COMMONWEALTH OF AUSTRALIA

Official Committee Hansard

HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON COMMUNICATIONS, INFORMATION TECHNOLOGY AND THE ARTS

Reference: Uptake of digital television in Australia

FRIDAY, 2 SEPTEMBER 2005

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HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON COMMUNICATIONS, INFORMATION TECHNOLOGY AND THE ARTS

Friday, 2 September 2005

Members: Miss Jackie Kelly *(Chair)*, Ms Owens *(Deputy Chair)*, Mrs Bronwyn Bishop, Mr Garrett, Mr Griffin, Mr Hayes, Mr Johnson, Mr Keenan, Mr Laming and Mr Ticehurst

Members in attendance: Mr Hayes, Mr Keenan, Miss Jackie Kelly and Mr Laming

Terms of reference for the inquiry:

To inquire into and report on:

The rollout process for digital television, including progress to date and future plans.

Options for further encouraging consumer interest in the uptake of digital television.

Technological issues relevant to the uptake of digital television.

Future options.

WITNESSES

Committee met at 10.52 am

VARAN, Professor Duane, Executive Director, Interactive Television Research Institute

CHAIR (Miss Jackie Kelly)—I declare open this public hearing of the House of Representatives Standing Committee on Communications, Information Technology and the Arts inquiry into the uptake of digital television. The inquiry arises from a request to this committee by Senator Helen Coonan, the federal Minister for Communications, Information Technology and the Arts. Written submissions were called for and 83 have been received to date. The committee is now conducting a program of public hearings and informal discussions. This hearing is the ninth for the inquiry.

I welcome the representative of Murdoch University's Interactive Television Research Institute. Although the committee does not require you to give evidence under oath, I advise you that these hearings are formal proceedings of the parliament and consequently warrant the same respect as proceedings of the House itself. It is customary to remind witnesses that giving false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. This morning the committee had a tour of the Interactive Television Research Institute's premises and a presentation from Professor Varan. Would you like to make some introductory remarks and recap some of the things we were speaking about?

Prof. Varan—Sure. First and foremost, I would like to thank you for inviting me to testify before your committee. On behalf of the university, I want to thank you for coming out here to Perth and touring our institute's facilities. It has truly been a great honour to host you. I also want to commend you on the depth with which you have dived into these hearings. The transcripts make for fascinating reading. As you will appreciate, there is a lot of ground in our submission that has also been covered by others who have already testified before you, so with your permission I will use this opportunity to highlight a couple of issues that have not been receiving as much air time.

The television industry globally is going through a period of significant market disruption. Its business models are changing rapidly and its value chain is evolving to better suit television's new landscape. Digital television is part and parcel of that change. We believe that the digital television revolution is critical in providing broadcasters with the tools they will need to diversify their revenue streams so as to ensure their viability in an uncertain future.

Australia's digital policy has made significant achievements, but taken as a whole I think the policy has been highly disappointing. By attempting to appease special interests through penalising their competitors, Australia has crafted a policy based on mutual disadvantage. In attempting to level the playing field, it has left no surface on which to play and it is the consumers who have been the real losers, because the proposition they have been left with fails to capitalise on the exciting opportunities that digital enables.

Much of this, I believe, violates the spirit of the broadcast services acts of 1998 and 2000. Throughout the original legislation, the government made quite a point of celebrating its competitive neutrality. Australia's digital policy was supposed to create competitive tension between those vested in the status quo and new entrants who would champion change. Where are these new entrants? The legislation even went so far as to bar broadcasters from introducing

datacasting services for a period of a year after the launch of digital. Why? Specifically to help give the new players a bit of a boost. But the datacasting regime which ensued suffocated all new life. Faced with clear evidence that the market did not respond to the regime, the government refused to revise its restrictions. As a result, there is now almost no new content in the digital mix. Where are the drivers to digital? Better picture and enhanced reception are a start, but they will not facilitate analog switch-off. But does that really matter? Why convert in the first place? The forces of scarcity which drive this change in the US and Europe are not as imposing here, so why rush?

We believe that we cannot live in isolation from the changes taking place globally. There is no question that to date Australia has produced a quality of television programming that defies its relatively small market size. We have done this because the occasional export successes we have had have underwritten our capacity to produce great television. If we cannot interface with television's new frontier, if we lack the skills to produce the new enhanced formats, if we fail to capitalise on the tide of change, if we refuse to embrace the change, then we will find our production capacity eroding rapidly and this will ultimately result in the erosion of Australia's domestic television proposition as well.

This is our primary concern at ITRI—that slow movement on our digital front in Australia will result in significant erosion of Australia's existing strength in the export of television content, which will in turn significantly erode the quality of our local television content. I think it is also important to recognise that in time the landscape will change anyway, with the advent of personal video recorders, IPTV and a wide range of new television platforms. We cannot protect the status quo forever. With or without digital conversion, change is at hand.

I think it is also important, in exploring digital conversion, to address key questions about the structure of the platform. By awarding broadcasters their own spectrum we are left with seven platforms, not one. I think experience has proven that it is almost impossible for them collectively to agree on the contours of that mosaic. Hence we have recommended in our submission that datacasting spectrum be awarded to a platform aggregator so as to help create a platform approaching something like that of Freeview in the UK. This party can then invest in building the appropriate back channel infrastructure and can help create a more seamless experience for the user, for content producers and for advertisers. It is also possible that this may not require a full broadcast channel, but clearly the terms under which such an operator would function and how they would interface with the channels will require some work. At the level of principle, however, we think such a measure would help stimulate digital conversion.

