CONFIDENTIAL & PERSONAL 20 April 1988 PRIME MINISTER MISC 128 : MEETING WITH LORD YOUNG David Young asked to see me early this evening. He said that in a meeting today in his Department, and through a great deal of lateral thinking, he and his officials had come up with a new technical solution to the problem of allocating the spectrum. Until now, it has been assumed that the existing allocation for the current four channels was a fixed parameter, and that we were considering the allocation of new spectrum to additional services. In the new approach which was pioneered today however, he and his officials have considered the possibilities which

In the new approach which was pioneered today however, he and his officials have considered the possibilities which might exist when the existing system, additional spectrum and satellite capacity are all free to be changed. He claims that in this situation he can produce a result which is far superior to any being proposed under existing assumptions.

He is clearly reluctant to raise this at the meeting tomorrow as it is almost certain to be opposed by Douglas Hurd, in view of the fact that the Home Secretary wishes to produce a White Paper by the end of July. The obvious hidden agenda of the DTI is that broadcasting be moved from the Home Office to their Department.

Recommendations

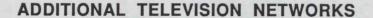
^{1.} It is important that the new approach is set out on paper and thoroughly examined. David Young might be asked to produce a short paper for the next meeting of MISC 128

outlining the way forward as he sees it. Then MISC 128 at its next meeting could take a decision as to whether further work was necessary. 2. This issue needs to be clearly distinguished from the organisation of government point - whether broadcasting should move to the DTI. My personal view is that as the technical issues of the spectrum loom larger and the commercial issues dominate the future of the television industry so the case for shifting broadcasting policy to the DTI becomes increasingly stronger. Zum hyth BRIAN GRIFFITHS

BROHDCHITTING: Legislation PT 2

ADDITIONAL TELEVISION NETWORKS

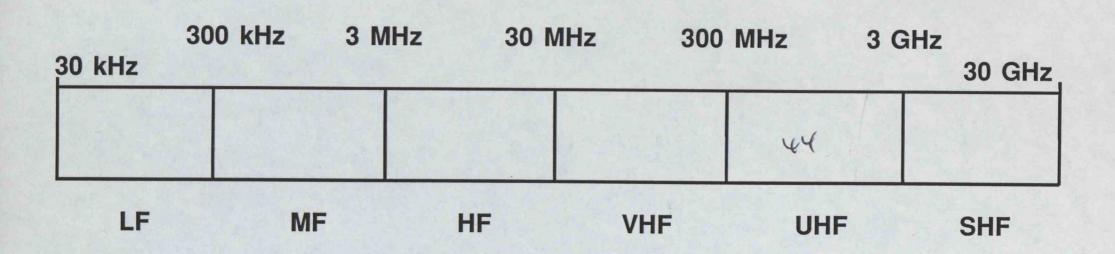
THE TECHNICAL OPTIONS



The purpose of this presentation is to identify the <u>technical options</u> available to Ministers. They are:

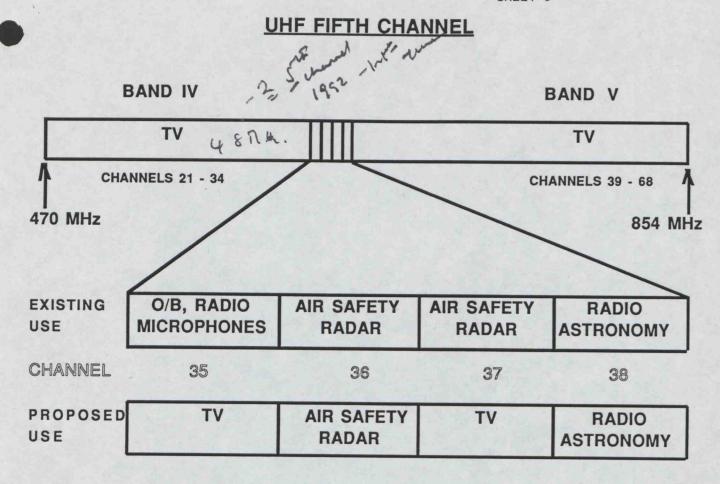
- a fifth channel at UHF covering 70% of households from January 1992;
- a sixth channel at UHF covering up to 40% of households from 1990/91, or 50% plus of households from the mid 1990s (but more work is needed);
- no fifth/sixth channel at VHF this option is no longer seen as viable.
- up to six programme channels reaching perhaps 70% of households from 1991, delivered by MVDS at 2.5 GHz, OR up to twelve programme channels from 1990/91, at higher cost to consumers, delivered by MVDS at 12 GHz;
- up to fifteen extra DBS services in addition to 3 allocated to BSB and 2 held in reserve subject to (very uncertain) international negotiations.

RADIO SPECTRUM



A SINGLE TV TRANSMISSION USES 8 MHz OF SPECTRUM

FOUR EXISTING TV SERVICES (BBC 1, BBC 2, ITV AND CH 4)
USE 350MHz IN UHF



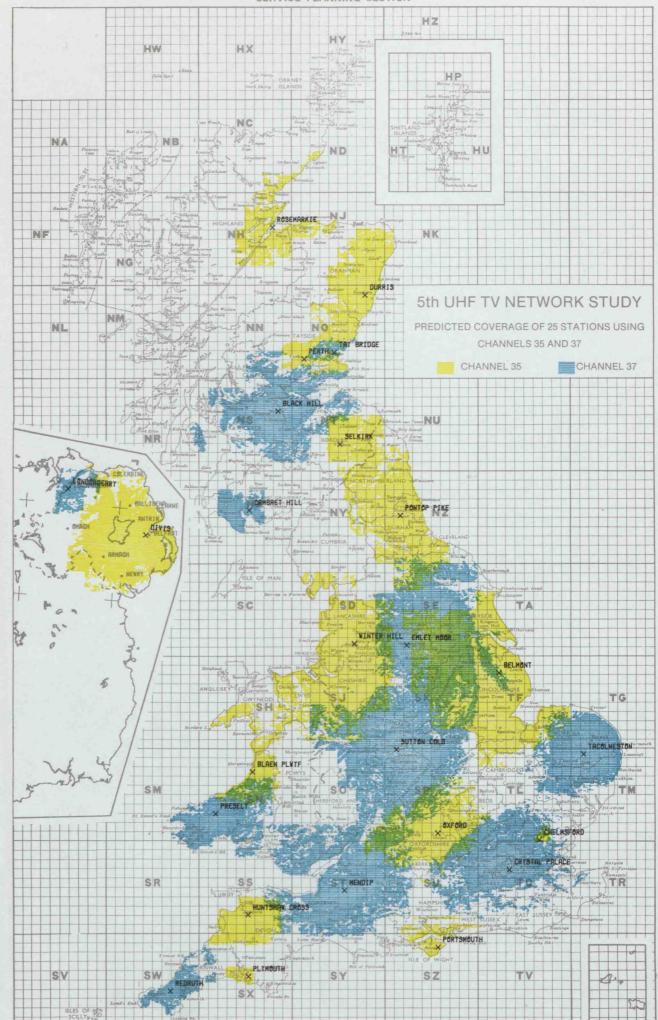
OFFERS:

- + ONE PROGRAMME CHANNEL
- + 70% COVERAGE FROM JANUARY 1992
- + LOW COST (£30 PER HOUSEHOLD)
- + NATIONAL OR REGIONAL PROGRAMMING
- + CAA AGREE COMPATIBILITY WITH AIR SAFETY SYSTEMS

BUT:

- REQUIRES INTERNATIONAL COORDINATION
- DISPLACES EXISTING USERS OF CHANNELS 35 AND 37 (POSSIBLE £20M COST TO BE MET BY FRANCHISE WINNER)
- RETUNING OF VCRs

