



COMMONWEALTH OF AUSTRALIA

Proof Committee Hansard

SENATE

ENVIRONMENT AND COMMUNICATIONS REFERENCES
COMMITTEE

Future of Australia's video game development industry

(Public)

FRIDAY, 19 FEBRUARY 2016

MELBOURNE

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SENATE

ENVIRONMENT AND COMMUNICATIONS REFERENCES COMMITTEE

Friday, 19 February 2016

Members in attendance: Senators Bullock, Ludlam, Reynolds, Urquhart.

Terms of Reference for the Inquiry:

To inquire into and report on:

The future of Australia's video game development industry, with particular reference to:

- a. how Australia can best set regulatory and taxation frameworks that will allow the local video game development industry to grow and fully meet its potential as a substantial employer,
- b. how Australia can attract video game companies to set up development operations in Australia and employ local staff,
- c. how export opportunities from Australia's local video game industry can be maximised, and
- d. any other related matters.

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REED, Mr Antony, Chief Executive Officer, Game Developers' Association of Australia**Committee met at 08:55**

CHAIR (Senator Urquhart): I declare open this public hearing of the Senate Environment and Communications References Committee in relation to its inquiry into the future of Australia's video game development industry. This is a public hearing, and a *Hansard* transcript of the proceedings is being made. Before the committee starts taking evidence, I remind all witnesses that, in giving evidence to the committee, they are protected by parliamentary privilege. It is unlawful for anyone to threaten or disadvantage a witness on account of evidence given to a committee. Such action may be treated by the Senate as a contempt. It is also a contempt to give false or misleading evidence to a committee.

The committee prefers all evidence to be given in public, but under the Senate's resolutions witnesses have the right to request to be heard in private session. It is important that witnesses give the committee notice if they intend to ask to give evidence in camera. In addition, if the committee has reason to believe that evidence about to be given may reflect adversely on a person, the committee may also direct that the evidence be heard in private session.

If a witness objects to answering a question, the witness should state the ground upon which the objection is taken, and the committee will determine whether it will insist on an answer, having regard to the ground which is claimed. If the committee determines to insist on an answer, a witness may request that the answer be given in camera. Such a request may also be made at any other time.

On behalf of the committee, I would like to thank all of those who have made submissions and sent representatives here today for their cooperation in this inquiry. I now welcome the representative from Game Developers' Association of Australia. Information on parliamentary privilege and the protection of witnesses and evidence has been provided to you. Have you received that, Mr Reed?

Mr Reed: Yes.

CHAIR: The committee has your submission. I invite you to make a brief opening statement and then the committee will ask questions.

Mr Reed: The Australian game development industry began in 1980 with the establishment of Beam Software. Nearly 20 years later the Game Developers' Association of Australia was founded and tasked with representing the interests of a successful and growing industry, one of those interests being to achieve the same recognition, legitimacy and, yes, support from the Australian federal government as that afforded to other creative sectors. Fast forward another 13 years and the then arts minister, Simon Crean, announced the Australian Interactive Games Fund—the first federal government support initiative dedicated entirely to the Australian game development sector.

The global games industry had, by now, become the most dominant and successful of the entertainment media format. Year on year, the global industry posted revenues in the billions, and compound annual growth predictions far exceeded those of any other creative sector. Games drove, and continue to drive, innovation. Games have pervaded non-entertainment sectors like health, education and defence. Broader public sentiment towards games has changed with greater understanding of the medium, and games themselves have become more diverse, from simple entertaining experiences to delivering complex and challenging narratives. We now have generations that have grown up with games. Australian developers have been there every step of the way and are celebrated internationally for the quality of work they consistently produce.

Barely a year after the Interactive Games Fund was introduced, it was discontinued by the federal government. The initiative was dropped without consultation or any attempt at understanding the purpose or structure of the program. This may sound like a slight, a criticism of the government; it is not. We are an industry of solutions. After a day of justifiable anger, the sector came together to discuss how, as a community, this new hurdle could be overcome. The removal of the fund did not stifle creativity. It did not hamper production. The sector rallied and we moved on. However, the absence of the fund impedes the growth of the sector.

I focus on the Interactive Games Fund as it was the first federal support program committed entirely to the games industry. In the design of the fund, the industry was consulted and, as one, agreed that the \$20 million commitment be used for growth. The sector also suggested the model be self-sustaining, determined not to become a patronage industry heavily reliant on government funding. It was working. Some funding recipients have generated export revenues more than 10 times the original investment from the fund. Some have doubled or tripled the size of their studios or moved from contract arrangements to full-time employment. Many have won international awards for their work. There are many more examples, some of which will be heard today from other speakers.

The revenue generated by these businesses comes back into Australia as taxable income, which is quite nice actually. The economic argument for supporting games is compelling; however, financial return is not a major motivator for game creators. Games are another medium for conveying stories and experiences to players. Games differ from passive media forms in their direct engagement with the player. Games expect more of a player than a film or a book, and in doing so game creators have dialogue with each individual player.

This personal experience offered by games is a major reason for the medium permeating into non-entertainment sectors. Games are now being used in health care, in preventive health and in rehabilitation recovery. Games are used in Defence for a recruitment and training, for recreation and for postdeployment treatment. Games are being used in education across all subjects. And game design methodologies are being used in corporate spaces to motivate employees.

For 36 years brilliant, creative, intelligent Australian game developers have been creating content that has been enjoyed by players around the world. With little support in a highly competitive environment they have persevered and maintained the global opinion that Australia has some of the best talent in the world. Why do we seek government intervention? It is for the same reason we always have. The sector wants to grow. We want to create more content. We want to provide more employment opportunities. We want to be significant contributors to Australia's cultural knowledge and financial economies.

In the submissions to this inquiry this committee has been provided with numerous statistics, arguments for and examples of successful support programs for games. I would like to task this committee with learning more about us, the people behind the games—our motivations, our aspirations, our passion and our drive. Make this the foundation of your recommendations.

CHAIR: Can I start off by asking you to expand a little bit on the issue that you talked about with games used in health and health care.

Mr Reed: It is becoming more and more prevalent now. It is already being used successfully. In fact, if you pop down to the Royal Children's Hospital you will see they using games there, and the Murdoch Childrens Research Institute is developing a variety of tools to help with rehabilitation using games technologies. It is a really interesting thing to see. It is being used for cancer treatment as well. In the case of Defence, it has been used for soldiers who come back with injuries, especially burns. Yes, it is pretty prolific now and will grow.

CHAIR: You talked about the removal of the fund impeding the growth of the industry, and you said that you wanted to continue to grow the sector. How do you see that happening without the assistance of the fund?

Mr Reed: One of the issues the industry faces is a lack of sophisticated investment. I do not think this is particularly isolated to the games industry, per se, I think the creative industries suffer from this in general. Without that investment it is very, very difficult for companies to invest in experimental ideas and to take risks. As such, when we built the fund and created the guidelines for it, it was about exactly that—addressing that need to take those risks. We still do not have that network. There are no incentives for investors to invest in the innovation in Australia. That was what the fund was originally intended to address.

CHAIR: Without that investment, how do you continue to go on and grow? How do you see the future without that investment?

Mr Reed: We certainly do not grow at a pace that would make us and keep us competitive with the rest of the world. That is the reality. We will still grow.

CHAIR: So it is the competition with the rest of the world that enables you to grow in terms of that investment?

Mr Reed: Absolutely. Our issue right now is, if you look at the education system, we see enrolments of over 5,000 students a year into games or games related courses. There are only just 1,000 active participants in this industry. So we are effectively graduating five times more students than there are people in this industry. We do not have the ability to cater to those graduates. That is a problem for us. They will either be moved into sectors that they do not necessarily want to be moved into or they will have to go overseas, and we do not want to lose that talent. We have some really incredible graduates.

Senator LUDLAM: Thanks for coming in, Mr Reed, and thanks for your submission. You went into a bit of detail. Because this is the first hearing that this committee has had into this subject and you are the fitness witness—which I think is appropriate—can you just give us a thumbnail sketch of the history of the last 10 or so years of the industry—what you guys have been through, maybe in the immediate lead-up to the global financial crisis, and what has happened since then.

Mr Reed: Certainly. Leading up to the global financial crisis, the industry was comprised mainly of contract work—that is, work that was provided by international publishers. The work was funded entirely by those publishers, and the intellectual property was held by those publishers. The industry was very successful at the time.

Into the global financial crisis, we had a significant business restructure of those global publishers. We were developing a lot of content, and the market was becoming saturated. What happened during the crisis was that all of the publishers revisited their business models, and many of the large studios that existed in Australia that had subsisted on that contract model were closed. We talk about this quite often, but we tend to talk about it in the context that it only happened in Australia—it really did not. It was worldwide. The studios that were closed here were equally closed in Europe, in the US and in Canada. A lot of people lost their jobs during that time period.

However, during the global financial crisis we also saw the construct of digital distribution as an opportunity. What that did was it removed a barrier to entry to the consumer. It allowed us to go directly to the consumer and avoid that publisher middleman. Also, technology increased and improved and allowed us to build games on existing technologies so we could then focus more on content than we did on the technology. In doing so—and Apple is hugely responsible for this, by providing a massive audience—we could then have this platform, get out to new audiences, create our own products—ordinarily based on savings, and still that model has not changed; game studios are funded by savings right now—and reach consumers directly. This was really embraced early by Australia. We probably did this better than most other territories in the world.

We lost just over 60 per cent of our talent to overseas during the GFC. Those that remained formed new businesses on the digital model and have done extraordinarily well since then. We have capitalised on every digital platform that there is, and we have become world leaders in that. Again, we are revered around the world for the content that we produce.

Senator LUDLAM: But it seems as though the structure of the industry is really different to what it was before.

Mr Reed: Very. It is comprised now of very small, dynamic studios as opposed to the very large growth employers that we saw in the past.

Senator LUDLAM: In terms of state and territory assistance, what else is there on the landscape since the Commonwealth left?

Mr Reed: Victoria really is the only state that supports the industry in any meaningful form. There is a very, very small program in Queensland; however, Victoria has been supporting the industry for quite a number of years. As a result, 48 per cent of the national game development industry is in Victoria. Victoria supports production funding, understanding that, especially for new businesses, that project funding will help a new business and mitigate some of the financial risk to them. It supports, very cleverly, marketing. One of the great issues that we have in the digital distribution space is getting to that audience and making them aware of the product. Film Victoria have a special program that endorses and supports marketing, and they also support internships into game digital studios, so they are really nurturing that talent going forward.

Senator LUDLAM: It is an industry a bit unlike anything else. Obviously, it is still evolving, but it is not the same as the film industry or the music industry. Could you just briefly sketch for us what the structure of the market globally is. What is the market that the local developers confront?

Mr Reed: That is a big question. We all know that games are the biggest entertainment media in the world now, and the reality—

Senator LUDLAM: I am not sure if that actually is widely understood. Start at the beginning.

Mr Reed: Games have become the most dominant entertainment form in the world. It is predicted to be a \$100 billion industry in the next couple of years. Our markets are broad and global. We are an export-oriented industry, and—I think to your point, Senator—we are a very labour-intensive industry as well, unlike film, where it is quite disparate; after a project, people vanish into the ether. We do not. We provide full-time employment, and our talent is valued.

Our markets are around the world. We are entirely export orientated, as I said, and we look at all territories as potential markets. We do not make games specifically for any particular territory. This is particularly true of Australia. We are export-oriented because Australia is two per cent of the global market. It really could not sustain an industry of our scale. So we look to the Western markets. The reason we are as good as we are is that we do not see ourselves as being competitors. We see the rest of the world as our competitors. That is the bar we challenge ourselves with.

So, regardless of the territory and regardless of the platform, we are there. The issue we have right now is that we cannot explore new platforms, such as the big consoles—the PlayStation 4s and Xbox Ones—because they require significant investments. But the world is ours.

Senator LUDLAM: I am trying to get to market structure, I suppose, and how it is a bit different to other industries. It is not that you work for a publisher and people walk into a shop and they buy a game in a box. Those days are behind us. What does it look like these days?

Mr Reed: Right now it is entirely digital. Regardless of platform, there is a digital store that is available to a game developer. Once awareness of the game has been raised, invariably—no matter what device you have—that game appears in a digital platform in a digital marketplace and it is paid for as you would your phone bill. Yes, we no longer need to walk into a store to gain our content. That makes it accessible at any time as well, which obviously works to our advantage. Yes, games are immediately available when we need them to be.

Senator LUDLAM: We are going to check out The Arcade a little later in the day, but could you just provide a sketch of the different skill sets—the different domains of skills? It is actually quite diverse, isn't it? It is not just hackers sitting there cutting code; there are a lot of quite diverse skills involved.

Mr Reed: We talk a lot about the transferable skills that are developed as a result of working in the games industry. That is very true; our talent is headhunted all the time by different sectors. Game development is comprised of a number of disciplines, the most common being that programmer—the technicians that everybody hears about. When we talk about games or when people outside of the industry talk about games they normally talk about the code element.

That is not it at all. They are an important part of the structure—obviously, they create the technology on which the game is based—but we have artists, designers and project managers, and all of those disciplines can be broken down into various roles as well. An artist can be broken down into a lead, a character and environmental. So we have both these really specific and general skill sets that comprise a game development studio. In some studios, in a small studio of two, you could have one person assuming many of these roles. For example, in a studio like Firemonkeys, in St Kilda Road, where you have almost 200 people, you have a lot of specialists in very, very specific areas of technical art or project management design.

Senator LUDLAM: There has been a lot of talk since Mr Turnbull took office around agility, innovation and start-ups. I feel like this stuff has your name all over it. It might as well be describing your sector. What pick-up or response have you had from the new government thus far?

Mr Reed: None. But to be fair, I have contacted Minister Fifield, but I have not followed up with Minister Fifield yet. It is certainly a conversation we are to have. In all of the dialogue and the vocabulary being used by the Prime Minister right now, yes, it describes us to a T. There is no question; we encapsulate every one of the innovation arguments that he makes. But the federal government has not reached out to us in any form at all—yet.

Senator LUDLAM: Well, at least the Senate is reaching out!

Mr Reed: Exactly. This is a unique experience for us. This has never happened before, so we are quite excited, a little bit humble and very anxious about this.

Senator LUDLAM: You are amongst friends!

Senator BULLOCK: When you were talking about being export oriented, you said that Australia, with two per cent—and I hope I quote you correctly—'Can't sustain an industry on our scale.' I think you said that. That is the scale that is currently employing 827 people, according to your submission, and there are 5,697 people being trained for it. If Australia cannot support what we have now, and we are training many times as many people—training them right now—to find a place in that industry, what proportion of the world market are you hoping to capture? It sounds like you want to rule the world.

Mr Reed: When I said that Australia cannot sustain an industry of our scale, it is to do with consumers. Consumers have a lot choice when it comes to games. Yes, it is only two per cent of global revenues, but consumers have choice. They are not necessarily only buying Australian-made games, and so we look to the rest of the world. Are you wondering how we want to be supported by that?

Senator BULLOCK: I just wondered if it were realistic to expect that even all those people who are being trained for the industry now could find employment within it, in the best of all possible worlds.

Mr Reed: Our compound annual growth rate for the industry is almost 10 per cent, year on year. It is certainly significantly higher than any other creative sector, but it is higher than most manufacturing industries as well. Our audience grows daily. There are billions of people playing games and new people joining that fray every day. I suspect there are members of this committee who play games occasionally as well. It is not necessarily about

capturing a market share at all; it is about sharing the experience and the stories that we create. Melbourne based Hipster Whale would be a shining example of this. They released a game called *Crossy Road*. That game now has over 120 million players around the world. That is the kind of market we are talking about. That one game has captured almost four times the Australian population.

Senator BULLOCK: In your recommendations, you talked about the Export Market Development Grants, which obviously, given what we were just talking about, are very important. You said, 'The program could be better targeted towards digital businesses.'

Mr Reed: Yes.

Senator BULLOCK: That is a nice sentence, but it is not enough for me. Pad that out. What do you want in terms of better targeting?

Mr Reed: The EMDG is a wonderful program that has been around for a very long time and does support international activity for game development. However, it is limited. There are only a finite number of times you can apply to the EMDG to support assistance with travel. That is predominantly what and how it is used for and by the sector.

Coming back to the marketing point, it is critically important for Australian developers to reach international audiences. We do this by attending massive international trade fairs. We are all off to a big event called the Game Developers Conference next month in San Francisco. It is a trade only event. About 25,000 people turn up for that, but they will have significant media presence. A few weeks after that will be an event called PAX East, in Boston. That will attract between 65,000 and 75,000 consumers. It is in those events that Australian developers appear and really promote their games to what seems like a US audience, but news within the games industry travels globally very, very quickly.

In fact, we remain the only territory outside the United States that has a PAX, which is held here at the end of October. It will be in November this year. PAX here attracts 55,000. It is an event that is entirely built on the culture of games and celebrates games and players. It is one of the biggest events there are, and Australia, because of our reputation as both developers and consumers of content, scored the first PAX outside the US. You should come.

Senator BULLOCK: The last game I played was chess.

Mr Reed: That is brilliant: great rules, awesome balance. It is a great game.

CHAIR: Was that electronically?

Senator BULLOCK: No. One of our other submissions says that the industry is prone to a workplace culture characterised by 'unreasonable and exploitative labour practices'. What is your response to that?

Mr Reed: I think that was definitely true eight to 10 years ago. I think in those very large studio environments where pressure was being placed on developers, especially from international publishers and those investors, they were forced to deliver content at speed. The industry did go into a very unhealthy place. It was part of the industrial conversation, a lot of it. It has changed substantially since the global financial crisis and since the creation of these smaller, dynamic studios. It is termed 'crunch' in our industry and is almost unavoidable. It has, unfortunately, been given a name and hence it has become a topic of conversation.

Does it still exist in Australia? No, not as far as I know, and I am aware of all 225 studios that we have in this country. I have personal relationships with almost every one of them. We do not have those practices anymore. Did it exist? Absolutely. We do not deny that it did. There have been some terrible cases. But, as CEO of an association that is tasked with taking care of this industry, I tend to manage and watch over those companies to ensure that does not happen. It is not something we are proud of at all, but it is something that definitely happened.

Senator BULLOCK: Thank you for that, Mr Reed. I hope the government can come to your assistance, because their effect on other manufacturing industry in this country has been to destroy it. Maybe you are the future.

Mr Reed: We look at the car industry, for example, and we look at the mining industry. We think constantly about how we apply our technologies and our methodologies to what we do. We already have games in mines. We have games that map out mines. We have games for training those big diggery things. We looked at the car industry. We thought: 'What about all those designers? Where are they going to go?'

