

INTERNATIONAL DYNAMICS PTY LTD

Submission to the Productivity Commission Broadcasting Inquiry

Digital television proadcasting from the consumer point of view



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Introduction

Background

I am the Managing Director of International Dynamics Pty Ltd, an audio visual distributor and retailer founded in 1958. Our main product line is Loewe televisions from Germany. In the 70cm + screen size category, outside of the lower Sony/Philips/Panasonic territory, we are one of the major distributors of televisions in Australia, supplying over 80 dealers. We have been credited by many as the first Australian distributor and retailer to successfully enter the premium television market in volume.

The Loewe company we represent is one of the major TV brands in Germany, and in certain categories the biggest-selling brand by value (source: GFK July 1999). Australia is now the fifth-largest market of Loewe products in the world.

I speak not just from theory or logic but from a large amount of marketing and selling experience, including direct person-to-person selling to the general public. I have been an expert witness in television-related issues. My company group includes 9 retail stores, one of which is a multiple Westfield Retailer of the Year award winner, another is a current Victorian Fair Trading Award winner. Few people in Australia would have my understanding of the premium television market, and the concept of selling the added value of good picture quality.

Definitions

Throughout this submission we will make references to Digital TV (DTV), High Definition TV (HDTV) and Standard Definition TV (SDTV).

References to DTV indicate digital television and data broadcasting (whether HDTV or SDTV) instead of the current analogue system.

References to HDTV in Australia are based upon the legislated Australian HDTV format of 1920 pixels x 1080 lines @ 50Hz.

References to SDTV in Australia are based upon the DVB-T platform standard of 720 pixels x 576 lines @ 50Hz.

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1 Public confusion about Digital TV

1.1 Real people and television purchases

I have been arguing against HDTV as the mandated Australian digital broadcast standard since it was first announced, because so many of the Government, official bodies and media predictions were simply impossible to fulfill and doorned to failure. I even offered a free Loewe television to anyone who could show that all the official predictions would actually happen. The basic reasons are very simple: there will be a lack of buyers for HDTV sets, even if the original performance and availability commitments were both achieved by 1/1/2001 (which in my view will be impossible).

I believe most organisations providing submissions to this inquiry have had little or no experience of commonplace situations in the selling of televisions. The reason why most televisions sold in Australia are under \$1000 is simple: not enough people think it worthwhile to spend a lot more to get a better picture. The following are real life examples.

- The doctor who thinks the Loewe \$3000 set is superb ("I've never seen anything so clear") but buys the \$1500 unit which is loaded into a BMW 8 series car worth \$250,000.
- The successful lawyer who has an argument with his partner on whether to spend \$1899 for the better picture that he \$1299. They compromise on a \$1499 set.
- My physiotherapist who bought a new Ford Falcon wagon for local suburban driving, but a \$799 television. The television had to cost well under \$1000, even though she said the Loewe sets were much better.

I am considered a very knowledgeable and skilful television salesperson. Despite this I can't always overcome buyer resistance to higher priced televisions with better picture quality, even among people in top income brackets who can see the difference. I can supply more detailed reasons why this happens upon request.

Some of Loewe's more expensive models can have a VGA interface fitted for \$160. Our stores have demonstration areas showing the Windows and Internet display capabilities of these televisions. The take-up rate of the VGA card-equipped televisions is relatively low.

With any new technologies there are always a small number of "early adopters". With a mandated HDTV approach they will be in the Ferrari, Porsche and Rolls Royce category, provided a variety of manufacturers are willing to produce an appealing range of sets for our tiny market format. I cannot envisage this happening.

1.2 Why don't more television retailers complain?

Why don't more television retailers complain about the situation of lost sales and wrong and misleading information being released? In the early days a large number of dealers I know did complain, to no avail. After getting no replies they gave up. I was unusual in that I persisted. I contacted many of our dealers in November and suggested they contact the Productivity Commission. The dealers weren't receptive.

The general attitude was "it's a waste of time." "You can't change anything" is a very common attitude. In some of the larger stores the people in charge oversee many areas, including VCRs, refrigerators, computers, furniture etc, and they often aren't in direct contact with the public. In summary they haven't fully immersed themselves in the HDTV debate and didn't want to waste their time.

See Attachment 1.2 for letters from dealers about the effect the Digital TV media coverage is having on their businesses.

1.3 Drop in average sales price of televisions

Past and current Australian and worldwide experience show that most people will not make the relatively affordable jump from a \$1000 set to a \$2000 set, even though the picture quality is significantly better and easily discernible. The proportion of people moving to a \$3000 set continues to drop off rapidly, despite the improvement again being apparent.

Our retail group has recently recorded an increasing number of people buying lower-end model televisions. The most common reason given by buyers is that "HDTV is coming". They don't want to spend a lot more and have it wasted.

We know of cases outside of our retail group where television salespeople have advised clients to not spend more than \$1000 on a new television because of the impending arrival of HDTV.

If people knew the facts this wouldn't be happening as it does now. We can provide many letters testifying to the effect.

2 Comparing television formats

The proposed change from current analogue televisions to HDTV sets is often raised as being comparable to the change from black and white televisions to colour. It is completely different.

Regardless of the size of the screen and the viewing distance, a colour television was instantly discernible from a black and white set. Despite this it took years for colour televisions to become the major sellers. 10 years later black and white sets were still being sold, and even now are still available at the very cheap end of the US market.

It is a subjective question but an often quoted opinion: if you were to place a good-quality current analogue television receiving a reasonable signal next to an HDTV set of the same size, you would need to view both at around 2 metres distance or less to notice the picture quality difference between them. This is much closer than most people watch their televisions, and assumes that an affordable HDTV set could be made in a 55cm to 68cm screen size, which we find difficult to envisage.

Despite requests I have never been able to see a real-life HDTV demonstration. My advice has been that HDTV demonstrations in Australia have been on televisions of a size most Australians have never seen, let alone considered purchasing.

A more comparable leap to the change from black & white television to colour would be going from good quality colour television to good quality 3D television that does not require glasses for viewers in normal viewing positions.

