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Productivity
Commission

INTERNATIONAL DYNAMICS PTY LTD

Distributor of Loewe products

Third Supplementary Submission to the Productivity Commission Broadcasting Inquiry

Digital television broadcasting from the consumer point of view

interdyn

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Contents

Attachments

Introduction

This is our fifth submission to the Productivity Commission enquiry on Broadcasting.

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.

References to STBs indicate Set-Top Boxes, which are external tuners/decoders capable of receiving a digital transmission and converting it to analogue, for a current television to display.

1 The UK model

Nearly all discussions about SDTV seem to be based on the UK model, however there are many structural differences between the UK TV market and ours. I don't propose to go into all the factors because I haven't made a full study of them. But this should be done before assuming a similar degree of acceptance in Australia.

There seem to have been very little study on what other countries with Digital TV have encountered.

For example, the advice that a survey in Singapore found less than 1% of television viewers had any interest in HDTV at all (and presumably less would buy a HDTV set), which I found out by a single phone call to Singapore, was unknown to all the people involved in the Digital TV debate to whom I mentioned it.

Various European countries have SDTV broadcasts. What is their market structure and what have their experiences been? What have been the factors driving consumer uptake?

Mandated HDTV is the certain failure, the inconceivable mistake. Let's not assume SDTV is going to automatically be a rapid success.

1.1 Set-top boxes for SDTV

On further investigation I consider the prices mentioned in the media (and in my own previous submissions) for STBs for both SDTV and HDTV to be on the optimistic side.

I have spoken with Pace Micro Technology, one of the largest manufacturers of STBs in the UK. Pace advise that around 12 months lead time should should be allowed to supply STBs for our market, depending on detailed specifications being available. Until we get a final specification for our SDTV standard I cannot get more definite information.

From my discussion with Pace they consider it unlikely some standard unit will be suitable, however to keep costs down in any manufacturing process it is best to be as close as practical to standard production. We should not design our Digital TV standards in a vacuum.

The prices of STBs in the UK have many cross subsidies of different kinds, so it is easy to get a misleading picture of STB pricing. STBs that can be purchased over the counter in UK stores for around £250 (and that are often supplied free to subscribers) have an actuall retail price closer to £500 once the various manufacturer and broadcaster subsidies are taken away.

We should firstly work out what features are essential for Australians, then what others would be nice to have. Then let's discuss these possibilities with STB manufacturers before finalising the specifications. We should take advantage of production economies.

Assuming we don't have a decision until well into the new year with future delays possible until specifications are finalised, start up of Digital TV in Australia can be simply postponed because of lack of STBs.

2 The other big picture

In my previous submissions I have kept within the boundaries of my detailed knowledge, and concentrated on the HDTV/SDTV issue.

I was puzzled however that I couldn't recall reading anything about datacasting in UK or US audio visual magazines. I rang the UK and Germany and spent a long time on the phone with Mr Marc Boehringer of Loewe.

The information available indicates that practically all people in Europe get STBs in conjunction with a subscriber-based pay TV service. European TV systems have very different structures to ours.

Datacasting and picture quality are not the drivers of Digital TV in Europe. Are we so different in Australia? I consider we can't know what we are doing as we haven't decided what we really want or made enough effort to find out. I have made a few phone calls to overseas organisations, but this is not good enough market research on a multi billion dollar decision.

Once we have decided what we want I would suggest we commission a firm like Strategy Analytics (who have a very good international record of predictive success in the consumer industry) to research the possibilities. I have no connection with or financial interest in Strategy Analytics.

Lets pause, step back and really think. In the end this is the best way forward.

We are spending a lot of effort to work out how to divide the cake.

Shouldn't we work out how many people would want a piece of the cake in the first place?

3 Rules, predictions and puzzles

- Another rule about "improvement" technologies:

If there is already a working incumbent technology it takes a lot longer for the newcomer to become established (if it does at all) than its protagonists conceive of.

- Another millennium prediction:

For most people with reasonable analogue TV reception there will be little point in changing.