We could have the best industry for making car-racing simulators, which I think is the second largest genre in our sector. Taking those designers, taking those engineers—we could have taken them and retrained them and created

a particular genre that Australia would excel in. There are things that this industry can do that nobody really thinks about. But we can do some really cool stuff, and we want to. We want to help.

CHAIR: I might jump in. I feel like I was born in the 1950s, as I was—I do know about those diggy thingies in mines, though; they are called jumbos, so I can tell you that—because my question is: how do you know if it is an Australian made game? They are so accessible through just punching onto the internet or whatever you do. How do you actually know that they are Australian, and how then can you grow that industry from here?

Mr Reed: I love that question because it is a really interesting one. Typically, in the past we have never really cared about that brand being attached to our games. Games are games. It does not matter where they are made. It is interesting, however, that because of the success of the Australian market recently a lot more attention has been given to us, so we tend to find ourselves promoting Australia as much as the games in our communications. In the past, no, you would not have known. There is no way you would have known. If you looked at a digital store, there is no way you would know. However, when you consume the media associated with games, you start to learn where those games originated. I point at Giselle here because she is the representative of Hipster Whale and at Ben who works with Mighty Games. They have just had a massive success with their game *Shooty Skies*—

CHAIR: Sorry, what was it called?

Mr Reed: *Shooty Skies*. We are going through a genre. It is called 'verby nouns'!

CHAIR: I am sure we will know all about that by the end of the day.

Senator LUDLAM: You will be able to find it in the *Hansard*.

Mr Reed: Yes, verby nouns! If you look at Associated Press coverage and media coverage, you start to see Australia appearing more and more now—and very proudly. I think we used to dilute it, which is a shame because we have for a very, very long time produced amazing content. Now we actually promote Australia quite aggressively.

CHAIR: In your submission, you talk about youth unemployment, and we all know that is a very difficult area. I come from the north-west of Tasmania, where the youth unemployment is around 17 or 18 per cent. Can you expand a little bit more on how you see the opportunities? Again, coming from the 1950s, I am a baby boomer. I am interested to know if this is an industry only for young people.

Mr Reed: No.

Senator BULLOCK: You are a young person.

Mr Reed: I have a few miles on me.

CHAIR: It depends on what eyes you look through, I think!

Mr Reed: It is absolutely not just an industry for young people. It is an industry for talent and intelligence. We do not judge people on their age. We do not judge people on their gender. We look at diversity in its entirety. We value new contributors to our sector because the consumers want new, innovative ideas.

In terms of unemployment, we are working with the department of education right now on the implementation of the new digital technologies curriculum, looking at how we train young students early, not only in code—which I think has, unfortunately, been attached quite heavily to the digital technologies curriculum—but just in the creation of content in general. We want to take those young artists. We want to take those little bossy boots who might be great project managers, and young designers and mathematicians who, yes, will become the coders and create a classroom that can develop a game across any subject. The one I think we refer to most is in English. Why don't we create a game on *Pride and Prejudice* in which you could play every character in the book and play the story through their eyes?

What we are trying to do is get to the point where we are encouraging especially more young women into STEM related fields. I very proudly sit on the board of the Australian STEM Video Game Challenge and have done so since its inauguration. We want to create an environment in which, when those young students graduate, regardless of what fields they go into—you find a passion in everything you do. I do not care whether you are a bus driver or an accountant or, in our particular case, a game developer. Passion is always there. We can teach structure. We can teach format. We can teach process that will absolutely benefit the youth going forward.

We are doing work with prisons right now and looking at how games might be useful in rehabilitation. I am working again with the DET on a Koori literacy program for young Indigenous children who are struggling at school. I am also working on another program to introduce and create an Indigenous owned and run game development studio in which we can convey stories. We are looking for those opportunities where we can find the disaffected and use games to bring them back into the community and into society.

CHAIR: Getting back to young people, if you have a young person who maybe loves playing games and is really into that scene, how do they find the pathway to get where you guys are now? How visible is that for them?

Mr Reed: It is reasonably visible if they go looking. The one thing that the game industry does extraordinarily well—

CHAIR: But the question is: do they know where to start looking? If somebody is thinking, 'That's something I'd love to do but I don't have much idea of how to get into it,' is it easy to find that pathway?

Mr Reed: It is reasonably easy if you know the right questions to ask.

CHAIR: So how do we make it easier to attract young people?

Mr Reed: That is a really good question. I think it is by creating more awareness of the sector and the opportunities that are available in it. We say we would like to invite everybody to make games, but it is an extraordinarily difficult thing to do, especially to make a successful game. Working in games is tough. It is psychologically demanding on its participants. Yes, we should be raising awareness that this is out there. There are more than enough free resources online to allow people to get into the process of making games. That is one thing that the games industry is really good at; it shares its knowledge very, very willingly. So anybody anywhere could make a game right now. Yes, access to the internet is kind of useful. But it can happen. They can start now, based on a lot of free technologies and tutorials that are online. Part and parcel of that is making games about their experiences and using their experiences to convey a new narrative, a new experience.

Senator REYNOLDS: Good morning, Mr Reed. Thank you very much for your submission and your testimony this morning. I have to say that, from reading your submission and others, I am incredibly excited by the future of and opportunities in your industry. I think it is a shame that we are not doing more to promote the profession and also the industry and the opportunities that it provides. As a new convert to *Crossy Road*—

Unidentified speaker: Thank you!

CHAIR: a very bad one. Those logs get me every time. That aside, from reading your submission and listening to you this morning, it seems that, like in a lot of other innovative industries, the main problem is seed funding and venture capital, and our risk profile. It is not that we have lacked money here in Australia for investments; it is that we have not really made it easy or encouraged people to invest in these sorts of ventures. Is that what you find in your industry?

Mr Reed: Absolutely. You do not see that in territories that have really sophisticated investment networks. You do not see that in Canada, you do not see that in the US and you do not see that in the UK and a lot of Europe. Australia has a culture of commodities investment—and why not? It is probably the safest bet. You don't think so?

Senator BULLOCK: Commodities? At the minute?

Mr Reed: Not right now.

Senator REYNOLDS: Depends on the commodity.

Mr Reed: What we have not done is encouraged investment in Australian intelligence and Australian creativity. This is where the government could play a very significant part—looking at methods of mitigating the risk to investors in innovation spaces. We have not seen that. In other territories it takes the form of some sort of tax concession or tax benefit, and that encourages investment. We could make the argument that in the US they have not had that. They have had Sand Hill Road in San Francisco, with billions of dollars. That is actually not true any more. Games are obviously our area of focus, and many of the states in the US right now are implementing tax incentive schemes to encourage investment into those sectors. We have been poor at that in Australia. We have not done a good job of encouraging investment into our smarts.

Senator REYNOLDS: What seems to be the real problem here is not that there is a lack of money but that there is a lack of a risk profile and understanding of the industries. You might have to fund two, three, four or five; but then, when you do fund the sixth one, it comes in big.

Mr Reed: Absolutely. That was the case with the fund as well. We got a little bit lucky with the fund, but we have had a lot of success stories out of it. But, yes, the fund was developed to address that risk, to allow developers to take risks. We would not go as far as five. If you get to five and you are still not doing it, it is probably time to not do it anymore. Yes, take those risks and maybe fail a couple of times—because failure for us is learning. We do not embrace it because it is not nice, but we learn from failure and we grow from it.

Senator REYNOLDS: I went to Israel last year and had a look at how they have gone from a very risk-averse, bureaucratic culture to one of really understanding risk and understanding this industry and the allied industries. It was very encouraging. Coming back here, I see that we have a long way to go in that.

I was encouraged to hear that you were going to reach out to Mitch Fifield. Have you reached out to Assistant Minister for Innovation Wyatt Roy?

Mr Reed: Yes, we have had communications with Mr Roy. I believe he was going to be popping into the arcade at some point the next time he is in town. We are also planning a day in Canberra to talk about the games industry. May is the month I think we are coming up.

Senator REYNOLDS: Hopefully on a sitting day so we can all—

Mr Reed: Yes, that is the plan.

Senator LUDLAM: Maybe budget day?

Mr Reed: That is a great idea. Let's do that.

Senator REYNOLDS: That might not be a bad idea. In light of that, have you had a chance to look at the National Innovation and Science Agenda?

Mr Reed: I have. Obviously, games are not included in that, but there are elements of it that apply to games that we will discuss further.

Senator REYNOLDS: In terms of 'we will discuss further', I have gone through and had a quick look at it while we were talking and there are at least 19 separate initiatives which are not industry specific. I was listening to you this morning, and, as to some of those initiatives: if a fund does not appear in the next budget—and there is a possibility it will not—what are the alternatives? Can I go through some of these and get a sense from you of which ones might be applicable to your industry? Then, out of that, can I get a sense of where the gap might still be and, if we do not get a specific fund from government, what other things we might look at to further help? The first one here is about making it easier to assess crowdsourced equity funding. Obviously there are legislative barriers at the moment to that. Is that something that is a potential for your industry?

Mr Reed: Absolutely. We have not really had an issue in that regard. I think the bulk of the Australian games that have been crowdsourced have been very successful—you might even meet some of those this afternoon. Yes, absolutely. That entire model is going to take strain. In the case of things like Kickstarter, it now feels more like a popularity contest than an investment in the actual product that is being proposed. If you look at some of the biggest projects that have been on Kickstarter and look at the brand names behind them, there is significant disparity between a small unknown versus a known celebrity-endorsed product on a crowdsourcing campaign. There are also a lot of platforms out there that do not get the same sort of recognition as Kickstarter, but absolutely that would be of benefit to us.

Senator REYNOLDS: The next one was tax breaks: a 20 per cent non-refundable tax offset. Is that something of use?

Mr Reed: Very definitely. What we have seen in international territories where you do have a very similar model is reinvestment straight back into the company. That would be exactly the same. Back in the early 2000s, the games industry, for a very short period of time, had access to the 10BA which provided a very similar tax break. We saw, in that very short amount of time, reinvestment straight back into the companies. The games sector does not generally take that money and hide away with it. They want to play more so they make more.

Senator REYNOLDS: The next one was: changes to the tax treatment of venture capital limited partnerships or VCLPs. Are they players in your space at all, or not really?

Mr Reed: No. There has been limited investment by VCs in the games sector. The issue that we faced is that the VC model does not really suit the gaming industry. It tends to be very short term with an early exit. That is not really how game developers think. This is a career investment for them, so the VC model has not typically worked in our case, no.

Senator REYNOLDS: This one is: better access to company losses to help companies innovate and grow. Again, it is not penalising for seeking out new opportunities to innovate. That is within companies themselves, so that you can access losses in your business more readily. In terms of some of your new start-ups that might be underway, is that something that might help them grow?

Mr Reed: To a limited degree. Those losses are not that substantial that there would be any sort of burden to the government at all. Yes, it would be useful.

Senator REYNOLDS: In some cases?

Mr Reed: In some cases, yes.

Senator REYNOLDS: Additional support to incubators and accelerators more generally?

Mr Reed: Absolutely. We have, in Melbourne, The Arcade which is demonstrably one of the most successful collaborative work spaces that has been created in this country. Seeing likeminded people coming together and being encouraged to work in a non-competitive environment has enormous benefits.

Senator REYNOLDS: There are the next two initiatives. On the face of it, I thought that maybe there are not really great opportunities here, but maybe in an innovative way there could be. 'Opportunities to provide innovative solutions to government' and 'More opportunities to do business with government'—I do not know whether, on the face of it, you look at that and say: 'Are there any opportunities in your industry?'

Mr Reed: Undoubtedly.

Senator REYNOLDS: What sorts of areas?

Mr Reed: We have looked at methods of assisting government in a variety of areas. One of the ideas that we proposed a very short time ago to the Victorian government was: let us map out the entire public transportation system in the form of a game and then hand it out to the public with the same resources, the same finances and the same issues—hand it out to the public so you do not have a room of four or five strategists trying to work out the best timetable; you have 500,000 to a million people trying to work out the best timetable and the best way to manage the public transportation system. These are things we can do. There are plenty of options out there.

Senator REYNOLDS: Are you able to provide the committee with more information on that?

Mr Reed: It was just an idea.

Senator REYNOLDS: I do not know about the rest of the committee, but I think it sounds like a fantastic idea.

Mr Reed: We can use our technologies to find solutions like that. Defence obviously uses games technology a lot—not well sometimes, but they do use it. We would probably like to be more involved in that process so you get a better outcome than you have had.

Senator REYNOLDS: Then there is a suite of polities around intangibles—making better use and getting more returns from your intangibles in terms of tax and other benefits. I would imagine that is something in your industry as well that could help?

Mr Reed: Quite possibly, yes. I would need to do more research on it.

Senator REYNOLDS: Another one that I particularly liked was to do more for employee share schemes. As an early start-up you are able to salary offset—being allowed to have employees invest early in your company, but getting more in terms of investment in the company.

Mr Reed: We are already doing that. A number of small studios are established in exactly that way.

Senator REYNOLDS: There are definitely things here that might help. Obviously, you have had a good look at this. There are many proposals in there. Where do you see some of the gaps in the NESA program for your industry in particular?

Mr Reed: For us, there is the direct funding model—the ability to seek, not only project funding but, more importantly, enterprise funding; the direct investment into a company which does not really exist in the program as it stands right now. Similarly, encouragement for a more sophisticated institutionalised investment network, not the VCs. We need to see our larger institutions investing in innovation and we are not seeing that right now. I do not think it is fair to put that pressure on the VCs as those initial investors at all. A program should be put place that encourages a larger investment pool into innovation in this country.

Senator REYNOLDS: If I understand you correctly, you are not talking about necessarily the government or the taxpayer putting up this pool but unlocking the superannuation funds and all sorts of other funds, and even providing a different type of investment option for Australians to invest through their super fund or their managed investment fund—having an option to tick 'Would you like to invest in this sort of industry?' Is that the sort of thing you are talking about?

Mr Reed: That is the sort of thing I am taking about. Broadening those options would be to the benefit of Australians in general.

Senator REYNOLDS: Have you had the opportunity to talk to any funds or to pursue that? That does seem like a very good idea. I think there are a lot of Australians who might just want to take a little bit of a risk—maybe not a large percentage of their portfolio but one or two per cent of their portfolio, just to have a go in this sort of industry.

Mr Reed: We work very closely with PwC on a variety of ideas. This has been one that has been on the table for quite some time—that is, looking at institutional investment. It is something that we are still exploring. Understanding legislative hurdles is still something that I am coming to terms with. It is quite a process.

Senator REYNOLDS: I will finish there. In terms of that option, in particular, when you meet with Minister Roy, that would be a fantastic proposal to take to him. Intuitively, I think it is something he would be quite excited about. So thank you very much.

Mr Reed: You are welcome.

Senator LUDLAM: I have a couple more if we are okay for time. In your submission, you talk about how Australia has gone from an industry dominated by the big triple A studios to a much more fine-grained, independent group of survivors, I guess. Do you have an idea in mind of the ideal market structure? Do you want to see the big studios come back? And how do we prevent them from picking off the subsidies, such as they are, at the expense of some of the local developers?

Mr Reed: Our ideal would be a healthy mix of both. The industrial argument right now would be: if we had an incentive scheme that would encourage those very large publishers back into this country, it would swallow the talent that we have in our independent space right now. That is a very real risk. It is not something, necessarily, that the industry wants at the moment. Really, decisions about the industry are driven by this industry. Should we have them back? Eventually, yes, we should, because they are great learning platforms for future independent developers.

The one thing that those big studios do very well is provide training, understanding of process and understanding of business. Staff or employees then break off and build their own companies on the back of it. That is exactly how the Australian industry, in its current form, has developed. Would we in the long term like to see those larger studios back here? Absolutely, we would. We have the talent here. We want to see greater employment in this sector. Would we do it at the expense of the sector we currently have? No. We do want to protect what we have. It has been a lot of hard work and a lot of sweat equity for the developers to build the success that they have. We do not want that undermined in any form.

Senator LUDLAM: Finally, and following some of Senator Reynolds' line of questioning, can you just spell out for us and make the case why you think the industry needs instruments or policy incentives that are specifically tailored to it, as opposed to, maybe, more broad-based incentives—if that makes sense? Why does this sector need singling out for particular kinds of support?

Mr Reed: I think one of the great challenges the sector has had is that we straddle that really odd line between technology and arts. We see ourselves as a creative industry. We are not one or the other. We are pretty much both of them. Invariably in legislation and new programs, we see a program that is aimed at one or the other. We kind of have this schizophrenic view then of where we fit into the grand scheme of things. I think Minister Crean was really forward-thinking in his embracing of the industry as an art form. Understanding the technical backing that we have, he did not really see it that way. It was about games as art and games as a communication, or games as a medium. Prior to that, we had always been put in an innovation portfolio. When we see programs launched, they are never actually directed at us because we do not really fit that mould. We will look at a program and be told, 'No, you are kind of arts.' We will go off to the arts and they will go, 'No, no. You should be over there in innovation.' It has been challenging for us. That is probably the single biggest reason we are saying, 'Look at us; we are different.' I do not think anybody in the federal government has encountered anything quite like us, to be honest. We are different.

Senator LUDLAM: Thanks for hanging in there.

Senator BULLOCK: Just one last one: in the Labor Party in Western Australia, I drafted the original affirmative action rule. I like to be regarded as the father of affirmative action, mainly because it annoys the Left. But I noticed that in the ABS statistics for your industry in 2011-12, 8.7 per cent of employees in the industry were women.

Mr Reed: That is terrible.

Senator BULLOCK: If we are going to conquer the world and appeal to half the population, I think we probably need some more input from women. What are we going to do to get that?

Mr Reed: I could not agree with you more. Diversity is a significant problem—diversity in its entirety, not just on a gender basis. It is a major part of the industrial conversation right now. We are looking at plans to address it in our sector. We have concerns about systemic problems. One of the reasons I happily jumped onto the board of the STEM Video Game Challenge was to look at primary and secondary schools and encourage more young women to embrace STEM related subjects—not just games but STEM subjects in their entirety.

We will change that landscape and we are. We are changing the landscape but we are choosing not to set it on fire to do so. We are doing it slowly, methodically and the right way. It is not fast enough for many people and it is not fast enough for us as well, but the reality is that we do not have enough women in the sector or studying in the educational institutions to become part of our sector right now.

We have a pretty aggressive plan for this year. I am working with the DET. I have spoken with the chief scientist of Victoria, Google, Apple and various others about this as well. We will address it. I think we are at 12.7 per cent now. That is not something I am proud of at all—none of us are—but we are making the change and we will make that change.