2.1 Performance differences between SDTV and HDTV

It is debatable at what point the performance differences between SDTV and HDTV become noticeable. The 90cm screen definition given by the Productivity Commission in its draft report is reasonable, but irrelevant to consumers in general as analogue sets of this screen size currently start in price from around A\$5000.

It is worth noting the view of a senior manager from a large multinational television and picture tube manufacturer regarding television screen sizes when viewing HDTV:

"For consumers to enjoy the full benefits of 1080i resolution, they must view the display at a distance not more than 3 times the dimension screen height. At distances greater than 3 screen heights, the human eye becomes the limiting factor. In most living rooms, consumers view the television from larger distances. For this reason, only the largest displays bring the full benefits of 1080i to consumers."

When people refer to the "cinema quality" pictures of HDTV, they are actually referring to the highest 1920 pixel x 1080i lines format. The 1440 x 1080 interlaced or 720 x 576 progressive formats can also be referred to as HDTV, inasmuch as they are higher definition than SDTV. It is important to note that 1440i and 720p are not the "best technology" format being debated currently.

2.2 The US experience applied to Australia

The European PAL system is acknowledged as having superior picture quality compared to the earlier US NTSC ("Never Twice the Same Colour") system, but the US didn't change. One of the reasons for the US having HDTV as an option may be the poorer quality of NTSC. HDTV is a failure in the USA compared to SDTV in Europe.

If we take the often-published figures of around 25,000 HDTV sets sold in the USA in the first 6-7 months, pro-rata on a per-capital basis this would equate to 200 sets sold per month in Australia. If we take F.A.C.T.S. statement that there are 5 manufacturers interested in the Australian market and assume they have 3 models each (3 models is not many for a television manufacturer), they will have sales of only 14 units per model per month Australia-wide.

Other sources state that only 5000 HDTV sets were sold in the USA in the first year of broadcasting (New Scientist October 1999). The discrepancy in the US sales figures may be because there has been no clear explanation of whether they refer to sets sold to dealers, sets sold to end users, which DTV standard they refer to (the US has 18 DTV standards) and whether the sets were only HDTV-ready, or HDTV-equipped. HDTV-ready monitors require a suitable set-top decoder, whereas HDTV-equipped sets are ready to use with HDTV broadcasts. There is certainly reluctance from proponents of lagging new technologies to provide accurate detailed sales information. HDTV sales and DTV sales are often mixed in together.

On ringing a selection of US dealers stocking major brand HDTV sets (listed on the manufacturers' websites) none had operating sets on their shop floor.

How many manufacturers will commit millions of dollars for designing and manufacturing new unique-format HDTV sets for a tiny market like Australia, with total failure as a real possibility?

In a paper submitted to the HDTV briefing and demonstration on November 4 1999 in Sydney, Dr Joseph A. Flaherty said "I think there will be a million homes with DTV and HDTV receivers and set-top boxes in 24 months." Thus 3 years since the start-up of Digital TV in the USA, I'll assume 300,000 of these sets are HDTV to the Australian 1920 x 1080i standard, in itself an optimistic prediction. With a total estimated television sales market of over 80 Million sets in the USA over a 3 year period, less than 0.5% will be HDTV.

Over the same 3 year period it is estimated 2.5 Million televisions will be sold in Australia, so on the same basis there will be less than 3000 HDTV sets sold per year. These figures are supplied by an HDTV enthusiast pointing to the success of HDTV. At what point do we consider HDTV a failure?

3 Misleading information on sizes and pricing

If the official and media information on the Digital TV issue was correct we shouldn't complain, even if it inconveniences or damages our business. I submit however that in many important cases it has been misleading and often simply false.

The Trade Practices Act provides penalties for "conduct that is misleading and deceptive". Mr Nicholas Seddon, Reader in Law at the Australian National University says "misleading means just that —no element of fraud or negligence is required".

I am not making a comment on the legal application to particular cases, but the principle of Section 52 of the Trade Practices Act states "people should not be mislead to their damage."

I can say for certain that consumers and the been damaged by previous announcements and articles. Sales of larger televisions dropped off sharply throughout Australia when They came back up when the reports quieted down. This up-and-down sales pattern correlates with the intensity of Digital TV reports in the media. Examples of misinformation follow.

3.1 60 Minutes

Television sales dropped sharply after the Nine ("Consign your TV to the scrap heap") for a Digital TV story on "60 Minutes" on Sunday 7th November. After the broadcast our stores and dealers received scores of phone calls from worried "60 Minutes" viewers who had recently purchased televisions. On 4th and 5th of November I had received calls from customers worried about the commercial. On Monday the 8th I received several calls from customers worried about the program. The last caller had purchased a television on the Saturday, and seemed close to tears. The impression she got was that she had just made a big mistake by spending over \$3000 on a television, when the program said HDTV sets would only be \$4000 to \$5000.

Many people have told me they had an old television, which they wanted to change, but were waiting for HDTV. They were behaving very rationally. If I was told officially that Rolls Royces and Ferraris would be around the same prices as a good Holden in a year's time, I'd wait to buy one too.

3.2 Australian Broadcasting Authority

The ABA's website advised browsers under heading that "conventionally sized sets are likely to approach the price of current TVs". The buying public sees televisions with 51-68cm screens as "conventional sized sets," but is not told that a range of conventional size HDTV 1920 x 1080 sets will not be made in the foreseeable technical explanations, typical Australian-sized full HDTV 1920 x 1080 resolution cannot be manufactured economically with existing television picture tube technology.

3.3 Our House

The GTV-9 program "Our House" aired a segment on Digital TV on Wednesday November 24 1999, mentioning a price of \$2500 together with background shots of a Sony HDTV, and saying price drops were expected. I could write a complete submission on misleading and/or untrue information in the media and from Sony. Why doesn't F.A.C.T.S. ensure that its members and other HDTV supporters provide realistic information on pricing?