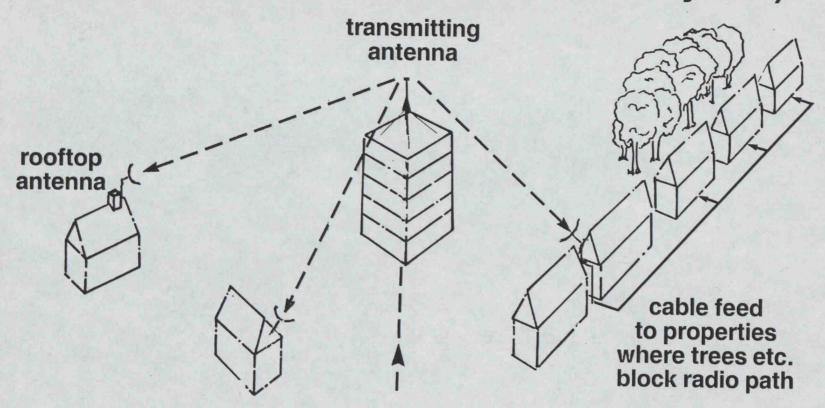
ISSUED BY BBC RESEARCH DEPARTMENT TADWORTH SURREY SERVICE PLANNING SECTION



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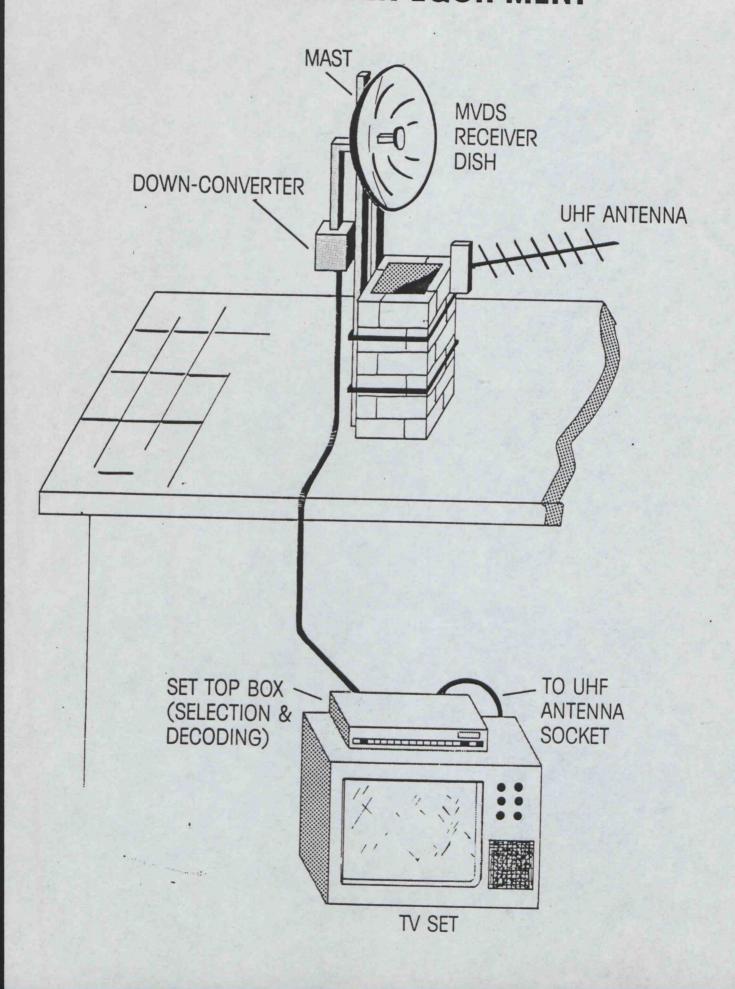


MVDS (Multipoint Video Distribution System)



signal from TV studio

MVDS RECEIVER EQUIPMENT



MVDS - 2.5 GHz OPTION

EXISTING MOD LINKS **OUTSIDE BROADCASTING** USE 2.45 GHz 2.31 GHz 2.40 GHz 2.54 GHz 2.65 GHz PROPOSED MVDS **OUTSIDE BROADCASTS** MVDS USE (PLUS EXISTING SHARED USE BY ISM/AMATEURS/MILITARY RADAR/ **NORTH SEA LINKS)**

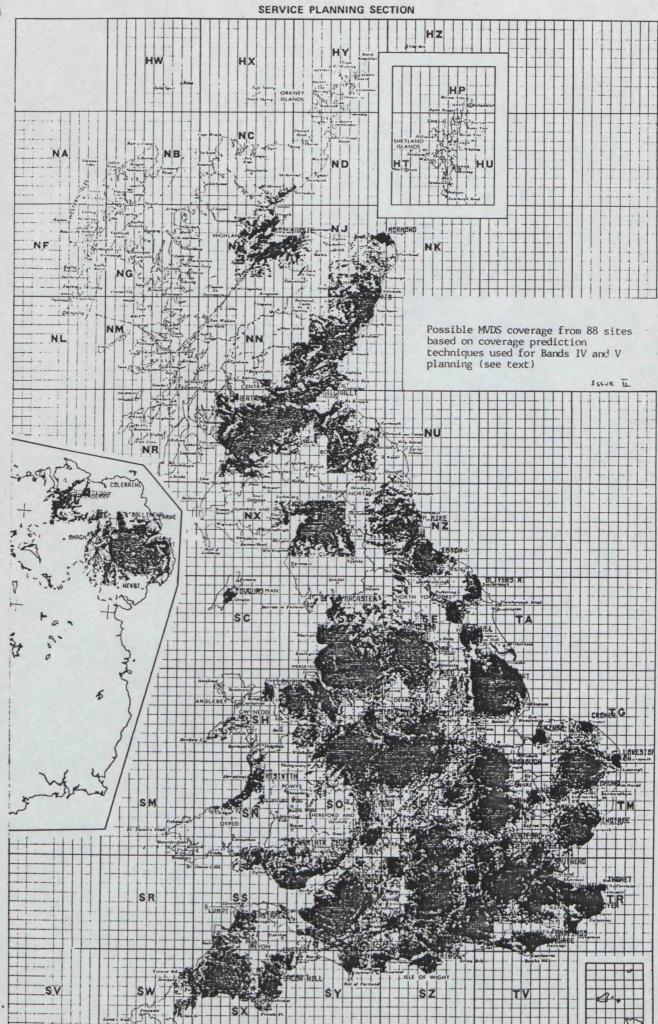
OFFERS:

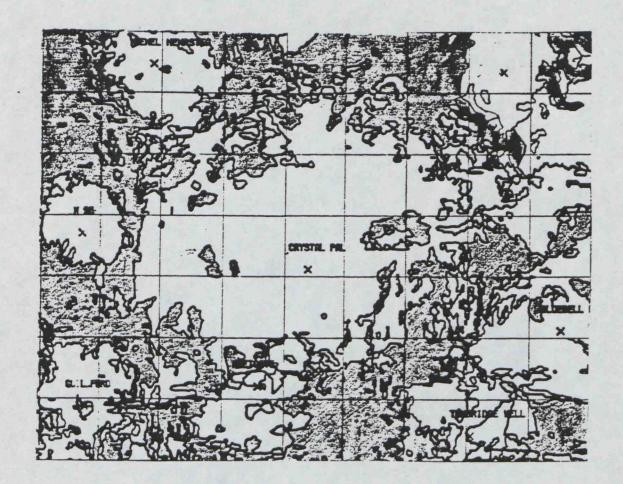
- + UPTO SIX PROGRAMME CHANNELS
- + 70% PLUS COVERAGE
- + NATIONAL, REGIONAL OR LOCAL PROGRAMMING
- + MEDIUM COST (£250 PER HOUSEHOLD)
- + OFF-THE-SHELF EQUIPMENT
- + 1991 START TECHNICALLY POSSIBLE

BUT:

- GREAT PRESSURE ON SPECTRUM (EG. FOR ELECTRONIC NEWS GATHERING) AND NO ROOM FOR EXPANSION
- PROBLEM MEETING LONGER-TERM NEEDS OF MOBILE,
 MOBILE-SATELLITE & OTHER SERVICES.
- LARGE ROOF-TOP AERIALS
- SHIELDING BY BUILDINGS, ETC.(COULD BE MADE GOOD BY LOCAL CABLING)

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Predicted Coverage of UHF Stations in the London Area



Areas not Served

MVDS - 12 GHz OPTION

DBS OUTSIDE BROADCASTING
USE

11.7HGz 12.1GHz 12.5GHz

PROPOSED DBS MVDS
USE

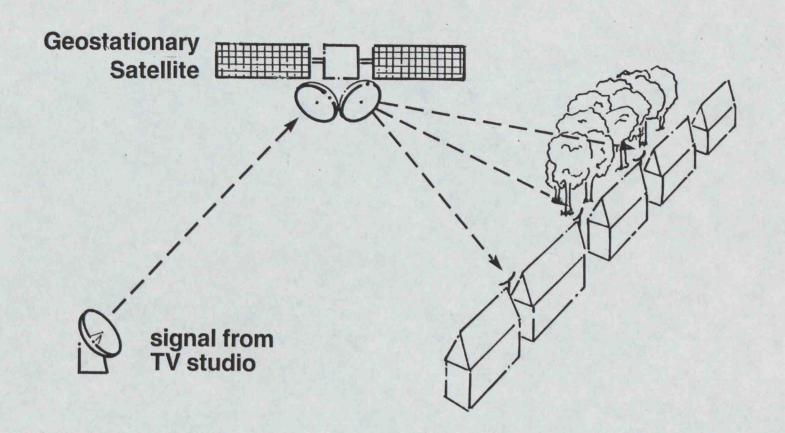
OFFERS:

- + UPTO TWELVE PROGRAMME CHANNELS
- + 70% PLUS COVERAGE
- + NATIONAL, REGIONAL OR LOCAL PROGRAMMING
- + 1990 START TECHNICALLY POSSIBLE
- + LESS PRESSURE ON SPECTRUM AND ROOM FOR EXPANSION

BUT:

- HIGH COST (£300 £500 PER HOUSEHOLD)
- FURTHER DEVELOPMENT OF EQUIPMENT NEEDED
- LARGE ROOF-TOP DISH AERIALS
- SHIELDING BY BUILDINGS, ETC.(COULD BE MADE GOOD BY LOCAL CABLING)

DBS (Direct Broadcasting from Satellite)



DBS

EXISTING USE

5 DBS CHANNELS (3 BSB + 2) **OUTSIDE BROADCASTS**

11.7GHz

12.1GHz

12.5GHz

PROPOSED USE

10 DBS CHANNELS

10 DBS CHANNELS (OR MVDS)

12"

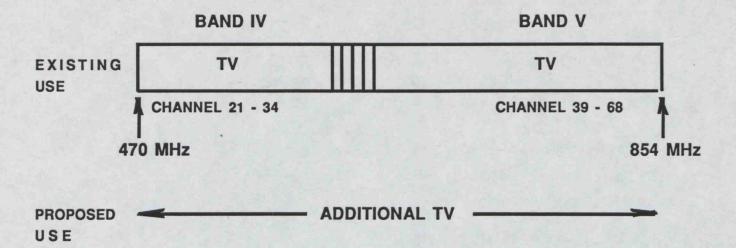
OFFERS:

- + UPTO FIFTEEN PROGRAMME CHANNELS
- + NEAR UNIVERSAL COVERAGE
- + AERIAL SIMPLER THAN MVDS

BUT:

- HIGH COST (£300 £500 PER HOUSEHOLD)
- INTERNATIONAL NEGOTIABILITY UNCERTAIN
- COULD PRECLUDE MVDS AT 12 GHz
- DISPLACES O/B LINKS

UHF SIXTH CHANNEL



OFFERS:

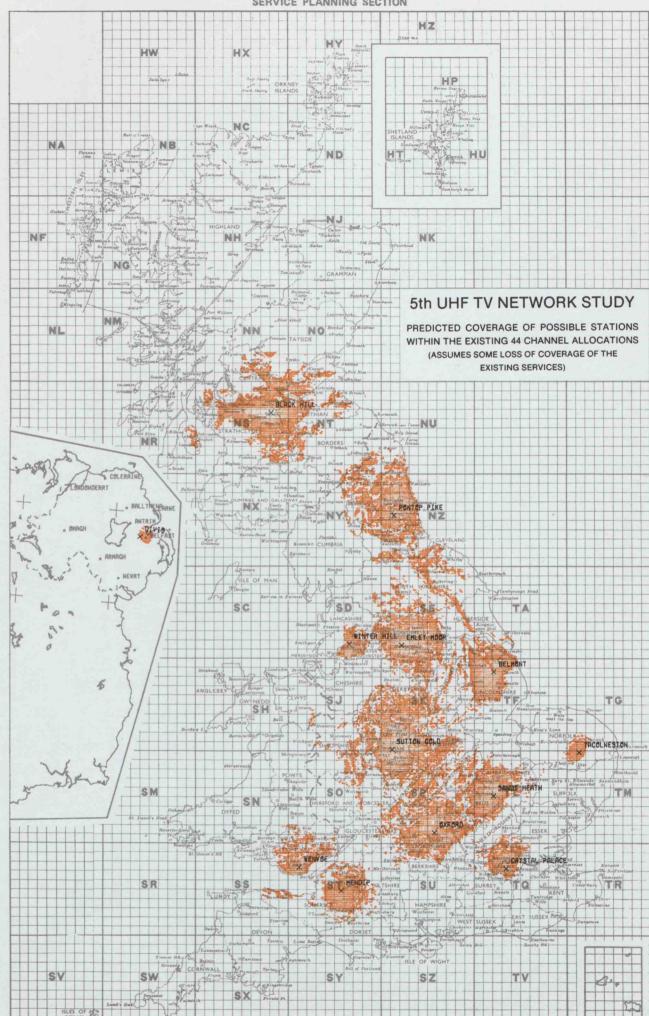
- + ONE PROGRAMME CHANNEL
- + UP TO 40% COVERAGE FROM 1990/91
- + LOW COST (£30 PER HOUSEHOLD)
- + NATIONAL OR REGIONAL COVERAGE

BUT:

- DIFFICULT INTERNATIONAL COORDINATION
- EXISTING TV SERVICES AT RISK (10,000 HOUSEHOLDS)
- REDUCED SPECTRUM FOR O/B SERVICES
- NB: FEASIBILITY OF UHF SIXTH CHANNEL NEEDS FURTHER
 3 MONTHS STUDY

LONGER-TERM OPTION OFFERING MORE THAN 50% COVERAGE FROM MID - 90s

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BBC

VHF FIFTH/SIXTH CHANNEL

BAND I

EXISTING WOBILE, MOD & AMATEUR

47 MHz 54MHz 68MHz

PROPOSED MOBILE, MOD O/B TV O/B
USE & AMATEUR

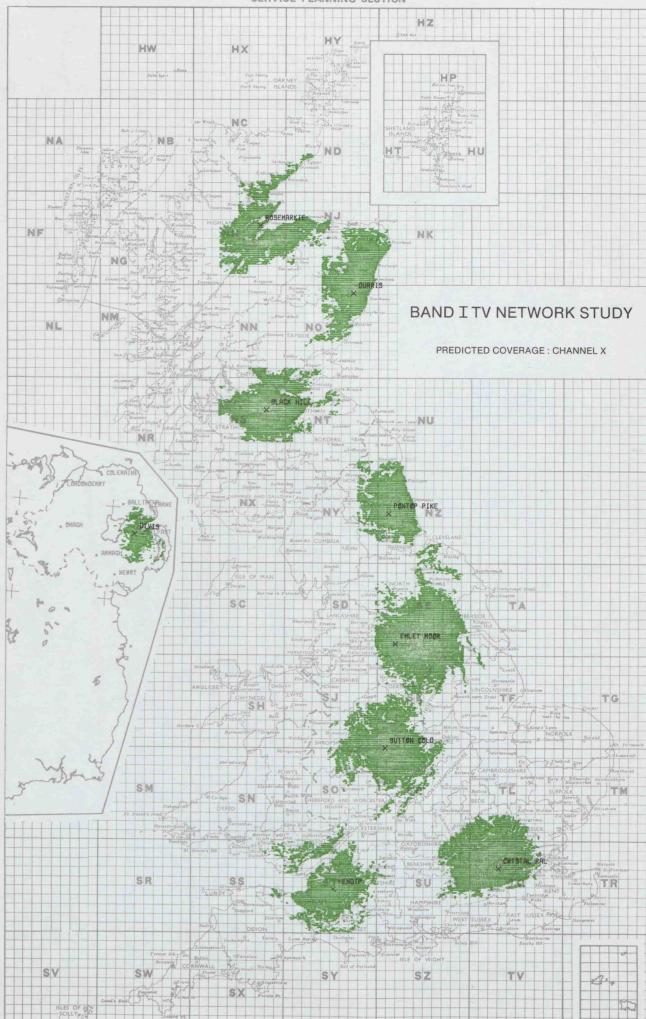
OFFERS:

- + ONE PROGRAMME CHANNEL
- + UPTO 40% COVERAGE FROM 1992
- + MEDIUM COST (£100 PER HOUSEHOLD)
- + NATIONAL OR REGIONAL COVERAGE

BUT:

- CAA FEAR POTENTIAL INTERFERENCE TO AIRCRAFT
- POLICY REVERSAL
- SPORADIC E
- INTERFERENCE TO MOBILE RADIO
- H AERIALS

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BROADCACTINE ! legislation 172

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THE ECONOMICS OF TELEVISION ADVERTISING IN THE UK

Summary Presentation

Booz•Allen & Hamilton-London

CONTENTS

- 1. Background
- 2. Nature and extent of the problem
 - Assessment of economic damage
- 3. Forces driving demand
 - Development and validation of analytic models
- 4. Prognosis for the future
 - Application of models to forecast demand trends
- 5. Options for the future
 - The role of the fifth channel, and other policy changes

Background ... THE PURPOSE OF THIS STUDY IS TO MAKE AVAILABLE TO GOVERNMENT A MORE COMPREHENSIVE SET OF DATA AND ANALYSES THAN AVAILABLE HITHERTO ON THE UK TELEVISION ADVERTISING MARKET Scope of the project includes: Modelling the demand for TV advertising Collection of historic data Modelling of historic growth Forecasting of future growth 2. Modelling the supply of TV advertising

- - Analysis of viewership and audiences
 - Analysis of cost structure of the industry
 - Forecasting of supply trends under alternative future environments (including authorisation of advertising-funded 5th Channel)
- Assessment of economic damage arising from present situation 3.
 - Economic losses to UK advertisers
 - Economic losses in TV industry
- 4. Analysis of alternative policy options
 - Competitive selling of Channel 4 air-time
 - Authorisation of an advertising-supported 5th Channel

Background...