CHAIR: You are certainly not the Lone Ranger in that field, but it is good that you are actually moving towards an increase.

Mr Reed: We are not but we take it personally.

Senator REYNOLDS: Hear, hear what you are doing on STEM training. I think whatever you can do to encourage more girls is overwhelmingly good. With the new agenda and some of the initiatives that you think will be particularly beneficial, are you doing anything now with the industry to let your membership know what is there and how they can take advantage of it or is that something for your members to find out themselves?

Mr Reed: We would communicate that to the membership. We invariably break it down and provide it in digestible chunks—

Senator REYNOLDS: Have you done that already?

Mr Reed: Not in the innovation program yet. I need to break it down some more and understand exactly—

Senator REYNOLDS: But you will do that though?

Mr Reed: Absolutely. Yes, always.

Senator REYNOLDS: Lovely. Thank you.

CHAIR: Thank you very much, Mr Reed, for your submission and your attendance here today.

Mr Reed: Thank you very much, Chair.

CHAIR: It has been most helpful.

Mr Reed: You are very welcome. Thank you so much.

BRITTEN, Mr Benjamin, Member, International Game Developers Association, Melbourne Chapter; Technical Director, Mighty Games Group

ROSMAN, Ms Giselle, Chapter Leader, International Game Developers Association, Melbourne Chapter

[09:47]

CHAIR: I now welcome Ms Rosman and Mr Britten from the International Game Developers Association, Melbourne Chapter. Information on parliamentary privilege and the protection of witnesses and evidence has been provided to you. The committee has your submission. I invite you to make a brief opening statement and then the committee will ask questions.

Ms Rosman: Thank you for inviting me to talk today. I am here to talk on behalf of IGDA Melbourne. IGDA is the International Game Developers Association, a non-profit professional global association. After the GFC in 2009 Melbourne saw the closure of many game studios and a sudden influx of talented developers out of work. I rebooted the local IGDA chapter so that these newly independent developers would have a place to begin to rebuild a community and ultimately the local industry.

I am also the Executive Producer of Global Game Jam, a game-making event that spans 93 countries. Finally, I am the business administrator of Hipster Whale, creators of *Crossy Road*. I am here to talk primarily from my IGDA Melbourne perspective. In my roles in IGDA and Global Game Jam I have had the opportunity to interact with game developers of all kinds and discover more about their local industries. These experiences from across the globe give me unique insights to compare and contrast with the Australian industry.

I would like to introduce Ben Britten. Ben has been involved with the local IGDA for many years and he is the Technical Director of Mighty Games. Ben will be fielding questions with me.

The video game industry is estimated to be worth around \$100 billion. The Australian games industry has been through some tough times, but it is still here and is still seeing success. Without any government involvement Australia will still make games; however, we do not want to just make games, we want to grow the sector, stabilise the industry and ensure Australian games have the best opportunities with regard to commercial, cultural and artistic success. The Australian market is small. Game developers primarily make goods to export. Most developers have well over 95 per cent of their income derived from offshore markets. We have the benefits of being native speakers of the language of the internet—English. Culturally we are similar to North American countries, which are the powerhouse of the Western game development world. Geographically and socially we have strong ties with the lucrative Asian market. We need to make the most of this.

Victoria currently accounts for well over 40 per cent of the Australian games industry. It is no coincidence that Victorian developers have this market share and have had more consistent state government support than any other state. The funding amounts are not massive but they are enough to make a difference to start-up studios. Samurai Punk originally made prototype, *Screencheat*, at Melbourne Global Game Jam in 2014. That year, via the Australian Interactive Games Fund, Screen Australia sponsored that jam. Two years later and Samurai Punk have released *Screencheat* on Steam, and are now working on their ports to Xbox One and PlayStation 4.

Since the initial prototype, *Screencheat* has secured around \$75,000 in funding. It has already grossed \$450,000 via Steam and is expected to find greater success on consoles given the local multiplayer style of the game. Many prior and current state and national funding programs have focused on funding specific games. This is not a bad thing, but I think that studio funding models would go further to achieve economic stability and success. Mighty Games was fortunate enough to receive funding from both Film Victoria and the discontinued Screen Australia fund. These funds were instrumental in making it possible for them to release *Shooty Skies*, which has already had over five million downloads since its release in October last year. *Shooty Skies* has already generated revenue nearly 10 times the funding it has received.

The Australian games industry does not want to subsist on government grants and handouts. It wants the opportunity to grow its skills and global presence. Commercial and cultural concerns are not mutually exclusive. *Crossy Road* has not only been a huge financial success but has also exported our quirky Australian humour to over 120 million users worldwide. *Crossy Road* was the featured release partner for the Apple TV, and we saw our Australian culture displayed proudly across the planet on billboards and TV commercials.

Australia already punches above its weight globally. We have done so since the eighties. After clawing our way back from the GFC, our studios have become world leaders in game innovation. In October of last year, five of the top 10 games in the App Store were Australian made. However, we are at a tipping point. Other regions continue to lure our best talent and our local companies struggle to fill our growing need for experienced workers. Poor infrastructure hampers our efforts and other countries tempt our studios away with enticing tax offsets. We

have an opportunity now to give the Australian games industry the support it needs to accelerate growth, attract our overseas talent back home and become a global leader in innovation and technology.

CHAIR: Mr Britten, you are happy to tag along on those words?

Mr Britten: I helped her write that; it was fine. She is older than I am.

CHAIR: I am really going to feel like I was born in 1930 at the end of this session! Some of the language is interesting. I really have to get on to that *Crossy Road*, I tell you! You talk, again, about the global financial crisis and young developers. How many of them were lost from the industry and do you know where they have ended up?

Ms Rosman: I would say, roughly, 60 per cent—Tony will correct me if I am wrong, I am sure—left the industry. Some of them, particularly programmers, have moved locally into other industries. A lot of them, I know, went into finance. A lot of them moved to Canada—the tax offsets there mean that the growth has been massive—or overseas.

CHAIR: What does the industry need to lure them back? Is it the funding that you talked about? You talked about \$75,000 worth of funding for a particular game, rather funding to grow the industry.

Ms Rosman: We have had quite a few individual game funding options and, as I said, it is not a bad thing, but games are hit-and-miss. The game that was originally funded for Mighty Games was not successful, but the following game—and there were lessons that we learned from that—went on to make a hit.

In terms of luring people back from overseas, a lot of it comes down to—this is from personal conversations—the stability of the industry and knowing you can work permanently. There is a lot of sweat equity that has gone into where we are at the moment, whereas if you are working in a big studio in Canada or the US you know how much you are getting paid and what they are covering, and it is regular, consistent work. We have not had that consistency; a lot has been a work of passion.

CHAIR: Is the employment full-time, casual or ad hoc? How does it work?

Ms Rosman: It is a blend. I would not be able to tell you exactly. There is quite a bit of freelance work in the games industry as well. Ideally, we like to aim towards part-time and full-time roles, but there is certainly a lot of freelancing and outsourcing done—mostly locally but also internationally if we have not got the skills here.

CHAIR: How does that percentage of employment picture vary compared to what it was when you had that initial funding?

Ms Rosman: When we had the games fund?

CHAIR: Yes.

Ms Rosman: I think that did give the stability, particularly when they were looking at the enterprise fund.

Mr Britten: The enterprise fund allowed us to have stability. To address your question earlier about how we get those people back: ultimately it is about growth and stability. As an employer at Mighty Games, right now it is kind of hard to find talented people. Often we are looking for mid-level people or better and it is hard to find those people locally. We do not have quite the long-term stability that we need to say: 'Relocate back to Australia. We can guarantee you 12 or 24 months.' We do not quite have that stability yet. The enterprise fund was a stopgap to provide that for certain companies: 'Here's a chunk of money so you have a stable base for two to three years. We know you're not going to go out of business.' You can then start to take those risks and bring the talent back in. Right now—at least at Mighty—we are looking at our current growth and success, which we owe very much to the funds we got. With our current success we can now start to look at bringing people back in. I think trying to bring that stability out to the industry as a whole will allow us, as an industry as a whole, to reclaim our Australian talent back to Australia.

Senator LUDLAM: You folks are probably very well placed to talk about the local industry here in Melbourne. Could you give us a bit of an overview about the scale and composition of the industry here.

Ms Rosman: There are 104 studios in Victoria that we know of—it is really hard to find some of them because they are squirrelled away.

Senator LUDLAM: What is the definition of a studio?

Ms Rosman: A group of people working on making a game for commercial release.

Mr Britten: One or more.

Ms Rosman: In terms of studio structure they are very small, they are mostly very young and unfortunately, because of the brain drain that we had as a result of the GFC, probably learning things through mistakes that they

could have learnt from someone more senior a lot more easily. We do have bigger studios—we have five studios. Firemonkeys, as mentioned, I think are at 176, and they have 20 per cent women. They are doing very well—

Senator LUDLAM: Relatively speaking.

Ms Rosman: on a scale of games studios. When you get excited about 20 per cent you know you are not in a good place. There are probably a handful of studios with over 25 people. The bulk of studios would have two to five people. Currently, anyone working with more than 10 as an independent studio is medium level.

Mr Britten: If you look globally, small studios have 50 to 100; in Australia, Mighty Games has 14 and we are considered quite large.

Senator LUDLAM: Is it the case that there is a lot of collaboration internationally? Are these studios expected to be developing a game from end to end, from inception all the way to marketing, or are we contributing bits and pieces to other work overseas?

Mr Britten: For the most part, we do the work entirely here. We start from conception all the way through to distribution and to maintenance and basically services. Nowadays you do not just release a game and it is done. You release a game and then you release an update every month for two years until interest runs out. Definitely in Australian games industry we are very much end to end. We will start from the beginning and go all the way through until the games are done.

Senator LUDLAM: I think we heard from Mr Reed that the industry is probably at its most mature here in Victoria and that that is partly due to state government support. Can you sketch what exists here at a state level by way of support?

Ms Rosman: Most of the funding comes through Film Victoria. Ben has been on that board so he can probably speak better about this. Some of it is project based and some marketing based for getting releases out the door and getting people to notice them.

Mr Britten: We tend to owe the maturity in the Victorian market almost solely to Film Victoria support. They have been very good at supporting games and very forward thinking in their support of the small-screen industry as it were. I think their funding mostly comes from an arts background. They fund film, obviously—that is the name—so they are very focused on very project based funding and marketing funding, which is really great for small studios. I think that has been one of the big factors in the growth since the GFC. We had a tonne of small studios and then a lot of us got Film Vic funding and now we have grown to be slightly bigger studios. We are at the point where there are 10 and above studios that are a bit too big to take advantage of Film Vic funding. That is why we are now looking at some of the stuff that Tony and you guys talked about earlier—tax offsets, bigger investment funds and things like that.

Senator LUDLAM: Is it based on already having your game and then going to Film Victoria for marketing and promotion?

Mr Britten: Both.

Ms Rosman: Usually you would want an initial prototype—so you would want a concept of your game, probably a working concept with basic mechanics, which is what the game does—to show it. I am not aware of any situations where it is: 'I have this great idea for a game. Give me money.'

Mr Britten: They have tiered things. People come in and say, 'I have a great idea, but I don't have any expertise. Can you give me some funding and I can hire expertise?' They have various different levels of funding. Film Vic is actually quite good about very small to medium-ish projects and trying to support them all along the route.

Senator LUDLAM: Has anybody tried to model the return on investment—that is, what we put in compared to what we get out?

Mr Britten: I am sure they have.

Ms Rosman: Yes, I am sure they have.

Mr Britten: I think the last number—Tony can probably correct me—was that for every dollar put in you got \$1.40-ish back, or something like that. I think that is in terms of tax revenue. Mighty Games, specifically, were funded by Film Vic and Screen Australia for two different projects and when we do our tax at the end of this year we will have paid back by twice in taxes the amount we got from the government. If you do the math, that is about 10 times or 15 times gross revenue.

Senator LUDLAM: That is not bad.

Mr Britten: We have done quite well.

Ms Rosman: One other part of Film Victoria funding that I would like to bring up is the trip funding, which was mentioned briefly before. Being a digital industry, obviously, has made things much easier from Australia, but you still need to get your product in front of people and make those face-to-face connections internationally.

Senator LUDLAM: So 'trip' is not an acronym; 'trip' is air tickets?

Ms Rosman: Yes.

Mr Britten: It was an acronym but it was one of those clever ones.

Ms Rosman: Yes, that is right. It is basically travel funding for specified important events that we should be at and representing at.

Mr Britten: That fund was pretty instrumental in us, as indies, being able to have a presence globally. We would show up to two PAX and GC in the states and be able to go Singapore's games connect and things like that. Without that trip funding we would not have been able to do that and the Victorian industry, for sure, would not be where it is now without that funding, alongside the Film Vic funds.

Senator LUDLAM: Let's talk about when they come here: given the scale of the kicking that the industry has had to go through in the last couple of years, how did we attract an event of the scale of PAX to Melbourne?

Mr Britten: Some of the reasons are Film Vic and the trip fund—but I do not want to discount the other states' games industries. Australia punches so much above its weight. We show up en masse at these events and say, 'Look, we are Australian and look at this awesome stuff we are doing.' In October last year we had five of the top 10 games in the App Store and Australian games are considered high-quality games. Obviously, Tony and the guys at Creative Victoria tried really hard to get the PAXs here, and I think we were able to do that on the back of the Melbourne industry.

Senator LUDLAM: In your submission you talk about adding the film industry producer tax offset to include digital game production. I do not understand why it does not already.

Ms Rosman: Nor do I.

Senator LUDLAM: Are there any justification is that you know of?

Mr Britten: No. I wish I did.

Senator LUDLAM: You cannot run the counter argument for us? Why would it not apply?

Mr Britten: Besides just a purely political reason, I do not know. There is some tension between film and games. There is a bit of, 'You are taking our funding.' There is little bit of that going on. I do not think it is necessarily justified. I think there is room for all of us and I think we are all in it together. Like Tony mentioned earlier, there is this idea that we are not really competing with each other in Australia; we are competing with the world. I think there is room for both.

CHAIR: You are obviously based in Victoria. Do you know much about the industry across Australia? I probably should have asked.

Ms Rosman: I am fairly well across it.

CHAIR: How big is it? Is it viable and is it operating in other states?

Ms Rosman: If you go back 10 years, it used to be a battle between Melbourne and Brisbane as to who was the capital of games. Then there was the GFC and since then, mostly because we still had Film Victoria, Brisbane has probably lost the most people from their games industry and has recovered the most slowly. Sydney is definitely growing and very keen, but it has a very young industry. Once again, if you go back 10 years, I used to work in education in games. If you wanted to do games you would want to work in Melbourne or Brisbane and if you wanted to do film you would go to Sydney. That is slowly changing, but it is a much less mature industry. Adelaide has a couple of studios and even just individual practitioners who work with international companies like Riot Games. They are very small. Canberra used to—I do not know that we would still call it 'having an industry'.

Mr Britten: There is still a handful of indies there.

Ms Rosman: There are a couple of indies there. They had 2K Australia's studio as their main thing, and that only closed a year ago—not even—having just released a really successful version of Borderlands, an international IP. I do not know a lot about Perth. Perth had a big company and a very big disastrous explosion before the rest of the GFC.

Mr Britten: I know there are a couple of guys trying to do arcade-type stuff. It is very embryonic.

Ms Rosman: It is very small and independent there as well. I know that in Perth we get mining companies trying to approach our talent quite regularly, particularly in the 3D visualisation kind of areas. I think that is most of it. There are a couple in Tasmania. I know there are a few hobbyists that are starting to work on building a community, and, from there, there is potential.

CHAIR: Essentially there are opportunities all across the country for growth of the industry without people having to move particularly up to the eastern states or the bigger centres.

Ms Rosman: No, that is right. If you saw funding similar to what we have in this state, we would have fewer people moving here from somewhere else. I know Sydney always says, 'We know we are getting somewhere when someone from Melbourne will actually move to Sydney for games.' We are not there yet.

Mr Britten: The great thing about the digital medium, obviously, is that you can be anywhere. You can be in the middle of the outback. As long as I have a computer and the internet, I can build a game.

CHAIR: Of course, and I guess that is the point I am making. There are opportunities, if there is funding there.

Ms Rosman: Matt Hall, one of the three who made *Crossy Road*, was living an hour out of Ballarat at the time.

Mr Britten: Yes—on a sheep farm.

CHAIR: Getting back to that, Ms Rosman, you talked about infrastructure in your opening statement. Can you talk a little bit more about that. I am pretty focused on the NBN a lot of the time. I am really interested to hear—

Ms Rosman: I do not have much more to say than, 'Can we have decent internet.' It is our lifeline.

CHAIR: What is decent internet to you?

Mr Britten: The best you can get.

CHAIR: I know what it is for me. Do not be shy, just tell us what you need.

Mr Britten: I am very lucky. I was one of the people who got NBN at my house, so I have 100 megabit down and 40 megabit up, which is okay. At The Arcade we have 100 megabit up and down, which is not enough—there is about 80 of us sharing that. On any given day we push terabytes of information up and down the internet. It is actually a measurable productivity drain to wait for files to move up and down. If we had 10 times the amount of bandwidth, we would use it all up. If you gave us 20 times the bandwidth, we would use it all up. The internet is our industry and right now that is one of our big limitations.

Ms Rosman: The copper wiring at my personal house has failed and I have been tethering my phone while running an event in 93 countries. It has been great!

Mr Britten: There are really no limits to what we could use if we had it.

CHAIR: I hear you and I feel your pain.

Ms Rosman: We want all of those things, but that is our communication pipeline and we talk in bits and uploads and downloads.

Mr Britten: It is a technical challenge for us because all of our projects are very large sized files, so we have actually spent time and money dealing with the fact that we know we cannot push them over the internet all the time. We have local repositories and we build things locally as opposed to, where we can, doing it on the web. We cannot take advantage of a lot of the services that are out there because we cannot move the bits over the internet.

CHAIR: I raise that question because I get frustrated as well. I live in an area where I do not even get mobile phone service, and I am two minutes from a major centre. I guess I get frustrated because some of the rhetoric that I hear is predominantly around the NBN delivering enough for people to play movies. But when we are talking about the design, the business model and the infrastructure that you guys need to be able to do that, you could have someone remotely living in a location, like you talked about, who could stay there with their family and their friends and build an industry in that town—which probably needs the employment—if they have proper infrastructure.

Mr Britten: The analogy that I use is roads. Right now, we are all on dirt roads. We are trying to push huge semi trucks down dirt roads and we just need to have some highways.

Senator BULLOCK: You just took me back to the agriculture committee and beef roads. When you are talking about your success you said you—

Ms Rosman: I ride on the coat tails of success, but yes.