3.4 USA pricing compared to Australian pricing

Due to a number of factors (which I can advise to those interested), televisions in the USA cost far less than Australian equivalents, say over 2 to 3 times. For simplicity we will use a 'multiplier' of 2.5 times the US\$ price to achieve the A\$ price, although we can provide examples of products at 3.5 times*. The cheapest Sony direct-view fully-equipped HDTV set in the USA currently (according to the Consumer Electronics Manufacturers Association USA website at 26/11/99) is the KW-34HD1 with an 86cm picture tube at US\$8499. This is also the smallest fully-equipped HDTV set available in the USA we could locate using a direct-view picture tube, still much larger than the average Australian television, and over 20 times the price (a good direct-view television is considered superior in picture quality to a projection TV). On this basis the Sony KW-34HD1 equivalent in Australia could sell from around A\$20,000.

* A Sony 32 inch television quoted at US\$999 is the cheapest we could find on the internet. In Australia the lowest-priced Sony 32 inch set was quoted at A\$3500.

3.5 Reconciling the extraordinary range of HDTV prices

Two years ago, when costs for the Digital TV infrastructure were reported as around \$500 Million, I was asked how much I thought it would cost. My answer was \$1 Billion or so, which was not based on any knowledge. Advocates of new technologies generally underestimate implementation costs, whether out of lack of knowledge, wishful thinking, or to help get their technology accepted. In truth it is impossible to know all the circumstances that can arise.

Philips Australia submitted that an HDTV set will cost around \$15,000 (I see this at the "budget" end of the market), but Sony say \$8,000 (or less than half their equivalent US pricing). This is easy to reconcile. Sony has a caveat in their submission about pricing. If their actual prices turn out to be higher, they can point to this caveat. I assume the Philips price was referring to a set capable of the full 1920 pixel x 1080 line resolution. Sony may have been referring to a set with lower specifications such as 1440 pixels x 1080 lines, with "virtual pixels" and not real ones, as one of their US models uses. Such details aren't available.

The really low HDTV set price estimates come from F.A.C.T.S. and commercial networks, the main proponents of HDTV. Prices such as \$5000, \$4000 and even \$2500 have been quoted, but I'll pick \$3500 as an average figure. Do the networks know more about television pricing and production than the actual manufacturers? Why aren't the manufacturers quoting the same low prices for 1920 x 1080i HDTV sets and set-top decoders?

F.A.C.T.S. and the networks know that if they had started promoting HDTV with realistic prices, they would have received little or no support. The discrepancies in pricing are thus easy to understand.

3.6 Information from HDTV proponents

I have seen very little information on the consumer angle from SDTV proponents on the visual media, and only a little more in the print media until recently. I don't see all media reports of course, but obviously HDTV gets by far the greater coverage. No customer I have spoken with can recall hearing about consumers' interests and SDTV in the media.

We have no objections to companies putting the best case forward for their legitimate commercial interests, and don't expect them to highlight the negative aspects. We do object to them repeatedly supplying information that is untrue, misleading, or without realistic basis, particularly when they have access to information about the real situation.

3.7 F.A.C.T.S.

In the media it easy to say "I was misquoted" to explain away misleading figures. A very recent example of misinformation was heard on radio on Sunday 26th November. The 3LO program "In the National Interest" had Mr Tony Branigan from F.A.C.T.S. as a guest, who was talking about \$4000 HDTV sets. People would assume he is talking about a complete HDTV set to the Australian "cinema-quality" (1920 x 1080i) specification. I would like to know the make and model of this set, as I do not believe it exists.

Mr Branigan also mentioned that Japan would be having digital HDTV next year, and that Singapore, India and China were also looking into HDTV. I checked the "Latest DVB News" section of the official DVB website on the same day. It mentioned that Singapore and India had adopted DVB, but nothing about HDTV. Any country considering DTV gets all the specifications for all the different standards, so in this sense they all must "consider" HDTV. Australia remains the only country with a mandated 1920 x 1080i HDTV system.

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4 New technologies

"Australia's rapid take-up of new technologies" is a mantra often quoted, as if there was a rule that Australians are always way ahead in this area. It is not so.

Large-screen projection televisions are far more common in the USA, which is a close example in terms of pricing. The current US NTSC broadcast standard is much worse than Australia's current PAL standard, yet US take-up of HDTV has been an acknowledged flop to industry figures outside of HDTV enthusiasts. With the burden of an "orphan" standard, why should it be any better here?

There is more difference between an \$899 television and Loewe sets our company group sell for under \$2000 (as well as other brands), than between SDTV and HDTV sets. Despite this Australians mainly spend under \$1000 for a TV.

4.1 F.A.C.T.S. consumer survey quoted in daily media

"F.A.C.T.S. released the results of a survey this week on what consumers thought of the digital era. Clearly aimed at influencing Prime Minister John Howard's careful watch on the mood of mainstream Australians, the survey concluded that people would rather have the best quality TV achievable rather than access to datacasting services". (Brisbane Courier Mail, 13 November 1999)

On page 1 the survey states "Surveys are not should not be interpreted as predictions as to the future consumption patterns of Australians when these technological advances become a reality." This is something with which I completely agree.

I don't propose to analyse the entire F.A.C.T.S. survey, but let's look at an example from page 23:

"Methodology note: In order to determine which of two opposite positions our survey respondents agreed most with, we presented them as the opinion of two hypothetical people – Mr Smith and Mr Jones.

Mr Jones thinks the TV networks should be required to broadcast in both a lower quality standard definition and in cinema quality High Definition so when consumers upgrade their sets they will have a cheaper option and therefore have more choice.

Mr Smith thinks that in order to have a smooth transition from analogue to digital TV that we're better off to pick the best system and to bring everyone onto that system. He thinks the new system should be simple and that having two systems will create too many problems, just like the problem caused by having VHS and Beta VCR systems in the 1980's."

What was not mentioned was that the failed Beta format was the better one!

Imagine if the alternatives posed were instead as follows:

Mr Jones thinks the TV networks should be required to broadcast in high quality as high definition sets will be several times the price and not in the sizes that most Australians buy.