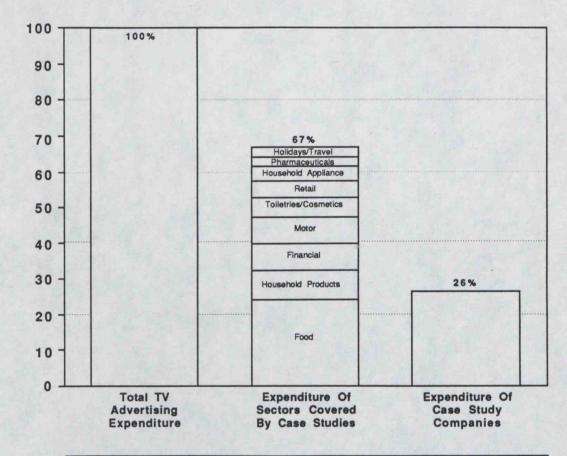
THE FOLLOWING DATABASES WERE COMPILED FOR THIS STUDY:

| Title | Information Collected | Size Of Sample | Analyses Available |
|--|---|---|---|
| 1 . Survey of all major campaigns in selected companies, 1983 - 1987 | Historic trends in advertising/sales ratios Historic trends in sales Distribution of expenditure among: Brands Media Channels Qualitative judgements regarding future performance | 22 Companies (25% sample of UK TV advertising expenditure) | Determinants of advertising expenditure Sales growth Price response (elasticity) Channel proliferation (channel 4 / TV am) Other |
| 2. Survey of all advertisements in 21 days of 1980 and 1987 | Advertising volume broken down by sector, individual market, channel and campaign Prices of all spots transmitted | 220,000 Spots 3,050 Campaigns (100% sample) | Advertising expenditure growth by sector and individual market Price response, 1980-1987 by sector and market Distribution of expenditure among channels by sector and market |
| 3. Economic sectoral expansion model | Historic growth of output of major advertising sectors Forecast growth of output of sample sectors | 10 sectors (100% sample) | Contribution of GNP growth to TV advertising growth (income elasticity) Modelling of future contribution of this growth factor |
| 4. Models of supply side of TV industry | Costs of production in ITV, BBC, Channel 4 Hours of output of same channels Viewership of channels (incl. cable and satellite) | N/A | Efficiency of industry as supplier of Entertainment to audiences Audiences to advertisers |

Background...

IN ORDER TO COLLECT DATA ON ECONOMIC DAMAGE TO UK INDUSTRY, PARTICIPATION OF COMPANIES AS CASE STUDY SUBJECTS WAS SECURED. THE CASE STUDY COMPANIES REPRESENTED:

- · Directly,1/4 of UK TV advertising expenditure
- · Indirectly, 2/3 of UK TV advertising expenditure

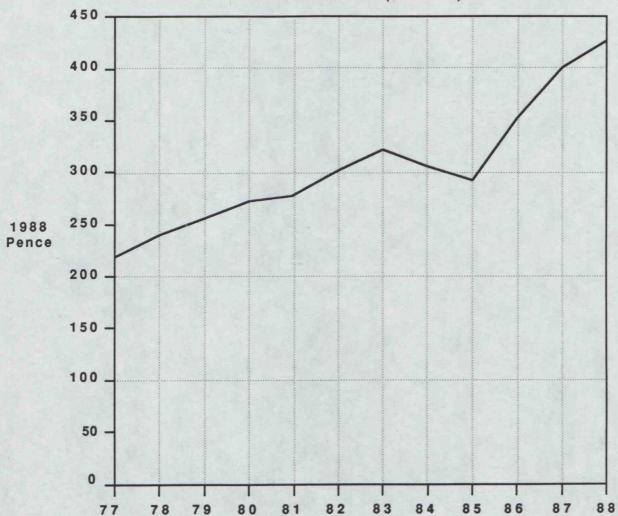


| American Express* | Kelloggs* | |
|----------------------|-----------------------|--|
| Audi* | Mars* | |
| Beecham* | National Westminster* | |
| British Airways* | Nestle* | |
| Brother | Polycell | |
| The Cooperative Bank | Prudential* | |
| Eagle Star* | Procter and Gamble* | |
| Halifax* | Richardson Sheffield | |
| Heinz* | Sainsbury* | |
| Hunters Foods | Unilever (5)* | |

THE PRICE OF TELEVISION ADVERTISING HAS RISEN IN REAL TERMS BY:

- · 95% since 1977
- · 37% in the last 2 years

COST PER THOUSAND INCREASE ON ITV AND CHANNEL 4 (1977-1988)

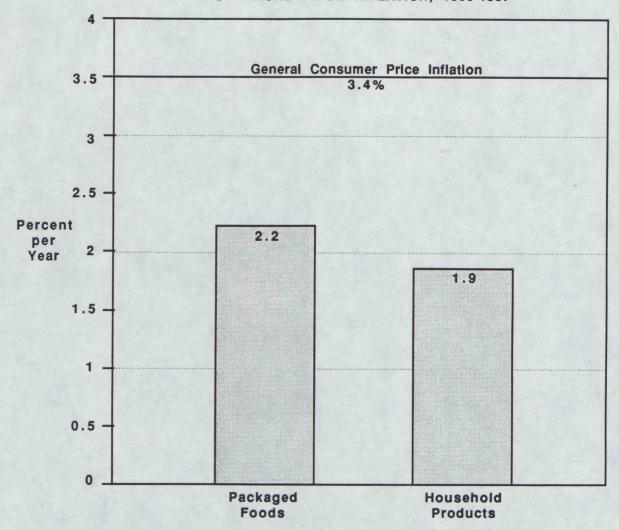


Data derived by dividing television advertising expenditure (in millions of £ 1988) by total volume of commercial impressions (billions of 30 second adult impacts)

Source: AGB/BARB

IN THE LAST TWO YEARS INFLATION IN TV COSTS HAS BEEN RUNNING AT 18% PER YEAR (IN REAL TERMS), CONTRIBUTING NOTICEABLY TO OVERALL INFLATION RATES IN SOME IMPORTANT CATEGORIES OF CONSUMER GOODS

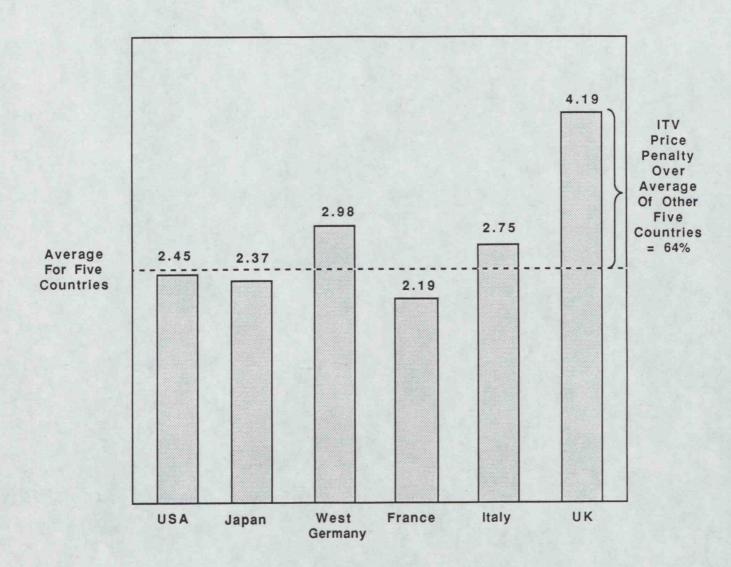
CONTRIBUTION OF TV ADVERTISING COSTS TO ANNUAL PRICE INFLATION, 1985-1987



Note: Based on average advertising-to-sales ratio's for 32 goods covered by survey of sponsoring companies; corresponding A/S ratios are 12.1% for packaged foods and 10.8% for household products. Note that these apply to sponsoring companies, not to all sales of these product categories