Senator BULLOCK: You exported our quirky Australian humour. How did the quirky Australian humour translate into Asia?

Ms Rosman: You had to choose the trickiest one. Talking with regard to how *Crossy Road* has done in Asia, we have very little cut-through in China, like many places, but our third biggest market is South Korea. They love us, so I guess they get it.

Senator BULLOCK: I am going to your submission because you say:

The next biggest challenge for videogame exports is localisation. Currently one of the largest, untapped market to local development studios is the Asian market.

And then you say, in a long series of words that do not constitute a sentence:

Assistance with both localising games in terms of languages and iconography, as well as creating the business relationships required with Asian companies to ensure the best penetration of their vast market

Tell me about languages and the iconography and the other challenges you confront in cracking the Asian market.

Ms Rosman: With regard to Hipster Whale and *Crossy Road*, we have brought on Yodo1, which is an Asian based company, to work with the Asian market. A lot of places tend to, when you are trying to get into Asia, bring on some local expertise.

Senator BULLOCK: To what extent could there be government support in putting you in touch with the best people to assist?

Mr Britten: That would be great.

Ms Rosman: I think once again that comes down to us all jumping on planes and building those relationships. There are a lot of companies that are looking to build—

Senator BULLOCK: We have trade people in the Commonwealth government that are looking to expand our exports.

Ms Rosman: Excellent. I am sure we would love to talk to them.

Mr Britten: There have been a few forays between games and the trade stuff. A few years back, I went to 'doing a business in China' thing, and it was very instructional. It was good. At the time, the company I was with was not big enough to do anything with that. Now, we have things like GCAP, Game Connect Asia Pacific, which sort of happens near PAX, and a lot of those companies will come to us, which is quite nice. Tony could probably speak to this a bit more.

Senator BULLOCK: We are talking about going around the world and people coming here—we were told earlier that we have the first PAX outside of America. Is that valuable in terms of making those sorts of contacts?

Ms Rosman: Yes.

Senator BULLOCK: So you need a local contact to help break through. If one of the biggest challenges facing the industry is getting into Asia, do we have people focused on that to see how we can crack it?

Ms Rosman: I honestly think it is an area—generally speaking, it seems with Asia, 'We want the content as well.' It is mutual thing where we are saying: how do we make this work?' Any assistance that the government has in terms of training us to understand or putting us in contact with people who work on building those relationships would be greatly appreciated.

Senator BULLOCK: The industry itself is active in its work to get into Asia?

Ms Rosman: Yes.

Senator BULLOCK: It is listed in your submission as one of the biggest challenges. It is not one of the big challenges that has been put in the too-hard basket?

Mr Britten: No. It is something where we are constantly looking at how we make our games. It is localisation in the language as well as culturalisation of the games. It is: how do we make our games appeal culturally to those markets, or how do we educate them so that they want to play Western style games? It is something we work on; it is literally something we talk about every day in the studio.

Senator BULLOCK: Just remembering that I am a moron and do not understand any of this stuff, tell me about iconography.

Ms Rosman: The imagery and what that can mean to people. Moving to Brazil, that is another big and emerging market that is important that we all consider. In terms of emerging markets for games, Brazil, Russia, India and China are recognised as massive markets that are currently underserved. For iconography with *Crossy*

Road we have done a South Korean update, so you have characters that reflect South Korean culture. We did the same for Brazil just recently. Then we spoke to other game developers in Brazil and said: 'Here are our characters. How is this going to go down in your market?' We the feedback such as, 'That character there—do not do that.' We thought it was funny, but maybe it was not so funny.

Mr Britten: The guys did something similar with the Chinese new year. We had a big Chinese new year update. It had a lot of Chinese based characters. There is a lot of iconography, like red envelopes and stuff around the lunar new year that they do. There are things that we would put in—different colour schemes and things—that they would find off-putting because of their cultural history.

Senator BULLOCK: Are the other developers in the business all sensitive to these cultural differences?

Mr Britten: We all try to be. We try to find people and consult. That is where these contacts help. We can say, 'Hey, who is my person around here who understands Chinese culture and stuff?' They can help us make sure we are making the right decisions.

Senator BULLOCK: Try and keep away from the red envelopes—they will cost you.

Mr Britten: Red envelopes are good, actually.

Senator REYNOLDS: In your submission you talk about more diversity being required. Could we delve into that a bit further in terms of what you are referring to?

Ms Rosman: As mentioned in Tony Reed's discussion, it is not just gender. But, given that 50 per cent, give or take, of the world are women and about 10 per cent of Australian game development is done by women, I think that is underutilising. Games are entertainment and games are fun, but games tell our stories. Games are part of our culture. We are going to be looking at games in the way that we have looked at books and films as telling our story, and—as much as I love my white men—I do not want to just hear those stories. I want to hear stories from a greater range of people.

Since PAX began in Australia, I have run a Women in Games lunch thanks to sponsorship, again, by Film Victoria, when I said: 'We've got all these people. We need to get together and start even just building our networks so that we can have each other's backs and encourage other women to consider this as a space.' We had about 120 people there this year. We also invite heads of studios, so you can say, 'Hey, look! Here are women you can hire.' That has been quite successful. As of this year, that has become a permanent fixture in the Film Victoria calendar, so they will be looking after that, which is brilliant.

Once again, Film Victoria has just started a Women in Games Fellowship, which will be quite an individual thing. It is looking more at upskilling so that you have women in some more senior positions in games. Once again, while the percentage of who is studying is still very male heavy, it is not as bad as it is in the industry. But we do not want to lose those young women either through the educational process or once they get into a studio and find it is really blokey and no-one has bothered to stop and question that. So, if we can build up some more senior women to influence that culture and build those safety nets before we have the lots of young women who are wanting to move into the industry, that will be more effective and I think you are going to have lower dropout rates as a result that.

Senator REYNOLDS: In terms of that, you are looking at it in two, or maybe three, ways. One is 10 per cent, and there is obviously a lot of room for improvement.

Ms Rosman: Yes.

Senator REYNOLDS: One of the barriers, as in many other professions, is a very blokey culture. So it is a bit of a detraction for the women: either they do not see that as a viable career or, when they do get in there, it is a bit intimidating and the culture is not great for them to work in. That would be one of the first things. Secondly, when you are talking about stories, is it an issue of having that diversity of stories reflected in the content and in the games themselves for everybody's exposure or, in the case of gender, is it women creating games that are actually designed for women and are of interest to women? Is it a bit of both or is it neither?

Ms Rosman: It is a bit of both. I tend to like to think—and I am not a game designer—that we do not design just for men or women, but having that influence can make a big difference anyway. You have women questioning: why another bikini? Why another D-cup? They are making it aware that that is actually going to alienate a lot of your potential market. If you have a monoculture then you are going to have the same ideas perpetuated, so you need to have those different conversations about—

Senator REYNOLDS: As you said, your characters tend to be D-cups rather than reflective of the general society to attract—

Ms Rosman: Yes, and it is art. They do that in film as well; they are all babes there. But there is room for improvement there and the improvement, I believe, will reflect better economic outcomes as well.

Mr Britten: It is not just the objectification but creatively as well. I come from film and theatre, where the groups I worked with previously tended to be a bit more diverse. Now I am in games and Mighty Games Group aggressively recruits women and minorities, and we have a hard time with it. I think we have, effectively, three minorities out of 14 people, so we are trying. But I definitely feel that. Our games are fun and they are meant to be for everyone, but I still feel creatively stifled in our own environment, even though we try really hard, simply because we cannot get the diversity in as much as we want. It is about the stories, it is about the influence and it is about creating teams that can make games that are for everybody and are creatively broadened. As an old white dude I have seen all the old white dude stories I need to see, frankly, and I quite enjoy the huge diversity we are seeing now come out of a lot of the indie spaces. I at least want to see that transition into what we are doing at Mighty, for sure.

Senator REYNOLDS: I guess the temptation is that you have a group of young men, middle-aged men or whatever who are interested and have the same sense of humour and the same view of objectification and whatever. The question is: what are they going to create? Things that they like, and they mutually reinforce. As it goes up the chain, if you do not have that diversity then it is—

Mr Britten: It is almost impossible to avoid. Even though we try really hard to be diverse and have our ideas and creativity embrace as much as we can, we still find ourselves doing that, because we are basically dudes, even though we are trying really hard not to. If you are a studio of mostly men who are not necessarily aware of it, as you say, that is what you are going to make. It is kind of a problem.

Ms Rosman: Figures recently are saying that women now make up 53 per cent of the gaming community. You are missing out. You need to be making games for a range of people.

Senator REYNOLDS: Apart from anything else, it is the financial message there—

Ms Rosman: Culturally I want to see those things, but I think that will also translate to financial benefits.

Senator REYNOLDS: I guess that aspect of it then crosses over to what you were talking about before in terms of cultural diversity and tapping into other markets and knowing exactly what they want and how they respond to it—not necessarily to our sense of humour.

Ms Rosman: That is right. Culturally we are very diverse here in Melbourne, and in Australia, so we can speak to other markets through our own experiences if we are looking at the right people to ask what their experiences are.

Senator REYNOLDS: What I did not know was that five of the 10 top apps last year were Australian made.

Mr Britten: In October.

Senator REYNOLDS: Are they paid apps?

Mr Britten: Those were all free apps.

Senator REYNOLDS: Presumably they had in-store—

Mr Britten: Yes, the whole—

Senator REYNOLDS: Mindset. What are those five? I would be interested to know.

Mr Britten: *Shooty Skies* is one of them—that was our game. There was *Need for Speed*, which is by Electronic Arts, which is Firemonkeys. Was *Burnout* one?

Ms Rosman: *Torque Burnout*, which was made in North Fitzroy by a company that has just started in games and used to work in advertising.

Mr Britten: Was *Sling Kong* another one? I cannot remember the other two, but there were five of them.

Ms Rosman: I should have done my homework. I can take it on notice if you like.

Senator REYNOLDS: If you could take it on notice, it would be very interesting. It is a fantastic story to get out into the general community. *Crossy Road* seems to be the app of this hearing today. With that, or with these five, what are the factors of success that you think can be learnt and transported? Why have these ones succeeded where others may not have?

Ms Rosman: I can probably talk more to *Crossy Road* than the other ones. Shareability is one of the biggest things. I think there are two things that made *Crossy Road* successful. When you die in *Crossy Road* it is funny, so you laugh and so you are prepared to go again and die again. Then you want to unlock all the characters and see what funny thing happens next. Making that moment where you have lost amusing was a great move. Then it

is the shareability. *Crossy Road* has spent no money on user acquisition, so we do not pay to get players to download our game. User acquisition is this big full-on industry that is growing with free-to-play games. It is affordable if you are Firemonkeys or if you are Disney, not so much if you are a two-to-three person set-up.

Senator LUDLAM: How does that work?

Ms Rosman: I am still trying to work out exactly how it works. It seems ridiculously expensive but you pay companies—

Mr Britten: Basically the idea behind user acquisition, or UA, is advertising. I pay advertisers to put my ad in their games and then people see the ad, they click on the game and they install my game, and then I have acquired a user. User acquisition is sort of a monetary strategy for your game. Games like *Shooty Skies* and *Crossy Road* are very interesting and innovative in the way they monetise, and that is one of the reasons they are doing so well. Their average value per user is actually quite low: it is 20c to 25c per user on average across the whole user base. User acquisitions costs about \$5 to \$7 per user right now in places like the States. So user acquisition for games like *Shooty Skies* or *Crossy Road* does not make sense, but we make money on other people's user acquisition spend. One of the big sources of profit for us are ads in games.

We have incentivised ads where you can say, 'Would you like to watch an ad and get some money?' We do not put it in anybody's face. It is a nice way to monetise for people. Our average user value is about 20c per person, so we cannot afford to do UA. So we go for virality—that is what we do. *Need for Speed* is a good example—one of the other top fives. I have the others here now that Tony got me. I will tell you those in a sec. With *Need for Speed*, for instance, the average user value is going to be above the \$5 to \$7 mark, so that will be \$5.50 or \$7.50 or whatever. They can afford to spend a lot of money to acquire users so that they can then make that money back on their average. That is the whole idea behind user acquisition, if that makes sense.

I have the others of the top five here. Tony got them for me. The two that were missing were: *True Skate* and *Jetpack Joyride* from Halfbrick.

Ms Rosman: *Jetpack* must have done an update.

Mr Britten: Four of the five were Victorian and the other one was from Brisbane.

Senator REYNOLDS: On that last bit of discussion, I am not sure I am any the wiser.

Ms Rosman: We got a bit sidetracked.

Senator REYNOLDS: Would you mind to take on notice to explain the monetisation of it and the options, and how people make money out of this?

Ms Rosman: Could you just repeat the question that you are asking so I can get it down? Sorry. It started off as what made *Crossy Road* successful.

Senator REYNOLDS: It was user acquisition, so—

CHAIR: It will be in *Hansard*, so we can get it from there.

Senator REYNOLDS: Basically, it was with the user acquisition, but then that sort of opened out into different ways of how you make money and the different financial models. Could you perhaps take that on notice, in terms of educating us in how that works?

Ms Rosman: Certainly.

Mr Britten: Sure.

Ms Rosman: Mandy also did a talk at GDC last year that covers really well what made *Crossy Road* so successful in terms of getting people to want to share their death moments on Twitter and Facebook, then their friends see it and compare their high scores. A lot of it was related to social media.

Senator REYNOLDS: Given the time, I am happy for you to take this on notice unless you have a ready answer now: of the thousands of applications that come on to the App Store, for example, or any of the stores, I am sure there are many fantastic ones that just sink without a trace.

Ms Rosman: You want to be featured by the App Store. You want to have solid relationships with Apple so that when you have got a game coming out you will get a feature. It is not a complete guarantee of success, but—

Senator REYNOLDS: But if you have got a good product—

Ms Rosman: Yes.

Mr Britten: It sort of boils down to your home marketing strategy. That is one thing—that we indies who are really good at making games are not necessarily very good at marketing. That is one thing we have been struggling with, which is why the Film Vic marketing fund is really handy. Also it boils down to this idea of

marketing: when you are making your game you market it to the journalists. You might get some coverage on Twitter or whatever and the journalists might cover you, and then Apple or Google might see that and go, 'This, guys, is a cool game,' and then you can start a cool relationship with Apple or Google about how your game is really good. It is all sort of this spiral of like, 'I am going to put out some information about my game in a marketing sense. The journalists are going to pick it up and that is going to give me cred to Apple, then I am going to go to Apple and say, "Hey—this is happening," and they will go, "Oh, that's interesting," and then it will get in front of them.'

Then you do this little marketing dance where you are like, 'We're going to release,' and if you release and everyone's happy, then you get a feature. That is probably the best way to do it. There are other ways, as Giselle said, like if you make a game that is very shareable and viral you can bypass the need for a feature and still do quite well. Other games are just focused on niche products, like Tin Man Games—they are going to talk a little bit later. I have worked with them in the past and they have a very niche product, so they do not really worry about features so much as focusing on their niche base. They produce games and those people know where to look for them, so that is the other way to survive in the market as well.

Senator REYNOLDS: Thank you. If you would not mind, on notice, to let me know then I think that will be very informative for us in terms of monetisation and marketing, which are obviously—

Mr Britten: Yes, it is all—

Senator REYNOLDS: If you would not mind just getting some more information for us, I think that would be very instructive. Thank you.

CHAIR: Thank you very much. We are out of time on this session, so thanks for your attendance and your submission.

Mr Britten: Thank you.

Ms Rosman: Thank you.

CHAIR: The committee will now break for morning tea and we will return at 10.45 am.

Proceedings suspended from 10:32 to 10:46

GOLDING, Dr Daniel, Private capacity

CHAIR: Welcome. Information on parliamentary privilege and the protection of witnesses and evidence has been provided to you. The committee has your submission. I invite you to make a brief opening statement and then the committee will ask questions.

Dr Golding: Thank you to the committee for this opportunity. I thought I would give you a brief overview of what it is I do, just because I am not necessarily representing any particular organisation. I am an academic at Swinburne University in the Department of Media and Communication. I have a PhD, which I wrote on video games. I publish widely on the medium in the industry and in a scholarly context. I am also a journalist and a critic and writer in a freelance capacity, but I have done work for the ABC, Crikey and *The Australian*, and I am a contributing editor at *Metro* magazine, which is the media educator magazine. I also have a book forthcoming on the games industry and gender, which is coming out next month. I am also the Director of the Freeplay independent games festival, which has been running since 2004—which might not seem like a long time for most industries, but in the games industry it is basically a lifetime. I did not found that; I would have been in high school at the time, as you might be able to guess! We have done a lot of work regarding games, and we work with other cultural institutions, such as ACMI, the State Library of Victoria, Federation Square, the Arts Centre, Melbourne Writers Festival—places like that.

I think the government has an incredible opportunity to make a lasting, positive intervention into games in Australia and the potential to turn the Australian games industry into the envy of the world, quite literally, I think. This can be achieved through considered funding and regulatory opportunities that recognise a number of endemic issues that face games globally. The No. 1 issue at the top of my list is definitely diversity, as has come up several times today already, which I am very glad of, and as I mentioned in my application. As we have already heard today, the last time the Australian Bureau of Statistics did a survey of people working in the Australian games industry, it discovered that 8.7 per cent of those were women, which, as compared to traditionally male dominated industries such as mining and construction, is lower than both of those, which is significant I think.

You may have also heard of controversies and events over the last few years such as the Gamergate controversy, which I am happy to talk to you about—but maybe not in the outline, because it will take up the entire session. This is something that has been a sort of aggressive policing by, I would say, a small section of game fans—possibly workers in the industry, but mostly fans—about who can have a say in the industry and attempting to exclude women, minorities, from having a voice. And yet who plays games? As we have also already heard, in pretty much every survey ever undertaken, even dating back decades, it has always been close to half and half, so there is obviously quite a difference between who plays games, who enjoys games and who makes games.

I think that video games should be a truly inclusive art. Since the 1950s and their early beginnings in universities and research laboratories, the combination of creativity and computers is the way that I would put it, and there is no reason why that has to inherently be a male dominated space. I would also say that, quite obviously, they are the art form that is native to the digital era—these devices that we have with us 24/7 now. This is the way that we spend leisure time on them, and I think that is significant, as Giselle Rosman has already said today, to be able to tell stories that reflect the general population. Australia has a broad base of players. Games mean a lot to a lot of people. So I think that funding and investment should recognise who plays games, who makes them and who does not and be able to make Australia the envy of the world by shaping systemic change towards a diverse, exciting and creative digital industry.