There is no use harping upon the sins of the past. I was delighted to see the transcript of the minister's speech last Wednesday and in particular her decision to launch a digital action agenda. As we noted in our submission, there is a clear need to see a group of leaders whose primary focus is digital conversion. This would help create a forum where the details associated with crafting a strategy moving us forward that takes into consideration television's full value chain can continue to be addressed. I think it is an exciting new development and I have no doubt that the inquiry you are leading will contribute substantially to helping find a path forward. So thanks again for inviting my testimony. I am happy to answer any questions you might have.

CHAIR—Thank you very much, particularly for your iteration of the need to move to digital. That was fantastic, because we have been looking for that for a while.

Mr HAYES—Professor, where do you see the industry sitting in relation to digital? It seems to me that your submission is very much creating the potentials and future development as opposed to what the industry believe they are comfortable with presently. Is there a major difference there?

Prof. Varan—Again, for people who have an investment in the status quo, the path going into the future really is different from the path going into the future for somebody who might be a newcomer, who might be challenging the status quo. For people who have their investment in the status quo, there is a desire to see minimal disruption to the existing universe. That has created a path going forward which is, as you said, somewhat comfortable. But the challenge that we face in facilitating digital conversion is the consumer proposition. How do we make sure that whatever the proposition is that there is enough in it for the consumer to warrant them going out and buying boxes and adopting the technology? That is why there is a little bit of a gap.

Mr HAYES—Do you see potential consumers being knowledgeable at all about digital television at the moment?

Prof. Varan—I do not think they are knowledgeable about digital television, but I think the introduction of the digital service on Foxtel has changed their perception somewhat. Whereas before they saw ads that told them that digital was about better pictures, now a lot of the advertising they are seeing on the Foxtel service means they are starting to get an impression of digital being about more content. In that way, the proposition that they have on terrestrial television is a little bit disappointing, because really there is not a great deal of new content. There is some new content, much of it, of course, is in foreign language, much of it is time shifted. That is almost all there is.

Mr HAYES—That almost leads into what I see as a dichotomy between existing players—that is, new content through multichannelling and expanding that or, alternatively, using spectrum for high definition. Yours is the first submission that raises, in a constructive way, the issue of datacasting. Most of the others within the industry have been against that, except for Southern Cross only yesterday.

Prof. Varan—When we say datacasting in Australia, we mean something very particular by it. Our understanding of what datacasting is has been shaped by the Australian variation of datacasting, which is something that terrifies just about everybody. I do not think there is anyone who looks at the Australian concept of datacasting, with its genre restrictions—in fact, many global conferences I am at, when I explain the Australian datacasting genre restrictions, the room breaks out in laughter. They cannot believe that anywhere in the world such a standard could be imposed where you would expect to regulate on a subjective standard which tries to differentiate between entertaining and informative content. That has actually cast a negative shadow across what datacasting means to people in the Australian market, and that has chilled investment in that sector. But if you break free of that, and if you begin visualising the possibilities around datacasting then that can be quite exciting.

Mr HAYES—To enable the back channelling?

Prof. Varan—The back channel is a bigger question associated with the platform as a whole, because you could have no datacasting and still have enhanced applications, as the Australian

legislation defines it, that would then be facilitated through a back channel in some way. You could have, for example, interactive ads that would allow the back channel, or you could have people voting on *Big Brother* or doing a whole variety of things like that within that space. But there are other types of applications where you would have the integration of some type of video and some type of data together that would present viewers with some pretty exciting propositions.

Mr HAYES—You are advocating that we should reserve sufficient spectra within the spectrum for two channels to enable datacasting.

Prof. Varan—That is right. What we have recommended specifically is that one of those channels could be used for a fourth network, which would be digital only. I know there has been a lot of concern around what the impact would be of that in the advertising market, but if it was digital only, the impact would be minimal. Digital penetration is not large enough; you would not see large advertising dollars shifting away from free-to-air broadcasters into that platform for a good period of time. And when it did become more relevant, I would argue that broadcasters are going to be facing competition from IPTV and a whole range of other platforms anyway, so the existence of that fourth network in the digital domain would not materially adversely affect the market.

The other thing that we recommended with one of those channels would be to use it for this platform aggregator—for somebody who had datacasting content that sat there but also ran a range of services like the electronic program guide, the back channel, et cetera, to create a seamless and coherent experience across the channels, rather than expecting each channel to be effectively its own independent platform.

Mr HAYES—I guess it is fair to say that you are advocating a reasonably revolutionary change in the television structure as we have known it.

Prof. Varan—I think that is a fair call, but I think that the original legislation was envisioning that kind of change. Back when the original legislation was introduced, there were a lot of exciting ideas in the marketplace around how the datacasting spectrum might be used. Fairfax, for example, were out there showing around a presentation about what they would do, and I think it is fair to say that that was not a fake representation of their interests; they had some exciting ideas about what they might do. But once the datacasting regime was defined, with its restrictions, that is when you saw the chilling of that interest take place. If you went back to the spirit of what the legislation was saying, it was trying to create that competitive tension between the status quo and between people who had a vested interest in change. That ultimately is, I think, a critical ingredient in seeing a proposition out there in the marketplace that stimulates people to go out and want to buy boxes.

Mr HAYES—I think you are accurate when you indicate the position of the marketplace. If you are also right—which I suspect you are—that people just do not have the broad understanding of the potentiality of digital TV, what more should we be doing to at least enliven the view about what digital TV can offer—other than simply better sound and quality or picture quality?

Prof. Varan—My question at the end of the day is whether there is a capacity to move forward by keeping the domain exclusively in the hands of the people who have a vested interest in the status quo, or whether we need to have some people there who, for their survival in that space, really need to challenge the status quo. I think that is part of the mix which is still lacking in the Australian marketplace. Ultimately consumers do not think in hypotheticals; they think in terms of the proposition that they see before them. So until there is new content that they can look at and see whether or not that content merits their investment in a box, then I think that we cannot really gain momentum.