ITV PRICES ARE 64% ABOVE THE AVERAGE FOR THE OTHER FIVE MAJOR OECD ECONOMIES

 This puts UK consumer industries at a significant competitive disadvantage vis-a-vis their major international competitors



Channels covered by above analysis are:

UK: ITV

USA: ABC, CBS, NBC

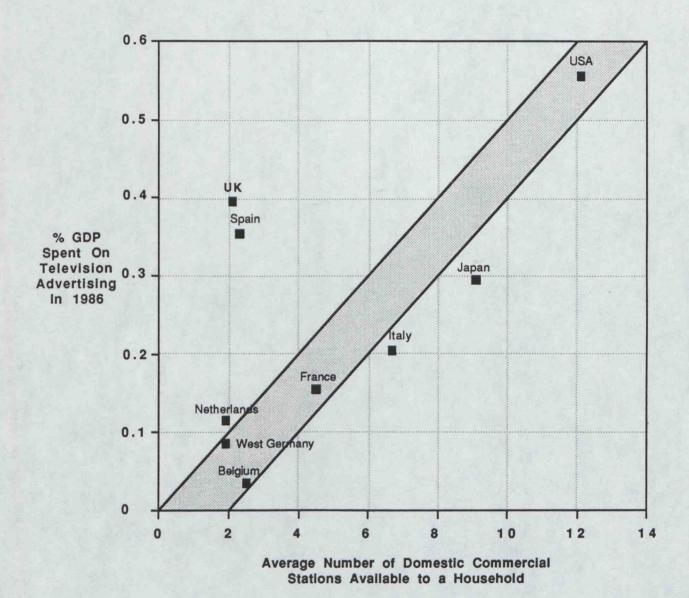
Japan: NTV, TBS, C X, ANB, T X, MBS, ABC, KTV, YTV

West Germany: ZDF, ARD France: TF1, A2, FR3, La 5

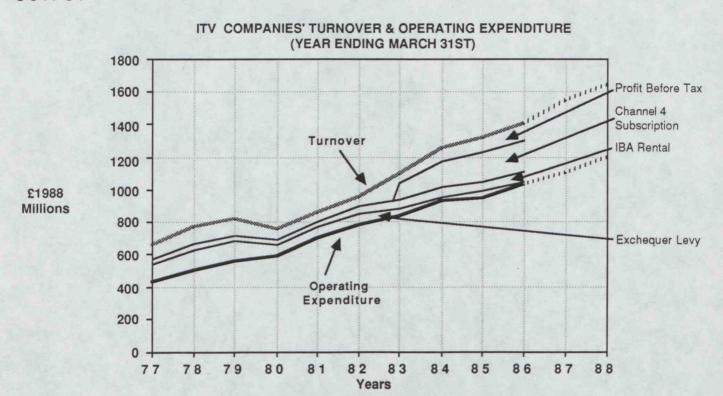
Italy: RAI-1, RAI-2, RAI-3, Canale-5, Italia-1

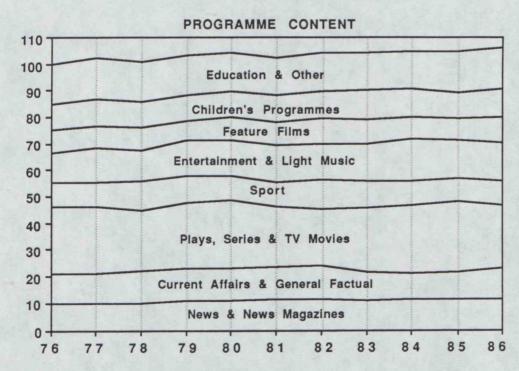
Source: (Saatchi & Saatchi Advertising Worldwide) European Market & Media Fact book, 1988 edition; financial data converted at 30 March 1988 exchange rates.

THE INEFFICIENCIES OF THE PRESENT COMMERCIAL TV MARKET STRUCTURE ARE IMPOSING A VERY LARGE BURDEN ON THE ECONOMY, WITHOUT THE CORRESPONDING BENEFIT OF MORE TELEVISION CHANNELS



INFLATING PRICES HAVE CREATED AN INEFFICIENT COMMERCIAL TELEVISION INDUSTRY. COSTS HAVE RISEN BY A FACTOR OF 2.4 IN REAL TERMS DURING THE PAST DECADE, WITH MINIMAL CHANGE IN VOLUME OR COMPOSITION OF OUTPUT





Source: IBA Annual Report and Accounts

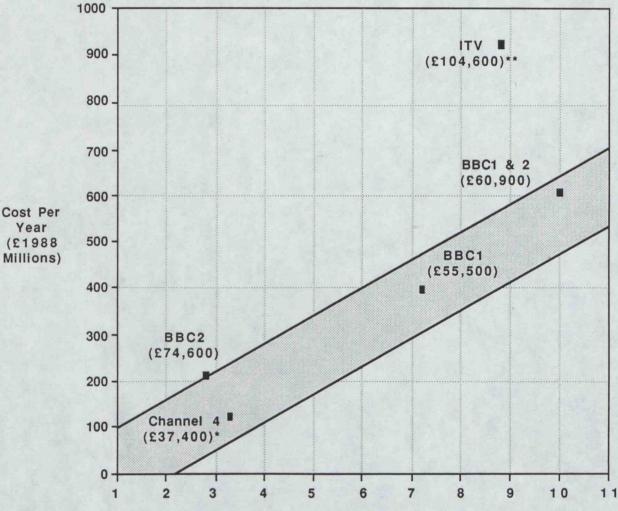
Hours of

Trans-

missions

INSTEAD, COSTS PER PROGRAMME TRANSMITTED HAVE BECOME WELL OUT OF LINE WITH THOSE OF THE BBC AND OF CHANNEL 4:

AVERAGE HOURLY OPERATING COSTS OF TERRESTRIAL TELEVISION CHANNELS IN THE UK (1986)



Number of Hours (000's) of New Programme Transmissions (Including Acquired Material Excluding Repeats)

Source: BBC Annual Report & Accounts, BBC Facts & Figures, Channel 4 Annual Report & Accounts, ITV Companies Annual Report & Accounts, BAH Analysis

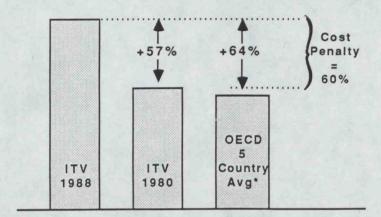
^{*} Figure in brackets represents an average hourly cost of the channel (excluding repeats)

^{** 10%} of total operating expenditure was deducted from the ITV's hourly figure to allow for advertising airtime sales and marketing

SUMMARY OF ECONOMIC LOSSES DUE TO HIGH TELEVISION ADVERTISING COSTS, 1988

(1) UK Television As An Advertising Medium [Delivery Of Audiences To Advertisers]

A. Direct Costs



= £700m PA

* 5 leading OECD economies other than UK: USA, Japan, West Germany, France, Italy

B. Indirect Costs

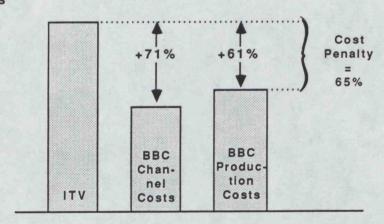
Consequent effect on:

- · International competitiveness
- · Inflation
- · Innovation
- · Employment

= £?

(2) UK Television As An Entertainment Medium [Delivery Of Programmes To Audiences]

A. Direct Costs



= £600m PA

B. Indirect Costs

Consequent effect on:

- · TV industry (strong)
- Other video production (medium)
- Entertainment sector generally (weak)

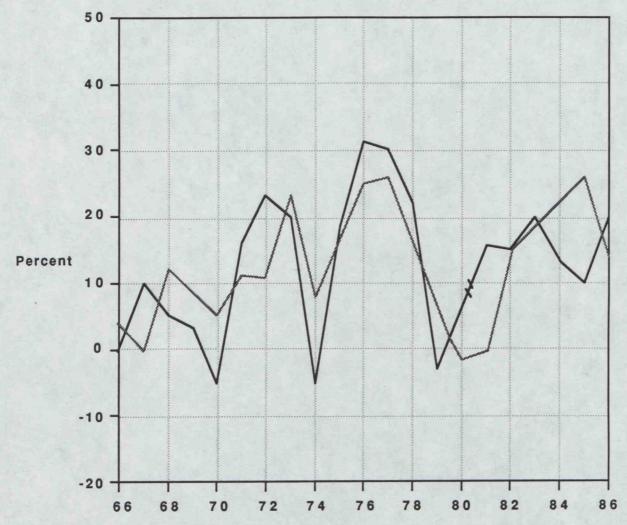
= £?