Mr Smith thinks that in order to have a smooth transition from analogue to digital TV that we're better off to pick the best system even though it will be 10-20 times more expensive than normal Australian TVs and in sizes not normally purchased here. He is not interested in the fact that nearly all the best entertainment systems shown have failed such as Beta, DCC, DAT, ELCASET and so on. He thinks only the best is good enough.

The above questions from hypothetical people are slanted as in the Wirthlin survey but they are factually more accurate.

All this survey indicates is that if you take people with little knowledge and ask them leading questions pointing to an answer convenient to yourself, you will get answers convenient to yourself.

4.2 Successful implementation

"About eighty percent of Australians will potentially have access to digital television transmissions on 1 January 2001." (ACCC media release 17th December 1998)

"Mr Robertson indicated that with the key recommendations for high definition standards and the transmission format now taken, the way is cleared for the industry to prepare the detailed specifications by the end of this year. He said this timing was essential for the broadcasting industry and the receiver production industry to be able to meet the Government's January 2001 timetable". (F.A.C.T.S. media release 30 July 1998)

When can we expect a factual statement on what coverage will be achieved at 1/1/2001?

"There are no reliable pointers to what might drive consumer take up of digital broadcasting technology. Even major consumer product manufacturers, despite years of consumer research and many successful products, report they have yet to find the key to what guarantees success. As a consequence, many products never go beyond the test market stage. Even some that are given world-wide launch become commercial failures" (Final report of the Australian Broadcasting Authority Digital Terrestrial Television Specialist Group Canberra 1997).

This is correct, so why has it been forgotten?

4.3 The history of DAT and DCC formats

Both DAT (Digital Audio Tape) and DCC (Digital Compact Cassette) were digital audio cassette formats given world-wide releases in the 1980's and 1990's respectively. There were newspaper and magazine articles explaining all the research that had been done into figuring out what consumers wanted. It was a big market. There had been many questions to potential users, and suggestions about

defects in the existing systems. In a technical sense DAT and DCC were great successes.

I can recall only one question that was apparently not asked: "Would you be prepared to pay up to 10 times the cost of the existing product?" But this proved to be the most important question.

The point made about prices dropping with higher demand was brought out (as it has been by many HDTV proponents), and there was a great deal of promotion. Manufacturers did cut prices to an extent, but the anticipated demand just didn't eventuate.

In the consumer electronics market both these technologies have disappeared.

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5 Debunking arguments in favour of mandated HDTV

In most issues of public interest there are different points of view which should be put responsibly. The information released by mandated HDTV proponents however is often provably wrong, apart from being extraordinarily biased.

As a supporter and published advocate of SDTV along the lines of the Productivity Commission draft report, I have replied to each and every question received over the last 2 years. I have asked for anyone finding what they think is an error or omission in my published material to contact me. I have answered every query received.

In contrast when I have a question for various Government Authorities, TV Broadcasters, Media etc it is rare that I get a response at all, and even rarer to get an answer to the questions asked. I can provide numerous examples.

I am pleased to supply answers because I have confidence in my facts. It is clear that mandated HDTV proponents do not have confidence in theirs. Bias is exemplified in section 3 of this submission.

5.1 Historic examples of failed "better" technologies

The lessons of history

"Those who cannot remember the past are condemned to repeat it".

- George Santayana 1863-1952

It is a proven fact that many of the "best" entertainment technologies consistently fail. Consider the following lessons from history:

VCRs Beta (produced by Sony, long disappeared)

VCS-2000 (produced by Philips, long disappeared)

The "inferior" VHS system is the world standard.

Audio tape Reel to reel

8 track

Elcaset (Sony was one of the protagonists for this format)

Compact cassette Digital Audio Tape

Digital Compact Cassette

The worst format sonically (compact cassette) was the winner.

Divx This is a more recent example, with a great deal of US

consumer research released on why the Divx system would be a success. Divx was a DVD player with a modem connection that would allow pre-paid discs to be played for 48 hours only. To "hire" a Divx disc was much cheaper than buying a DVD disc, and the assumption for its success was that users would

only want to watch a movie once or twice anyway. It has since been a total failure and has losses. Strategy Analytics, a specialised consultancy firm with a good track record of predictions in consumer technologies, predicted the failure of Divx of HDTV in the USA. (More details can be supplied on request.)

VCRs

VCRs are a near-universal household item and video stores such as Blockbuster are a standard part of the landscape. Imagine the public were told that for little extra cost they could have a much better picture quality and it was completely compatible with both their own tapes and video store tapes. It wouldn't even mean more equipment or set-top decoder boxes. On the "best technology wins out" argument people would go for the better quality.

Unfortunately they didn't. The format was called Super-VHS. Super-VHS VCRs look the same as normal VHS units, and cost several hundred dollars more. On the "cost will drop quickly" argument, they should have soon been much the same price as the comparable VHS units. Super-VHS tapes should also have finished up at a similar cost to normal VHS tapes. They were promoted for some years and just didn't take off. Most have gone off the market and I can't remember when I last saw one advertised.

HDTV, if selected as our DTV format, will either succeed or fail. In the event of failure what happens to the people who paid the huge amounts of money for HDTV sets, and end up only able to receive SDTV broadcasts?

5.2 The "prices will drop rapidly" argument

The USA, with a consumer electronics market around 20 times the size of Australia's, hasn't had much change in pricing of HDTV sets after a year of broadcasting. The "budget" priced models at US\$7000 are not as good performers than the more expensive units. Availability of lesser-quality models at lower prices does not constitute a price drop. A price drop means that models of the same or better quality are lower in price now than when they were introduced.

For an example of prices <u>not</u> dropping quickly, the US magazine *Home Theater* in its May issue reviewed the US\$3995 Mitsubish VS-50803 50 inch TV and US\$3000 HD-1080 HDTV set-top decoder, concluding that this combination makes "a great budget HD television." In November 1999 this combination is listed on the CEMA website with recommended retail prices of US\$4295 and US\$3499 respectively, an increase of 11.5%.

