Film Inquiry Submission No. 42



Australian Interactive Media Industry Association

Level 12, 77 Castlereagh St Sydney NSW 2000

Ph: 02 9221 9399 www.aimia.com.au

28 June 2003

Inquiry into the future opportunities for Australia's film, animation, special effects and electronic games industries

Please find AIMIA's formal response to the above-mentioned inquiry.

We would be pleased to speak with you if you require additional information or have further questions.

Yours sincerely,

Sandra Davey National President sdavey@kcollective.com

About AIMIA

The Australian Interactive Media Industry Association (AIMIA) represents the Interactive Media and Digital Content industry.

AIMIA's aim is to promote growth and success in the Australian interactive media industry.

Our 1,200 members spread across Australia are primarily producers and developers of digital content and content applications for interactive platforms including broadband and narrowband, iTV, wireless, CD/DVD and games consoles.



)

)

Table of Contents

ntroduction	3
Question One	3
Question Two	5
Question Three	6
Question Four	9
Question Five	10
Question Six	11
Question Seven	12
Question Eight	13
Conclusion	15

Inquiry into the future opportunities for Australia's film, animation, special effects and electronic games industries

2

F

.



INTRODUCTION

Defining the rules for inclusion of the industries covered in this Inquiry is difficult. Whilst this Inquiry attempts to focus specifically on the film, animation, special effects and electronic games industries, AIMIA takes a broader view of what we term the 'interactive media' industry.

Situated in the broad context in which AIMIA operates, interactive media becomes a 'catch-all' for a range of industries involved in producing digital content and/or content applications. They include those covered in this Inquiry but would also include areas such as music and games (interactive entertainment), e-learning, and traditional media.

QUESTION ONE

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

Statistical indicators of sections of the film, animation, special effects and electronic games industries are captured by range of organisations including the Australian Film Commission and the ABS. To date however, there has been no consolidated view of either the complete interactive media industry or the digital content industry.

In this context we applaud the work currently being done by the Department of Communications, Information Technology and the Arts, to develop a valid methodology and range of valid statistical indicators for capturing and measuring the value and contribution made by Australia's digital content creators and interactive media industries.

We believe that once a viable, robust model is developed, industry and government will be in a clear position to measure, not only the economic contribution made by interactive media and digital content, but importantly, the effectiveness of existing programs. Furthermore these indicators will provide insight into the development and execution of new models and new programs.

Interactive media is a broad industry sector, which includes web developers, datacasters and streamers, electronic publishers, interactive TV (iTV) producers, software developers, advertising agencies, web-based services, e-learning, and games developers. All use a range of interactive tools and functions to create and bring new digital content products and services to market.

On the basis of its membership and industry knowledge, AIMIA estimates there are approximately 3,500 companies operating in this space in Australia. Most are Small to Medium Enterprises (SMEs) with a few larger corporations. While we know they are a fundamental part of the increasingly important copyright/intellectual property industry, and that they also cross over the ICT industry generally, we have no way of estimating their economic contribution to GDP.



We refer to the views put forward by the Games Developers Association that show the increasing importance to the economy of Australian games developers. With their unique combination of intelligence, creativity and online delivery, digital games are likely to transform the education and entertainment industries. Based on the technology and skills of interactive media practitioners, games offer enormous potential for export. With the right support and investment, they could allow Australia to move beyond existing United States of America (USA) export models (predomintly PC and console-based) and focus on other areas such as the Asian and European markets, and on products and services associated with convergence (wireless devices, IP telephony, traditional media, always-on technologies).

We also make note of the work done by the Allen Consulting Group¹, specifically "*The Economic Contribution of Australia's Copyright Industries*" which highlights the following:

- In 1999-2000 Australia's copyright industries contributed \$19.2 billion in industry gross domestic product (IGP), up from \$15.6 billion in 1996-97, representing an average annual growth rate of 5.7%.
- With a growth rate of 5.7%, Australia's copyright industries are one of the fastest-growing sectors of the Australian economy. The growth experienced by the copyright industries has exceeded the average annual growth rate of the economy as a whole (4.85%).
- In terms of adding value, this represented 3.3% of Australia's Gross Domestic Product (GDP).
- While the value of copyright has traditionally been seen in cultural and social terms, the rise of the information economy and the services sector is changing this traditional perception so that copyright is increasingly being seen as core infrastructure, underpinning a number of Australian industries.
- Despite this change in attitude, there has been little analysis of the economic value and importance of Australia's copyright industries as a whole.