CHAIR: I am interested in the book. Obviously, it has not been released yet, so I do not want you to give away the story-line or whatever.

Dr Golding: Well, it is all in print now.

CHAIR: Can you give us a little more information about what it is about?

Dr Golding: Sure. I am a co-author. The other author is Leena van Deventer, who is a local community organiser and a games maker herself and a writer. It is through a Melbourne publishing house called Affirm. Basically, it traces the context and the history of how it is that games became a male dominated space. We have interviews with two of the key figureheads who have been fighting against the male domination of the industry internationally—a woman called Anita Sarkeesian and another woman Zoe Quinn, who both spoke to the United Nations several months ago regarding this in particular, and they have been featured in *Time* magazine, *The New York Times* et cetera. We traced the recent issues as well in the book.

CHAIR: I take it that the history is a world history rather than an Australian history.

Dr Golding: That is right. We recognise that we are writing in Australia and we do talk about Australia, but it is a global issue.

CHAIR: You talked about government intervention in regulatory opportunities and then you talked about diversity. Do you see that there could be some opportunities for regulation around trying to attract women into the industry? How would you do that under the current anti-discrimination laws?

Dr Golding: Certainly. I think that there are many opportunities. I know that the gender equality commission have focused on a number of different industries. I would love it if they would turn their attention to games, for example. I know that they have the Male Champions of Change program, which has had some success. I think that is a perfect program that could be applied to the Australian games industry. Beyond that, I was pleased to hear Senator Bullock talk about affirmative action before, and that is something that definitely could be incorporated. I would also strongly suggest that, if any tax breaks or funding mechanisms were installed to focus on the games industry, it would be a terrific idea to include at least a program that rewards companies that actively pursue a diverse workforce, and possibly representation as well.

Senator REYNOLDS: Thank you very much. I really enjoyed your submission. You certainly raise a lot of issues. I want to start off with Gamergate and the whole issue of diversity. Do you think one of the reasons why perhaps the industry does not have as much attention or focus as it really should have today, in terms of importance, is that there is this stereotype out in the community—and, I must confess, I may have had this opinion—that it really is a space for people who, stereotypically, are a bit geeky, in the studio boiler-house sort of environment? Do you think that has also impacted perhaps on that?

Dr Golding: The first time that the video games industry made the front page of *The New York Times* was recently with regard to Gamergate. So certainly that has had an influence on the stereotypical understanding of who plays games. Of course, as we have already heard, that does not actually reflect reality and I think the stereotype causes harm in more ways than just to the people it is stereotyping in that it makes invisible the people who cannot fit that stereotype. So when you are talking about a gamer as this kind of white male guy who possibly lives in his mother's basement or something like that, then you are actually making invisible the people who are not any of those things who also play games, and we know they constitute a significant section of the audience. So I think that who plays games, versus the stereotype, has certainly played a role.

There is also perhaps a feeling that the global games industry, through advertising and the targeting of demographics, has to some extent actively cultivated the impression that games are for men—globally, in terms of history. I think that that has created the impression for some that this is a kind of 'safe space' for boys to be boys and men to be men, and certainly that has had an impact because the stereotype feeds back on itself in that respect. I am not sure if that answers your question.

Senator REYNOLDS: It does, thank you. You mention the Male Champions of Change program, which I am a huge fan of—in fact I am trying to get it introduced into my own political party at the moment. A couple of the factors for success are that more women have to be visible and you have to find women in the industry who do not conform to the stereotype. They have to come out and be visible so that other women can identify with them and see that there is perhaps a pathway or an opportunity for them. It will also break the stereotype more widely in the community. Are there women there who could—

Dr Golding: Absolutely. At the Freeplay festival last year we had 56 per cent women on our speaking roster, which to my knowledge is the first time that there was an event—one that is not a specific Women in Games event—that had more women speakers than men. There are absolutely women there. Perhaps one of the things that needs to be thought about in terms of the statistic of 8.7 per cent is that that captures the people generally who are employed within the industry. Sometimes the women are found more on the fringes, working outside, perhaps on their own, and perhaps in tangentially related fields. Maybe they are a screenwriter who is also making a TWINE game, which is something that is text heavy, for example, and does not require the program to be—

Senator REYNOLDS: TWINE?

Dr Golding: Yes, it is the name of a piece of software. I suppose it is associated with more marginalised forms of game making.

Senator REYNOLDS: I will come back to that, because it is interesting what is defined as marginalised. To change it, obviously you need more visible women and to show alternative pathways that are not seen as marginalised or on the fringes. But you also need the Male Champions of Change themselves to stand up and talk about why it is important. Do you see them existing in the industry?

Dr Golding: The women or the men?

Senator REYNOLDS: The men—the Male Champions of Change themselves to actually stand up and put the case within the industry.

Dr Golding: Yes, I hope so. I think that certainly the idea of diversity being important is widely accepted throughout the industry.

Senator REYNOLDS: Is it then a matter of what we do about it? We know we need some, but we do not know quite how to get some? Is that the state?

Dr Golding: Yes, and that is one of the reasons why I think it could be a terrific move to bring it to the government's attention for any sort of regulatory and funding mechanisms, because then it is not so much a matter of waiting, because we have waited a while. The first commercially successful game was Pong, in 1972, so it is not like it is young any more.

Senator REYNOLDS: We had representatives here earlier from IGDA and the Game Developers' Association of Australia. Is that something that those associations could take on as a project with the industry.

Dr Golding: I hope so.

Senator REYNOLDS: Coming back to marginalisation—the gender issue, which is very interesting—the word 'marginalisation' is pejorative really, in terms of being fringe dwellers and being marginalised. Is it a great area of opportunity, particularly for women, that they can do more home-based work out of that studio boiler-room blokey environment? Are there any initiatives at the moment or opportunities that are being made into programs to make the companies themselves more aware that they can use people offsite or part time, because that seems to be perfect for women who would like to do some more home-based work?

Dr Golding: You are right that labour does play a role in that. Even things like child care. It is very difficult to be the primary carer of a child when you have to work for long hours.

Senator REYNOLDS: For both men and women.

Dr Golding: Yes, absolutely. Or when attending games events it is very difficult to put in the long hours that are required, purely because of the nature of things like that. So, for flexible working arrangements, they may well be but I do not know of any programs that encourage that sort of thing specifically tailored towards games. Maybe that would be a great move.

Senator REYNOLDS: Do you see that is something that would be the role of government to facilitate, or is it really for the industry to get together through the associations to come together and perhaps bring in outside expertise and start talking about it and working through it. Because ultimately you would think there is a financial motive for this, that it just makes financial sense to open up and be more accessible to broader markets.

Dr Golding: Yes, absolutely. I made that financial argument in my submission. It is certainly not the only argument.

Senator REYNOLDS: No, it is not. But for people running a business it is quite a powerful one.

Dr Golding: It certainly is. I certainly hope that industry is able to make those moves, and I would certainly encourage them to. I hope that they will. I see government as another means of doing that. I know that Screen Australia has recently started up a number of programs—

Senator REYNOLDS: They have, and it looks like a good program.

Dr Golding: And Film Victoria, as well, is running a game-specific program regarding a fellowship for women, which is terrific, obviously. We need programs at every level—for entry into the industry and for retention, as well.

Senator LUDLAM: Thank you for your evidence and your submission. It is great. Could we start by focusing on what you think government could do. You have spelt out a couple of proposals for the how the industry and its internal culture can sort itself out and protect its diversity. At 1.3 in your submission you talk about potential responses and you go specifically to what government can do to support diversity in the industry. Your audience is diverse but the industry less so. Could you talk us through some of your proposals.

Dr Golding: Are you referring to page 10?

Senator LUDLAM: Our submissions are numbered differently. I have .1.3.

Dr Golding: Yes. I am talking about financial and organisational support for existing formal and informal Women in Games groups, and there are many that exist in Australia currently. They are grassroots and they are often localised. Some of them are more formalised—Ms Giselle Rosman was talking before about the Women in Games lunch. The publication MCV recently had awards for women in games, which is another great move. But there are often groups that exist purely on the financial support of their founders' pockets. They are often not

professionals. Support for that in any form would be terrific. There is support for Australia's peak video game industry bodies to confront gender diversity, both publicly and privately, which I think we have already spoken about. There is the expansion, once again, of the Women in Male-Dominated Industries program to include the video game industry. We have already mentioned specifically the Male Champions of Change, but I think that that sort of support from organisations that have experience of working within male-dominated industries to come into the video game industry, because it is not like the video game industry is unique or special. It is a male-dominated industry and we have proven tools for how to tackle that. There are diversity targets and structural strategies built into government funding, which I have also suggested. I think that would be ideal. There is also possibly the provision of women-only games development study and skills scholarships. We have seen some, such as the fellowship here in Victoria. As well as that, perhaps more generally across the board for educational institutions as well. The education question is an interesting one, because if you look at the statistics that are available federally we have actually seen a drop. From 2001 about 25 per cent of domestic enrollees in information technology degrees were women. By 2014, which is when the most recent statistics were released, that has dropped to about 16 per cent. So it has actually dropped over the past 10 or 15 years.

Beyond that, there are anecdotal examples. I do not have access to all of the universities, but I have spoken to RMIT, for example. They have a more or less fifty-fifty gender breakdown for people studying games. So, it depends. There are strategies being enacted even at the educational level to combat this.

Senator LUDLAM: That last one is going to annoy the Gamergaters substantially. A couple of pages previous to that you state in your submission:

I have already personally experienced this growing chilling effect around videogames in professional circles and do not doubt that I will continue to do so.

What experiences as speaking of there, because Gamergate was obviously quite a bruising experience for the community? I gather from your evidence that it is still bubbling.

Dr Golding: Yes. I am happy to talk about that specific example, where, for example, they love to go through transcripts of things. I am certain that I am now speaking to some game Gamergaters in the future as they read my words written down in *Hansard*.

Senator LUDLAM: It is all about ethics in Senate testimony! Choose your words very carefully.

Dr Golding: I have done some interviews in the media where, for example, I would say that I have spoken not particularly controversially about Gamergate and some of the associated issues. They have then gone through those and made complaints to the broadcasting organisation, and then taken those complaints to the ACMA. Of course, there is nothing to answer there. This is all perfectly reasonable material to be broadcast. However, it creates a headache for everyone involved, including the broadcasting organisations. So the next time they go to cover games—is it worth the headache. That is the kind of chilling effect that I am talking about. It is where, as an entire industry, when you say 'gamer' people often append that with 'gate'.

I should add that one of the things that I think has been great about this process—not great about Gamergate—is that the people who made the front pages of the *New York Times* are usually the women who are fighting back. They are saying there is something worth sticking around for in video games. There is something worth preserving, and making sure that it is not just a boys-only space here. I think that in many respects that is also the story that people get out of it. It is not just that there are these rabid online hate mobs, but that there are people here who enjoy video games and view them as a valid cultural pastime, and as a form that is worth thinking in and living in, and almost giving up your privacy for these repercussions that occur sometimes.

Senator LUDLAM: Another element of your submission that really jumped out was the working conditions. We spoke of this earlier with Mr Reed. You go into a little bit of detail about the pressure that people get put under, and the quite systematic exploitation are used to exist in the industry here and overseas. It is assumed that because you are working in such a cool sector you will be happy to do 20-hour days.

Dr Golding: That applies to more than video games. In the information technology sectors in general, 'young start-up', 'agile' and these sorts of terms are magnets for people who are willing to work in a cool environment.

Senator LUDLAM: So it is not a unionised sector at all?

Dr Golding: No.

Senator LUDLAM: Is there a need for greater organisation, or do you think that the issues are mostly behind us?

Dr Golding: I do agree with what Mr Reed said before, in that it is a phenomenon that is largely to do with the big studios. This is a global issue. It has manifested itself in Australia in two particular instances, which I have

highlighted in my submission. Of course, I am not living and breathing the daily life of someone working in a small Australian studio at the moment so I cannot speak to it from personal experience, but anecdotally we do see less of it there. I guess what I would hope is that, in helping to grow the Australian games industry, government at least keeps an eye on the kind of workplace culture that is being cultivated and ensures that we do not see a return to the sorts of awful practices that occurred. It is a huge financial problem if you are bringing in workers who then leave after being burned through like a renewable resource, as we saw, allegedly, in the Team Bondi example. That is a problem, because we see fewer veterans. As we heard before, there are fewer people around to say, 'Hey, I made this mistake—don't make this mistake,' and to mentor young people and guide them through their careers.

Senator LUDLAM: Isn't that still a substantial risk? I think the statistic we heard before is that we are graduating 10 times as many people every year as the entire industry presently employs. I have forgotten whether that proportion is exactly right—maybe it is five times. We should have kept you at the table for the whole day. Isn't there still a substantial risk of that kind of exploitation—attracting the lowest bidder?

Dr Golding: Yes.

CHAIR: I will hand to Senator Bullock, but I want to ask one question on that theme. Given that the industry has had that reputation about exploitation of workers over a period of time, do you think that has impacted at all on the lack of women wanting to go into the industry? Do you think there is a parallel between the two?

Dr Golding: Yes, perhaps not so much from women wanting to go into the industry, but women being retained in the industry. As I said before, it is very hard to have a child or want to have a child and work in an environment where, anecdotally, we have seen people in the past working 15 or 16 hours. I am sure that has played a role historically.

CHAIR: In a previous life I represented workers for over 30 years and I know that there are some industries that have a reputation that is not as good as others. You have to try to clean that up, and when it is cleaned up you have to convince people that it is cleaned up for them to want to go into that sort of stream. If that is an issue about trying to attract women, the message has to be out there that the industry is better than it used to be and those old things have gone. It is about making sure that that message is getting out there.

Dr Golding: I think that to some extent this is not one of the issues that is tied up in the public image of the industry. The image is still that it is a cool, interesting industry to move into. I would say it is more of a retention than an attraction issue.

Senator REYNOLDS: Is it more an issue of mainstreaming now—saying that this is not just the new, cool thing to do any more, but it is now a serious, mainstream profession that should be treated like every other profession in every way?

Dr Golding: Yes. One of the factors there that we have not spoken about, although I do mention it in my submission, is ensuring that games connect with other creative industries and is part of that same landscape. Apart from anything, then you might see it crosspollination. We can be honest that most of the creative industries are not utopias of gender diversity, but at least some of them will be able to have lessons, people and mentors who have worked in similar circumstances or who may choose to migrate over to games or do a project in games. That sort of thing is really important, too.

Senator BULLOCK: Chair, in defence of your current role, I am sure you are still representing their interests.

CHAIR: I am always representing workers' interests. Thank you, Senator Bullock.

Senator BULLOCK: I want to channel Senator Xenophon for a bit and talk about gambling. Gambling is continuing its insidious infiltration of a range of sports. It is bringing tennis into disrepute, most recently. The public is concerned about the subtle opportunities for gambling that are being opened up by international gambling operators in a whole range of activities. I note in your submission that it seems to have stretched into this industry. You say that we need to keep an eye on it and regulate it. What do you think needs to be done and how serious a problem is it? What should we be looking at to do in terms of regulatory arrangements? How serious is it in terms of the potential social problems, particularly engaging young people, and a problem for the industry in terms of bringing the industry into disrepute?

Dr Golding: I would break that up into a few different issues. The games that are made locally in Australia do not often have that problem. In many respects the Australian industry, such as *Crossy Road*, which we have spoken about so many times today already, is a terrific example of being a free-to-play game that is not exploitative of its players.

Senator BULLOCK: Is there any main chance for these product placements that have been happening all day? I did not mean that.

Dr Golding: That is one of the keys to its success, as well, when you were asking that question before, in that it does not—there are some games that, for example, have a barrier, so that once you reach that barrier you have to pay more to continue. *Crossy Road* is not one of those games. There have been games made like that in Australia, that probably tread that line a little uncomfortably, for me, but I do not think it is prevalent. The games made in Australia do not face that problem quite as much. It is something still to keep an eye on. But it is a global issue, and there are games sold on the Australian App Store that are made internationally but are digital poker machines, where you pay real money to play a game and the fruit comes down. They are often ranked highly in the highest grossing charts on the Australian App Store. If you look at the reviews that users have left for them, it is disheartening to hear people tell stories of how they have lost money.

There are other instances. This is perhaps tied up more in regulation. I give the example in the submission of how, when I was a journalist at *Crikey*, I pursued a story where I discovered that users could bet real money on games of EA sports titles, so *FIFA*, the soccer game, particularly. There was no warning from the Classification Board on the box or anything like that. I tried to pursue that with several regulatory authorities, but in my experience nobody was really interested in pursuing that. It was, of course, optional content; it was, of course, online only content. However, I see it as something that might be regulated. These games are not made in Australia.

Senator BULLOCK: As people pursue and explore the financial opportunities, if this has the capacity to grow as an income stream for developers, isn't something that we should be acting on now to cut it out?

Dr Golding: Yes, I think so. It is difficult to draw a line in the sand between the free-to-play model, which I described earlier, and straight-out gambling. I am sure we have very clever law makers in Australia who can find that line somewhere. It is something that I think we should actively keep an eye on, at the very least. Perhaps the Classification Board could be given a remit to look at that or at least include a line on the box when the game is sold in stores. Perhaps we can work with online distribution platforms, such as Apple's App Store, to better regulate those or at least build in warnings and these sorts of things.

Senator BULLOCK: Chair, can we keep this in mind when we are discussing things?

CHAIR: Absolutely.

Senator REYNOLDS: I want to pick up your point about the blurring between different forms like screen and film. It made me wonder whether we need to start looking at different ways of viewing content versus platform. A lot of the regulation we see in this committee on classifications, et cetera, is all about the platform that it is viewed on, rather than the content itself. Do you see that as an issue—that perhaps we have to redefine content and the relationships between how it is developed and how it is delivered? At the moment legislation seems to be most focused on the platform that it is communicated through and not the content. Is that something that you see in this industry?

Dr Golding: Content is shaped by platform. There is always a closely, tightly interlinked relationship between the two. Historically, there was a sizeable debate over how films and games were classified. In about 2004—I am not 100 per cent sure of that date—the guidelines for the MA15+ classification in video games were changed so that the content that was classifiable was the same as in films. That has been one of the sticking points, because previously it was specific to games in terms of what could be classified, then it changed to be the same sort of content as for cinema.

It has been an ongoing debate. We cannot just think of everything as being in a melting pot of content together. Platform does play an issue. We have already heard about how players have a different kind of relationship with the game than they do to a movie, for example. I do not think we can forget that. That said, I think that all the media forms exist within the sphere of creative industries. Closer dialogue and ensuring that there are opportunities for the different industries to work together, have a dialogue and learn from each other is really significant and important in that sense.