If the "better technology" argument was valid televisions in general with the best picture quality (generally the more expensive) would win the sales battles. This has not been the case.

Sony Australia quote in their submission to the Productivity Commission the Japanese experience of HiVision, the high definition analogue television system

introduced in 1991. Sony state that set prices dropped from A\$25,000 in 1991 to A\$5,000 in 1999, but did not mention that the relatively cheap 1999 pricing is a result of the HiVision system being phased out, not because of its widespread acceptance.

Sony also quote in their submission that in decoders has dropped to US\$649 in November 1999 for the RCA DTC-100. Regardless of the fact on general principles that this would equate to around A\$1600 (and that it can't be used with our system), "Stereophile Guide to Home Theater" magazine in their December 1999 issue note that the DTC-100 isn't available yet, and its performance has not yet been assessed. US\$649 will be the cheapest HDTV set-top decoder yet on the US market, after a full year of broadcasts, with premium models priced at up to US\$6000 (equivalent to A\$15,000). How can Sony seriously expect their HDTV set-top decoder ("We would expect this pricing to be at the premium end of the market") to achieve a suggested retail price of A\$999, when we take Australia's market with its small production runs into account?

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6 Recommendations

6.1 ABA final report on DTTB in Australia

The Final Report of the Australian Broaddasting Authority Digital Terrestrial Television Specialist Group in 1997 made several key findings:

- Finding 6.3 "Systems that are able to address both HDTV and lower cost standard definition television (\$DTV) receivers for smaller screen sizes, would appear to offer significant advantages to consumers and might assist earlier wide acceptance of DTTB by consumers. The ABA considers this to be an important consideration in the final determination of a system standard for DTTB in Australia."
- Finding 10.3 "Service commencement will be driven not only by policy decisions but by equipment availability for both broadcasters and consumers and at this time announcements about mass production commencement of products for the Australian market would be speculative."

Both these points make economic sense, but they seem to have disappeared from the Digital TV debate. I understand timetables and situations can change, but why haven't the general public been informed? At present there are either unrealistic expectations and/or confusion. We need media releases with full details of the current situation, as it affects consumers.

I again quote the ABA from its final report:

Chapter 1 "There are no reliable pointers to what might drive consumer take up of digital broadcasting technology. Even major consumer product manufacturers, despite years of consumer research and many successful products, report they have yet to find the key to what guarantees success. As a consequence, many products never go beyond the test market stage. Even some that are given world-wide launch become commercial failures".

This is true now as it was then, and will be just as true in the 21st century.

How then can we ignore the SDTV model with a track record pointing to success and pick the HDTV model with a track record of low demand, with an ever-increasing number of people in the USA believing HDTV to be a failure?

6.2 Productivity Commission draft report on Broadcasting

The Productivity Commission's draft report on Broadcasting makes sensible recommendations on the implementation of Digital TV with which we can agree, however we believe only SDTV is needed at this stage. At a later stage HDTV can readily be added if it is considered worthwhile, broadcasting in Australian conditions.

6.3 My recommendations

The HDTV scenario has the valuable spectrum resource tied up to service a very small percentage of the population. This not only will deny new enterprises access to the much larger market that would be possible under SDTV, but will also deny the general consumer economical access to the services the rest of the world can enjoy. Mandated HDTV creates an elite by its very nature.

The alternate scenario, an SDTV-led change, would allow more affordable access to a much larger market because its take-up rate would be service and information driven, not quality driven. This is the difference between the VCR (rapid take-up rate) and DAT (virtually no take-up). This larger market in turn can sustain more enterprise and is clearly a much more productive use of our resources.

Utility, not just premium quality, drives mass consumer change. The choice ultimately is between relatively easy access for all (both consumers and enterprise), or access restricted to a few. The social ramifications are obvious.

I completely refute the argument that "buyers will be confused between a choice of HDTV or SDTV", put forward as a result of the commercial stations reported offer of a two year test of dual-system transmissions. Buyers are already completely confused because of the misleading and untrue information they have been given. I have yet to find a person who thought they understood what the whole Digital TV debate is about. Very few television salespeople understand it.

People decide on much more complex issues in everyday life: what type of home loan is best for them; where should they send their children to school; should they buy a Macintosh or PC computer for home use; what type of camera format should they buy and so on. The general questions I am asked by television buyers are more along the lines of "Can you tell me about HDTV?" "What's digital television all about?" "How much will it cost?"

The decision between HDTV and SDTV is much simpler. It's like the difference between normal VHS VCRs and Super-VHS VCRs. They are compatible formats, with differing picture quality and features, and if you want to pay more for the extra benefits, you can.

The solution to this issue is simple. Give the public clear and factual information on a couple of pages on the points relevant to them. If given the choice between HDTV and SDTV, with the huge difference in pricing as the major factor, I consider Australians will overwhelmingly choose SDTV televisions. We only need to look at current television purchase prices and the failure of technologically better formats to see the clear preference for affordable products. F.A.C.T.S., Sony and other HDTV proponents would do well to add accurate pricing of HDTV sets to their market research questionnaires, if they don't already understand this.

Why has so much effort and expense been expended to try to force mandated HDTV on Australians? Are these the main interests that Australia's digital future should be based upon? I would put the interests of TV users in the forefront of any decision on digital broadcasting.

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International Dynamics 29th November 1999 Page 1 of 1



INTERNATIONAL DYNAMICS PTY. LTD.

A.C.N. 004 479 225

84-88 BRIDGE ROAD, RICHMOND, 3121

MELBOURNE, AUSTRALIA

TELEPHONE: NATIONAL (03) 9429 1944

INTERNATIONAL 61 3 9429 1944

FAX 61 3 9428 0983

«Full Name»

«Company Name»

«Address»

«Suburb» «State» «Postcode»

Attachment 1.2
International Dynamics

SENT TO LOWNE DEALERS

Wednesday 10th November, 1999

Dear «First_Name»,

I have been invited to give evidence to the Productivity Commission hearings on Broadcasting. I will be providing information on why HDTV should not be mandated as Australia's broadcasting format, with details on previous failed Australian-only standards in other industries, and the history of the demise of other much-hyped technology platforms such as Betacam, Elcaset, DAT etc. Your experience as a specialist retailer is invaluable in this respect, and your comments would be appreciated.