Estimated overall total: approximately £1.5 billion p.a.

Forces driving demand ... **OUR ANALYSIS HAS SHOWN THAT THE FOLLOWING FACTORS HAVE** DETERMINED HISTORIC PATTERNS OF DEMAND GROWTH (1) Primary long-run determinant is the performance of the economy (growth, profitability) (2) Additional growth is coming from expansion of certain high-growth sectors of the economy (3) Residual patterns of change (not attributable to above two effects) are due to a quite complex process of response to Changing prices Channel proliferation (Channel 4, TV-am) of which the main features are Inelastic price response by large brands/large businesses Loss of share by small brands/small businesses FURTHER DETAIL ON THESE FACTORS IS GIVEN IN THE NEXT FOUR PAGES -12Forces Driving Demand...

TV ADVERTISING EXPENDITURE HAS EXHIBITED STRONG GROWTH DURING THE PAST TWO DECADES, FOLLOWING THE BUSINESS CYCLE CLOSELY

YEAR ON YEAR CHANGE



Note: 1980 point suppressed due to distorting effect of 1979 TV strike

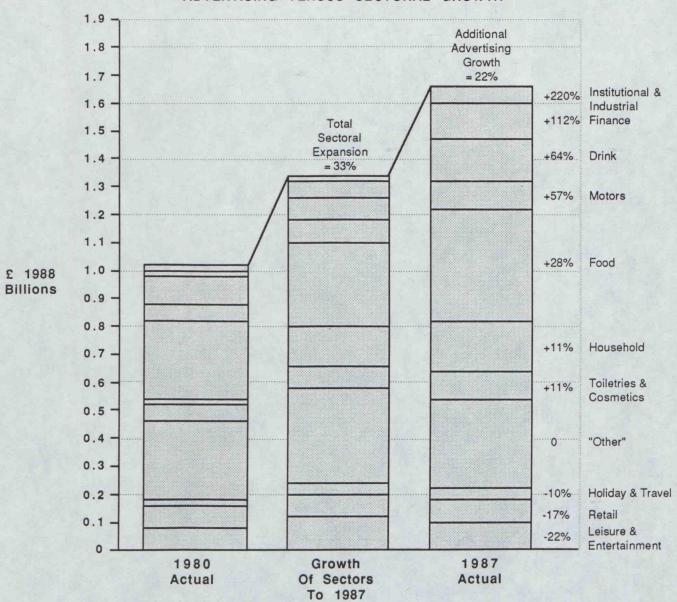
Source: AA/ITCA/CSO; M J Waterson in Adstats

Television Net
Advertising Revenue

Gross Trading Profits (Excluding North Sea Oil Profit) Forces Driving Demand...

STUDYING THE PATTERN OF CHANGE DURING THIS DECADE MORE CLOSELY, WE OBSERVE THAT THE MAJORITY OF THE DEMAND GROWTH IS ATTRIBUTABLE TO EXPANSION OF ECONOMIC SECTORS (WITHOUT CHANGE IN ADVERTISING/SALES RATIOS); AN ADDITIONAL 22% GROWTH IS DUE TO OTHER FACTORS

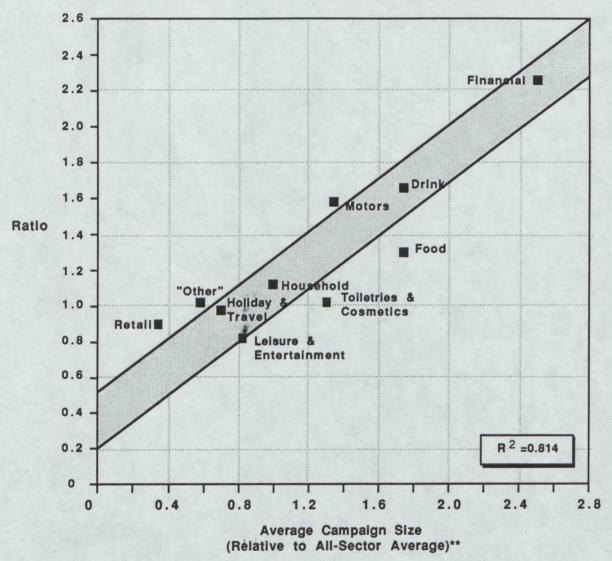
TELEVISION ADVERTISING EXPENDITURE ADVERTISING VERSUS SECTORAL GROWTH



Forces Driving Demand...

THE RESIDUAL (ADDITIONAL) GROWTH IS HIGHLY CORRELATED WITH AVERAGE CAMPAIGN SIZE, CONFIRMING THE FREQUENTLY ENCOUNTERED VIEW THAT SMALL FIRMS/BRANDS HAVE BEEN DROPPING OUT OF THE MARKET IN FAVOUR OF LARGE ONES

RATIO OF 1987 SECTORAL EXPENDITURE TO THAT PREDICTED BY SECTORAL GROWTH MODEL*



^{*} Institutional advertising category omitted (see text)

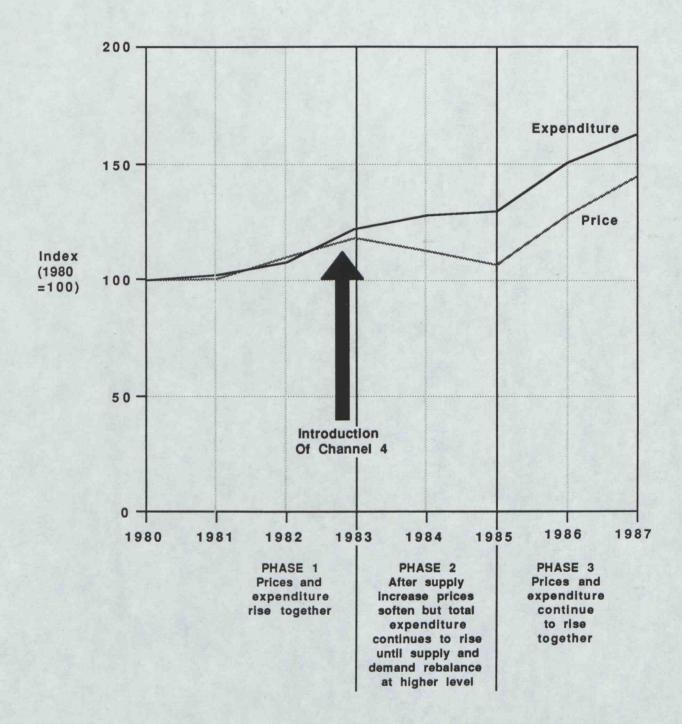
Source: Analysis of 2017 campaigns running during October 1987 (100% sample of 21 days advertising) BARB

^{**} In 3 weeks of 1980; based on complete sample of advertisements in this period.

Forces Driving Demand...