Mr HAYES—Is it fair to say that these sorts of changes that you are advocating will not only revolutionise the industry but very much affect the economics of the industry and their reliance on advertising as a sole source of revenue?

Prof. Varan—That is exactly right. Our view is that the economics of advertising globally are changing very rapidly and that ultimately Australian broadcasters will not be able to insulate themselves from that change. Even if nothing happened in the Australian market, as the global advertisers change their strategy, it will also influence how they shape their particular markets in the Australian market. What those global advertisers do will have a flow-on effect for other people in making their own marketing decisions. So I think that change in the business model associated with television is inevitable.

The thing that I think is exciting about digital is that it is part of the solution, not part of the problem. It actually gives tools to broadcasters to help diversify their revenue streams. If I were a broadcaster, the last thing I would want would be exclusive dependency, almost, on one model of revenue, which is the 30-second ad. That will probably will be threatened in the future by a variety of technologies—many of which broadcasters in Australia will have absolutely no control over, such as IPTV. What digital does, I think, is to help them grapple with how their business models need to change to better prepare them for television's new landscape.

Mr KEENAN—If you were to take the whole thing apart and start again, how would you see an ideal regulatory framework constructed? I know that is quite a broad-ranging question.

Prof. Varan—Again, I think this is a bigger problem globally. I do not want to at all create the impression that digital conversion is easy. It is hard for regulators everywhere. Part of the problem is that a lot of the key principles which have guided policy in this space no longer fit. So the whole idea of spectrum scarcity, for example, which has been a key principle upon which broadcast policy has been shaped, has changed radically with respect to the digital future. I do not think it is easy. One of the key problems with the approach in Australia has been that, by trying to appease the different interests and the different parties by effectively penalising competitors, fundamentally we have had a disabling approach rather than an enabling approach. To protect one sector, the other sector has had new conditions imposed on it that further restrict it. It is a policy which is born out of restriction after restriction that defines what people cannot do, not one which is designed to maximise the flexibility of the market so as to be able to respond ultimately to what consumers want. Fundamentally, I think that is the flaw that we have in our current approach, which requires some change.

CHAIR—You mentioned Helen Coonan's digital action agenda. In your submission, you refer to '… an entity given explicit mandate over digital conversion in a forum facilitating close

interaction with industry', similar to the digital TV action plan forum of the UK government. What do you see being in such a plan?

Prof. Varan—When you look at what happened in the UK, you will see that it is actually a remarkable story. You saw the collapse of ITV digital. It would have been very easy for the market at that point to get spooked by that development. But I think that the existence of a group of people who have a view on the long-term change that kind of had to happen meant that they could navigate their path through the ITV digital collapse and come out of it stronger, rather than weaker. There are always going to be unknown questions that are going to be puffing up repeatedly in this space, and we cannot mount an inquiry every time something new comes along or mount a different review every time a new development comes along. There has to be a group of people which has invested interest in facilitating the conversion process and that process, as we have argued, has to represent the entire value chain. One of the real problems in Australia is that we have almost left a lot of that kind of decision making to the broadcasters alone, and we have not seen the sector as a whole engaging in the questions around what the shape and the contours should be of that change. This is why I think the presence and the existence of a body like that is really smart, because it creates a forum in which change can be negotiated and facilitated.

CHAIR—That commission sounds pretty large—you have the broadcasters, the advertisers and the entire value chain there.

Prof. Varan—I do not think it has to be large. This is one of the questions that I struggled with. In theory, for example, you could have one person who represented the free-to-air broadcasters. In practice, that is difficult because the free-to-air broadcasters do not sing with one voice. This is where there is a little bit of a problem around the sides. In theory, you could have seven people and those seven people could represent a healthy cross-section of the industry, but you are left with this problem where, in certain sectors of the industry, particularly on the broadcast side, there is a divergence of views around how that works. So it is hard to think through that aspect of the process.

CHAIR—Are they negotiating or advising government or are they looking for investors for a way forward? What is the role between government and the commission?

Prof. Varan—That is always a sensitive issue, particularly in our current landscape. For all practical purposes, I suspect it would be advisory in nature. I do not think that, in the past, we have shown the inclination to turn over that kind of authority to the hands of a body like that. Even in an advisory role, I think the primary opportunity in itself to create a forum in which those issues are regularly consulted upon, with recommendations that go forward, commands some influence. There will be a need for questions around things like legislation, the budget et cetera, and for recommendations that are associated with those to be regularly made.

CHAIR—Especially in standards. You state that, although Australia has over-regulated many aspects of the industry, we believe it has under-regulated questions associated with technical standards. It has been repeatedly been suggested to this committee that we need a standards body, a testing and performance centre. Are you thinking along those lines?

Prof. Varan—It would make sense for that to be a significant portion of the agenda. I think that is right. Standards, by their nature, are best done when you have some capacity to ensure that everybody is abiding by them. They do not really make sense in a voluntary environment. They do not really protect the consumer when they are done in a voluntary environment in that sense as well.