We do note however, this report does not capture interactive games, iTV, wireless or other elements of the interactive media industry, so these figures appear conservative.

Nor do the figures from reports generally touch on a significant difference between the digital industries and traditional creative industries. Digital technology has 'democratised' the creative industries and opened up the possibility of everyone with access to a computer to be their own creator. Professional interactive media developers are being constantly challenged to provide new products and services to enable non-professionals to create their own 'products', all of which stimulate the content industries.

We also note from this report that Australia continues to be a net importer of copyright/content, with imports significantly higher than exports and that this has important social, economic and cultural implications.

Australian Interactive Media Industry Association www.aimia.com.au | 02 9221 9399

Inquiry into the future opportunities for Australia's film, animation, special effects and electronic games industries

¹ The Allen Consulting Group, (2001), "Economic Contribution of Australia's Copyright Industries", www.allenconsulting.com.au.



QUESTION TWO

The economic, social and cultural benefits of these industries

The Creative Industries Cluster Report from NOIE (Stage 1, 2002) stated:

"Creative industries producing digital content and applications are of increasing importance due to their ability to contribute to economic growth and social development. They are providing innovative new services and products and developing new ways for people to interact with information systems and new technologies. These industries are expected to increasingly impact on other sectors of the economy in cross service and cross product innovation."

The economic, social and cultural benefits of our creative industries and the global creative industries have been well documented in a range of reports. Other stakeholders in this Inquiry (e.g. Games Developers Association) will articulate these in their submissions.

Organisations like AIMIA provide vital services to the interactive media industry which, more often than not, is made up of very small organisations. With representation at the State level, AIMIA provides valuable insight and industry education to organisations attempting to compete in a global market against much larger corporations.

As the industry association representing interactive media and digital content developers, we make reference below to a number of reports that describe the benefits of the infrastructure and services (notably broadband) associated with the development and distribution of our creative industries. All the reports are clear about the value of the creative industries and their benefits, which go beyond the social and personal, to the economic. They are generally optimistic about the future of digital content although few include the enormous impact of every individual now having the potential to be a digital creator.

We would like to make particular reference to the Cisco report mentioned below that argues "businesses with broadband connectivity enjoy an additional 4.8% of cost savings compared to their non-broadband connected counterparts and report an average revenue of \$500,000 per employee, nearly twice the revenue per employee obtained by non-broadband businesses, and about five times the revenue per employee on non-internet businesses."

Allen Consulting Group, (2002), *Built for Business I and II – Beyond Basic Connectivity*. A report commissioned by Cisco Systems, available at www.allenconsult.com.au/publications research.php

Allen Consulting Group, (2001), *The Economic Contribution of Australia's Copyright Industries*. A report commissioned by the Australian Copyright Council and Centre for Copyright Studies.



Broadband Advisory Group (2002), *Australia's Broadband Connectivity*, (particularly Chapter 1) available at <u>www.noie.gov.au/publications/NOIE/BAG/report/index.html</u>. This report has a number of useful footnotes.

Framework for the Future, (2002), *Enabling our Future*, available at www.dcita.gov.au/Article/0,,0 1-2 11-4 104751,00.html

OECD (2002), *Information Technology Outlook 2002*, available at www.oecd.org/pdf/M00030000/M00030907.pdf

National Office for the Information Economy (2002), *The Current State of Play*. Regularly updated by the National Office for the Information Economy and available at <u>www.noie.gov.au/projects/framework/Progress/csop.htm</u>

National Office for the Information Economy and Ovum (2001), *Productivity and Organisational Transformation: Optimising Investment in ICT* (this report shows that almost half of forecasted growth in GDP in 2002 could be attributed to Information and Communications Technology).

Prime Minister (2003), *Investing for Growth*, available at <u>www.isr.gov.au/growth/</u> or his speech at <u>www.pm.gov.au/news/speeches/1997/industry.htm</u>

Prime Minister and Cabinet (2003), *Backing Australia's Ability*, available at <u>www.backingaus.innovation.gov.au</u>

Senator The Hon. Richard Alston MP (2003), *Australia Continues to Embrace Broadband*, available at <u>www.dcita.gov.au/Article/0,,0 1-2 1-4 113788,00.html</u> and <u>www.dcita.gov.au/Article/0,,0 4-2 4008-4 114216,00.html</u>

QUESTION THREE

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

From the early days of the CD-ROM explosion, Australia and in particular those who work in the interactive media and digital content industry, have moved to new platforms and channels such as broadband, wireless, games and iTV consoles, and are now completely immersed in the opportunities of an increasingly converged market.