WHEREAS THE RESPONSE TO PRICE CHANGE AND CHANNEL PROLIFERATION HAS BEEN COMPLEX, OUR OVERALL CONCLUSIONS ARE THAT:

- The weighted average price elasticity (in the absence of new channels) is close to one on the current balance of campaign sizes
- New channel introduction has a relieving effect on prices, but expenditure remains buoyant due to elasticity close to unity



Prognosis for the Future ... WE NOW APPLY THESE MODELS OF THE FACTORS DRIVING DEMAND TO FORECAST THE BALANCE OF SUPPLY AND DEMAND UNDER DIFFERENT CONFIGURATIONS OF CHANNEL SUPPLY. WE CONSIDER: • The likely distribution of television viewership among channels under the following scenarios No change Introduction of competitive selling arrangement for Channel 4 Authorisation of a Channel 5 • The balance between supply and demand for commercial television time under these scenarios -17-

OUR SUPPLY-SIDE ANALYSIS IS BASED ON THE FOLLOWING ASSUMPTIONS REGARDING DISTRIBUTION OF VIEWERSHIP AMONG CHANNELS

FORECASTS OF TERRESTRIAL TELEVISION VIEWERSHIP UNDER DIFFERENT POLICY OPTIONS (% OF TOTAL TV VIEWING)

| | | 1995 FC | | | PRECASTS | | | | |
|---|----|-----------|------|---|----------|--|------|---|------|
| Channel and Present Audience Share | | No Change | | Competitive Selling of Channel 4 Airtime | | Authorisation Of 5th Channel As Targetted Channel (1) | | Authorisation of 5th Channel as Broader Appeal Channel (1) | |
| | | 1992 | 1995 | 1992 | 1995 | 1992 | 1995 | 1992 | 1995 |
| BBC1 | 36 | 36 | 36 | 35 | 35 | 33 | 31 | 33 | 28 |
| BBC2 | 11 | 11 | 11 | 11 | 11 | 10 | 9 | 8 | 8 |
| ITV | 41 | 41 | 41 | 40 | 40 | 39 | 37 | 38 | 34 |
| TV am | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Channel 4 | 10 | 10 | 10 | 12 | 12 | 11 | 10 | 10 | 9 |
| Channel 5 | 0 | 0 | 0 | 0 | 0 | 5 | 11 | 9 | 19 |
| | | | | | | | | E SA | |

⁽¹⁾ Launched in 1991; also assumes competitive selling of Channel 4 air-time

THE SUPPLY OF AIR-TIME CAN BE ALTERED VERY SIGNIFICANTLY BY REGULATION OF CHANNEL MINUTAGE; THE AVAILABILITY OF THIS POLICY INSTRUMENT MUST BE TAKEN INTO ACCOUNT IN THE EVALUATION OF ALTERNATIVE POLICIES

| | | Minutes Per Hour | |
|--------------------------------|-----|------------------|-----|
| | 6 | 7 | 8 |
| Existing 2 Channels: | | | |
| Low Growth of New Media | 352 | 411 | 470 |
| High Growth of New Media | 346 | 404 | 462 |
| | | | |
| 2) Additional "Targetted" | | | |
| Channel: | | | |
| Low Growth of New Media | 426 | 497 | 568 |
| High Growth of New Media | 418 | 488 | 558 |
| 3) Additional "Broader Appeal" | | | |
| Channel: | | | |
| Low Growth of New Media | 466 | 544 | 622 |
| High Growth of New Media | 459 | 535 | 611 |
| | | | |
| | | | |
| | | | |
| | | | |

Notes: Calculations are based on:

(1) 44.5 million adults

(3) Additionally, viewing of terrestrial channels increases by 0.1 hours per day if "targeted" 5th channel launched and

0.2 if "mass appeal" channel launched

⁽²⁾ Current total viewing of 3.6 hours per day, rising to 3.65 by 1995 on account of new media growth in low growth case, and to 3.7 by 1995 in high growth case; 3% of total viewing is accounted for by cable/satellite in low growth case and 6% in high growth case

⁽⁴⁾ Viewing shares among terrestrial channels as given in exhibit 5.1

AIR-TIME SUPPLY WILL ALSO BE AFFECTED BY THE DEVELOPMENT OF CABLE AND SATELLITE CHANNELS. THE ADVERTISING DEMAND ACCOMMODATED BY THESE CHANNELS MAY REACH THE FOLLOWING LEVELS

(1) High Growth Case

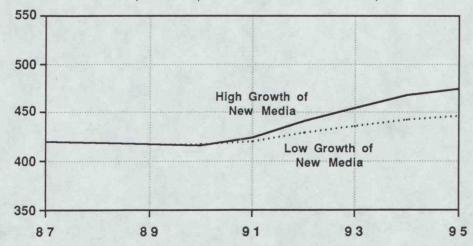
| | CA | BLE | SATELLITE | |
|--|-------|-------|-----------|-------|
| | 1992 | 1995 | 1992 | 1995 |
| Number of UK households viewing (1) | 1.9m | 3.5m | 2.5m | 7.2m |
| Number of adults per household | 2.1 | 2.0 | 2.1 | 2.0 |
| Hours per day per adult viewing of advertising support channels (2) | 0.65 | 0.65 | 1.0 | 1.0 |
| Number of spots per hour | 16 | 16 | 16 | 16 |
| Cost per thousand (3) | £2.65 | £2.65 | £2.65 | £2.65 |
| Total annual revenue raised (4) | £40m | £70m | £81m | £223m |
| Eq. adult commercial impacts (bn per year) | 10 | 17 | 20 | 54 |

(2) Lower Growth Case

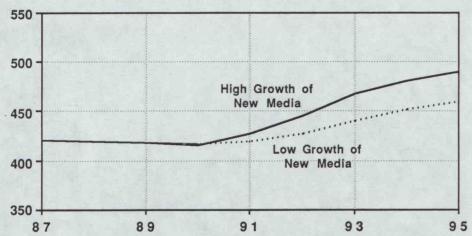
| | CABLE | | SATELLITE | |
|--|-------|-------|-----------|-------|
| | 1992 | 1995 | 1992 | 1995 |
| Number of UK households viewing (1) | 1.8m | 3.1m | 0.65m | 2.5m |
| Number of adults per household | 2.1 | 2.0 | 2.1 | 2.0 |
| Hours per day per adult viewing of advertising support channels (2) | 0.65 | 0.65 | 1.0 | 1.0 |
| No of 30 second spots per hour | 16 | 16 | 16 | 16 |
| Cost per thousand (3) | £2.65 | £2.65 | £2.65 | £2.65 |
| Total annual revenue raised (4) | £38m | £62m | £21m | £77m |
| Eq. adult commercial impacts (bn per year) | 9 | 15 | 5 | 19 |

THE OVERALL PATTERNS OF SUPPLY GROWTH CONSEQUENT ON DIFFERENT CHANNEL AUTHORISATION SCENARIOS ARE AS FOLLOWS:

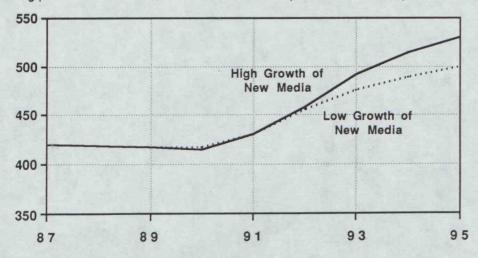
A. Without additional terrestrial channels (7 minutes per hour on terrestrial channels)



B. If "targetted" 5th channel launched in 1991(7 minutes per hour initially on terrestrial channels, declining to 6 minutes per hour during period 1991 to 1994, constant at 6 minutes per hour thereafter)

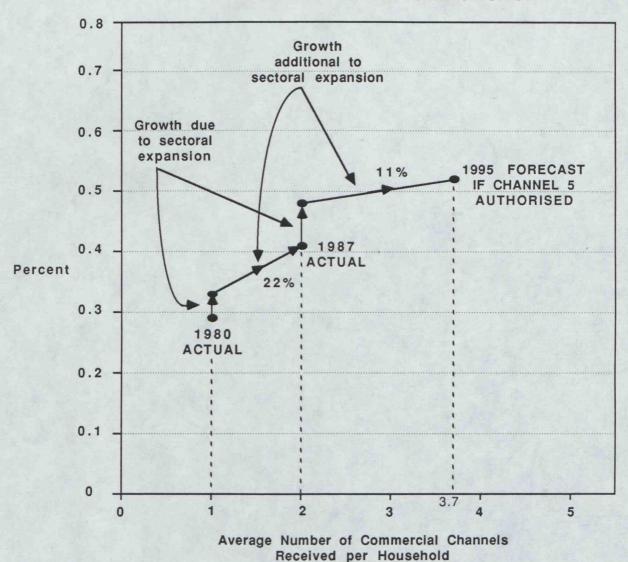


C. If "broader-appeal" channel launched in 1991 (7 minutes per hour initially on terrestrial channels, declining to 6 minutes per hour during period 1991 to 1994, constant at 6 minutes per hour thereafter)



WITH REGARD TO DEMAND GROWTH, OUR FORECASTS ASSUME ADVERTISING EXPENDITURE GROWTH SLIGHTLY EXCEEDING THE LEVEL ATTRIBUTABLE TO SECTORAL ECONOMIC EXPANSION