CHAIR—We have had a lot of input on the receivers—whether they have to be SD capable, HD capable, MPEG-4 capable. Now you are also saying they should be capable of back channel as well, universal back channel. We need to define our receivers—

Prof. Varan—In our submission we have argued that we probably need two standards. We probably need a basic proposition, which is about tuning only, and we could call that a digital TV standard. Then there might be something like digital TV plus. The digital TV plus is really about enhancements. But if we kept it kind of consistent as a message like that to the consumer then I think they would understand that when they were getting digital TV they were getting only the bare-boned, basic proposition, which is just picture tuning, effectively, and sound, and that's it. But if they want the digital TV plus then they are entering into a universe similar to what you see in the PC market, where you have certain basic standards which apply and you know that every PC is going to adhere to those basic standards but you know that there is a lot of variance in the market. You have choice. That is where I think standards would best be facilitated—definitely a testing and certification process which is about guaranteeing that the bare-boned minimum does work, and it works effectively and it tunes with no strange problems, or anything like that. But also, on another end of the spectrum where there are enhanced services that are also being facilitated, that is where something like the back channel would be a part of the enhanced standard set.

CHAIR—The consumers currently are confused by digital anyway.

Prof. Varan—Absolutely.

CHAIR—They tend to walk in and ask for a set-top box, thinking they will get digital TV. I think the distinction between SD and HD is pretty vague. I think the consumer wants digital TV. I do not know that he thinks there is a digital plus. He wants a set-top box.

Prof. Varan—I think that is a fair comment. I think you are right. Even as it is right now, the proposition is confusing for consumers.

CHAIR—The testing conformance lab, any idea on funding it? You have a lot of global players. Have you managed to get together any interest in industry players getting together and funding it, or should government pay all, half or part of the levy?

Prof. Varan—I am not speaking necessarily of us, but a number of universities across the country are doing a really good job trying to build up some expertise in this area. The University of Wollongong is an example. Doing this in cooperation with the university sector would make a huge amount of sense, particularly in terms of the human resource side of that equation and particularly if you had a view of that being not just at the minimal level but doing things like trying to cook up bugs to see what happens when particular types of applications are

downloaded, and looking at the future possibilities around potential problems in the mix as well as just the certifications of boxes that are rolling out into the market place.

I could see there being some type of partnership that was a three-way relationship, with government providing some seed capital—and I think at the end of the day there will have to be some funding—with universities being involved, particularly in the ongoing operation of the centre, however it works, and with the private sector being involved on a user pays kind of basis. Whenever anybody comes in with a box that they need to have certified, there should be a fee associated with that. When somebody wants to put in an area download and they need that tested in advance, there should be a fee associated with that. It is not too hard to visualise a number of alternative scenarios under which such a facility could be funded.

CHAIR—What amount of government seed funding should there be?

Prof. Varan—If you look at the cost of our digital head end and the investment there, the other advantage that a university would have is that a lot of vendors would probably supply on a very different cost ratio to the university sector. You are probably looking at about $1½ million, and then there are ongoing expenses to keep the facility up to date, and every box that comes out—

CHAIR—You don't think that would come from the levy and the income you would generate from—

Prof. Varan—I think that would come. Once it is in motion, it can become financially self-sufficient through the life of its operation.

CHAIR—So maybe over three or five years? At the moment the only clear pathway we have is LG's suggestion for a switch-off in 2010. Everyone else is pretty vague about it. Their 2010 suggestion is based on some mandation action by government. Would you see it as being five years from here, or beyond switch-off?

Prof. Varan—There is already a supply of set-top boxes in the market—probably 75-plus boxes are already there. There has been no research done around the existing boxes in the marketplace. It is really very difficult because there are so many things that could go wrong. There are things that could be going wrong at the point of transmission. There are things that could be going wrong in the air. There are things that could be going wrong in people's aerials. There are things that could be going wrong on the path from the aerial to the TV set. There are things that could be happening in the receiver itself. So solving the receiver side takes away a big chunk of that problem, which is great. I think that the way to do it would be to forward fund it and get it happening immediately around the certification of the existing boxes in the marketplace. I think that gives it plenty of work to do in the short term but then, as new boxes come onto the market, they would find their path into the certification suite.

CHAIR—Do you think the existing 75 providers would fund it or would they want to have a grandfathered situation?

Prof. Varan—No, I think you have a mix in terms of who the suppliers are. There are the LGs and Panasonics who are very responsible. In the case of Panasonic, they have long been making

an investment in this area, with very little return for that investment. So I think they would be quite keen and they would support it. But there are a lot of people who are importing who have no real vested interest in the structure of the marketplace. I doubt that they would actively participate in the regime. The retailers, of course, have to be brought very quickly into that process so that retailers refuse to supply unless it has actually been certified. I could see the major retailers buying into that process very quickly.

CHAIR—I have just been reminded that one of our previous witnesses suggested there was a box out there that basically would not receive SBS, and that has been sold onto the market. So you could be picking a box that already is not satisfactory.

Prof. Varan—With respect to one of the first boxes that we bought, as part of doing our own testing, it took us three months to try to tune the box. It was a matter of sending it back to the manufacturer, having a new one sent out, and sending it back again. It was that classic problem of not being properly retuned for the Australian market. The thing about it that was frustrating for us was that it was a matter of us sending box after box back to them for three months, and we were thinking, 'What happens with the other consumers who, unlike us, do not know what is going on and who just accept it?'

CHAIR—Just accept that Channel 9 is all you have got.

Prof. Varan—Just accept it.

CHAIR—So, with your changes to the datacasting regime, how would you stop that from just being a fourth channel?

Prof. Varan—Again, I think that idea of it not being a fourth channel is somewhat artificial anyway. In our view, when it is digital-only, it is not really a broadcast channel in that sense anyhow because, to receive the signal, you have to have a digital set-top box. However, at the time that the legislation was going through, there were other proposals that were out there around how a datacasting regime could work. For example, there could be restrictions that said that, with the video feed of the picture service, the picture size that was available on datacasting service could never be full screen; it would have to be quarter screen at most. If that happened, that means that I could watch a 24/7 news channel but I would effectively be looking at video content there that was only in quarter screen. You would have to think that is a huge disadvantage vis-a-vis the existing broadcasters. There were also proposals that regulated the data rates. That in effect would achieve the same thing because, with a lower data rates, you could achieve a good picture with a smaller image but it would be hard for you to achieve that with a larger one.