- And a future puzzle for historians:

Why, when we jumped in early to get more efficient use of the spectrum, did we then spend our time tying up the spectrum so it couldn't be used efficiently?

Digital TV Development 1999-2002

DVB Market Situation in Europe

UK

Statistics

24.5 m TV Households

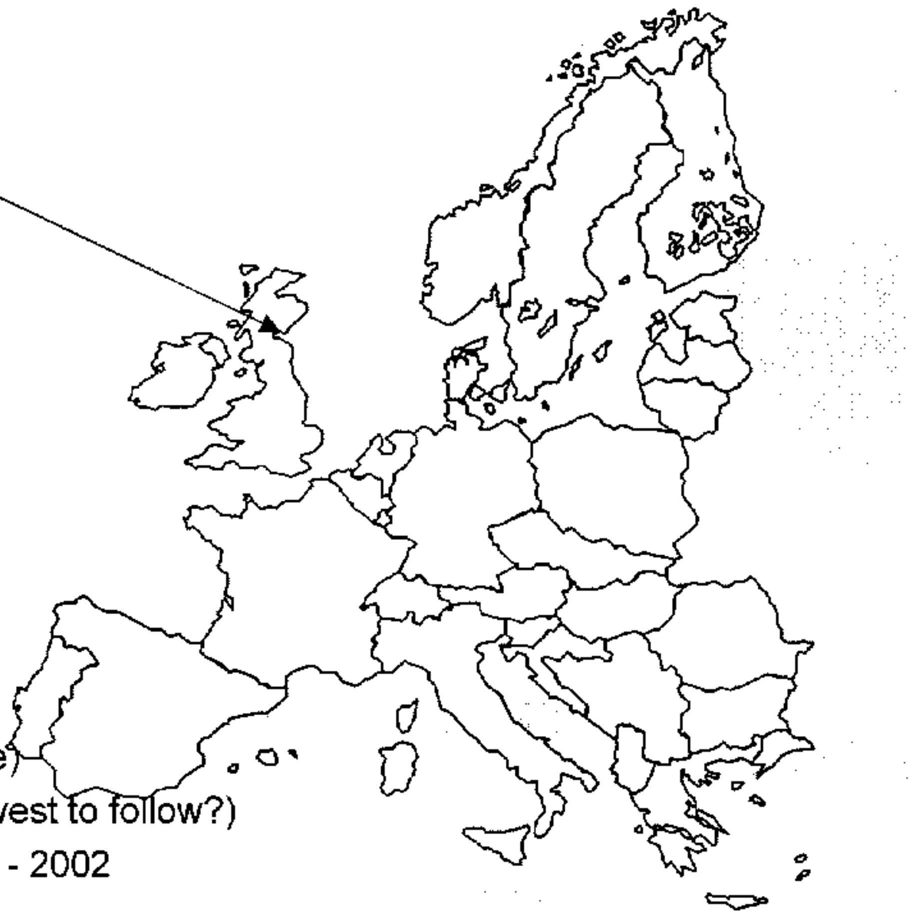
69% Terrestrial; 20% Satellite; 11% Cable

Digital Operators

Satellite: Sky Digital - 1.2 mill
Terrestrial: ONdigital - 350,000 (08/99)
Cable: CWC (10,000), NTL, Telewest

Key Issues

- Strong analogue satellite and cable platform
- First DTT operator
- Highly competitive digital market place
 (NB: Free STB offers)
- Cable late to start (rolling out slowly)
- 12 million homes (50% of pop. can receive cable)
- Cable consolidation - NTL & CWC merge (Telewest to follow?)
- BSkyB to switch off analogue service by E/2000 - 2002



