

SUPER CHANNEL

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A copy of my paper.

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WITH COMPLIMENTS

THE THREE T'S - TELEVISION, TECHNOLOGY & THATCHERISM

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Broadcasting, 21 September 1987.

My proposition to this seminar is straightforward. The technology is no significant constraint upon public policy towards television in the UK. The key issues are political, social, commercial, regulatory - not technological. But be warned. Statements which purport to be purely technical may turn out to be the voice of special interest.

Should the public policy objective in the UK be to further the cause of consumer choice, competition, and cartel collapse, then the technology is ready and waiting. Hence the title of my paper - the three T's, television, technology and thatcherism. Last week in Japan, Prime Minister, where I was marketing Super Channel to Japanese advertisers, I caught the word wafting through the simultaneous translation-satcha'lism!

This piece of technology [hold up keypad] really began the consumer choice revolution in television. The remote control keypad. It allows all of us to become Michael Grade - without leaving armchair, or cigar. It has reached one third of UK homes and has radically affected viewing behaviour - without the benefits of a single Royal Commission.

This piece of technology [hold up videocassette] has already brought a "fifth channel" to just over 50% of all UK homes, again with little Government involvement and lots of market forces. The retail market for pre-recorded videocassettes in 1986 was worth £419 millions - nearly three times the size of the cinema market (£145m), or one third of the total advertising revenue earned by all 15 ITV companies in the UK.

This piece of technology [show coax cable] has for years been the means of delivery of 10/20/30 television channels. In Europe and North America, cable television serves more than sixty million homes. Cable television traditionally involves wide band one way communication into homes via coaxial cable, separate from the narrow band two way copper wires belonging to the phone company.

The average individual in a US cable home watches 8 channels on a regular basis.

But cable breaks with established television policies of providing universal coverage to all citizens. For cable television is no solution to providing additional television choice outside urban areas, because of its economics.

In the UK, cable television started late, with successive governments blocking its introduction until the early 1980's, and has made to date only slow progress. Yet in a few short years 33% of viewing in UK cable homes is not to BBC 1, 2, ITV and Channel 4. There is clearly market demand for more television choice in the UK.

Cable and satellite television enjoy a symbiotic relationship. Satellite television channels would not survive without cable television taking the signal the final mile into the home and cable television needs satellite channels to attract paying subscribers. Super Channel today is received in 8.6m homes in 15 countries - all 8.6m are on cable systems, with only a few thousand like Professor Peacock's Edinburgh residence having home dishes. In North America, the ventures into direct broadcasting by high powered satellite (DBS) to cheaper, smaller dishes in homes have been a fiasco. In Japan DBS is up and flying. In Europe, we await the launch shortly of German DBS, followed by the French in 1988 and the British BSB in 1989. In addition there is the first of the medium powered satellites - ASTRA - due for launch in 1988. Much heated debate surrounds the exact size of dish (30cms, 60cms, 90cms) and the resultant cost to the consumer.

The economic and technical characteristics of direct broadcasting by satellite (DBS) tend to favour service to the outer suburbs and rural areas, reaching the parts that cable cannot reach, thus making DBS and cable more complementary than competitive.

Satellite television on the continent of Europe has been instrumental in loosening up the long standing state monopolies of broadcasting, and introducing a greater consciousness of the consumer - the viewer, and the advertiser who pays for "free" television.

But the timescale of change with the newer technologies is long. The UK Cable Authority would expect there to be 600,000 cable homes by 1990, from just 208,000 homes today. There are 20 million television homes in the UK. BSB is predicting in 1995 7 million DBS homes in the UK. Astra's forecast is 5.1m DBS homes. CIT Research prophesies much slower growth - to 250,000 home dishes in 1995. Let's remember that the VCR has taken a decade to get into 50% of homes.

Can something therefore be done sooner to loosen up the duopoly, if that is considered politically desirable? The answer is yes, using the technology of terrestrial transmitters, but subject to the timescale and costs required to move existing users of frequencies. Charles Jonscher's report for the DTI on the radio spectrum has demonstrated clearly that the current duopoly broadcasting policy cannot be justified by spectrum scarcity. If Government is prepared to allow competition in television, new terrestrial frequencies can be found for additional programme channels - as has long been the case in the USA, and more recently in Italy, France and Germany.

Newspaper coverage in the run-up to this seminar would suggest, Prime Minister, that the option of additional terrestrial channels is now generally accepted as feasible. However, which frequencies for how many channels at what cost and over what timescale will be hotly contested with all sides summoning their own expert engineers to prove themselves right and the others wrong!

Television channels in the two VHF frequency bands are technically feasible. That is where the old 405 line channels were. However, VHF is unlikely to revert to television given the growing and commercially successful demands of mobile communications, and the need to reintroduce dual standard VHF/UHF sets.

In the UHF band there are 44 frequencies which are used to give 99% national coverage to the four UK national television channels. In the USA, a typical conurbation has at least 10 UHF television stations. To get more television channels from the existing 44 UHF frequencies would require a change in current broadcasting policy which aims for universal coverage by national channels instead of, for example, more than four channels for some parts of the population and less than four for others. The doctrine of universal availability has a price - 800 new transmitters will be installed by the IBA/BBC in the next few years to increase coverage from 99.3% to 99.5% of the population.

To get more terrestrial television channels may also require a change in engineering standards governing interference, and adopting new transmitter technologies of precision frequency control.

There is another option in the UHF bands - reallocate additional frequencies beyond the forty-four, for example numbers 35 and 37, to television broadcasting. However, to demonstrate the complexity of frequency allocation which is both national and international in dimension, this would give a problem near airports and on flight-paths because frequency 36 is used for aeronautical radar.

As we go even higher in the frequency range, beyond 1 gigahertz, spectrum congestion is less and less of a problem. Here in the very very high frequencies, clear line of sight between transmitter and aerial is a virtual requirement. In the 1 to 2 gigahertz frequencies, there is equipment already on the market, and some temporary frequency space could be made available immediately, to launch local television stations with 25 to 40 kilometre radius, as already exist in the States. In 3 to 5 years there could be the technology available at the 30 gigahertz frequency for even more localised terrestrial television distribution down to 1 kilometre radius. This technology above one gigahertz is called MMDS - Multi-point Multi-channel Distribution System.

I doubt whether it is profitable this morning to discuss the detailed allocation of individual parts of the spectrum. But I would hope that the seminar agrees that there is sufficient frequency around for new competitive tv services in the UK.

One final point about delivery technology. PTOs (public telecommunication operators) such as Mercury, BT and the City of Hull can, technically, deliver television via the local telecom network into the home, with optic fibre technology [show] increasingly showing its cost effective paces. Regulation currently disallows this. Here is a further policy option, which Alastair MacDonald's committee at the DTI is pondering in relation to changes in telecomms infrastructure over the next 20 years.

Thank you for your attention. I have set out to show that today's television technology, if you are prepared to see its commercial exploitation, is no obstacle to - indeed aids and abets - satcha'lism.

Sources:

Deregulation of the Radio Spectrum in the UK, HMSO, 1987

Screen Digest

UK Cable Authority

CIT Research Ltd

Astra and BSB, for their 1995 market projections

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