There were counter-arguments to that as well—that of course manufacturers could always develop interpolation technology that would allow you to zoom in on a picture that was picture in picture, but again you would have to argue that the quality that you would get by zooming in on the picture in picture in the corner would probably not be on par with a free-to-air broadcaster and certainly would not be high definition, which is another way that we can differentiate between what the datacaster could in theory do and what the free-to-air networks could do. I think that the problem that I can see is that the consumer proposition is not driving this. That, ultimately, is what we believe should be the key driver between this change. It should really be

what is good for consumers, because that is ultimately what stimulates the market to respond to the proposition.

CHAIR—Most of our screen manufacturers who have given evidence think that eventually your internet screen will merge into your TV screen and vice versa, the other way. At the moment, you can get TV on your laptop and eventually even your main family viewing screen will also be an interactive, web based screen—IPTV. Why datacasting? If that seems to be a trend, isn't datacasting already obsolete? You don't see it as already obsolete? In addition, if it were a digital-only channel, at the moment only 10 per cent of households receive digital. There was some very strong evidence from Channel 7 yesterday that just pooh-poohed that market: 'No-one's buying that when you're getting 10 per cent of the market audience—what's that worth?' You would not get advertisers to advertise on it. It would be a very hard proposition to run as digital-only.

Prof. Varan—That is why I do not think the government needs to be overconcerned with trying to differentiate between the digital space and the analog space. An operator of a fourth channel that was digital-only does face such huge odds against them going in. But, if that is their bread and butter—if that is how they survive—then they have a vested interest in going to consumers with a proposition good enough to persuade them to go out there and buy a box. I could see, for example, that if there were a good media proprietor—a media proprietor that actually had content—that came into the mix and said, 'Here you go; to access this program, to access this content, you have to go out there and buy a set-top box,' I think you would see very significant stimulation in the market to want to go out there and get the box. I do not think you would go to 60 per cent overnight but I do think that you would go from something like 10 per cent to 30 per cent. I think that would be a big boost and you would start a momentum there, which could build.

CHAIR—Presuming that it was only one digital-only channel, what if you allowed it to multichannel? Would you get higher than that?

Prof. Varan—I think multichannelling has a lot of potential. But the difference that I see between, say, a fourth network and a multichannel service really is around the question of what the vested interest is in seeing change. Somebody who is running a multichannel service necessarily must do that in a way which does not cannibalise their existing revenue stream. That is good. I think there is a lot that you can do within that multichannel universe that is exciting for the consumer and is exciting for the broadcaster within those parameters. You certainly would not do something that would potentially erode your audience share in that sense, whereas, for a dedicated fourth channel that was digital only, that would be the game—the game would be about building the audience up however you could.

CHAIR—The presumption is that it is not one of the current media players that bids at the auction for it.

Prof. Varan—Yes, not one of the existing media players.

CHAIR—How would you ensure that the subscription industry was not unfairly impacted?

Prof. Varan—I think the subscription industry is not inherently impacted because there is no need to guarantee a monopoly to the subscription industry per se. The complication with the subscription industry is the antisyphoning regime. If, just for a moment, you said that the antisyphoning regime was not a constraint that the government was imposing which was in some way impacting that sector then, that being the case, the question would be: why should the government protect the pay TV sector? There is no inherent reason why the pay TV sector should be given an inherent monopoly over any type of subscription service in the country—it should be a free market in that sense—but the complication is the antisyphoning regime, because the pay TV industry feels that the government is intervening and depriving them of what in most markets is a key driver for subscription television. So that then raises the argument about whether it is inappropriate to penalise them again in another way, but I think that is peculiar in Australia specifically because of the antisyphoning regime.

CHAIR—Senator Coonan has flagged changes to the antisyphoning regime. What do you think would be the better impact for the industry in terms of changes?

Prof. Varan—I think the changes that she is recommending are very reasonable. I do not think Australians want to see their premium sports event potentially migrate across to pay TV. I understand the government's interest in that. On the other hand, I think there is a fair argument that says that a lot of content is being denied to Australian viewers because the rights are being held up by broadcasters which are not going to air. If you were looking at this from the consumers' perspective, I think the path forward that the minister is proposing is a reasonable path and I think it is one that the pay TV industry should be seeing as a reasonable attempt to approach what a lot of their concern in this space has been. I think that they would probably welcome the direction at least. I do not think that they expect that the change will happen overnight anyway. I think they understand that any change in this landscape will phase in over time anyhow, so I think it is a reasonable direction moving forward.

CHAIR—Do you have a plan, a timeline or a strategy for analog switch-off?

Prof. Varan—The problem with that question is: around what parameters? If you were to say around the existing parameters, then I think that you would be talking about a very long timeline—in fact, I would suspect that on the current parameters we would be lucky if were doing it in the year 2020—and in fact I would suspect that we would never do it because, as you say, there will be new technologies in the mix before any of that becomes relevant anyway. So then the question around trying to forecast digital conversion really depends heavily on what the proposition is which consumers have. I think each of those different propositions puts a different footprint on how relatively short or how relatively long that digital conversion process is.

CHAIR—You mentioned other countries where subscription TV and long switch-off has had a big impact.