DVB Market Situation in Europe

Spain

Statistics

12.1 m TV Households

87% Terrestrial; 10% Satellite; 3% Cable

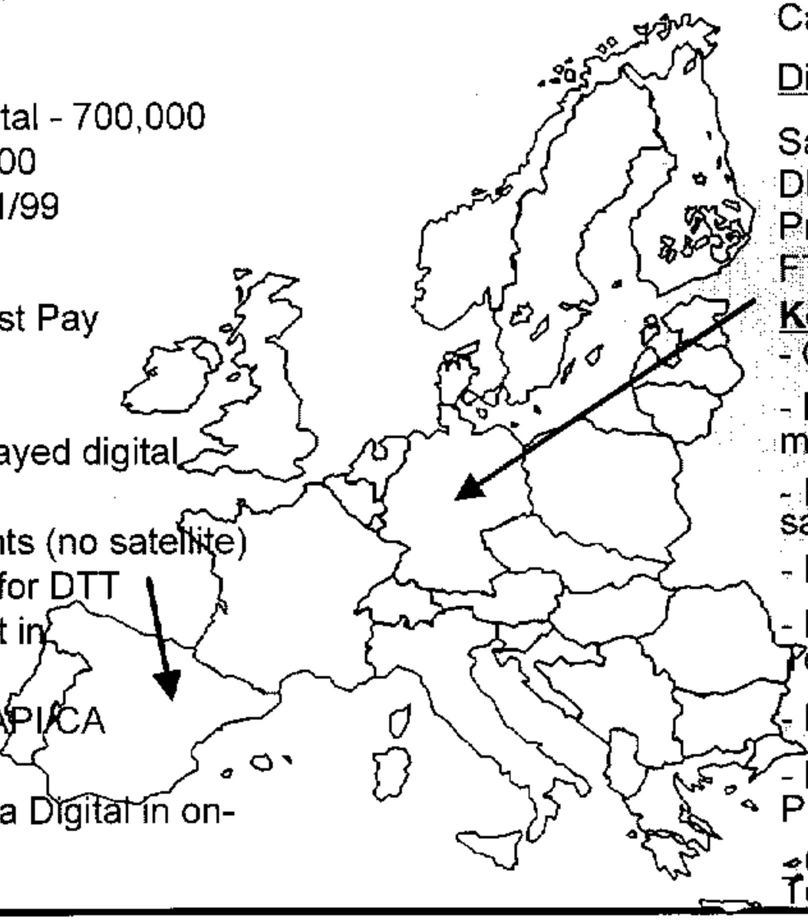
Digital Operators

Satellite: Canal Satelite Digital - 700,000
Via Digital - 348,000

DTT: ONda Digital - launch 11/99

Key issues

- FTA TV culture (one of lowest Pay TV rates in Europe)
- Terrestrial dominates
- Cable almost negligible (delayed digital cable roll out (Y2000))
- 50% of pop. live in apartments (no satellite)
- Strong government support for DTT
- All broadcasters will transmit in digital by 01/01/02
- ONda digital undecided on API/CA
- STB prices low
- Canal Satelite Digital and Via Digital in on-off merger talks



Germany

Statistics

36.9 m TV Households

10% Terrestrial; 30% Satellite; 60% Cable

Digital Operators

Satellite & Cable:
DF1 - 310,000(01/99)
Premiere - 440,000(01/99)
FTA - ARD / ZDF

Key Issues

- Cable reception dominant
- Diverse & competitive Free TV market (Pay TV penetration low)
- High acceptance of cable and satellite as distribution method
- Little reliance on terrestrial
- DTT trials taking place (Deutsche Telekom supporting - 2001)
- D-box domination for Pay TV
- DF1 and Premiere merged to form Premiere World (launch: 10/99)
- Cable controlled by Deutsche Telecom (selling off networks)