The integration of different media formats, more interactive platforms, and consumer appetite for new services has begun to transform the digital content business. We are increasingly becoming a society of users and suppliers rather than buyers and sellers. In this context, access rather than ownership is important, and for interactive media producers, the development of new formats and platforms is fundamental to meeting the demand and take up of ever increasing numbers of digital users and creators. As information technology (IT), communications technology, traditional media, film and content have converged, new and emerging businesses in the iTV, broadband, wireless, interactive entertainment, e-learning and games areas have emerged.



Digitisation, the spread of broadband and the promise of multi-channel broadcasting have brought together diverse groups of interactive media professionals, from film, TV, print, music and games, to wireless, broadband and other channels. Songwriters, artists, and authors now work on a daily basis with web developers, iTV producers, animators and games developers to create products and services for the entertainment industry, for education and for ecommerce. Non-professionals are also accessing (and purchasing) these products and services for their own creative activities.

The opportunities in a converged world, for Australia, are enormous. We note the opportunities put forward by the Games Developers Association in relation to interactive entertainment and those put forward by FIBRE in relation to broadband, and endorse those.

Interactive Games

)

Using interactive games as an example we note the following.

At the start of the 21st century, interactive games have redefined leisure and taken up a prominent position in the entertainment industries. From the primitive graphics and simple game play at milk bar table tops or Atari 'console's' in the early 80's, the proliferation of the PC and introduction of new generation 'consoles' have seen interactive games move from 'niche out-of-home arcade' experiences to become a central part of the mainstream entertainment experience.

But unlike the dotcom boom, this business is no flash-in-the-pan. Games now generate greater revenue than the Hollywood box office. In Australia, sales of hardware and software leapt by 31% in 2002 to \$825million. Australians now spend \$2.3million per day on interactive games – about the same as they spend on movies (source: Games Developers Association of Australia).

The research organisation IDC, has projected online gaming (not gambling, but games) will grow nearly 50% each year for the next few years, with US revenue climbing to \$US1.8 billion in 2005 from \$US210 million in 2002. UK research firm, In-Stat/MDR believes the market will be worth \$US2.8 billion worldwide by 2006.

Interactive games today range from simple website or mobile phone 'casual' games to highly sophisticated and immersive 3D worlds that give the player a sophisticated and ever more life-like virtual reality, providing an engaging and interactive experience unlike anything previously offered by other forms of traditional entertainment. Games are no longer the exclusive domain of 'teenage skateboarders' or 'computer geeks', with a wide cross section of society now playing a diverse range of games that mirror the options provided by TV and movie channels. Games provide a form of entertainment far different from television, movies, and theatre. Games allow players to perform fantasies and not just watch them unfold, to be heroines and heroes, not just admire them.

Australian Interactive Media Industry Association www.aimia.com.au | 02 9221 9399

Inquiry into the future opportunities for Australia's film, animation, special effects and electronic games industries



)

This has lead to a dramatic expansion in the demographic range for gamers particularly through the lucrative 18-34 segment who now play games as a regular weekly complement and/or alternative to traditional entertainment activities such as TV, movies and listening to music.

Having achieved a level of 'critical mass' in the home via PCs and TV, interactive games continue to evolve, with the emergence of a 'games everywhere and anywhere' culture driven by rapidly improving wireless services and a general transition beyond traditional one-to-one gaming toward new networked multiplayer options. Interactive games constitute the first true interactive media entertainment form combining cutting edge graphics and 3D animation, an amazing array of sound effects, rich originally composed soundtracks and the opportunity for the audience participate by playing a part in the performance.

AIMIA recognises the importance of interactive games with regard to future growth of the interactive media industry and has established an Interactive Entertainment Taskforce to identify key trends, issues and opportunities that will provide a roadmap for industry growth within this market.

