the USA.

Founded in 1997, Irrational Games Australia focuses on role-playing games (RPG) and strategy games for both the personal computer and console markets. The Canberra studio is developing the game 'Tribes:Vengeance'.

Supporting the ACT's industry success is the Academy of Interactive Entertainment Ltd. The Academy (AIE) was established in 1996 with the assistance of the Canberra Institute of Technology, the ACT Government and the established games development company, Micro Forté. This year, its current intake is made up of 60% ACT students and 40% interstate and overseas students. It is recognised as offering premier 3D animation training and its co-location with industry provides graduates with 'employment-ready' experience. The Academy is looking to forge entry into the international education and training market, exporting its quality services to key Asian countries.

#### Film

The film and video industry in the ACT is also limited in size. As at 30 June 2000, there were 21 film and video production businesses registered in the ACT, with 58 persons employed in the industry. This sector generated \$4.1 million worth of income in the ACT in 1999-2000, equivalent to just 0.3% of national industry income (ABS 2001).

Whilst the film industry is relatively small in Canberra, it enjoys some advantages over other jurisdictions. These include low cost production, lower ancillary costs, low visual and noise pollution, sharper light due to height above sea level, consistent weather patterns, ease of accessibility and the close proximity of the city to the bush. There is also a significant amount of documentary film, and corporate and training video work undertaken within Canberra and the region.

### The economic, social and cultural benefits of these industries

#### <u>Games</u>

In the past six years, the electronic games industry has almost doubled, albeit, from a relatively small base. However, the size of international contracts secured by local companies is significant as most of the expenditure occurs locally, predominantly through salaries.

The development of computer games and 3D animation appear to be determined by access to a skills base and appropriate infrastructure. Broadband technology enables more efficient access to the interstate and international clients. IT firms in the ACT, through the roll out of broadband by TransACT, enjoy access to this high-speed bandwidth.

#### <u>Film</u>

Film production has a broader economic impact through its demand for ancillary support services – accommodation for crew, catering, set construction, equipment etc. A further recognised benefit derived from film locations is the exposure and subsequent promotional opportunities. In 2001, an Indian film company used Canberra as a backdrop for several 'dream' sequences for the movie 'Aap Mujhe Achhne Lagne Lage' (I Have Begun To Like You). The advantages of Canberra as a film location (discussed earlier) were the main reasons for the Indian film company selecting the National Capital. Featuring one of India's leading male actors, Hritik Roshan, the movie had a world-wide audience of around a billion people. This type of exposure can provide a platform for promoting the city as a visitor destination.

Whilst Canberra does not enjoy the film infrastructure, namely indoor film production sets, which are available in Sydney, Canberra has the advantage of relative proximity to Sydney and low ancillary and outdoor production costs. It also has the capacity to service post-production in animation and 3D, and can provide valuable support to this component of film production particularly with the move towards digital technology. The skills base within the ACT can be readily accessed and engaged by other jurisdictions.

## Future opportunities for further growth of these industries, including through the application of advanced digital technologies, online interactivity and broadband

Access to low cost broadband and advanced digital technologies will be a major determinant of the future growth of the games and animation industries. The technology is important for both the development/production of these entertainment services and the growth of consumer demand. Australia's access to broadband is patchy.

The ACT, through TransACT and others, has seen the rollout of broadband technology to a significant number of households and businesses. TransACT is building and

managing an advanced telecommunications network across Canberra and the region providing telephone, video and broadband data services to residences, businesses and government departments across the ACT and surrounding region.

TransACT coordinates a complete range of communication services including:

- digital television (free to air and subscription) and video on demand;
- permanent 'high speed' data connections to Internet Service Providers;
- a complete range of data services for business including VDSL, ADSL, ISDN and Virtual Private Networks;
- a full-service telephone network; and
- mobile telephone services.

By June 2003, TransACT will have coverage of 59,884 homes, 3,910 small businesses and 66 medium businesses. It is envisaged that this will increase to around 150,000 homes and businesses within the next two years.