DVB Market Situation in Europe

France

Statistics

23.4 m TV Households
79% Terrestrial; 11% Satellite; 10% Cable

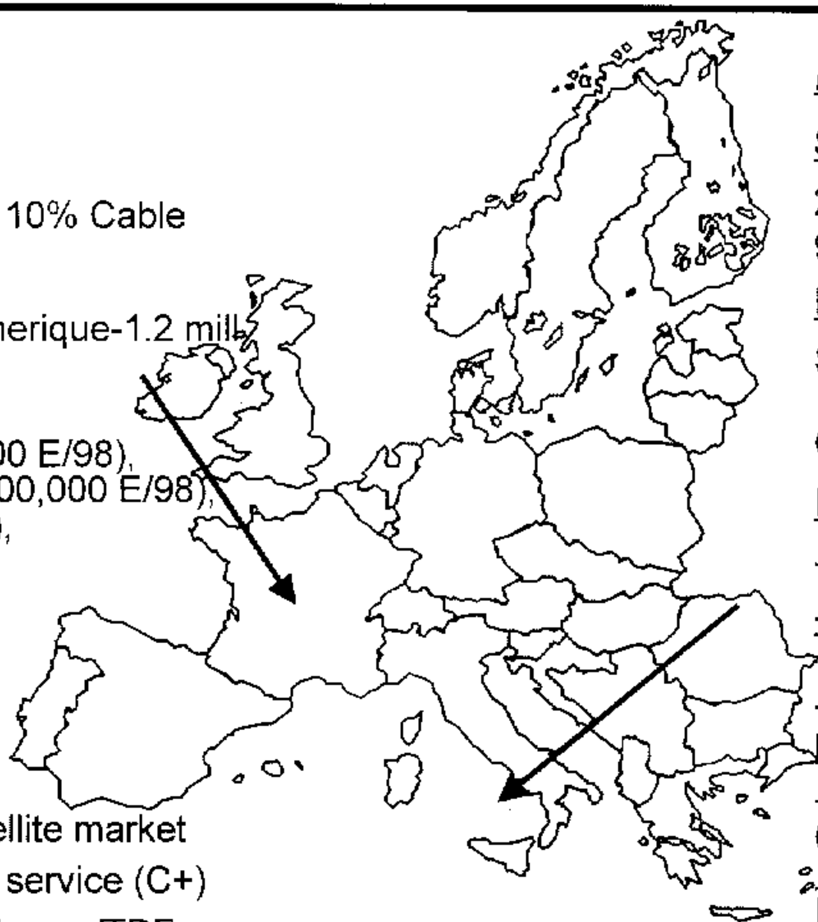
Digital Operators

Satellite: Canal Satellite Numerique-1.2 mill
TPS - 720,000
ABSat - 325,000

Cable: France Telecom (33,000 E/98),
Lyonnaise Communications (100,000 E/98),
NC Numericable (62,000 E/98),
Reseaux Cables de France,
Rhonevision Cable, Videopole

Key Issues

- Pay TV culture
- Highly competitive digital satellite market
- Successful terrestrial Pay TV service (C+)
- DTT launch 2001 (France Telecom/TDF supporting)
- Dominance of Canal Plus in owning film and sports rights
- Low level of PC Internet connectivity