- 1. When the Federal Government announced HDTV as their selected broadcast format, what effect did this have on your TV sales?
- 2. What has happened more recently, and what do you expect to happen as the legislated DTV commencement date of 1st January 2001 approaches?

Real-life experiences from your business would be useful, and I will need your comments in writing by Monday 15th November at the latest. If you have any questions about this, please contact me immediately by phone on (03) 9429 1944, by fax on (03) 9428 0983, or by e-mail at encel@onthe.net.au

Best Regards,

Alex Encel
MANAGING DIRECTOR



HAMEIN HOLDINGS PTY LTD ACN 055 284 552 T/A

WorldWide Appliances

A RETRAVISION STORE LIKE YOU'VE NEVER SEEN BEFORE

SHUP AXB1, ERINA FAIR, TERRIGAL DRIVE, ERINA NSW 2258 TELEPHONE (U2) 4365 3899 FACSIMILE (U2) 4365 3768

Attachment 1.2.1
International Dynamics

Alex Fucel International Dynamics Pty, Ltd 84-88 Bridge Road Richmond, VIC, 3121

November 17, 1999

Dear Alex.

In answer to your questions in the letter dated the 10th of November 99 the vast majority of consumers do not recognise that there is a difference in high definition digital to standard digital broadcasts, to them it is all one and the same thing.

The musinformation that the television stations, especially channel Nine, is broadcasting is damaging Existing televisions will be able to be used with digital broadcasts, via a set top box.

High definition television will not be in the price realm of the mass market for another ten or fifteen years.

Most people today cannot afford and do not buy the high tech televisions that are available under existing technology, opting for budget rather than super picture.

The markets for large screen televisions in the mass market are model's priced from \$1000 to \$2000. The medium size market is well under \$1000.

Unless high definition digital television can fall within this price category within the next five years, the majority of people will simply not buy them.

Once you go above \$2000 for a television the market caters to high-income earners.

Unless television is to become the exclusive realm of the riell, (not politically sane), high definition television will not become the force claimed Nine wish it to be in the next ten years

The combination of incoming O.S.T. and digital television has had an effect of putting people in two frames of mind about replacing their televisions. It has certainly slowed the whole market down

There needs to be a transition from analogue to digital that people can understand and afford. In the end, it is the customer who decides whether a new format is successful or not. Customers will vote with their money.

It has not been pointed out to the public that their existing televisions can be used via a set top box, until the set accels replacing. Ty-stations are running a scare comparing.

I expect people to continue to wait to purchase televisions as they get closer to the first of January 2001

As the penny drops that they cannot afford high definition television, they will probably wait until the price drops and purchase set top boxes in the meantime.

Without the market to broadcast to, the majority of stations will not make many high definition programs initially, thus slowing down the take up, as is happening in the United States now.



NAMLIN HOLDINGS PTY LTD ACH 865 264 652 T/A

WorldWide Appliances

A RETRAVISION STORE LIKE YOU'VE NEVER SEEN BEFORE

SHOP AXBI, ERINA FAIR. TERRIGAL DRIVE, ERINA NSW 2250 TELEPHONE (02) 4365 3889 FACSIMILE (92) 4365 3760

A recent trip in September failed to find satisfactory working display of high definition television in any major electronics store in the United States. We visited electronic stores in Los Angeles, San Francisco, Denver, Scattle, Dallas, Boston and New York

The general impression was one of disappointment. The potential for high definition television should not be spoiled but should be a transition over the next fifteen to twenty years. With digital being the next logical step Far better compression techniques will be developed in the next decade, With digital still in a rapid development stage, the high definition television set that can be built in ten to fifteen years time can then incorporate more advanced broadcast features that will be developed after gaining the experience of digital now

Who knows what needs and potential the data broadcast system will develop

We run the risk of trying to do too much too soon and waste vast resources and potential, trying to second-guess the needs of the Australian public.

The customers will choose the path that they can understand and assimilate in their lifestyles now

It would be a shame to see the potential of high definition television wasted, by going off before the market has been prepared properly.

I hope this gives you an insight into a retailers point of view

Regards.

Alan Williams
Managing Director



463 Flieders Street TOWNSVILE GLD 4810 Emoil: avdesign@utra.net.au Telephone: 07 4772 3470 Facsimile: 07 4772 2570 Mobile: 0418 778 917

IJL BH

Attachment 1.2.2
International Dynamics

17 November, 1999

FAX: 1800 687 376

International Dynamics Pty Ltd 78 – 80 Herald Street CHELTENHAM VIC 3192 TEL: 03 9585 0522

Dear Sir.

Re: Effects of the Announcement - HDTV

In answer to your letter of 10 November retithe effects of the announcement of HDTV as the new Australian format, please find listed below our comments.

- Even before the recent announcement of HDTV, previous information caused total confusion and reluctance by customers to purchase the current model Television Sets, not wanting to be purchasing something which will be old technology.
- We expect that as the legislation for DTV approaches, sales for current model Television Sets or non digital Television Sets will fall even further.
- 3 Currently we have no information of pricing on any DTV componentry available from any Company, so our customers are left between a rock and a hard place, not knowing whether to purchase or even what will be available as an alternative to purchase.

I apologize for not getting this to you by Monday, 15 November but hope this is of benefit to you.