Senator REYNOLDS: Do you see that happening, or is it still pretty stovepiped?

Dr Golding: It does happen. I would like to see it happen a lot more, perhaps more in an institutional sense as well. As I mentioned in my opening statement, I often speak to people from places like ACMI, Federation Square and Arts House here in North Melbourne. Often they are surprised to learn about all the amazing things that are happening in games. Maybe I should not have listed ACMI there, because they are really on top of games. Some organisations are on top of things, but I still think that there are institutions that play a fundamental and significant role in shaping what we see as culture that could learn so much more about what is happening in games. That would be great for them and it would be great for games.

CHAIR: Thank you very much for your attendance and your submission.

CRAWFORD, Ms Laura, Lecturer, Games and Interactivity, Swinburne University of Technology

VERDON, Associate Professor James, Department Chair, Film and Animation, Swinburne University of Technology

[11:22]

CHAIR: I welcome representatives of Swinburne University of Technology, Associate Professor Verdon and Ms Crawford. The committee has your submission. I invite you to make a brief opening statement and then the committee will ask questions.

Prof. Verdon: Thank you. We would like to make a joint opening statement. I will make some general points and then pass to Laura to speak to some specifics. The Department of Film and Animation at Swinburne offers a number of games-related courses and also undertakes research in that area. The university has a number of areas that work through games education and research. In 2014 the university brought a number of different screen-based disciplines together as part of a university restructure, so the Department of Film and Animation is home to the disciplines of film and television, animation, games and interactivity and also areas of digital media. There is a strong sense that we see the synergies between those areas and what build that.

Certainly our film and television offerings are much more mature than our games and interactivity offerings. That reflects the industry and reflects other things for us. Our connections with industry and the way in which we engage with industry is about embedding industry. Particularly for our undergraduate students, we do not see that industry is something that they deal with once they leave us—they finish of course, become qualified and then go to industry. We are very genuine about embedding industry within our course. I would like to pass to Laura to address more specifically some of the recommendations that were made as part of the submission.

Ms Crawford: Today I would like to focus on three issues pertaining to the state of video games in Australia that are part of our submission: placement of graduates, censorship, and the relationship between academic research and industry. First, in addressing the placement of graduating students, we are speaking to recommendation 2 of our submission, that the government invest in an initiative whereby part or all of high level games graduates' first-year wages are paid via an internship scheme, thereby providing the graduate with experience and the company with an employee who can bring new and current thinking to their work culture. Nothing like this currently exists in Australia, and not having this kind of scheme in place is damaging to the industry here in a number of ways. Primarily, larger games companies are not receiving the benefit of the unique input of recent graduates. Also, talented games graduates either leave for larger industry hubs internationally—so they are leaving Australia—or they choose not to work in game development at all. These are some very talented people that we are putting out there.

Second, I would like to address the ongoing issue of censorship pertaining to the video game industry in Australia. In the Swinburne document this is recommendation 5. Due to stringent classification laws relating to video games, Australia's relationship with the international games community can be a little bit strained, particularly with other major developers. While we now have an R18+ rating in place, this does not necessarily mean that certain video games will not come under just as much scrutiny as before by the Classification Board or the review board. Censorship cannot be changed simply by changing laws. It is socially and culturally ingrained in many cases. We are proposing a broader representation of Australians on these boards, and perhaps, eventually, a separate committee for the censorship of video games. There is currently only one out of 18 board members on the Classification Board that list games in their profile, and this is one among many, many hobbies.

Third, is the relationship between academic research into video games and the games industry, which is touched upon in recommendation 6. Many other industries have government funds allocated to research or grants that enable private companies to invest in university research. This is invaluable for either the companies or departments involved as they have access to cutting edge research, and also for the graduates, students or academics involved as they have a tangible and supported project. A scheme of this nature would be very beneficial to the video game industry, and to those dedicated to the research of video games in the industry. Additionally, grants that support interdisciplinary and transdisciplinary research into playing games would be beneficial for the creative aspects of this industry, which quite often, within these contexts, gets overlooked.

CHAIR: What are the degrees that you offer that are relevant to the game industry?

Ms Crawford: We offer three degrees at Swinburne that are relevant. We have a game design degree, which focuses primarily on design in which select students also get to make a lot of games, but it is primarily design based. They still engage with the tech. Then we have a double degree, wherein students take the game design degree and a computer science degree together. And we have a game development degree where students take a degree which is specifically tech based, and they learn to make games.

Prof. Verdon: We are also currently accrediting another double degree which will be games interactivity and animation. That is a further offering. And there are also some vocational education offerings within Swinburne in that area.

CHAIR: So how many graduates? You talked about internships for your graduates. How many graduates are there each year?

Ms Crawford: Anywhere between 30 and 50.

CHAIR: And do you know what sorts of employment opportunities there are in Australia for those 30 to 50 graduates each year?

Ms Crawford: We have had three groups of graduates come out and start their own studios this year, with help from The Arcade and from Tony Reed and the GDA. But mostly the idea is that they either go into independent game development—so we started offering them minors in business and things like that so that they can understand how to do that for themselves—or they maybe go into what we call a AA studio, which is a larger studio. It is not quite a AAA, it is not huge, but there are a bunch of institutional studios in Melbourne that have anywhere between 30 to 60 employees. If a graduate is very lucky they might get a position there. It is actually becoming more rare, because the incentives are not really there to employ someone who has just graduated.

Prof. Verdon: The notion of 'graduate' for us is changing, because previously our games offerings were majors within the bachelor of arts; this year, for the first time, we have a named degree in games and interactivity. This recognises the growth in this area. Obviously, there were lots of business and sustainability cases put around that. We are going to be able to track those much better, because we can represent those students through course enrolments rather than, 'I decided to major in this area,' or 'I took a minor in this area.' Pulling that data together, we are also going to be able to forecast through that data.

CHAIR: You talked about the bringing together of the various departments in 2014. Has that provided more interest in the gaming area for people going into that stream?

Prof. Verdon: Has it provided more interest to prospective students? It is very hard to track why a student comes to you. Once you have the students, you can talk to them, you have that engagement and you work with them over a long period of time. You do not know who did not come, and you often do not know why they did not come. We have seen an increase, and I think the introduction of a named degree in games and interactivity for us speaks to a growing interest and profile in the area. Previously, the numbers within the majors and the minors and the offerings we had in games were growing to a point where we thought, 'This is sustainable to have a profile in its own right.' I think that does speak to that interest and that profile growing. It is a little early to say where that is going to go and how it will scale.

CHAIR: What is the breakdown of male and female?

Prof. Verdon: It is reflective of industry currently. There is nowhere close to parity in student cohorts. We have a little more control over making staffing decisions. All of our appointments are merit based. Since bringing together this department at the beginning of 2014, we have made one hire in games and interactivity, which was Laura. We now have three male academics and one female academic in that area in our department.

CHAIR: Are you building on doing anything to attract more females into that area?

Prof. Verdon: Yes, certainly.

CHAIR: Do you want to talk a little bit about that?

Ms Crawford: As Tony Reed was talking about earlier, I am also on the board for the STEM Video Game Challenge. As Tony pointed out, part of that is trying to reach out to high schools and primary schools, and at that young age trying to get young girls to understand that video games can be a career for them. We are speaking to parents and teachers as well, and something is happening that would happen 60 years ago, when a young girl would go to her parents and say, 'Mummy, Daddy, I want to be a doctor,' and they would go, 'Oh no, dear; you can be a nurse.' That is happening now with video games. It is, 'I want to go into video game development' and what is happening a lot is, 'Why don't you go into graphic design? Why don't you go into something more stable?' or, as we have been talking about, 'Why don't you go into something with a better gender balance?' Swinburne is the only university on that particular board, and we are there to try and encourage that gender parity. I am also currently on a STEM committee with our dean of science, and they are building a network throughout the university. One of the focuses of that will definitely be looking at females within STEM careers and encouraging the students that we have to be brave and happy about getting into industry, and making that a safe place for them within the university.

Senator LUDLAM: Thank you both for coming in and for throwing a bunch of proposals into the mix as well. I think that is really valuable. We are here looking for good ideas. In your submission, you talk about the Cool Japan initiative. What is that one? I had not come across it before. What is Cool Japan?

Ms Crawford: Actually it was one of my colleagues that wrote about that, so I do not have a lot of information about it myself. I do believe, though—just bear with me a second—

Senator LUDLAM: I guess I can always google it, but if you have any—

Ms Crawford: Please, if you could do that, because it was not me who wrote on that. Do you know, James?

Prof. Verdon: We will take it on notice.

Senator LUDLAM: As you wish. We can go and have a look at that. We have spoken a little bit about using games for non-entertainment purposes. I think it is a bit of a bugger that it is the name itself that traps our minds in what is actually quite a diverse spectrum of different things. Do you want to speak a little bit about what is actually meant by this term 'games' and how that is reflected in some of your coursework as well? What can people actually go out and make?

Ms Crawford: Obviously, throughout the different degrees, the word 'games' is reflected differently. I teach in the game design degree in which we place a lot of focus on play in first year and on design and construction in second year. Then, in the third year, we focus on getting the students to understand the commercialisation of what it is they have learnt. So the word 'games', in the way we teach it to our students, is a very broad thing.

My background is psychology. I teach them a lot about the psychology of play, the psychology of players and the psychology of themselves as designers. The way in which we engage is—like I said, they come out with a very broad understanding of everything from the way in which it fits philosophically and into society, up to the way in which it can be a product. For them, in terms of what they are actually making, at the moment they are making quite a lot of co-op games. This is about facilitating social relationships. But, in a broader sense, as well, we get them involved in things like hackathons and things like that. To open Games Week last year at Swinburne, the first event that happened was a Microsoft hackathon which was health-focused. VicHealth—

Senator LUDLAM: Sorry; health?

Ms Crawford: Health-focused. And VicHealth was involved in that, actually. There were about 30 people there wanting to make games for health and utilising Microsoft technology in order to do that. About seven of those were to be taken through to further development.

Senator LUDLAM: You proposed a government-funded internship program. Are there any other industries or any areas that you could point to where such a thing exists, or is that unique?

Prof. Verdon: Certainly. In terms of allied industries, Film Victoria and Screen Australia both support paid internships for recent graduates and early-career practitioners within the film industry and, to a lesser extent, within the television industry. I think that is certainly one that is very close—it could be pointed to and modelled very easily.

Senator LUDLAM: Do you have any sense of the kind of the scale you would need to make a significant difference in keeping people here?

Prof. Verdon: The more the better is always the response to that question. For us, when we see our graduates go out into industry, when we are letting go of them, our strong desire is to send them into an industry that has an eco system and a culture which we believe absolutely strongly exists now but is also viable in terms of career progression. I think the scaling is about someone coming into the first year of a degree program thinking and being aware of those kinds of initiatives being out there, and that being something that they can take advantage of. As the industry grows—if we had this conversation in two years, the scale and proportion would be quite different—if it is very small scale, it must look like it is viable to them. So it is about starting out their career that they think, 'In three years time when I graduate, I've a shot at getting something like that.' So it is not about let us just take the very brightest and the very best and offer them a particular opportunity, and everybody will aspire to that. That is not about capacity building. Capacity building means that it needs to be substantial in proportion to the size of the industry.

Senator LUDLAM: One last one from me. There is some pretty strong language in your submission on classification and, particularly, refusal to classify. We went through this rather boring fight over R18+ classification a couple of years ago. We got that over the line. But you are still of the view here that there is a lot of material being refused classification. Is there any idea of how much? In confining our questions to games, how much stuff is being blocked at the border, so to speak?

Ms Crawford: Definitely, there are still a few games that have been blocked. If you were taking it down, I would say that, maybe, you are looking at another 30 per cent to what it was before—if you were going from 100. In looking at, probably, the last four or five years, about four have been banned—notably, for fairly violent content. It is not as rife as it was beforehand certainly but, by the same token, I do not think we can have just an R18+ rating and think that that will solve our issue, because perhaps it does not.

Senator LUDLAM: That took years to get over the line.

Ms Crawford: It really did, yes.

Senator LUDLAM: You have also said that censorship runs deeper than laws and it is culturally ingrained. I think I get what you are on about there. So what do you want to see changed if not the law?

Ms Crawford: I think just having on the board broader representation of people examining these games, playing them and talking with people who may not have a relationship with video games and giving perhaps a different perspective on these things.

Prof. Verdon: Dr Golding said earlier—and it was noted by one of the panel members—that we need to be a little more platform agnostic around those things and have a focus on content rather than on the platform.

Senator LUDLAM: Thank you.

Senator REYNOLDS: I was listening to some things you were talking about with the evolution of your courses—double degrees and now name specific courses. Have you thought about opportunities, such as the New Colombo Plan, to get your students embedded in markets—coming back to the discussions we had before—that we could open up but we need cultural understanding and linguistic understanding? Have you had a look at doing that in terms of giving your students some opportunities to specialise in the Chinese market or the Japanese market? We heard this morning that South Koreans apparently love our sense of humour. Have you had a look at not necessarily just that plan but other opportunities for exchanges with other universities?

Prof. Verdon: Yes, we have. The New Colombo Plan has been an amazing initiative but it is administered at a university level so you have diffident disciplines with different stakes. There is never enough of that stuff to go around. There is the recognition of games as a legitimate discipline, both within your institution and nationally, then partnering with somebody—there are a number of hurdles to get through there when you are compared with other disciplines like engineering and physics. They are very established disciplines that have very defined ways of assessing students and student merit and ways in which they are able to partner with other institutions, who feel comfortable about taking a student based on a transcript or based on something that is usually not a folio of work, for example.

We have partnerships with other institutions internationally. We seek to broker those wherever we can. At Swinburne games is certainly something that is emerging. We have to build critical mass. We have to build a profile for that to become attractive to other partners and to be able to be seen as an attractive partner to work with. With the effort and time you put into establishing any of those things you have to be able to scale it and make sure that there is a return on that investment. So to have sent one student or three students looks fantastic at the end of the year when you talk about it, but it needs to be something that we build that is sustainable. I think we need another couple of years and potentially some more support externally to be able to enable those things to happen, particularly for the games disciplines.

Senator REYNOLDS: Given the size of the industry here and the potential opportunities for it to grow as your program matures, is that something that you could see you could offer or perhaps differentiate yourself slightly on—you look to qualify your graduates to work in these companies and offer them something a bit different, not only the psychological understanding of how you market and some of the things we talked about this morning but also how to engage with new markets and develop product that is diverse?

Ms Crawford: Most definitely. Within the context of the design degree itself we certainly talk about various cultures and ways to engage with them and things like that but that is more of a broad sort of philosophical and cultural bent. I think what you are talking about would be a much more specific focus on that kind of thing. Providing subjects or a double major between the games degree and an international business degree, a language degree or something of that nature would definitely help I think.

Senator REYNOLDS: I would have thought that having graduates who have the technical and psychological understanding of the industry and who can say to existing companies or new companies: 'I understand the Chinese market. I understand their sense of humour and what they are interested in,' would be an offering that might not be there at the moment.

Ms Crawford: Absolutely.

Prof. Verdon: Certainly, and it is something that we would like to pick up on. The conversations I have had with potential partners in India, Malaysia and Singapore—most of those have been initiated through film and television because our profile in film and television is much higher. Traditionally, in film and television you train for a national industry. Industry and protocols and things vary from territory to territory. What became apparent very quickly to me in those conversations was that they were interested in partnering with us around games and animation because they saw it as being globalised and some of the things that were talked about this morning—that you can have a global outreach where everybody does things in different ways. There is not one way to do it, but there is absolutely a shared understanding of what it takes to get something there. Your point around then specialising within that that, or having a particular nuance or granularity around that—Swinburne, in terms of its scale and location and everything else, does that in some other spaces too, where you say: 'You can't take on all of this. You need to choose something and do it really well.'

Senator REYNOLDS: Just on that as well, the government's Innovation and Science Agenda is looking at having these landing pads, in Tel Aviv and Silicon Valley and elsewhere in the region. From the testimony we have heard today and following on from that, it seems that that might also be a good opportunity, something between getting Australian developers actually out into, for example, Tel Aviv, Silicon Valley or regionally, combined with more of the scholarships to study in the region. That might help develop the industry as well. Do you see a role for those landing pads as well?

Ms Crawford: Absolutely. If we could do some kind of exchange program in order to not only get our students to be more culturally aware and to be working within other cultures but then to have them perhaps be able to come back as graduates, as alumni or as current students and be able to inform the industry that we have here about the things that they have learned overseas would be completely invaluable.

Prof. Verdon: And the collaborative nature of those things—that you have a community of practice; you do not have one person in 10 different places; you have 10 people in one place and you build something—

Ms Crawford: And just really hit critical mass.

Prof. Verdon: And the intensity and the outcomes—we have seen that in a lot of other areas and it is very much applicable here.

Senator REYNOLDS: In this particular area, you referred to some barriers, in the short term, to making better use of those opportunities. Given your experiences, can you take on notice to identify what some of those barriers are and how, from a university perspective, the barriers could be overcome or what some other opportunities are in terms of ideas that we could look at?

Prof. Verdon: Absolutely.

Senator REYNOLDS: Thank you.

CHAIR: Black Delta's submission noted that other industries have advisory panels that provide input to government. They recommended that there be the establishment of a games advisory panel to provide government with expert advice about the industry. I have learned a lot more through this hearing today, and I am sure there are a lot of other politicians and people making decisions that can probably learn a lot more about gaming and the gaming industry than we already know. Do you see merit in that proposal?

Prof. Verdon: Absolutely. The process of consultation, the hearing of a number of different voices and then aggregating that, is always going to lead to more informed decision making.

CHAIR: What do you think would be the achievement? What could that advisory panel actually achieve?

Prof. Verdon: There is a lot of streamlining that can happen. If you have wide enough representation, but it is focused enough, the stuff that bubbles to the top is the hot issues. There are enough voices to be heard where there is not an exclusion of things and those issues, but you do not also have to sift through a huge volume of material that means you risk losing things along the way. It is that aggregation in a very focused and skilful way that leads to better outcomes.

Senator BULLOCK: Earlier today I put to Mr Reed the comments, which were made in Dr Golding's submission, about unreasonable exploitation and labour practices. He said: 'That may have been true once but we're moving on. It's not perfect yet but we've turned the page and things are getting better and better.' I used to be secretary of the hairdressers union in Western Australia. Employers in the hairdressing industry always wanted to encourage more and more apprentices. Apprentices were used very much as cheap labour. Then they found that there were no real opportunities for ongoing employment in the industry and left. Then more apprentices were taken on. Here we currently have got many more times the number of students than there are jobs—notwithstanding that the industry is expanding at 10 per cent a year. I am a little concerned about your internship

proposal because it sounds to me very much like apprentice hairdressers: a recipe for exploitation. How can you ensure that people would survive their internship and go on to a job, and not just be chewed up and spat out in an industry which has previously suffered from exploitation, churn and burnout?