Italy

Statistics

20.3m TV Households
95% Terrestrial; 5% Satellite

Digital operators

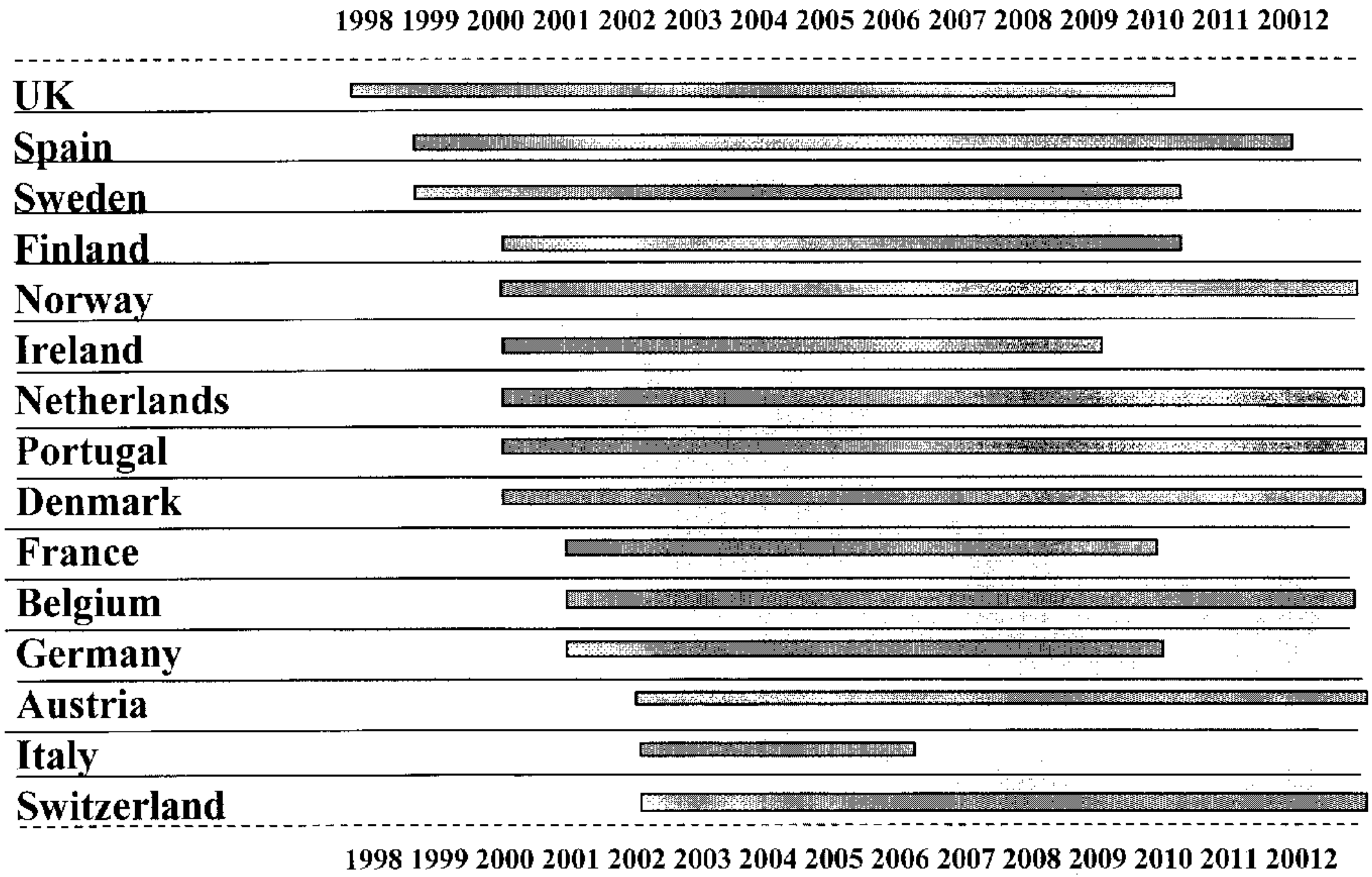
Satellite: Telepiu - 520,000 (01/99)
Stream - 70,000 (E/98)
Cable: Stream - 40,000 (E/98)

Key Issues

- Pay TV penetration = 14%
- Established terrestrial premium TV
- Negligible cable (digital cable proving difficult to develop)
- Stream ownership changes (plans uncertain)
- Olivetti takeover of Telecom Italia
- Rai involved in DTT trials (DTT launch = 2002)
- Analogue switch off = 2006
- Government decision making not based on coherent LT strategies