Whilst the ACT enjoys the benefits of a broadband network, other jurisdictions do not have the same concentration of access to broadband. As gaming technology advances, there will be more demand for access to high-speed broadband connections. The gaming market needs access to the local gaming population to support an Australian industry, as well as access to the key retail markets in the US, UK and Japan to sustain the industry.

## The current and likely future infrastructure needs of these industries, including access to bandwidth

As noted above, the ACT has a significant concentration of broadband connections per head of population. However, access across Australia is currently very limited. A further impediment is the significant access cost in Australia, particularly when compared with other countries. The relatively low population base and the lack of comparative density of population may be contributing factors in the costs faced by Australian consumers to broadband and other internet connections. However, cost remains a significant constraint to more rapid development of these industries, making production less competitive and restraining growth in demand for product.

## The skills required to facilitate future growth in these industries and the capacity of the education and training system to meet these demands

The creative industries recognise the success of the industry is heavily dependent on a highly skilled work force. Major impediments to the future growth of the industry Australia-wide include:

- the availability and retention of qualified and skilled staff;
- the responsiveness of the training system and providers to industry needs;
- the casualised nature of the industry and inflexibility in the system of Commonwealth incentives to employers of casual staff limiting their ability to take on trainees;
- the lack of a continuum of educational opportunities ranging from vocational training to research activities; and

• limited integration between technology and the arts.

As far as possible, the ACT is addressing the issue of pathways for educational opportunities. For example, the flexible secondary college system of the ACT facilitates student access to vocational education opportunities. Courses in computer games design at college enable the identification of students with particular aptitude and interest in perusing further study and careers in areas such as computer games design. There is also a need for the development of entrepreneurial skills for potential professionals working in the film sector to enable them to produce commercially successful products for a world audience. However, steps also need to be taken at the national level.

#### Availability and retention of qualified and skilled staff

The creative industries tend to be cyclical in nature and as a consequence have difficulty in attracting and retaining skilled and qualified staff. Highly qualified staff are able to seek employment in the world market and the relative size and competitiveness of the Australian industry puts it at a disadvantage in attracting these people.

ACT companies use the attractiveness of Canberra as a location for living and working. However, this is not always a sufficient attraction for highly qualified staff.

#### Improved responsiveness of training providers to industry needs

The industry requires an ongoing national forum to articulate its training needs to education and training providers and Governments at all levels. A national forum would allow for a coordinated approach. Existing mechanisms do not appear to be meeting the needs of this rapidly changing industry as it responds to the new technologies and gaming platforms which are being developed globally. Educational institutions need to be extremely responsive to support the growth of the industry by providing a qualified skills base, making available current hardware and software, and reviewing curriculum to ensure that it meets industry needs.

Course accreditation has been raised as an issue by the ACT industry. Students are now seeking "degree" course qualifications in this industry. The ACT's accreditation body has recently endorsed an ACT developed computer games design qualification.

## A continuum of educational opportunities ranging from vocational training through to research activities

Industry is also concerned that not only are there limited courses and curriculum available, but Australia also lacks a continuum between school-based, vocational, degree courses and research activities in the educational institutions to support this industry. As a 'new' industry, there is a reluctance to introduce new dedicated courses and there are perceived barriers to provide course linkages between the institutions. Either because of lack of knowledge of the requirements of the industry, or failure by educational institutions to consider it as a serious economic activity, there is a tendency for courses to be offered within existing course frameworks, rather than

development of specialist full range courses. The problem may be that the industry is evolving faster than educational institutions can respond.

The ACT Government would support Commonwealth funding for scholarships at various institutions as a means of encouraging development of courses and attracting students.

#### Better integration between the arts and technology sectors

Both sectors concur that there would be synergistic benefits derived if there was more effective co-ordination and communication between the arts and technology sectors, particularly in the educational institutions. Facilitating an interface with the interactive technologies and the creative industries could have significant benefits. A specialised institution, possibly based on the NIDA model, should be considered as a way of assisting this interface.