Prof. Varan—This is another key policy question. Do you include in your definition of what is required for analog switch-off homes which are picking up a free-to-air broadcaster and subscription TV space? So, in theory—and in most countries there are 'must carry' provisions—if all the networks were available on my pay TV provider then, if 80 per cent of the country was getting the signal through pay TV anyway, there is only 20 per cent of the country that you need to persuade to make that migration in DTT space. So the key issue that we were signalling is that

it is not clear in Australia what digital switch-off requires. Does it require 100 per cent of the people to pick up the signal through DTT only, or is it picking it up because they can get the signal one way or another?

If you look at it one way—and again there is duplication across those two, so it is not 10 plus 16 or whatever; there is some duplication in it—you have to say that under one definition they would be worried about 10 per cent penetration, except that we do not have the free-to-air networks on our pay TV platform, which is another issue, the 'must carry' kind of issue. But under another scenario maybe we are suddenly at 20 per cent, if those channels are available on the pay platform.

CHAIR—It has been very interesting, Professor Varan. Thank you very much for your time today.

[11.36 am]

CAMPBELL, Mr Kevin Victor, Chairman, Movies Online Ltd

CHAIR—Welcome. Do you have any comments to make on the capacity in which you appear?

Mr Campbell—I appear with the authority of the board of Movies Online Ltd.

CHAIR—Although the committee does not require you to give evidence under oath, I should advise you that these hearings are formal proceedings of the parliament and consequently they warrant the same respect as proceedings of the House. It is customary to remind witnesses that giving false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. Would you like to make an opening statement before members question you on your submission?

Mr Campbell—Firstly, I thank you for the opportunity to appear before you and I thank you for trekking out west so we can avoid making the trip to another state. In my time in the broadcasting industry we have had to get used to doing that many times. Having said that, I think that the submission that we have put to you is fairly succinct—brief but to the point—and I do not think that I need to go into a preamble other than to answer questions or maybe embellish some of the points that you may wish to explore fully as to why we have promoted the tack that we have done.

By way of background: I was in the broadcasting industry for 35 years and I was very involved at the forefront when the matter of the transition from analog to digital was first mooted by the government in conjunction with the industry. At the time, as a senior executive of one of the incumbent commercial networks, I was involved—through the old FACTS organisation, now the free-to-air TV organisation—with a number of submissions and delegations to the minister and the minister's advisers as to our perception of the process to migrate from analog to digital. That may help with a background understanding—not coming cold and specifically for the minutiae to do with the reasons for digital take-up. I guess that is the opening gambit.

CHAIR—So Movies Online's business is really sales into the broadband market. I notice you were talking about set-top boxes with some internet protocol technologies. Could you elaborate for the committee? We had a lot of evidence on set-top box technology and the testing and compliance centre and we have just heard about a back channel capability and now IP as well. This is from a $100 box.

Mr Campbell—It has obviously moved ahead very quickly. I will come back to the $100 box, because I think that we are seeing that the box for $100 or thereabouts, not much more, will probably be a reality in the not too distant future. In fact, the boxes are now down at a much more affordable price to the consumer. Our company was really formed to advance and promote internet protocol TV or video on demand as an alternative entertainment medium. The company's mechanism was probably four years ahead of its time when myriad organisations were in the same space. I think we have managed to survive the time and stay around by some

prudence and that, had we not been there then, we probably would not be here today because of the connectivity that is required for two-way or internet protocol and the bandwidth to allow that to accommodate streaming or push technology with a back channel or back hall to enable such a service. That is now a reality via a number of smaller ISPs who have taken advantage of the opportunities to bolt onto existing infrastructure and also to advance into the DSL mode or the ADSL mode, particularly advancing up to ADSL 2 or ADSL 2+, which is the additional megabit capacity that this requires.

CHAIR—ADSL 2+ are saying 12?

Mr Campbell—Somewhere between six and 12, and then if you listen to the technologists I think they are talking about—

CHAIR—And that is only one-way, one kilometre from the exchange?

Mr Campbell—It is basically one-way for providing the richness, but because it is internet protocol it has a back channel to be able to command. Therefore, the way internet protocol work, as you know, is that they are constantly talking to and referencing one another. But the richness comes down in one direction. So if you are on a piece of wire or category 5 type cable or fibre, as in the case of TransACT in Canberra, you then have the connectivity and the mechanism to accommodate that.

CHAIR—What is the minimum you require?

Mr Campbell—It is a bit more complex than having the minimum technologically, because we also have to work with the Hollywood studios and the MPAA, which is the Motion Picture Association of America, and they have prescribed technical parameters. It started off at four megabits. It is probably now down to two megabits, and we have actually trialled it down at one megabit. We propose—and have trialled it—to go straight into the MPEG4, where what would take approximately 3½ megabits can now be condensed down into 1.2 megabits. The technology is providing operators with a greater opportunity to maximise the use of a finite resource. So ours will be MPEG4, but the technology with MPEG4 automatically accommodates the lower rating encryption compression technology of MPEG2, so if you are talking about MPEG4 it does not preclude MPEG2. That is why, within our submission, we suggested that there is a mechanism for digital, which is the thrust of your inquiry—that is, the take-up of digital TV.

CHAIR—Are there any set-top boxes out there?

Mr Campbell—They are on a gradient—whatever angle that is. I do not think it is exponential at this stage but, as I think I said, there is probably not the incentive yet to take up or acquire a digital set-top box. There are still a number of new televisions out there with only an analog receiver in them and also, while you have the dual hybrid system running, there isn't the incentive for those who are possibly less informed and who just need a new television set to go to the additional expense of an extra couple of hundred dollars or $900, depending on what set-top box you want to add to a plasma screen—which does not have a tuner with it. I do not think there is the incentive yet, because we have the hybrid system. As I understood it when I was first involved, probably more intimately in looking at timetables with government, there was going to be a prescribed window with the clawback of frequency allocation, which is a finite resource and

in a very valuable band. Obviously there would be many other applications—probably some that we may not have even thought about at this time—so that that spectrum could then be allocated to utilisation.