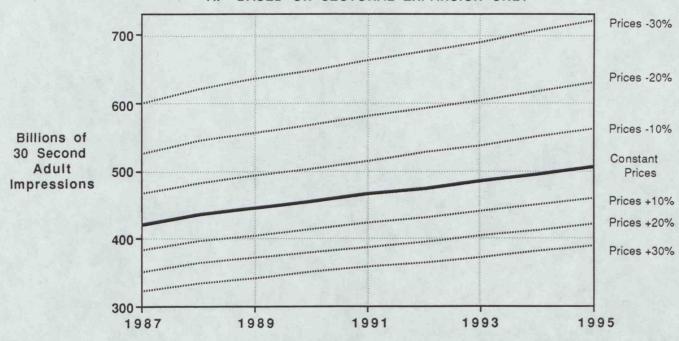
TV ADVERTISING AS A PERCENTAGE OF GDP



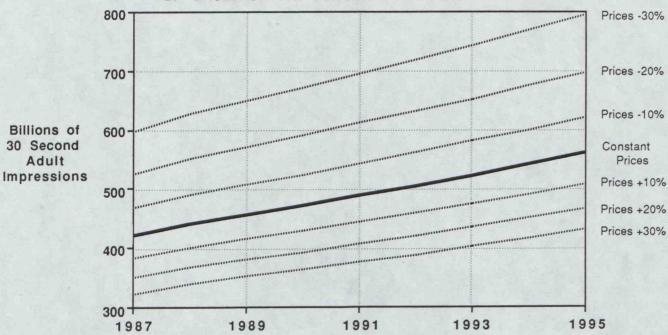
Note: The additional new media (cable and satellite TV) channels available in1995 are counted as adding 2 commercial channels per household receiving, or 1 per average UK household (assumed penetration of new media is 10.7 million, or 50% of total)

APPLICATION OF THE SECTORAL GROWTH MODEL, WITH AND WITHOUT THIS ADDITIONAL 11% GROWTH, YIELDS THE FOLLOWING DEMAND PROFILES FOR THE PERIOD TO 1995

A. BASED ON SECTORAL EXPANSION ONLY



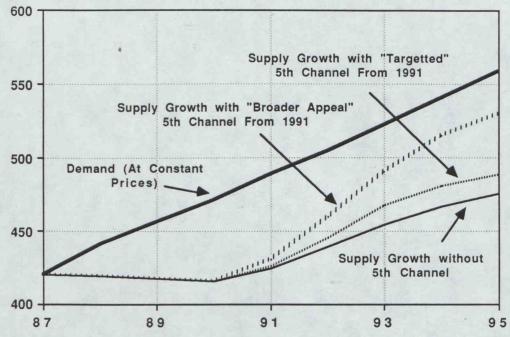




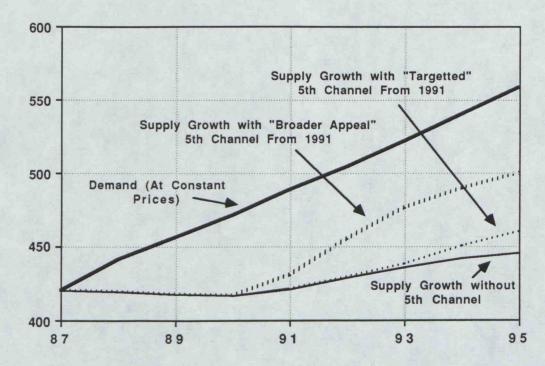
Note: Demand at non-constant prices based on elasticity of 1; the shift in demand (from the constant price line) corresponding to different demand elasticities can be obtained by making pro-rata adjustments on the vertical axis

CONSIDERING SUPPLY AND DEMAND PROFILES FOR THE PERIOD TO 1995, WE OBSERVE A LARGE SHORTFALL IN SUPPLY UNDER THE RESTRICTIVE SCENARIO, AND AMPLE DEMAND TO ACCOMMODATE A 5TH CHANNEL OPTION

(1) Based on High Growth of New Media



(2) Based on Lower Growth of New Media



Options for the Future...

WHAT ARE THE OPTIONS FOR THE FUTURE AND HOW DO THEY ADDRESS THE TWO CATEGORIES OF ECONOMIC DAMAGE WE HAVE IDENTIFIED?

| Option | Economic Losses in UK Consumer Industries (Due to rising costs and restricted supply of advertising spots) | Economic Losses in TV/Entertainment Sector (Due to lack of competitive discipline in TV industry) | |
|--|--|---|--|
| Option 1: Price Regulation | Solves rising cost problem, but not restriction on output | Holds revenue at regulated level. | |
| Option 2: Increased Minutage | Increases supply as required | Worsens, not improves, cost inflation | |
| Option 3: Auctioning of ITV Franchises | No downward influence on prices (possibly upward) | Transfers excess revenues to treasury | |
| Option 4: Competitive Selling of Channel 4 Air-Time | Limited help; increases competitiveness but not supply | Limited help; increases competitiveness but remains a seller's market | |
| Option 5: Authorisation of 5th Channel, Advertising Financed | Increases supply as required | Introduces competitive conditions and curtails cost inflation | |

Option 5 also provides UK consumers with an additional TV service

Options for the Future ...

KEY CONCERNS TO BE AD
ESTABLISHMENT OF A MARKET (INCLUDING CO
AUTHORISATION OF A 51

KEY CONCERNS TO BE ADDRESSED IN CONNECTION WITH THE ESTABLISHMENT OF A MORE COMPETITIVE TELEVISION ADVERTISING MARKET (INCLUDING COMPETITIVE SELLING OF CHANNEL 4 AIR-TIME AND AUTHORISATION OF A 5TH ADVERTISING-FUNDED CHANNEL):

- A. Will Channel quality be maintained?
 - Is there adequate funding?
- B. Will consumer choice be genuinely increased?
 - Will the channel be "different"?
- C. Is there going to be damage to other media?
 - Commercial Radio
 - Press
 - Satellite Television

Options for the Future...

A. CHANNEL QUALITY AND FUNDING

With 5 terrestrial channels, funding for each commercial channel will exceed £250 million per year (hence will be above present BBC2 and Channel 4 levels)

(1) "Targetted" 5th Channel

| Channel | Audience Share (%) | Billions of 30-Sec Adult Impressions | Net Revenue £m 1988 Value | 1988 Net Revene (for Comparison) £m 1988 Value |
|---------|--------------------------|---|---------------------------------|--|
| BBC1 | 29 | | | 474 |
| BBC2 | 8 | | | 252 |
| ITV | 34 | 256 | 1050 | 7 1541 |
| CH 4 | 10 | 76 | 312 | 5 1541 |
| CH 5 | 11 | 83 | 340 | |

(2) "Broader Appeal" 5th Channel

| Channel | Audlence Share (%) | Billions of 30-Sec Adult Impressions | Net Revenue £m 1988 Value | 1988 Net Revene (for Comparison) £m 1988 Value |
|---------|--------------------------|---|---------------------------------|--|
| BBC1 | 26 | | | 474 |
| BBC2 | 7 | | | 252 |
| ITV | 31 | 233 | 957 | 7 1541 |
| CH 4 | 9 | 58 | 281 | 5 |
| CH 5 | 19 | 143 | 587 | |

Note: New media viewing corresponds to lower growth case; terrestrial channel viewing assumes Channel 5 launched in 1991, and six minutes of advertising per channel

Options for the Future... B. CHARACTER OF 5TH CHANNEL THERE IS A MAJOR GAP IN THE COMMERCIAL TELEVISION MARKET FOR A HIGH-QUALITY CHANNEL: ITV is not filling this need (see chart below) · The proposed satellite channels are aiming at the mass audience, to stimulate antenna purchase · There is therefore an opportunity to make the 5th channel of higher quality (in terms of socio-economic appeal) than existing ITV service The experience of Channel 4 confirms that advertising finance need not be associated only with mass-appeal entertainment 1. VIEWING PROFILE OF ABC1 ADULT VIEWERS 100 80 60 All-Adult Average **BBC Performs** Viewing Better by 25% = 100 40 20 -0 BBC1 BBC2 ITV -28-

Options for the Future ... DAMAGE TO OTHER MEDIA **Radio and Press** 1. There is strong evidence that TV growth will not take away demand from commercial radio and press, and vice-versa Use of radio and press advertising is quite different Very local By smaller businesses Vastly smaller average campaign expenditure In USA, where radio market is very well developed, proportion of GDP spent on that medium is additional to the 0.55% spent on TV - it has not substituted We conclude that radio expansion will Partly create new demand Partly substitute press Not affect our TV demand growth forecasts Conversely TV advertising growth will not substantially affect prospects for commercial radio viability or for press viability **Satellite Television** 2. Our forecasts show that there is ample demand among advertisers to support both a 5th Channel and the proposed BSB service: Even "high growth of new media" forecasts - the optimistic basis on which BSB bases its fund-raising activity - is accommodated -29-