Yours faithfully,

Ian Lamont



Home Entertainment Systems Video and Data Projection Commercial Entertainment Systems
Conference Equipment Lighting Compact Discs Laser Discs
Pari Pat Pty, Ud. A.C.N. 010 #39 200 trading as AV Design

AUDIO TRENDS

Hollywood in Melbourne

Audio Trends (Wantima) Pty Ltd. A.C.N. 005 880 857

Shop 30, 348 Mountain Hwy, Wantirna, Victoria, 3152 Phone (03) 9729 8233 Fax (03) 9729 8118 eMail: shop@audiotrends.com.au

Attachment 1.2.3

Mr. Alex Encel C/o International Dynamics 84-88 Bridge Road RICHMOND Victoria 3121 12th November 1999

Dear Alex

Thank you for the opportunity to comment about the subject of HDTV raised in your recent letter and the public response we have received since the Federal government announced the proposed introduction of HDTV on 1st January 2001.

As you know, my family has been directly involved in the Consumer Electronics business for more than thirty years. During that time we have seen tremendous changes in technology. Without doubt, the introduction of colour television in 1975 and the compact disc in 1983 revolutionised home entertainment for everyone. However, during the same period a number of other formats were introduced that promised a lot, were technically superior, but proved to be unacceptable to the consumer. These included amongst others Quadraphonic sound, Laser Disc. DAT, Beta video format and Eleaset—an audiocassette system that delivered the performance of reel-to-reel tape with the convenience of a cassette. The Beta video format stands head and shoulders in the above group. Even today, Beta is still used worldwide by the commercial television industry and recognised by most video fanatics as superior to the VHS format. The irony is that its inventor, the Sony corporation has had to abandon ship and now make inferior VHS machines! So, no matter how good the technology is, if the consumers reject it for what ever reason, then it gets consigned to scrap heap.

Our present colour television system seems to be headed the same way, especially since the announced introduction of HDTV. Our sales have definitely experienced a downturn since this announcement. The problem has been exasperated by much misinformation in the media and in fact by government representatives. For instance, every consumer that has raised the subject in our store believes that all non-digital televisions will not receive a picture come 2008! Most are also of the opinion that come January 2001 that all programs will be broadcast Australia wide in HDTV and all will experience 'cinema' quality picture!

Experience overseas has shown quite the opposite. Even today, the United States has only introduced HDTV into major cities and even then not all. Broadcast periods are often only for around two hours and reception quality is often erratic with no reception at all on occasions!

Sales are also interesting to observe. We read recently that the US market planned to sell 20,000 sets in the first year. Although this sounds impressive, it pales into insignificance when compared with the 35,000,000 plus 'ordinary' televisions sold each year in what is the world's largest and most affluent economy. Obviously, television manufacturers still plan to sell millions of non HDTV for many years to come. Sure, sales will grow if the program material and broadcast reception improves. But, how long is this going to take? Truly, it is anyone's guess!

HDTV promises to be one of greatest developments ever in consumer electronics. However, we are concerned, especially following reports in both the print and electronic media that we in Australia seem to be telling the consumer that they will have to buy this new technology, dispose of current, proven and reliable technology or risk getting no picture at all. We hope a more common sense approach ensues in the coming months and that we enter the digital television era in a way that benefits the whole community.

There is no question in our minds, that as the proposed introduction of HDTV gets closer, more folk will postpone a purchase until they have at least seen a transmission and the pricing issue is more clearly defined. Of course, the Olympic Games will probably see sales increase for a short period. In the mean time sales will probably have a roller coaster ride.

In conclusion, we hope you find this information helpful and thank you again for the opportunity to express our viewpoint.

Yours sincerely

Stephen Ler

Stephen Lee

- CECTY

Hempel Sound Pty. Ltd. ACN 001 163 408

455 Penshurst Street Roseville - East 2069 Sydney • Australia Fax:(02) 9417 1221 Tel:(02) 9417 4069

Sales, Installation and Service of compatible Hifi/TV

12th November 1999

Mr. Alex Encel Managing Director International Dynamics Pty. Ltd. 84-88 Bridge Rd. Richmond Vic 3121 Attachment 1.2.4
International Dynamics

Dear Alex,

Thank you for requesting our comments on the current market reaction to the potential introduction of Digital Television.

When this was first announced earlier this year and the ensuing media advertisements started to appear, initial consumer reaction was one of confusion as to exactly what impact this latest technology was going to have on any impending purchases.

HDTV was described, as "a revolution with greater potential impact than the introduction of colour", that would begin transmission on 1st January 2001. This announcement was accompanied by prime time TV advertisements, featuring the highly respected Bruce Gingell, who enthusiastically touted the benefits of this new system. The result was – quite understandably – that the buying public thought the current analogue system would be ending virtually immediately, rendering obsolete any of the sets currently owned or sold. This reaction made it extremely hard for a retailer to sell any form of Television, and particularly hard for our market, which European sets in a sector where the customer expects, and is willing to pay for the latest in technology.

The truth of the matter, that the introduction process would not be overnight, and that at first, Digital sets would be extremely expensive, was not communicated to the public with anywhere near the visibility of the initial announcements. Leaving the retailer to try and disseminate, what little factual information he had at the time, in a format that would allay the fears of the buying public and enable him to maintain a profitable business. A task that was nearly impossible in the first few months.

There has been even more confusion generated of late, with the question arising as to which transmission format Australia should adopt. Surely this debate is premature, since there has been no standard yet defined, let alone actually written. Since the technical difference between HDTV and SDTV is not understood by the majority of our customers, why does this debate have to be carried out in a public forum? All this purchases to wait until all issues are resolved.

This hesitation to purchase is starting to spread beyond the actual TV set, to ancillary equipment such as VCR's and Surround Receivers. The level of change and confusion in the home entertainment market, is leading a large number of people to believe that the equipment they purchase today is going to be completely obsolete in six months time.

There has been some increase in sales recently due to the lowering of the sales tax rate, however as we get nearer to the release date of HDTV the market will once again tighten up. This tendency is quite natural and to be expected. But if at the end of the day, we end up with a format that is completely different to the rest of the world and therefore unworkable, the market is going to end up even more fractured, than it is at the moment.

I hope these comments are of some help.

