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INTERNATIONAL DYNAMICS PTY LTD
Distributor of Loewe products

**Second Supplementary Submission to the
Productivity Commission Broadcasting Inquiry**

**Digital television broadcasting
from the consumer point of view**

interdyn

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Introduction

This is our fourth submission to the Productivity Commission enquiry on Broadcasting. I am raising more examples of consumer behaviour, and the varied reasons that influence buying decisions.

International Dynamics' vested interest

As we stated in our previous submission, mandated HDTV would be the best option for my company, as long as the real facts were made clear to consumers. HDTV television prices would not be in a market area we handle, and sales too low to be a factor. HDTV would make our more expensive televisions look cheap in comparison.

I still strongly support a SDTV system, with optional HDTV broadcasts.

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.

1 Picture quality

We are missing very important points about the differences in the quality of the Digital TV formats.

Looking at current picture quality differences between HDTV and SDTV is not the whole story. If we look at a good PAL television now compared to a similar model say 10 years ago, there is a great difference. Because of the market size a lot of money and research went into improving PAL.

Because of its worldwide acceptance this will happen with SDTV. I cannot foresee this kind of effort going into a minor format such as Australia's proposed unique HDTV system. Whatever differences there are now in picture quality will decrease in the future.

1.1 Picture quality isn't everything

In any case the people who care about an issue will always be the most vocal. It is irrelevant to those who don't care and it won't be of any interest. (In the audio field it is the enthusiasts who talk about quality differences. For most people it is a yawn if mentioned). The point I want to make about picture quality is that it is only one factor among many that influence a consumer's buying decision.

The high picture quality of HDTV will only drive a small proportion of people sufficiently to pay the premium. This principle is what killed so many other "better" technologies.

I have had customers in our stores look at our Loewe televisions and acknowledge they have a better picture than others they were considering, yet some of the same people still bought the competitors' products (sometimes at even higher prices than ours). It could be the brand name, or the styling, or some other perceived value that attracts them to other brands.

I have people tell me they don't want a really good television, because their children will just watch TV even more and they watch enough already.

Today I had my regular FOREX dealer buy a \$3000 Loewe television. I asked him whether he wanted a VGA card added to the television, so he could connect his computer for large-screen video games, Internet etc. He gave me a very strong "NO". It wasn't the extra \$150 cost. "I'm on a computer at work all day, and I've got my Reuters. I don't want it at home" he said.

Customers see a set like our Loewe Arcada (the top model in the range) and ask "is that HDTV?" This is simply because it is so much better than the regular sets they have seen. (I am not implying there are no other brands with very good picture quality).

The very small minority who buy high quality audio equipment can't understand how someone can be happy with a mini system if they are well off.

My 9 year old son goes from a very good large television downstairs to a small set with reasonable picture upstairs without a problem.

Many women don't like televisions because they dominate the living room (or maybe because the husband will bring friends along, drink beer, watch sports etc).

People buy a television because it fits in an existing wall unit, or they like its style.

There is also a pricing ratio question. One way of looking at the purchase of a \$1600 television is that it is only \$600 more than a \$1000 model. Another way to look at this is that it is 60% more. Most people find huge price ratio jumps difficult. It is easier to persuade a customer to go from a \$3000 model to \$4000, than from \$1000 to \$1600 assuming in both cases that they have the money.

I could continue on with these examples, but the important point is picture quality is only one of a tremendous variety of factors that determine a consumer's purchase decision. Cost remains the major factor for most people.

2 Digital Radio

At the Productivity Commission hearing on Monday 13th December I indicated I had not researched the Digital Radio issue thoroughly. On reflection there are still lessons from the introduction of stereo AM radio that need to be researched by some independent body.

From memory at the time there were enthusiastic media articles, lots of stations setting up equipment, production units coming on the market. Our staff were worried. What stereo AM radios and tuners did we have to sell? I remember asking them to trust me. I told them if stereo AM radio succeeds, it would be much slower than the enthusiasts say, and the products would become available if the market warrants it.

It was so slow stereo AM radio effectively disappeared as a significant consumer issue. Our staff cannot recall ever being asked by customers about stereo AM capability.

With Digital Radio we need what we should have done with Digital TV.

1. We need to determine the goals.
2. We need to do comprehensive unbiased research (with realistic pricing indicated) to find out if these goals are achievable. This must include what the buying public are likely to do. They are not as suggestible as many like to think.
3. We need to determine our exit strategy if Digital Radio doesn't take off.

3 Picture tube technology

Further misleading information has been aired recently about the capability of computer picture tubes to be used as HDTV screens. Whilst at a technical level a computer tube can be used as a television screen, this is simply not practical.

Television picture tubes are capable of much greater brightness than computer tubes. To achieve the same level of brightness, a computer tube would require the beam current to be quadrupled for example. Again, technically this can be done, but it introduces unwanted effects. Convergence and picture geometry problems occur. Furthermore, computer tubes are not currently manufactured much above 22" screen sizes (except at extremely high prices), and not in the HDTV-required 16:9 screen format.

To create the HDTV-required 1920 pixels in a 1080 line format picture tube, at a regular 0.7mm dot pitch (the spacing between the pixels), the minimum screen size would be roughly 130cm wide x 73cm high, with a diagonal measurement of 150cm. The largest 16:9 direct-view picture tubes we know of currently planned by manufacturers will have a screen diagonal of 92cm. Sets using these tubes will weigh roughly 60-80kg.

If it could be built, a 150cm 16:9 picture tube would be so heavy it would be impractical, and would cost many times more than Australians would be prepared to pay. The alternative, a projection TV capable of the required resolution, is also an extremely expensive option.

Plasma screen television technology is still in its infancy, with sets currently ranging from around A\$15,000 to \$40,000. Picture quality is still inferior to direct-view televisions. LCD screen technology is currently not practical at this level.

In the USA there are no direct-view televisions that meet the best specification HDTV-required number of pixels. A review of a Sony television with "virtual pixels" in the October 1999 issue of US magazine "*Audio Video Interiors*" makes reference to a Panasonic professional-grade monitor with a 34" direct-view screen that does have the HDTV-required number of pixels per line. "*The price tag [for this Panasonic] soars to, oh, \$40Gs or so.*" Applying a direct currency conversion only, this is equivalent to around A\$65,000. Television, anyone?