CHAIR—In terms of your set-top box you would then be looking for the old analog spectrum, a bit of that, or you could do it within the television—

Mr Campbell—No. Our specific representation to you is that we are not suggesting that we want to get into the frequency allocation argument. The thrust of our submission is, firstly, as an opening statement—and you would expect it of someone who has lived well from the broadcasting industry in Australia for so many years—that we have in Australia probably one of the best television broadcasting industries in the world.

CHAIR—For the television broadcasters.

Mr Campbell—Also, I think technologically and ultimately for the consumer. That has been expanded very well by the addition of a Foxtel or an Austar—a subscription television system which provides more or the stuff that the free-to-airs do not provide. It takes me back to when we applied and promoted to government that we needed the full seven megahertz—I will get the terminology right. It was principally argued on our part that we applied for the full seven megahertz of bandwidth to accommodate a transition to a standard definition television signal which would replicate that of the existing analog and to also be able to simultaneously transmit high-definition television.

At that time multichannelling was never envisaged, even though the flag was raised in that argument. Government at the time were obviously mindful of what was happening in the UK with its allocation and transition into digital, where there was greater utilisation of the finite resource. Because multiplexing was technically a doable, you could provide the same service and squeeze it into a much lower frequency allocation.

The thrust of our argument at the time was to provide high-definition television, not to provide additional channels. I guess it comes down to the argument of the consumer and government, which owns the spectrum: how do you provide diversity of choice for the consumer on one hand and also diversity of ownership of services—whatever they are. Non-mainstream media can complement that which exists with the three, plus the ABC, plus SBS. In my view, we should not forget that it was a government initiative with community television and it does fill a void. I have had a closer look at this since my retirement from the mainstream and I believe that with their current financial ability they are always going to be starved of content in providing an alternative.

I submit that in terms of providing diversity of choice to the consumer community television may need to be looked at in another light. It could get additional funding in other ways rather than just straight advertising or handouts. In my view, they will not survive with straight advertising because advertising is based on cost per thousand, or TARPS—to use an acronym. I recall quite vividly that in the UK under the Channel 4 model the independent television network paid to the regulatory authority—to draw a parallel, it would be the Australian Broadcasting Authority here—a percentage, whatever that was, of their revenue which then went to provide a more viable alternative to the consumer and to run those programs that free-to-air would

probably never run. This would help generate employment for film-makers and program producers in every state.

The thrust of our argument about diversity is that there is no need for multichannelling other than that which the government has granted until now, which is basically complementary to the program that is on the main channel or a guide or which would then gobble up a majority of that space if they are going to go out in high definition. There will probably be a much slower take-up of high definition because of the cost, because you need a more expensive display device and a more expensive set-top box. That brings into play the alternative media by virtue of the advancement in technology and the connectivity for a service such as internet protocol TV.

That can be done via direct streaming, where you control what you want from point to point. It is from only point to point because it works on very similar principles to those of your laptop or your PC. It cannot be interrogated anywhere along the line and it directly streams. Therefore, it comes, it goes and that is the end of it. The other add-on to that, with the costs of PVRs—that is, something with a drive in the box—is that it is quite a practical solution to being able to push content onto a PVR and then control it and dump whatever is on that drive in accordance with the requirements of the MPAA. With that comes very high security and encryption demands, because the MPAA are not going to be caught like the audio business was with the Mp3. So you have to put every step you can in to avoid piracy and siphoning of content that does belong to them at the end of the day, even when you have the licence to do that.

What we are really saying is that we do not see that there is a need for the incumbents to yet further expand and command, when there is not a great deal of content. I know it has been said by many but, having been in programming and program acquisition, there is not a great deal of mainstream programming that is attractive to their principal source of revenue: advertisers. There is always going to be a place, and they go back to the United States model of the three blind mice when cable television commenced. It was designed to fill black holes within various counties, and then when a satellite became available they were all able to bolt together. That was really when the change occurred.

You have an ever-expanding platform with Foxtel, and it is a very smart platform. There is no question about that. Both the engineering horsepower behind it and the ownership horsepower to push it are very dynamic. But you can see the take-up of DVDs and DVD—digital video disc—quality that is superior to that received currently on analog. Certainly, digital reception does provide an enhancement to the technical quality. But if you can get that DVD quality down the line to a library that you do not have to go out for and you have the convenience of connecting with the outside world to a master server somewhere then we submit that that is the way forward for the next five years.

To achieve that, we are saying that we have to think about the consumer. They are concerned about a set-top box upon a set-top box upon a set-top box. So you have the aesthetics and also the cost. There is such a device available: a set-top box that can have a DVBT tuner in it, mutually exclusive to that processing, which is required to hook a piece of cable in the back and provide other services, including video on demand, internet browsing and any other application. It really will be a sit-back model of what we currently know with PCs of a sit-forward application.

CHAIR—How much do they cost?

Mr Campbell—At the moment we believe that set-top box, including a PVR, will be around $380. Without a PVR you are probably talking around $260 or $280. It comes down to volume driving price. It is very difficult to be specific there; we cannot be specific.

CHAIR—Who makes them?

Mr Campbell—A number of manufacturers do. When we started we shopped around with a show bag full of pamphlets about set-top boxes, as many others have done. We chose, at the time, a company in China which was very proactive, very progressive and ISO 9000 compliant. They actually design set-top boxes and their current boxes, without the DVBT tuner, are about $100. We have progressed that and a lot of the intellectual property that went into that was from our experience in helping them—I suppose we never held any of the intellectual property.