Key Trends to Impact on Australia

- The emergence of 'gaming anywhere' and 'everywhere' with the introduction of new high speed wireless networks and sophisticated devices such as Java enabled mobile phones and sophisticated next generation 'Game Decks' such as Nokia's planned N-Gage.
- The accelerating transition from one-on-one game play where players pit themselves against 'the game', to online or networked multiplayer options where players play with or against other remote players from either home through broadband connected PCs and game consoles or 'on the move' via laptop at cafés with a wireless bubble, 'smart' mobile phone or game decks.
- The introduction of new iTV games services that will enhance the role of the TV set as a key channel to deliver entertainment into the home already established through the mass market adoption of games consoles over the past five years.
- To date, Australia's interactive games market has been predominantly focused on the development of PC and console games for the export market. With rapid advances in digital broadcasting, broadband and high-speed wireless data networks, new growth opportunities have emerged across these platforms. With significant broadband penetration in countries such as South Korea (we note broadband has fuelled the local games industry) and a cultural fascination with multiplayer gaming and wireless technologies, AIMIA recognises that Asia presents a key market opportunity for Australian developers.
- The announcement by Foxtel that it will broadcast digitally in 2004 opens the opportunity for iTV games to be delivered to more than 1 million digital set-top boxes.
- Leading console manufacturers Sony and Microsoft, have both announced plans to introduce 'live' services for their (respectively) PS2 and XBox platforms introducing broadband multiplayer as a standard console gaming experience.

Australian Interactive Media Industry Association www.aimia.com.au | 02 9221 9399

Inquiry into the future opportunities for Australia's film, animation, special effects and electronic games industries



Each of these key trends opens enormous opportunities for the interactive media and digital content industry. Like the industry though, these opportunities move fast. If Australia does not position itself (as it did with film) to nurture creative and technical development and foster the production environment for these areas, we will miss our chance. We urge the government to support the growth of these fledgling areas now.

Furthermore, broadband is a requisite technology if Australia is to exploit these opportunities and for it to position itself as a 21st century nation. We note FIBRE's views particularly in the areas of developing cost-efficient bandwidth-pricing models for young developers and urge the government to continue their support of FIBRE's work. We also urge the government to move quickly in support for the take-up and use of broadband technologies.

We believe the demand aggregation case implemented by FIBRE has application across our interactive media industry, and are hopeful that FIBRE can continue to expand its operations to lower the costs of broadband connectivity and services across the various sectors of the digital content industries. In particular, we encourage the application of this aggregation case across the SME sector that forms the bulk of AIMIA's membership.

Digital free-to-air broadcasting and efficient use of the datacasting spectrum would also provide enormous opportunities for the interactive media and digital content industries. Digital television and datacasting in conjunction with a <u>viable return path</u> would give a new medium for interactive innovation. Thus far the uptake of digital TV has been disappointing and the datacasting spectrum auction was a failure. We encourage the government to revisit its policies on digital TV and datacasting to ensure that this exciting new medium for interactive services is used to its full potential. We also encourage the government to work more effectively with the ABC particularly in its application to new emerging platforms where the ABC is regarded by the industry as incredible innovators and stimulators of the local interactive media industry.

QUESTION FOUR

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

As Australia becomes increasingly connected to and reliant on new technologies, bandwidth and broadband requirements inevitably will expand, particularly for interactive media professionals working in these areas. Moreover, non-professional users who will rely on efficient infrastructure will also increase the demand for 'always on' access and for the software and applications that allow them to take advantage of digital content and services.

Current bandwidth pricing and availability is an impediment for local games developers, special effects developers and the post-production industry.

In Australia, we have digital skills and experience comparable to Canada but we lag behind when it comes to the ability to access opportunities capitalise on the much



larger American industries. In previous times, this was attributable to proximity. With the potential for broadband to close the geographic gap, it is the pricing of broadband and bandwidth which restricts Australia's ability to compete with Canada for the highly valued North American market.

FIBRE and CeNTIE are seeking to address these problems but more could be done. AIMIA believes we need efficient and affordable pricing for "spiky" (large, irregular volumes) use of bandwidth, more availability of cable/fibre/DSL services to developers and the community at large, and a larger CeNTIE-type fibre loop. As CeNTIE is currently only in Australia we note there are offshore data capacity issues that need to be remedied as well.

Support for bandwidth for distribution of games on demand (rental/purchase business models) will be required for both broadband internet and high speed wireless networks (e.g. GPRS, 3G).

AIMIA sees essential infrastructure as more than just networks. It believes that Australia needs to rapidly achieve a critical mass of high quality digital resources that are available for commercial re-use. The prime source for this digital material would be from Australian cultural, scientific and historical collecting institutions.