### The effectiveness of the existing linkages between these industries and the wider cultural and information technology sectors

The ACT Government has contributed to a number of initiatives which sees the collaboration between government, business and the education sectors aimed at achieving an environment that facilitates the quality growth in this sector. In May 2002, the Commonwealth Government announced that National Information and Communication Technology Australia (NICTA) was selected as the preferred applicant to establish and operate the Information and Communications Technology (ICT) Centre of Excellence. The head office is located Sydney adjacent to the University of New South Wales as well as a node in Canberra located next to the Australian National University. NICTA aims to establish collaborative research and training arrangements with other universities and research organisations.

The Commonwealth is contributing \$129.5 million to the Centre. The NSW and ACT Governments are each contributing \$20 million. Other contributors to the centre include the Australian National University, the Universities of NSW and Sydney, the venture capital firm Allen & Buckeridge, Redfern Photonics and Bovis Lend Lease.

The location of a NICTA node in Canberra, representing a third of the organisation, has the potential to attract significant interest in the skills and ICT infrastructure within Canberra. The Government acknowledges that the centre will bring important economic benefits to the community by taking the local ICT industry to a new level. The Centre has the capacity to create direct and indirect employment opportunities over the next several years, as well as having a profound effect on Canberra's economic future. The ACT Government believes NICTA will further position Canberra as a major originator and developer of ICT technologies and will significantly increase commercial R&D expenditure, driving company formation and employment. The Centre's strong focus on commercialisation would provide a catalyst to strengthen and accelerate the development of local ICT businesses, especially small and medium enterprises, and also attracting industry investment.

Also located in Canberra, the Academy of Interactive Entertainment (AIE) offers a variety of courses, both independently and in cooperation with the Canberra Institute of Technology (CIT) and the ACT Department of Education, Youth and Family Services. The AIE has a number of working industry partnerships with Micro Forté, Game Developers Association of Australia, ATI industries, Microsoft, Irrational Games Australia and Sony Foundation Australia. This facility could be built upon and developed further as a national centre.

One of the AIE's main objectives is to foster the growth of the Interactive Entertainment Industry in the Canberra region. To do this, the courses have to ultimately lead to an 'incubator' style course where students gain the necessary experience to create their own companies, preferably based in Canberra. AIE and Micro Forté assist these startups by providing funds and low rent accommodation at Canberra Technology Park.

## How Australia's capabilities in these industries, including in education and training, can be best leveraged to maximise export and investment opportunities

Participants in the ACT industry have identified access to major overseas markets as a significant impediment to growth in the industry. Better representation, either through industry forums or government trade missions, should be supported at the national level. The ACT Government is currently investigating the costs and benefits of establishment of a Film and Multimedia Office to provide a national and international profile for local industry participants. Other jurisdictions have established these offices, some with the assistance of Commonwealth funding.

The ACT Government urges the Commonwealth to assist the Australian interactive entertainment industry by hosting trade missions, extending taxation incentives<sup>3</sup> and supporting participation in international trade shows and conferences.

The development of new technologies has applications within the broader business and community sectors. Other uses include on-line training, web design, architectural visualisation and simulations. These flow-on activities need to be recognised, actively supported by Government and promoted.

The ACT's Academy of Interactive Entertainment (AIE) is increasingly attracting international students and will continue to pursue this sector of the market.

## Whether any changes should be made to existing government support programs to ensure they are aligned with the future opportunities and trends in these industries

The ACT Government, through BusinessACT, provides industry with access to its *Knowledge Fund* which is the centre-piece of the ACT Government's vision of a

<sup>&</sup>lt;sup>3</sup> See page 9 below.

thriving and globally competitive knowledge-based economy. The design of the *Knowledge Fund* recognises the multi-faceted and dynamic nature of the knowledge-based economy and provides assistance through five complementary components including Proof of Concept Grants, Commercialisation Grants, Industry Development Grants, Strengthening Management of High Technology Start-Ups and Equity Investment.