CHAIR—But in your business case, instead of going over ISPs, it could go over the set-top box broadcast?

Mr Campbell—No. In our business model it is going over a connectivity cable.

CHAIR—So why are you interested in these boxes? You would not be providing video on demand.

Mr Campbell—Very simply because then you can say to the consumer that one will drive the other, and you will end up with, in my view, a faster take-up. If you can get the one box that does everything then you have got a greater incentive for the consumer.

CHAIR—So this set-top box is not only connected to your TV, your VCR and your DVD; it is also connected to your phone?

Mr Campbell—To your ADSL line.

CHAIR—And to your subscription and your subscription back line?

Mr Campbell—Yes.

CHAIR—Could your Foxtel back line—

Mr Campbell—Foxtel is difficult. I think technically you can do anything these days, but I think that Foxtel have a proprietary application of their box, and their box is their box.

CHAIR—But the phone line backs mine. Would I need two phone lines?

Mr Campbell—No, because at the moment if you go into your ADSL 2+ you can filter those services and you will still only need the one phone line. Do not forget that Foxtel is either coming down the cable or, for most of us, coming off satellite. I hope I have not confused you by jumping around too quickly. Please stop me if I have.

CHAIR—So now my PC is attached to the set-top box?

Mr Campbell—At the moment?

CHAIR—No, the multifunctional set-top box.

Mr Campbell—No, your television receiver is.

CHAIR—Are you talking of movies online reaching new audiences this way?

Mr Campbell—Via cable.

CHAIR—Not via the TV reception aerial?

Mr Campbell—Or via the telephone line, which carries the bandwidth.

CHAIR—So we have an ordinary old set-top box which is receiving a digital signal off the aerial and a computer is also wired into the set-top box for movies online on your TV, rather than on your computer?

Mr Campbell—No—

CHAIR—Do you download direct onto the hard drive?

Mr HAYES—Isn't the TV only applying vision at this stage?

Mr Campbell—The TV is only a display device.

Mr HAYES—Yes.

CHAIR—So movies online is still over your terrestrial cable, telephone, satellite or however you do your broadband at the moment—your IP broadband.

Mr Campbell—IP would be over cable at this time.

CHAIR—And your TV based email?

Mr Campbell—Your TV based email would then come down the same cable, so what you are using is your standard television receiver.

CHAIR—You can do all of that at the moment, anyway, using different cables. So why would you need a government subsidy?

Mr Campbell—I thought you might home in on that one! That suggestion was based on the United States model, and it was promoted in order to advance the take-up of digital. They wanted to be able to claw back their spectrum, because digital was very slow to be taken up in the US.

CHAIR—Germany used that for their last few people as well.

Mr Campbell—Yes. That was really to demonstrate that there are other jurisdictions which are looking at it, for whatever reason. Maybe our government does not have the same urgency regarding that spectrum. As I understand it, there was a prescriptive date for the simultaneous switchover from analog and digital—or hybrid—to digital only. That was a way of resolving how you incentivise these things. We have put to you a couple of models. One is the mechanical model—a one set-top box model. The other relates to talking to consumers to find out how to get them to drink the water, not lead them to it. That model is based on the 2004 US model for accelerating the change-over.

Mr HAYES—I understand your position on high definition. I suspect you are right: it is going to take a while for that to pick up in any discernible way, and also having regard to the amount of spectrum it is going to eat up in the process. I do not understand your opposition to multichannelling, other than protecting a burgeoning business in terms of your organisation. Is that reasonable?

Mr Campbell—It is certainly a fair assessment. It is looking at encouraging diversity of operators as opposed to the incumbent three.

Mr HAYES—But it does not go to accelerating or encouraging the pick-up of digital television. One of the options out there is that broadcasters can opt to broadcast in high definition, and use some of the spectrum to do that. Alternatively, some of the spectrum could be used for multichannelling. Isn't that one of the implicit advantages of digitisation of television?

Mr Campbell—Of course. From my reading of it, it is what is being considered by and debated with the minister at the moment. I think that determination will be made in another forum, and because of different dynamics. My argument at the outset was that that is why 7 megahertz was allocated to the incumbent broadcasters.

Mr HAYES—The restriction on multichannelling to date has been in order to allow the pay TV market to develop in any event. With respect to whether that restriction continues, I am not quite sure that it should be there to create a market opportunity, if there is something else that can sit in the void.

Mr Campbell—That is a fair comment. With respect to the pay TV model, it is probably maturing every day. It is a very successful piece of technology and service. It comes down to asking: how much can the consumer consume with content?

Mr HAYES—In this instance, I suppose it comes down to what the consumer wants.

Mr Campbell—Exactly. Can they then be in control of what they want and when they want it? The alternative is when they have actual control by way of a remote unit that commands from a menu as to what they want, when they want it, almost to the second; they are the programmer. So you are releasing the old model where we were the programmers. Of course, you would react to whether a program worked or did not work; it was simply a matter of numbers.

Mr HAYES—So do you see us, for instance, leaving the issues of higher definition or multichannelling to the marketplace to determine?

Mr Campbell—Of course they can. There is, anecdotally, some resistance to providing as much high definition as was originally planned to access that bandwidth. It is now seen as being, 'We've got the bandwidth, therefore let's utilise it to provide a myriad of other services—whatever they might be.'

CHAIR—Thank you very much, Mr Campbell.

Resolved (on motion by **Mr Keenan**):

That this committee authorises publication, including publication on the parliamentary database, of the transcript of the evidence given before it at public hearing this day.

Committee adjourned at 12.11 pm