QUESTION FIVE

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

Interactive media training is provided by dedicated institutions such as computer graphics colleges, TAFEs and higher education institutions. CREATE Australia has also developed a 'multimedia' training package for the Vocational Educational Training sector.

To stay at the forefront of interactive media requires organisations to move rapidly as new technologies, platforms and approaches emerge. Continued on-the-job training for staff is of the utmost importance and the ability to develop new rapid-coursecontent ensures the survival of these organisations and the professionals they produce.

Courses are accredited and colleges endorsed by the Vocational Education and Training Accreditation Board. This government body seeks to standardise qualifications and education facilities that are both beneficial to the students and provide quality assurance. Vocational Education and Training assures provision of industry-endorsed training will be delivered to an agreed standard within a rigorous qualifications framework. This industry, however, has unique requirements in that it demands regular updating to keep pace with changes in hardware, software, and the related evolution of content form.

The current accreditation regime, whilst necessary, slows down the ability for organisations to rapidly change course content and has forced teachers to become administrators. As a result, many capable and reliable teachers have opted to work in the industry and have abandoned their teaching.

Inquiry into the future opportunities for Australia's film, animation, special effects and electronic games industries



Complying with government standards can restrict an organisation's ability to implement change swiftly in response to industry need. This is a universal problem in technology-related education. As an example, an AIMIA member (interactive media educational institution) recently decided to remove a course due to falloff in demand. They attempted to add a new and exciting course to their existing range of education (a course with an emphasis on interactive digital video). The course material was submitted for approval in June 2002. In May 2003, they have still not had a response from VETAB. Furthermore following three audits this year, they have still not had word from the governing body. The result is to run the program as an unaccredited course that has resulted in further drop off in student numbers.

Australia is in the situation where students often know more about 'doing' interactive media than their accredited teachers. Currently for organisations seeking to meet VETAB standards, all teachers on staff must have Certificate IV in Workplace Training and Assessment and/or relevant work experience in the competencies they are teaching. AIMIA would like to see the vocational education sector approval framework become more flexible and more tolerant to a range of teaching qualifications.

We are not convinced this framework succeeds and would thus like to see it reviewed.

Furthermore, the cost of imported hardware and software to both private institutions and to students is prohibitive and there does not seem to be any tax alleviation in sight. If the government wishes to encourage the development of the industry and to ensure educational services are competitive in an international arena, it should consider ways to make its tools more affordable. We note the same for imported software, development text books and other information sources which have also become prohibitively expensive resulting in restriction on student research and development.

QUESTION SIX

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

Interactive media is by nature fragmented – as is its impact across multiple industries. Mechanisms designed to foster collaboration and networking are needed but there is currently no focused industry development specifically designed for the impact of convergence across these sectors.

Australian Interactive Media Industry Association www.aimia.com.au | 02 9221 9399



AIMIA believes industry development therefore should focus on following core areas:

- Funding and supporting innovation, emerging ideas and models.
- Commercialisation and export, stimulating content development and interactive media development through co-investment and funding (access to equity funding and working capital).
- Access to effective distribution channels and markets.
- Fostering collaboration amongst the interactive media, games, broadband, film, TV, and publishing industries linking them with research facilities, arts and cultural institutions, interactive media labs and high-tech research labs such as CeNTIE or Sun's Digital Media Lab.

AIMIA's members, as an example, have the skills, expertise and insight to share with the industries affected by fast networks and 'always-on' technologies. Interactive media professionals and associations such as AIMIA are well placed to foster these important and necessary linkages.

AIMIA promotes the interactive media industry and facilitates links across its sectors through industry development for example through the Games Developers Association, Screen Producers Association, Australian Graphic Designers Association, the Learning Federation and the Australian Film Commission. We are convinced the development of these linkages is vital and encourage the government to provide regular funding for this work to continue.

QUESTION SEVEN

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

While Austrade offers and supports a range of TradeStart and export access programs, their focus is primarily on ICT – an area that is perhaps easier to manage than the more fragmented and creative 'digital content' industry. There is a need for Austrade to employ specialist content advisers and facilitators and to focus on this rapidly expanding area in their European, US and Asian offices and to link with potential exporters from Australia.

AIMIA is aware that recognition of an industry by government attracts investment. Government investment in and promotion of the industry is an essential first step in attracting serious private sector investment.