Ms Crawford: I think that is a perfectly legitimate concern to do with young people, certainly graduating people, going out into the industry for the first time, not knowing what to expect, not having their own personal boundaries on these things and, of course, feeling like they are lucky to have a position. Perhaps there could be some kind of monitoring with it. I do not expect that it is going to happen in the scale of hundreds of thousands every year, so perhaps it could be someone who visits every now and then and checks in on the company.

By the same token, I do not think we can guarantee that that will not happen. We have a very good industry here, as Mr Reed pointed out, and everyone, certainly within our community here in Victoria, is held accountable. We very much know one another. Perhaps recommending internships through reputable companies, which have proven themselves in that way, but I do not know—

Senator BULLOCK: Every company would hold themselves out to be reputable. Every employer of people on 457 visas holds themselves out to be reputable, yet there is a trucking company in Sydney that employs 457 visa drivers who cannot turn a truck around. If it depends on the formation of some sort of inspectorate to make sure that people get a fair go, I think that would be enough for me to turn my back on the internship idea.

Finally, could I have your indulgence, Chair, to make a comment?

CHAIR: Yes, that is fine.

Senator BULLOCK: It had not occurred to me that it was possible to lower Australia's censorship standards. I am appalled at the degenerate bilge that passes muster in this country and erodes the moral fabric of our society. I would want to toughen up our censorship rules a lot.

CHAIR: That was a comment. I am happy for you to respond to it if you want to.

Ms Crawford: As I said, censorship is a contentious issue. Quite often the way in which we view censorship, as I said before, is culturally and socially ingrained, as well as everything else. There are a lot of disparate voices and it is quite a subjective issue. But, if we look at it from the point of view of the way in which we are legislating it or the way in which we are enforcing it, the way it was written in this submission was not necessarily to say that we need to make it more lax but to say that we perhaps need to make it more fair and open. At the moment we have people who are legislating on the products of this industry who do not have anything to do with it really. That is definitely an issue. It does not necessarily have to do with sexuality or violence and things like that—and of course sometimes it does—but it does have to do with perhaps having people in place who have more of an inherent understanding of what that product is and how it works culturally and socially. It does not necessarily mean making the laws more lax; it just means getting them to be enforced by people who have an understanding.

CHAIR: In your submission, you refer to games for non-entertainment purposes, and you talk about things such as games for health care and education. We did hear a little bit about that earlier. You suggested that Australian developers could develop a niche in serious games. What sorts of things are needed to achieve that? Should that be a focus to encourage development in Australia? And are we then putting one type of game over the top of another one and giving one more precedence? I am interested in your views on that.

Prof. Verdon: Our department sits inside the Faculty of Health, Arts and Design, which is quite an unusual grouping of disciplines and it often receives comment. What it has done for us—and this happened at the same time, the beginning of 2014, as our department was formed—is that it has given us access to, particularly, health and allied health disciplines that we just would never have thought about before. Certainly across film and television, animation, games, interactivity and digital media, there has been the beginning—it takes time for these things—of this traffic. It starts often with research and then filters down through to many more of the coursework teaching programs. I just now have such a different viewpoint around what is possible in those spaces. I was not aware of some of the work that was going on and, to be frank, the low quality of some of the work that represents outcomes in our discipline. For example, in health communications the production value of some health communication material could be vastly improved by more skilled technical work going on. Laura, it would be good if you spoke a little bit about Dr Steven Conway, a colleague of ours, a games academic, who is working with our psychology and sociology academics, within the prison system, to produce games material—and this is coming back to that kind of question.

CHAIR: Mr Reed did touch very briefly on the use of it in prison, so I am interested.

Prof. Verdon: This is for recently incarcerated young offenders and an orientation that is focused around mental health and coping strategies within the Victorian prison system. That is a game, and it starts to move those definitions: what do we call a game; what is something that is a tool; what is something that is a game; what is

something that is a health intervention, for example? It is not so much about blurring those things but saying that you can define that product that they are working towards as all of those things, and I do not think that it cuts anything else out of the equation. It does not stop anyone doing anything else. It does not drive more activity in that space. It starts to open up those possibilities for many people to come to that and say, 'In my area, I could do something like that over here.' Rather than siloing, I actually think it becomes much more porous.

Ms Crawford: It is more about an interdisciplinary or transdisciplinary approach rather than cutting anyone out of anything. It is putting games perhaps more on the map in terms of being able to collaborate with other industries and funding that kind of collaboration.

CHAIR: I find that quite exciting. Before we started at 9 am, I had this general view that people that played games were young teenage—Senator Reynolds used the word 'geeks'. I would never have thought that you could apply that sort of technology to improving people's health and wellbeing and those sorts of things. So I think that is really exciting and it is a really exciting phase to look at how we can merge that technology, broaden it and utilise it much more widely.

Prof. Verdon: I just want to briefly mention another project that I am personally involved in, which is around health communications. It is looking at health communications strategies in the efficacy of delivering messages. There was some research done at the University of Southern California—it was quite a large study—that showed that if you narrativise content you increase engagement. That was around pap smears. They had a 50 per cent increase. The information that was given to women was retained equally between a non-narrative and narrative version of that information. The action that women took was 50 per cent increased for those who had seen the narrativised version, which was in the form of a Latina soap drama. That is the way in which it was delivered.

I am working on a project now that looks at applying those things to narrativise very standard health communication messages and then making those interactive so that you choose the character that you identify with and play through the scenarios for those characters. It is a game. It is currently not configured in that way or spoken about in that way because it frankly would not help to further that project internally. But it will be a game. That does not stop anything else happening. That could be applied elsewhere. It is absolutely transportable across a range of other fields.

CHAIR: You talked about the Faculty of Health, Arts and Design being part of that mix at Swinburne in 2014. Are you seeing students come up through health looking through the door at what is happening in the games area and thinking, 'Gee, I could use that'? Do you intermingle?

Prof. Verdon: To be very honest, we are two years in and we have had huge curriculum overhauls. We have had to restructure degrees to enable this to happen. The pipeline effect of that is probably two years away. So, yes, people are looking through the door. We have visitors that we did not have before. We go and talk to people who we did not talk to before. There is a pipeline effect, and it will take a couple of years before we see the real outcomes. But it is working and the interest is clear.

Ms Crawford: We have quite a few students from the psychology area. We have quite a few students who are involved in mental health who will take both majors or come and do our minors and things like that. There has been quite a bit of interest, definitely. The school of psychology is now quite interested in placing students into our more psychology centric subjects.

CHAIR: Is this something that you think the Australian gaming industry could be at the cutting edge of or is it already out there in other parts of the world?

Ms Crawford: I think it is something that is being developed everywhere. It is also more about utilising games for more practical means. That is something that is happening as a whole, not just in health. It is happening in insurance and building. There is a virtual environment called Second Life where they have programs within that to teach first-year building students about what not to do around a construction site as opposed to just putting them out there. So it is definitely out there as a whole, but certainly if Australia were to invest in serious games, particularly with a health bent, there is no reason why we could not be one of the world leaders in that particular field.

CHAIR: When you talk about Australia investing, are we getting back to government investment?

Ms Crawford: I think it is about government investment but it is also ideological—being encouraged to do so. We are, at the moment. There are meetings happening between games people and health people, such as between surgeons and heads of hospitals and people who are making games. That kind of thing is happening, for sure. But if we could make it a little more overt perhaps we could benefit from that.

CHAIR: But there is certainly a leadership role that government could play in that area.

Ms Crawford: There is an essential one, I think. Yes, I think we are at the point where we need you now to help.

Prof. Verdon: Certainly universities—public universities particularly—take their cues from decisions that are made in other important places. That drives policy and activity.

CHAIR: Thanks very much for your attendance and your submission. It has been most useful and very interesting.

Proceedings suspended from 12:04 to 12:15

AGANESOV, Mr Tigran, Chief Operations Officer, Black Delta

CLINNICK, Miss Lauren, Marketing Director, Mighty Games Group

GRIFFIN, Mr Zachary, Founder and Chief Executive Officer, Black Delta

RENNISON, Mr Neil, Founder and Creative Director, Tin Man Games

STAPELBERG, Mr Paul, Founder and Chief Operating Officer, Well Placed Cactus

CHAIR: I now welcome representatives from Black Delta, Mighty Games Group, Tin Man Games and Well Placed Cactus—you've got to love all those names! Information on parliamentary privilege and the protection of witnesses and evidence has been provided to you. The committee has each of your submissions. I invite each organisation to make a brief opening statement and then the committee will ask questions.

Mr Griffin: In addition to our existing recommendations, it is Black Delta's belief after raising private equity and commercialising a studio which now employs 14 personnel that Australia is suffering from a significant talent shortage that hinders the future success of studios and indeed the Australian industry as a whole. This in turn increases recruitment costs through longer recruitment times and causes additional expenses to be incurred when securing international talent and service providers which simply do not exist here in Australia with the competence we have found offshore.

Further, the current environment has required us to invest more in the training and development of our current staff and, more importantly, prevents Australian companies from competing on an even playing field in the global market. Additionally, we believe that through our recommendations the Australian industry must be allowed to grow artificially until such time as the aforementioned points are corrected.

Miss Clinnick: I would like to add that the Australian gaming industry is something that we are proud of now and we invite the government to be proud of it as well. We are award-winning, innovative international leaders. Our community is internationally renowned. Similar to our sports prowess as a nation, Australia is punching above its weight in the games industry internationally.

I wanted to thank you sincerely for speaking with us today. Today and all days, the games industry here welcomes the government to collaborate and speak with our industry. We are facing a post-mining and post-manufacturing world. The games industry in Australia is in an excellent place to seek optimisation and create strategic supportive policy, which we are discussing today. Australia has the opportunity to set regulatory and taxation frameworks that will allow the local video game industry to fully meet its potential as an innovator and a substantial employer.

Senator LUDLAM: Thanks for being here. I realise that you are pretty busy, so thanks for taking the time to give us some firsthand experience. I might go to you first, Mr Rennison, because you were one of the recipients of the original games fund that we were speaking of right at the beginning of the day.

Mr Rennison: I was.

Senator LUDLAM: Do you want to sketch for us what kind of support you guys got and what you managed to do with it before it was taken out?

Mr Rennison: Essentially I and the other director of the company were working from home offices. We were working really hard with lots of contractors around the world, probably punching well above our weight for two guys sitting at home, but we had massive plans and we had already developed lots of relationships with potential licensors. We were building our tech, and getting that enterprise funding was just the catalyst. It opened so many doors for us. We immediately hired three staff. We moved to permanent offices.

Having those key staff enabled us to suddenly have skill diversity, because obviously the other director and I had a certain number of skills, and having new staff on the team brought a whole load of new skills to the table which meant that our technology became better very quickly. We were able to release more titles quicker than we were before. Just since we have had that funding, for example, we have released 23 new titles on iOS and Android, and we have taken 11 of those and released them on PC, Mac and Linux.

Having that springboard too helped me to go out and chase new projects and speak to new licensors. We have been working on projects with Games Workshop, who are one of the leading board game manufacturers in the world. We did a title based on Judge Dredd, which many people might know of. It is just being able to go and talk to people like that and have some credibility and put forward our technology.

Just going back to the hiring of people and how important that is, to give you a bit of an example, we were not originally going to release our titles on PC, Mac and Linux. They were just going to be on iOS and Android,

which are mobile and tablets. We hired one guy, and this one guy knew a lot about the marketplace in which to sell these titles. I just looked at the figures this morning, and our 11 titles on that marketplace since he has been employed have grossed US\$160,000. So that is just one person coming onto the team and the impact that person made.

Senator LUDLAM: Mr Reed reminded us right at the beginning of the day that the fund was not just a handout and then, 'We'll see you later.' The idea was that it would be recycled back into the budget. Did you guys end up paying the money back or is that a bit too soon to say?

Mr Rennison: We had a quarter that we have to pay back. We have only just received the last piece of the funding.

Senator LUDLAM: So it is still kind of trickling out even though it got pulled off two years ago?

Mr Rennison: Yes. We have been getting it in little bits. I have just received the last little bit. I have to deliver a report every six months to Screen Australia, which is very detailed and shows all of our successes. It breaks down how much things have cost and how well we are doing and the publicity we gained.

Senator LUDLAM: Is it possible to give us a rough idea of the return on investment, because there were some pretty impressive figures flying around before?

Mr Rennison: I cannot give you some exact figures. I could probably come back to those figures. We have five years to pay back the money. I quite easily see us doing that in that period.

Senator LUDLAM: It is interesting, even though it was only there very briefly, that it gave us some reliable data on how people used it. Some of the other folk here came to speak specifically to how that fund worked when it was operating?

Mr Griffin: We have no experience with the fund.

Senator LUDLAM: So how did you guys get on your feet?

Mr Griffin: We raised private equity through investors here in Australia and offshore as well.

Senator LUDLAM: I think you have spoken about simulation and VR software, and it feels to me like 2016 might be the year when this finally breaks open. We have all been collectively waiting for 20 years and now maybe it is finally here. Do you want to give us your thoughts on where the industry might be heading?

Mr Griffin: Sure. I think it is very early days at the moment. It is a bit reminiscent of pre-iPhone. In terms of finding out where the industry is going in terms of the VR side of things, there are a whole lot of players in the marketplace right now—you have Sony and Oculus—all of whom we are in contact with. The mobile space is certainly something that will be quite strong in a few years, but I think it is extremely early to say exactly what VR will look like and where that success will be. Goldman Sachs, I think, recently estimated the VR industry as a whole to be worth \$80 billion by 2025. We are certainly investing into that technology and gearing up in terms of the talent that we have and that we are recruiting so that we can support and drive that here locally when competing offshore against more established areas with greater talent pools, but it is something that is too early to call.

Senator LUDLAM: Looking across your different submissions, there is a reasonably consistent request for a games advisory panel and then there are a diverse range of suggestions after that. Who want to speak to that proposal? It is obviously something that does not exist. Has there ever been such a thing in an Australian context? Who wants to take that one on?

Mr Aganesov: I do not think there has been—not that we have experience working with. It is quite successful in many of the other industry sectors. Essentially, some of the consistent issues that we are faced with are that game development or commercialising a studio relies on a range of skill sets. One of them is that a lot of the developers or idea settlers have limited experience in actually commercialising a product—so the business acumen, the intelligence that goes with it, and the experience. Essentially, the panel could consist of a number of individuals, and some of them should be VC funders—someone who can advise and potentially be the bridge between an idea and actually challenging the commercial aspect of that idea. They are policy setters, so they can understand and advise on the actual tax breaks that are required for start-up and operational costs, providing that nurturing environment for young and upcoming studios.

From an advisory perspective, they could also have AAA studios. A lot of the concerns and a lot of the questions being raised in the submissions were around inviting already internationally established AAA studios into Australia, but we strongly feel that we should be investing in our own young and upcoming studios. We have a fantastic pool of talented people, but combining them and building them up into something special is what we

are not doing right. Establish the AAA studios here in Australia, who can then bridge the gap between industry and education as well. So the advisory panel would have a substantial amount of work to do.

Miss Clinnick: If I may add to that, the Australian game development community always invites a lot of communication and collaboration. I would defer to the Game Developers' Association of Australia to outline the structure of existing committees and panels that we have. It is very frequent, common and accepted for us as an industry to talk as a group and to interface with other interest groups. For example, in education I fit on a committee for the STEM Australian technology student initiative, where there is a competition encouraging STEM skills in young, primary school-age children. We would absolutely encourage any sort of an opportunity for a pane, and further opportunities to interface with the government wholeheartedly. It is very common for us to speak very transparently and openly, so there would be no hesitation for that kind of a panel to be established.

Mr Aganesov: In addition to that, in terms of funding and providing all of the checks and balances for the younger and up and coming studios, when a lot of us were first kicking off in the entrepreneurial world we have a real tunnel vision; we only think about the product. This advisory panel would assist in providing checks and balances and challenging the idea. The technology and the IP that has been built up by the studios you could replicate across multiple industries—mining, software, aeronautical industries, defence industries—and that talent is just not being harnessed at the moment. We are letting it go.

Senator LUDLAM: What is your experience, either collectively or individually, in engaging with the government's new innovation agenda? There are ads on TV, there are things in the newspaper, there is a kind of buzzword bingo games are being played around—'agility'—and stuff like that. I am being a little bit tongue-in-cheek, but it is kind of refreshing. I was saying to some of our previous witnesses that this stuff sounds like it has your names all over it. Are any overtures being made by any of the relevant ministers to you guys? Are you knocking on doors?

Mr Aganesov: We have investigated there thoroughly. We are in touch with the groups. At the moment it is purely around suggestions. We will not hear anything until later on—probably the third quarter of this year. We are in touch with the policymakers. We are assisting and being at the forefront, understanding exactly what is going to be seen. At the moment it looks as though they will be channelling some of those funds towards clusters and what the IGEA has covered in their submission in terms of creating sort technology hubs. That is inviting and refreshing. In terms of how the funds will be distributed and whether there will be dollar-for-dollar funding in terms of the actual framework itself, that has not been discussed. But it certainly is refreshing for us.

Senator LUDLAM: It sounds good. I am trying to work out if any of it is going to hit the ground, particularly in your work.

Miss Clinnick: Mighty Games Group was invited to attend the launch of LaunchVic by Philip Dalidakis. We were invited to speak to him personally to talk about the way that games interface with creativity and technology in a very influential way. In the marketing area we are now making better inroads with innovation and technology media. They are now seeking comment much more. It is no longer child's play, if I may say so. We are seeing a lot more interest from the media. StartupSmart and Startup Daily are starting to get their journalists to reach out to us a lot more. They are expecting that it is going to be part of the movement. And we are definitely very heartened by the discussion around innovation. We are definitely here to support the concrete measures that will back up what is being spoken about.

CHAIR: I have just a couple of questions from the opening statement. Mr Griffin, you talked about an even playing field. Do you want to expand on what you mean by that?