Sony DME 09/99

DTT Start & Analogue Switch Off



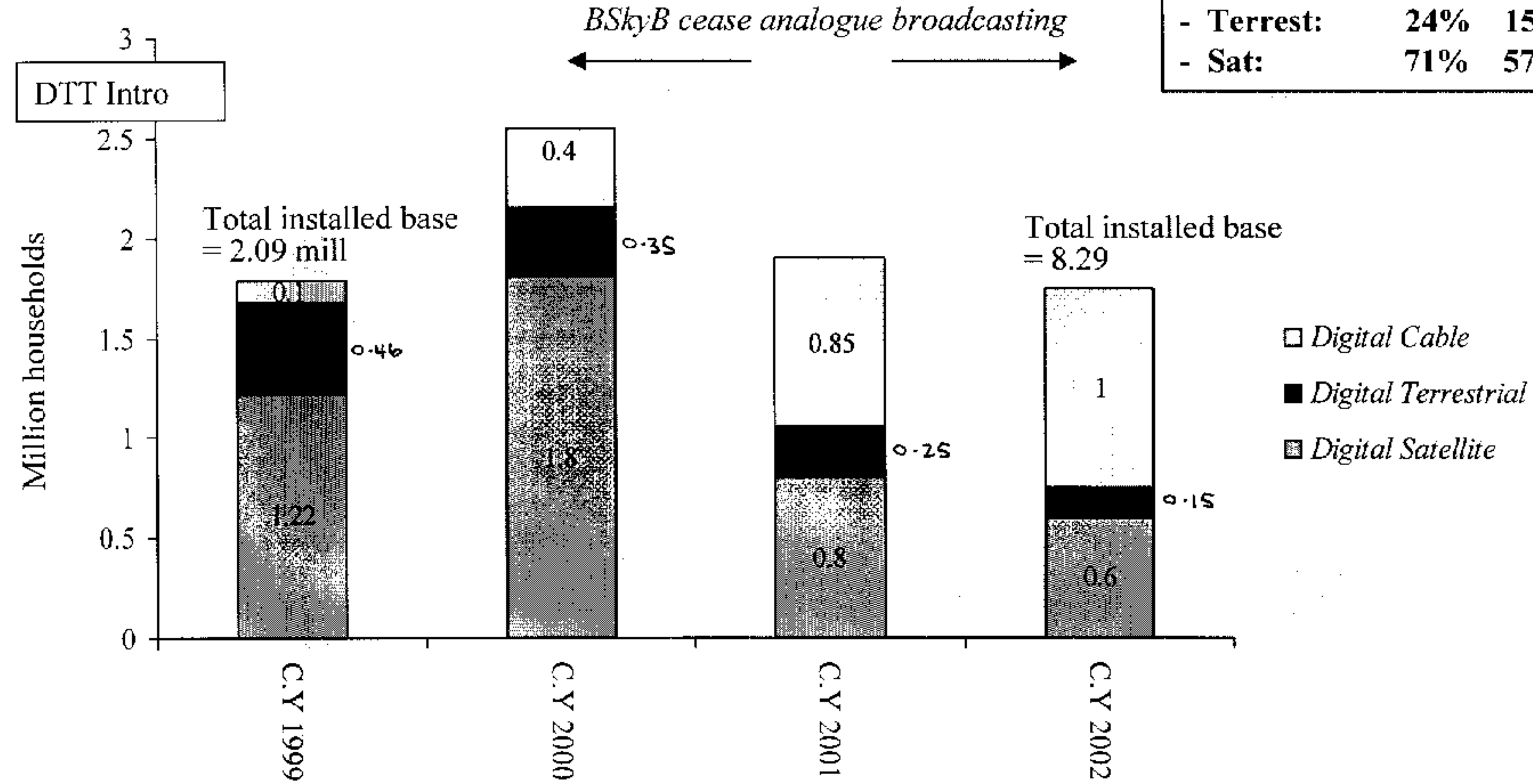
Source: Digitag 08/99

UK Digital STB Forecasts 1999 - 2002

Analogue Switch Off: 2006-2010
(if 95% coverage)

Penetration Rate:

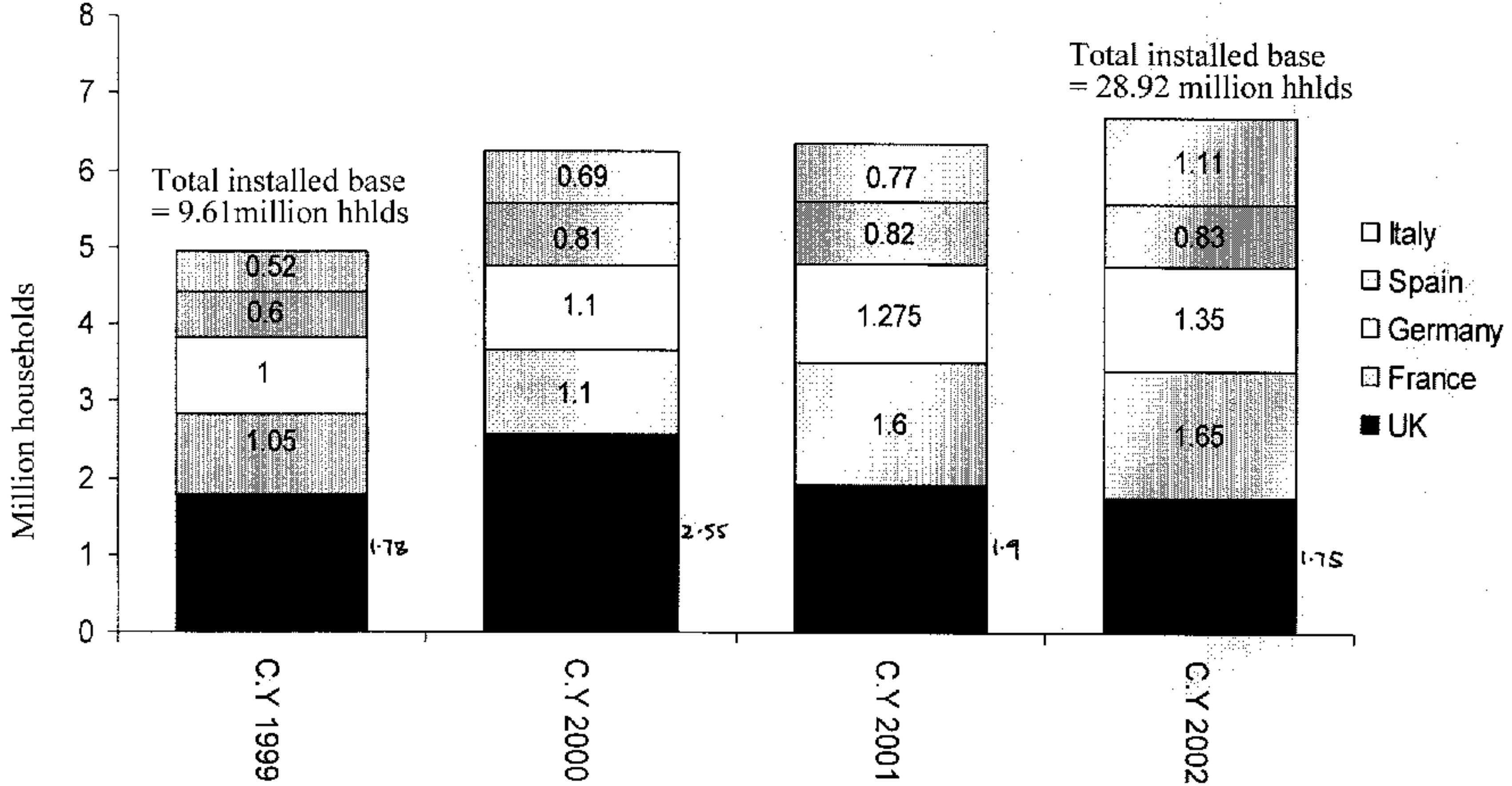
	'99	'02
Total (digital):	9%	33%
- Cable:	5%	28%
- Terrest:	24%	15%
- Sat:	71%	57%