A number of 3D animation businesses have successfully bid for grants from the Knowledge Fund - an acknowledgement of the potential these companies provide in supporting the outcomes of a knowledge-based economy. A recent recipient of the *Proof of Concept* grant was SIMmersion Pty Ltd investigating a developmental environment that allows commercial designers and / or software developers to create 3D applications that produce highly realistic simulations of real-world terrain. The Academy of Interactive Entertainment (AIE) Ltd was a recent recipient of an *Industry Development Grant.* The grant enabled the provision of state of the art 3D animation facilities to enhance the international competitiveness and skills development for the interactive entertainment and creative content of businesses in the ACT and Region.

Currently the film industry has the capacity to attract significant capital through the s10ba Income Tax Assessment Act provision which enables companies to invest in film and receive a tax benefit.

The ACT Government would like to see the s10ba Income Tax benefit, currently being offered to the film industry, extended to those within the electronic games, animation and special effects industry. An extension of the 10ba tax benefit would assist in providing essential funds to finance the capital-intensive development stage of new games for example. The convergence between the film industry and interactive entertainment is a further argument in favour of equitable treatment of the whole of the entertainment industry in terms of taxation treatment.

The Commonwealth should also assist in developing relationships between venture capital providers and the industry – this includes large institutional investors and also smaller scale ones (that might assist with small projects such as documentary films). There is a need to facilitate small-scale venture capital investment to allow the ACT film industry (particularly documentary) to progress projects to a level where they can attract further investment. In the film sector this would allow for progressive investment, commencing with script development and proceeding through to final production. The industry is at present misunderstood by the finance industry despite its potential. The *Venture Capital Act 2002* should provide a wider pool of foreign investors and make Australia more attractive to international fund managers. The ACT Government considers that there may be a role for the Australian Centre for Global Finance (AXISS) to assist in partnering prospective venture capital funds with industries such as the interactive entertainment industry.

#### Other issues

#### Games industry profile

While the Australian film industry is world renowned, as an emerging industry the games sector does not believe it is taken seriously. This impacts on its ability to attract finance to support the significant development phase in creating new games.

#### Vertical integration and the protection of Intellectual Property

Vertical integration of the Games Industry in particular, from development through to publication, was raised as an issue by industry participants. The industry is seeking better protection and establishment of intellectual property assets developed by Australian companies. The industry conceded that it may be a matter of education of executives working in the industry, however, the ACT Government considers that the Committee should ask the Department of Communications, Information Technology and the Arts and Intellectual Property Australia to investigate whether or not it is meeting the needs of this sector of Australian industry. As a predominantly service industry, retention of intellectual property of Australian games development companies is critical.

#### Games Classifications

Computer games producers consider the national classification system for their product inappropriate. It appears to disadvantage local Australian producers in favour or overseas product. The ACT Government considers that this anomaly should be reviewed to provide a degree of equity in the treatment of our industry and ensure its development.

#### Immigration guidelines

The ACT industry is concerned that Commonwealth Immigration does not tend to recognise qualifications and specific skills in these industries as factors in favour of approving immigration applications from overseas residents. In view of the world shortage in qualified staff for the electronic entertainment industry, the ACT Government seeks a review of the immigration guidelines to facilitate the immigration of trained personnel to service the industry. The aim is to provide more flexibility for companies to attract staff with specific skills.

## Conclusion

There are opportunities for Australia's film, animation, special effects and electronic games industries to grow and to capture an increased share of the global market if we are able to respond to the issues raised above quickly and flexibly.

The industry needs to be considered seriously as a contributor to gross national product and employment in the same way that computer manufacturing and telecommunications is regarded, rather than an offshoot of the arts seeking

Government support to function because it is socially and culturally desirable. There is an element of maintenance and development of Australian culture, but predominantly this is an industry which develops products and sells them, makes money, and employs people.

The ACT Government seeks support from the Committee to foster this valuable industry's growth.

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