Mr Griffin: To give you an example, we now have 14 employees. The beginning of last year was when Tigran and I went and raised the private equity to found the studio. It has been extremely difficult to find talent that exists here in Australia that has the experience that was found internationally, offshore. For example, two candidates whom we were actively trying to recruit were both picked up by Microsoft and Amazon. We cannot compete just yet with paying \$150,000 to \$200,000 for these programmers. It would add significantly to our expenses throughout the year. Furthermore, through recruiting the rest of the unit and actually getting the talent in, the resumes we are receiving—and indeed from talking with other members of the industry—show that the talent does not exist, and the only talent we do have in Australia will, if it is any good, get poached offshore. There is not really anything we can do about that at this stage, which is why we were saying that this industry, which was decimated by the GFC, needs to be artificially supported until such time as it can be on its own feet and we have this talent here that we are fostering. We invest heavily in training and the development of our staff.

Before founding the studio I was a lecturer at Victoria University. Five of my ex-students are now artists we have trained. We have now launched one of the games—the trailers—and the artwork has been of an international

standard. But in terms of the programming and the other services, we now have to go over to England, to Germany—we have a PR agency over there—to find that business acumen that worked for Electronic Arts and all these larger multinationals. It is not that we do not have the capacity for this talent here or that the people here do not have the talent; it is that they do not have the experience that someone internationally has.

Mr Stapelberg: To build on that, you mentioned the GFC, which closed a lot of the bigger studios, which I guess was one of the predominant reasons I, coming straight out of university, struggled to find a junior position, which led to us starting up our company, Well Placed Cactus. We were funded through the New Enterprise Incentive Scheme, whereby we basically received the dole for a year to run our own business. That started in early 2012, and from there we have self-funded the rest of our company, a nine-man team, and in the next two months we will add another three people to that. There is a big gap between experienced people, as was mentioned, but there is also a big gap between where the junior skill set needs to be to a hireable level. We have found that we have loaded our company from the top down, starting with lead developers, and then mid-range, but we are struggling to be able to bring on juniors. From a financial perspective they are obviously a lot cheaper than mid or lead developers, but they require a lot more hand-holding and supervision to build their skills up, and as a small company we just cannot afford the kind of risk involved in waiting for them to build their skills up to be considered a junior.

Mr Rennison: If I could just add to that, you go across to these student shows, and they are showing off the projects that they have been working on really hard over the year, and there are some talented people out there. But you walk around, and sometimes I worry, because I am concerned that these talented people have nowhere to go, they have nowhere to take these skills. There are no entry points into some companies, because, as Paul said, a lot of companies cannot afford to bring them into their ranks.

CHAIR: And the previous funding that you talked about which was there: did that enable that opportunity for some of those young people?

Mr Rennison: Absolutely. We hired two—I guess you would call them junior programmers—about six or seven months ago, and they have been amazing.

CHAIR: But you have been able to do that only because you are still receiving that funding?

Mr Rennison: Yes, absolutely.

CHAIR: So, without that you would not have been able to do that?

Mr Rennison: There is no way at all that I could have done that.

Mr Aganesov: One of the other suggestions that we have discussed internally, in terms of the current university participants in game development courses or computer science or whatever it may be—one of the things that could be recommended to bridge that gap—is to potentially send them across to gain some experience offshore, as you would have in a typical university exchange program going to, say, Vietnam, and then potentially having a partnership with the likes of EA or Blizzard and sending those guys there to get that experience whilst they are still studying—and when they do come out of university, or their first year in.

As Mr Rennison said, the by-product of having underdeveloped staff is that it delays the project. When you bring them on board you have to train and develop them for a period of three, four or five months, whereas if you are in any other business you are potentially training someone purely on your operational procedures, whether it is in marketing or any other sector of the organisation. But in programming or arts specifically, it takes a long time to achieve that quality. As you delay the project in gaming, you really do not receive any revenue until the project has launched. Any title that has the complexity of a PC or a console title could take anywhere from one to three years to release. During that time your burn rate of cash on a monthly basis just increases. It is like a knock-on effect that is probably quite significant.

Miss Clinnick: If I may add to the description of a level playing field, in our submission we are aiming for a level playing field in that we are in a digital distribution age now, which means that we are in many ways on an even playing field when it comes to digital distribution. But Australia is still very geographically far from international hubs such as the US. For us to have a level playing field when it comes to crucial business development relationships with publishers and consoles and things that are very crucial, it might cost Australian companies three times or more what it costs our competitors. Often it is a lot more financially straightforward for our competitors to be there when we would like to be there. Travel assistance is a very effective way, even in small packages. On a state level right now, Film Victoria will be dispensing small packages of \$2,000 to eligible companies to go to the Game Developers Conference, which is the biggest event on the calendar for our industry. Many companies would not be able to go without that assistance, and \$2,000 per company is really comparatively

very small. We bring all of those contacts and those relationships back, and we disperse them in our community through meet-ups and things like that. We share that openly. It is a very effective way of supporting us.

CHAIR: And that has been a bit of a theme through this whole program today—the importance of that networking and that ability to put yourself out there in the marketplace, I guess.

Miss Clinnick: Absolutely.

CHAIR: Mr Rennison, you talked about technology. One of my babies is the NBN, and I want to talk about the opportunities we might be missing out on by using the existing old copper network rather than fibre to the premises. Can you indicate what effect that might have on the gaming business in the future?

Mr Rennison: I am not an expert on the NBN or internet speeds at all; I will just openly admit to that. But yes, it goes without saying. We are in a digital marketplace. It is just simple things: for example, I might have a meeting on Skype with a client in the UK, and just being able to talk to those people and draw other people into those meetings, and having that ability to talk openly and freely, is really important—and sometimes impossible, depending on where you are with internet speeds. But as a whole, we are digital. As Lauren said, it is an even playing field out there. That is the one thing we have in our favour. But the one thing that could hamper us down the line when things get even more complex and download speeds need to be even more intense is that: if we do not have that infrastructure in place now, that could damage us later on, I believe.

Miss Clinnick: As a very concrete example of that, with the internet speeds that we have right now, if Unity—which is an engine that many use to build their games—releases an update that has a large file size, somebody generally has to download that, put it onto a USB or a hard drive and circulate it physically around our coworking space, because we cannot individually download it. So absolutely there are limitations. As Neil said, if I am speaking to a console holder and they can only understand one word in five, I will lose out to a competitor from South Korea that has perfect internet. So it definitely is holding us back, and there would be a big quantum of improvement for our industry if we could get strong, reliable internet.

Senator LUDLAM: I will just fax these things around the globe—using a USB key!

CHAIR: What is a fax!

Mr Griffin: Further to Ms Clinnick's point, we have fibre directly into our office space.

CHAIR: Wow. One of the lucky ones.

Mr Griffin: One of the ones that had to spend quite a lot of money to get that, as well. It was about \$2,000 to \$3,000 to get the actual fibre into the building, and we pay \$1,500 a month for 100 up and 100 down. Something like the NBN, where we could pay \$100 a month, would be greatly appreciated. I think, at the same time—

CHAIR: Just on that, we all have a bit of a laugh, but what difference would that make to your business?

Mr Griffin: As we scale up, we need additional connections as well on that bandwidth. The size of these games that we are producing now is getting larger, and data sizes are not getting any smaller. Investment into that infrastructure is needed so it can support what Australia and the industry need not only today but also in 10 and 20 years time. Granted, I am not an expert on copper versus fibre; but, from what I do know of fibre, we need that essentially right to the node and even into the houses that we are dealing with.

CHAIR: Yes. So 25 gig on fibre to the node ain't gonna cut it?

Mr Griffin: Definitely not.

Mr Stapelberg: Just to build on that, Well Placed Cactus started as a remote studio. So we started with—

CHAIR: Whereabouts?

Mr Stapelberg: We started with members in Brisbane, Sydney and then, recently, Melbourne, where I moved two years ago. We have a nine-man team currently; we are all remote. We have a couple of office spaces—one in Brisbane and one here in Melbourne—and the rest of our team all work from their own homes. So we are transferring files constantly to Google Drive and Dropbox, and having Skype or Google Hangouts conversations. Slow internet speeds can really hinder communication on a day-to-day basis when we are not all in one location. There have been a number of times when we have actually not been able to have a Google Hangout or Skype call and had to go back to a traditional phone call. Being a remote studio, having that day-to-day contact with someone and being able to see them through a video-chat system is just essential—body language and so on. It is one of the main ways we communicate.

Also, a lot of our clients are based in the US. If I send them one of their projects, we have to upload 10-, 20- and 30-gig files to get that to them across the world, and that can sometimes take up to a couple of hours. From my home, that would probably take a whole day. That means it takes longer to get their feedback, which puts

pressure on our production pipeline and adds overheads to the whole business and workflow. We deal with large files, download and upload, so the longer we wait for files to come down to us or to one of our team members the longer we have to wait before we can actually do what we need to do.

CHAIR: Yes, there is a cost. I come from a regional community, and a lot of our regional communities today are hurting, with many young people out of work. Opportunities for people to work in their home environment are sometimes really attractive, and it is also good for that local economy. But you have to have the proper services and the proper technology to do that; otherwise, it just does not work, as you have explained.

Senator REYNOLDS: I have a couple of things to follow up. In terms of the Australian dollar, the current exchange rate, intuitively you think that may help your cash flow. Has that translated into better profits?

Mr Griffin: As we get closer to the launch, we are watching the exchange rate every day and, as much as we would have liked the Australian dollar to have been stronger when we were developing, we would like to see a drop in it in the next couple of months. It would significantly increase our bottom line. But it is certainly something which has affected us not just in terms of America but also in dealing with the euro. We attended a trade show which cost close to 60,000 euros for us to go over there and attend—Gamescom in Cologne in Germany last year, to present our product and showcase it. For the record, Gamescom is the largest gaming show in the world, with 340,000 attendees every year over the four days. In addition to that, when dealing with suppliers and services internationally, as we mentioned before, and having to go overseas to find that talent, again we incurred the exchange rates through most of our transactions. Indeed, every fortnight there are more often two to three payments that are in foreign currencies.

Mr Aganesov: Some of the assets for this particular title involve laser scanning of racing circuits around the globe for us. When we go to one, we are talking about a \$15,000 investment for a single circuit, and that is typically in euros or the USD. Until you get to launch—and that could be a two-year period—this sort of exchange rate affects us significantly. But, once again, the upside to that is that when you do go to the market—and for the guys that are already in the market, as Mr Rennison said with the App Store and so on and so forth—they have the ability to cash in on that.

Senator REYNOLDS: Double-edged.

Mr Aganesov: Yes, absolutely. But in any event, besides the costs associated with procuring services outside of programming and art internationally, you also have the time delay. If we are dealing with the US, Canada or eastern standard time zones, it means that we have to stay up till three, four or five in the morning to be able to deal with them and hold meetings. So fostering the local environment would be a far better approach to all of it.

Senator REYNOLDS: One of the other questions—completely changing tack again—is on the issue of being able to retain good developers here given the international competition and the salaries, particularly, I guess, if they are getting paid in US dollars at the moment. Again, that is an issue. I was down in the south-west this week, and I have been meeting with local innovation hubs and a lot of the developers. Obviously access to broadband is an issue, but apart from that I met all sorts of amazing innovators who had been working for Microsoft and Google and who moved down there for the lifestyle. So I am just wondering: apart from salary, which is obviously a big one—but, particularly for these guys, it was not just that, because they had made money but they were looking more for a different lifestyle—do you think there is an opportunity for either the industry or the government to help with advertising or other help to get people to come here, not just for the money? Do you see any opportunity to have a reverse movement of talent in that way, or do you see examples of that?

Miss Clinnick: Yes, absolutely. There are a lot of opportunities for this, and we have already put some of those into action. The GDAA is supporting an Australian developers party at the GDC, which I mentioned earlier. Tony and the GDAA are facilitating that. It is a party that has limited invitations, and it is in demand for other developers that want to come, because they want to see an Australian games showcase. We as a community have a really good reputation for being open, friendly and positive, but also for innovation. So I feel that not only returning Australians but many internationals do want to and are trying to make plans to come here because of innovation, the quality of life, the upbeat nature of the community and things like that. So it is definitely an employment destination that many more would like to come to, and I think there are definitely a lot of opportunities there for policy and initiatives to help facilitate that.

Senator REYNOLDS: Thank you.

Mr Rennison: Just to give you a real world example of that, you can probably tell from my accent that I did not grow up around here. I actually flew out to Melbourne in 2007. My now wife and I were looking to move over here for the lifestyle, and I came to GCAP, which is Game Connect Asia Pacific, which was being held here in Melbourne. We had not even decided which city we wanted to live in yet, and I came along. I had some money,

because I had made some money in the UK from some games related projects I had worked on, and I wanted to start my own independent studio here in Australia. It literally took that one flight over here and one talk by, I think, Amelia King—who at the time was dealing with the games enterprise stuff at Film Victoria, where they were talking about investment—and that was it: I was sold and I was here, and then all these years later I now have a little studio and am employing Australians, something I am quite proud of. Sometimes it does not take much to persuade people from overseas to come and set up a business. You have a wonderful country. That is a great starting point.

Senator REYNOLDS: Thank you. That is a great story to share. I heard lots down the south-west—wanting to go out in the morning surfing, eating well and drinking well, getting a laptop out. Obviously, connectivity is a bit of an issue. What more could we be doing to attract people who have gone over, earned some money but want to either come home or are looking for a different lifestyle, because they have been boiler room-ish, working for years—what could we do?

Mr Aganesov: In terms of peripheral benefits, and you talk about the lifestyle, there is absolutely no point in selling the dream for people to come back without having a place ready for them, for something to do. It is a matter of putting together an innovation hub where projects can be worked on collaboratively for various sectors, not just games development—let us say it is just software engineering, let us say it is aeronautical, whatever it may be. They need to see a future path for their career as well as the peripheral benefits. Lifestyle alone, even as—

Senator REYNOLDS: I guess family as well.

Mr Aganesov: Mr Rennison is absolutely right. Everyone we speak with internationally have got this dream about coming to Australia with their family. There could probably be innovation clusters but with the right approach to them, not just a matter of a party where everyone can sit and collaborate and talk about what they did yesterday and what they are planning to do tomorrow; where there is a future path set for them where they can say it is a five-year investment; it is backed by the Australian government. You have got the panel to foster these guys, to build a real future for them—the young talent. And for the middle-aged talent with families to establish themselves, it is about financial security.

CHAIR: I think it is fabulous when our young people go overseas for an experience, but I hate it when they have to go because they do not have an option here in the country that they might choose to stay in.

Senator LUDLAM: Miss Clinnick, you talk in your submission about collaboration in critical mass. We are going to kick off to the arcade shortly, but I do not know that Hansard are going to be able to follow us there—no. While we are on the record, are you folks still based there, or you have been in the past?

Miss Clinnick: Yes.

Senator LUDLAM: You are, okay. Do you want to sketch a little bit for us, while we are on the record, what is there and what makes it important; how you guys have found it valuable?

Miss Clinnick: Certainly. The arcade being a collaboration space and a co-working space for games developers and people who support them with their business services is invaluable. For all of us, being in the same building means that if somebody from another company has a marketing question, they walk down the hallway and they ask me over a cup of tea. We do not have to arrange a meeting; I do not have to travel to them. So the proximity is wonderful—the sense of community. If someone is having a challenge, or even just a moment of doubt, they can always talk to other people that are in the arcade.

It is also really good for hiring. For some people, we have a hot-desking area. We see students come in to their contractors, or freelancers come in to the hot-desking space for a couple of days or for a week. Often, I will go: 'That is a really interesting thing that you are working on. Can you tell me a little bit more about it?' There are many stories in the arcade of someone walking past, being impressed, seeing what someone is doing at the hot-desking space, and that is a way of risk-managing the employment for that person and then they end up getting a job.

It is really an amazing space. We invite everybody from platform holders; international guests always want to come to the arcade. It is always a destination if anyone comes at all to Victoria. For us, it is an amazing opportunity to be with our colleagues, be transparent and open with our colleagues, host events, really genuinely connect and have very authentic, close relationships domestically; also give people an extremely efficient way of getting a snapshot of what we have domestically when we have visitors.

Senator LUDLAM: If the Vic government pulled its funding, though, is there still ongoing funding to support that space, or is it a one-off to just get it started?

Miss Clinnick: I would ask you to refer that question to the Game Developers' Association of Australia, who more formally manage the relationship.

Senator LUDLAM: But it was important in at least getting it up on its feet?

Miss Clinnick: It definitely was. We have seen now that there is an economy of scale. The risk period is over, the success is clear and now it is really a benchmark. We are seeing people in New Zealand using the model and being inspired by the model. It is definitely impressing people internationally.

Senator LUDLAM: I think it is the critical mass question, isn't it? It is more than the sum of its parts now.

Miss Clinnick: Yes, definitely.

Senator LUDLAM: There were a few other nods at the desk when we were talking about the arcade. Does anybody else want to chip in?

Mr Stapelberg: To build on what Lauren said, the arcade has been a phenomenal success for us. Before the arcade, I was working from home, being the remote studio we are. My daily trip outside was to walk my partner to the train stop. Apart from that, I was just inside, basically isolated from the world. Joining the arcade has given me, on a personal level, a chance to engage more with the community and people in a similar industry. It has helped me to meet people.

From a business perspective, it has helped us create one of our office hubs here in Melbourne which we work from constantly. We are looking to grow that. In the current space we are in at the moment we are looking to move our desks around to accommodate the extra people we are bringing on. From a financial perspective as well, the arcade has helped us gain new business roughly to the value of \$300,000. I have been in there for not even a year yet. Also on that relationship perspective, it is good to be close to people and see them every day. It helps them keep you in mind when they hear of something that they think we are suited for. So it has also helped us grow financially as well.

Mr Rennison: I also think it is a really valuable opportunity for talented and hardworking individuals. We have a part-time artist on our team, and I know for a fact that he is working with three other groups of game developers within the arcade. He is building his skills, working on other projects and learning tech and tricks that he is then bringing to my business. Conversely, the stuff he is learning with us is going to these other businesses. So we are all kind of helping each other out here. That is really, really useful.

CHAIR: Has that helped to create more sustainable employment for that artist? If you were not in that hub and they were not off doing stuff for other people, would that mean their hours would be much more limited? Does that provide longer employment or better employment opportunities for people and more experience?

Mr Rennison: The opportunities for him are just amazing, because he can be working with me for a morning and then go and have a coffee and spend two hours with another developer problem solving some stuff and then come back to me. Then I might not see him the next day because he might be helping out somebody else. If he had to travel across the CBD every time he had to do this then he would lose half the day just travelling.

CHAIR: So there are great opportunities. As nobody else has any further questions, thank you very much, all of you, for your participation, your submissions and your enthusiasm. Let us hope we can build on that from today. That concludes today's hearings. I would like to thank all witnesses for their informative presentations. I thank the secretariat, Hansard and broadcasting, and I now declare the hearing closed.

Committee adjourned at 12:58