Source: Sony DME 09/99

Digital STB Forecasts 1999 - 2002

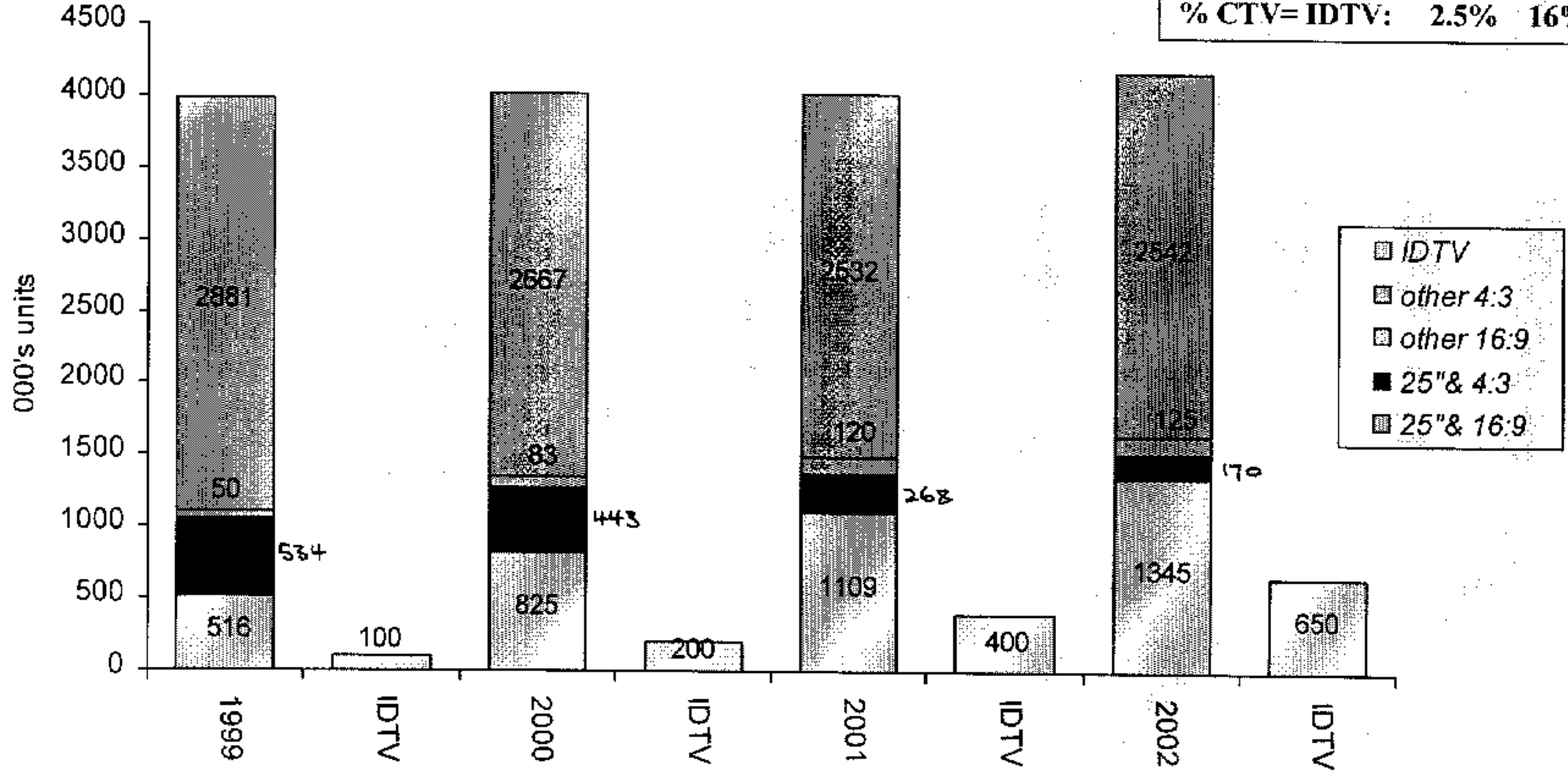
Digital STB Market
(UK, France, Germany, Spain, Italy)



Source: Sony DME 09/99

UK IDTV Forecast 1999 - 2002

	1999	2002
% >25":	26%	36%
% 16:9:	14%	35%
% >25"=16:9:	49%	89%
% >25"=IDTV:	9.5%	43%
% CTV= IDTV:	2.5%	16%



Source: Analogue forecasts: SIS / IDTV forecasts: Sony DME 09/99