QUESTION EIGHT

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 following list is a summary of the barriers and impediments to growth in interactive media:

- Recognition of the importance of the interactive media industry.
- Access to equity funding and working capital.
- Distribution bottlenecks and access to markets.
- Broadband penetration.
- Return on investment in R&D.
- Lagging statistical indicators.
- IP Regimes and Crown Cpyright.
- No common digital rights information management regime.
- Significant information holes (particularly for organisations ability to track potential technology or market shocks).
- Culture clashes, limiting linkages across related markets (between content developers and IT firms), and between traditional incumbents and emerging digital developers (e.g. advertising and television).
- First mover casualities (short term reaction to the dot.com tech wreck).
- Branding into global markets.
- Increasing cost of core technology.

Given these current constraints, programs designed to assist with these barriers and impediments to growth would be welcome.

Additionally, AIMIA would like to see:

- New and committed funds are needed for active industry collaboration and development. We believe from an industry point of view that AIMIA would be in an excellent position to facilitate a project or program in this area.
- Local content requirements for interactive media. Ensure there is local content for the new and emerging platforms specifically, Pay TV and Free-to-Air broadcasters should have minimum local content requirements. It is currently unclear how these apply to interactivity such as iTV.
- Incentives for local film production. Ideally, the government should increase incentives for investment in film, games and interactive components of films and television programming.
- Increase funding for the new emerging programs being developed by the ABC and SBS. The ABC and SBS have been great crucibles for development of Australia drama, comedy and documentaries (and for training new generations of interactive media workers). The ABC in particular is well respected amongst



the interactive media industry for its work with new and emerging technologies (SMS, digital TV, iTV, etc).

- Free Trade Agreement. The US movie houses are anxious to use the FTA negotiations to remove 'unfair' protection of the local film industry. The government should ensure throughout its Free Trade negotiations that it retains the right to subsidise and protect the local film, games and interactive industries.
- More focus on the take-up of digital TV. Digital TV promises multi-channelling and interactivity which will provide opportunities for digital content development. AIMIA would be delighted to see policies that encourage use of local developers.
- Continued investment in encouraging the take-up of broadband technologies.
- The government should implement the recommendations of the recent Broadband Advisory Group. At the bare minimum, we are yet to see a response from government in relation to the Advisory Group's recommendations.
- AIMIA's members create and produce intellectual property (in the form of digital content). One of the consistently identified problems for the Australian economy is that we are net importers and consumers of content, rather than creators and exporters. Yet we have a well-developed digital content industry with the potential to produce and export innovative and commercially attractive interactive media. As a nation however, we have no strategies and no significant funding to support it. AIMIA wants to see a coherent strategy and commitment in the form of funding and/or financing assistance for the production and distribution of digital content.
- As witnessed over the past couple of years, content is king. Technology is nothing without content, witness the many failed technologies of previous eras that withered because there was no social need or social use for them when they were in a critical stage of development. While we have many new technologies on the horizon, they will not flower without appropriate social, cultural and economic use applications - and this translates to content in the contexts of both products and services.
- With the turnover from games revenue exceeding Hollywood revenue for the first time in history, more funds should be made available to organisations such as AIMIA and the Games Developers Association to help support the rapidly emerging interactive entertainment markets.
- Development of funding programs, incubators to support the successful development of an Australian games industry with a global export focus.
- Specific initiatives dedicated to the emerging opportunities in the e-learning marketplace.
- Funding for teachers of interactive media and emerging technologies. Teaching
 interactive media requires not only the teaching expertise but also extra staff
 to establish and maintain hardware and software as well as new classroom
 approaches to teaching by doing.



- Development of funding to support development and innovation within the 'Complimentary Creative Industries' essential to the development of a successful Australian games industry e.g. special effects/computer generated graphics (CGI), advertising and design services and digital audio/video production.
- Support for bandwidth for distribution of 'games on demand' (rental/purchase business models) will be required for both broadband Internet and high speed wireless networks (e.g. GPRS, 3G).

CONCLUSION

As the industry body most closely associated with the interactive media industry, we are acutely aware that it is in need of urgent assistance.

We have drawn attention to some of the problems currently facing the industry – and to some possible solutions – all of which require leadership and support from government, industry and the private sector.

We would be pleased to have further discussions with government about the views presented in this submission and look forward to hearing the outcomes of this Inquiry.

ENDS