Yours sincerely,

Eckhard Hempel

TOTAL (3) PAGES



Targa Hi-Fi

163 Anderson Street Cairns, Qld. 4870 (07) 40532715 fax: (07) 40532715 email: lifetek@internetnorth.com.au

Attachment 1.2.5
International Dynamics

15th November 1999

Mr Alex Encel 84 – 88 Bridge Road Richmond Vic. 3121

Dear Alex,

Only received your letter today regarding the Productivity Commission hearings on Broadcasting.

To answer your question 1: I would say that our TV sales have stopped growing and question 2: I expect that sales will begin to fall off dramatically as the commencement date approaches, almost all customers are asking about DTV, most are confused.

I know this is not much but hope it helps.

Regards,

Bruce Rankine



12th November 1999

Attachment 1.2.6
International Dynamics

Alex Encel International Dynamics 84 – 88 Bridge Road Richmond VIC 3121

Dear Alex

Re: - effect of the HDTV announcement on our business

Following the announcement of the decision to broadcast digital in HDTV, there was a dramatic reduction in the amount of leads generated from our advertising of Loewe televisions. A large percentage of the calls we received from our advertising were from people simply to inquire whether their current set would need to be "trashed"?

We have generally found that after discussing the HDTV Digital TV issue with clients, they invariably chose to purchase an entry point model rather than the up-market models as was previously the case. Their reasoning was to "just purchase a basic set and wait for the new digital technology to sort itself out". I estimate that this trend has affected our sales by 30 – 40% over this period.

With the incredible amount of mis-information in the media surrounding the expected cost of a HDTV set, I expect TV sales to decline even further and almost dry up by 1/1/2001. Without the option of SDTV, customers will not embrace the new digital TV technology, once they discover how prohibitive HDTV prices will be.

Ultimately the HDTV issue just adds to the confusion over Digital TV for the average consumer, which will only increase the buyer trauma and therefore dramatically affect sales.

I hope this issue is resolved quickly, and that future direction is communicated clearly to the public, so as to have as little effect to general TV sales as has been the case in other countries.

Yours Faithfully STEREO SUPPLIES

Don MacKenzie Queensland Manager

Brisbane City (Opposite Wintergarden) 153 Elizabeth Street, Brisbane, Old 4000 Telephone: 07 3221 3155 Facsimile: 07 3229 8481 Mt. Gravatt
(Big Top Sho

(Big Top Showrooms) 1290 Logan Road, Mt. Gravatt, Old 4122 Telephone: 07 3349 5400 Facsimile: 07 3849 7508 Aspley
Home Base Centre,
Cnr. Gympie & Zillmere Roads,
Aspley, Old 4034
Telephone: 07 3863 0144

Indocropilly
'Loewe Lifestyle'
Level 3, Westfield,
Indocropilly, Old 4068
Telephone: 07 3878 5999
Facsimile: 07 3878 5988

Bundall
Shop 10/12 Upton Street,
PO Box 6817
Gold Coast MC, Qld 9726
Telephone: 075 5317 955
Facsimile: 075 5316 160



5256996

Attachment 1.2.7 International Dynamics

Mr. Alex Encel MANAGING DIRECTOR INTERNATIONAL DYNAMICS PTY LTD 84-88 Bridge Rd., Richmond Melbourne 3121

Dear Alex.

Thank you for the opportunity to comment.

My background is Radio and Television, Electronics and Communications in manufacturing, distributing, servicing and retailing, 43 years in the industry. I have served on the board of Retravision and Narta

The average consumer is confused about Digital Television.

They are generally apprehensive of the cost for HDTV and all want to know when multi channel broadcasting will be available on free to air.

A large number of people are upset about Foxtel ceasing the cable roll out in a lot of Sydney areas. Foxtel has acquired a lot of sport exclusively, especially the Rugby League, which is no longer as widely available on free to air, and yet the cable is and will not be available, so viewers have lost their ability to view their favourite sports programs. This is without even mentioning the demise of their favourite teams, i.e. South Sydney Norths etc. No further advantages should be given to Foxtel and the cable operators. Multi channel broadcasting free to air, or affordable subscriber payments, with no or limited advertising is what the average punter is hoping for.

They don't want high cost limited program HDTV

The picture quality of modern 100hz progressive scan receivers that are mass produced for European standards at low cost is more than adequate to receive the further improved digital transmission quality, when compared to the first generation CTV receivers produced in the late 70's, receiving analogue ghosty snowy noisy transmissions. Five channel digital sound available through digital transmission will further enhance the digital experience

In summary we need digital multi channel European standard with no HDTV initially.

Best wishes

Edmund Moran / Managing Director MORAN TECNOLOGY RETRAVISION SUPACENTA CARINGBAH NSW



Tivoli Hi Fi

Attachment 1.2.8 International Dynamics

Mr Alex Encel International Dynamics Pty.Ltd. 84-88 Bridge Road Richmond

Vic.

3121

Date: 12/11/99

Dear Alex,

Thank you for your letter of the 10th November. I am faxing you herewith a copy of an article that appeared in "The Age" on Monday the 1st November. According to this article the Government and the advisory committee seem to be completely out of their depth. It further seems that no matter what the Productivity Commission's findings the probability of the draft report and its recommendations being read by the Advisory Committee is very slim. I also agree with you on the HDTV broadcasting format, history and overseas experiences indicate that it could be a very costly mistake to mandate in favour of it.

Re your item 1. We were not involved enough with TV sales to measure the real downturn effect on sales the Federal Government's announcement on HDTV broadcast has had, however I understood from conversations I have had with our friendly competitors, the loss of sales was severe and for some almost devastating.

Re your item 2. Our more recent in-store experiences show that the public are very confused about what DTV is and the distinction between HD and DTV is blurred. I believe this is largely caused by the media not informing the public fully and correctly on the issues surrounding digital TV, probably due to lack of understanding in the first place. We also met a good number of people who defer their buying decision due to the believe that Digital TV is going to be considerably better and will be available for similar costs as current TV sets.

As to what will happen as the 1st January 2001 approaches is very difficult to know but it will depend on whether the public will be informed correctly and completely on the effect and all the options encircling Digital TV

Kind-Regards

Philippe Luder Managing Director