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Development of Digital TV in Europe

2000 Report

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1. Digital TV market overview

1.1 Roll-out of digital services

1.1.1 Satellite digital services

Just as last year, the structure of the French market for satellite digital TV did not change substantially in the year 1999/2000.

Satellite digital TV offerings are still supplied by four operators:

- Canal Satellite, a subsidiary of the Canal+ group, the leading pay-TV operator with 13,6 million subscribers throughout Europe at the end of 1999 – 6,6 million in France of which 1,7 million are digital; CanalSatellite uses the SES/Astra satellite system
- Canal+ Numérique, also a subsidiary of the Canal+ group, is the second French digital service and a multiplexed version of the analogue TV channel Canal+ on the SES/Astra system
- TPS (Télévision Par Satellite), a joint venture between France Télévision, M6, TF1, France Télécom and Lyonnaise Communication, which is broadcast via Eutelsat
- ABsat, a service operated by the AB group, whose core activities are TV production and TV programmes distribution and sales.

Partly due to Canal+'s captive analogue and terrestrial customer base, and because of an early launch (April 1996), Canal Satellite, which stopped broadcasting analogue signals at the end of 1998, and Canal+ Numérique, still dominate the market with a 64% market share[1]. In fact, in June, 2000 the Canal+ group had a base of 1,611,358 digital decoders installed in France.

TPS, with its 905,000 decoders installed, is seeing its market share increase exponentially from 33% to 34% between 1998 and June, 2000.

By the end of 1998, ABsat numbered an installed base of decoders of less than 15,000. The AB group's strategy is clearly to position itself as a "content provider"[2]. Indeed, any direct marketing of set-top boxes has been abandoned. Its 18 TV channels are now financed via the "Découverte" and "Passions" options, which are packages sold by CanalSatellite and TPS and are marketed by these two DTV satellite packagers respectively.

In this context, and considering the total number of subscriptions[3]) to satellite digital TV, by June 2000 the AB group was able to claim that it had an 11% share of the market (see Table 1).

[1] The market share is here expressed in terms of digital satellite subscriptions

[2] for satellite DTV packages but also cable and terrestrial DTV platform

[3] Of note is the fact that a large number of subscribers to CanalSatellite also subscribe to Canal+. The number of subscribers is therefore much lower than the number of subscriptions.

Table 1: Subscriptions to satellite DTV offerings broken down by satellite DTV packagers

	Subscriptions		Market share	
	1 999	*mid-2000*	*1 999*	*mid-2000*
Canalsatellite	1 371 672	1 434 109	38%	37%
Canal+ numérique	1 051 615	1 111 837	29%	29%
TPS	830 000	905 000	23%	23%
Absat*	360 000	405 000	10%	11%
Total	3 613 287	3 855 946	100%	100%

* By December 1999, Absat also had 40,000 subscribers to its cable TV service

Source: IDATE

1.1.2 Cable digital services

The position in June 2000 is that the French cable industry is dominated by 4 major cable operators who control more than 85% of the subscriptions to cable and 90% of the homes passed by cable. Indeed, in March 2000, NOOS (formerly Lyonnaise Câble) had around 750,000 subscribers, representing a 26% market share. France Télécom Câble, NC Numéricâble and UPC France respectively accounted for 25%, 24% and 13% of cable subscriptions.

The entry of the UPC group in fourth place among French cable operators is confirmation of the major restructuring now taking place in the sector which began two years ago. Since 1998, the French cable industry has been characterised by financial deal-making mainly due to the new European cable directive which encourages telecom incumbents to either sell their TV cable assets or separate their phone and cable business. Of course, the cost of network digitisation and low profitability expectations in the short term can also be considered as one of the reasons behind this restructuring process.

In this context, UPC, who already owned RCF, and who purchased the Videopole and Time Warner France[4] networks in July 1999, has become the fourth largest French cable operator with 1,3 million homes passed and around 380,000 TV subscribers.

Furthermore, the US-backed company NTL entered the French cable market when it purchased five of France Télécom's 1G networks in May 1999. Its competitiveness increased in August 2000 when NOOS (formerly Lyonnaise Câble) was able to compete on the Paris market after NTL had taken over the shares in the company owned by France Télécom.

Thus, in 1999/2000, the French cable market saw the sell-off by France Télécom of its cable network to the two veteran French cable operators (NC Numéricâble and NOOS), with the consequent movements of capital that were bound to follow.

During the first half of 1999, France Télécom launched an invitation to tender to sell the cable networks it owned but did not operate – the "Plan Câble" networks. The tender involved the 3.7 million homes equipped for cable TV. There was an exclusivity stipulation for the provision of cable TV covering Lyonnaise Câble (now NOOS) and NC Numéricâble.

[4] Médiareseaux, Citéreseaux and Rhône vision câble

Consequently:

An agreement was signed in September 1999, between Lyonnaise Câble and France Télécom for the purpose of combining the cable operations of both companies into a single entity of which 50.1% would be owned by Lyonnaise Câble. The agreement allowed for the entry of a third investor in late 1999 who would provide 20% of the share capital. Finally, in August 2000, NTL in association with Morgan Stanley bought out all of France Télécom's interest.

An agreement of the same type was entered into with NC Numéricâble in January 2000. Since then, Canal Plus (28%), Exante (28%) and France Télécom (42.5%) share the holding of the third French cable operator. France Télécom's role has become purely financial because FT is likely to sell its holding in the next three years.

In this context, it will be seen that the French cable market was in a state of flux in the years 1999/2000, both as regards investment and from the marketing point of view l (See chapter1.2.2).

The market players have continued to make the necessary investments in order to provide digital TV services through most of their networks

The new entrants, especially UPC and NTL, claim they will be investing around a billion francs (€152 million) in the modernisation of their infrastructures, enabling them to provide reliable broad-band services. NTL has also announced that the reconstruction of the 1G networks acquired in May, 1999 will be complete by late 2001.

Simultaneously, the industry veterans are also planning major investments in their networks which will enable them to offer digital video, Internet services and telephony services in the short term. According to the AFCO, the professional association of French cable operators, cable in France ought to generate an investment in France of 10.3 billion francs (1.5 billion Euros) over a three-year period (1999-2002).

Given the process of digitisation which has also been observed in the medium-sized independent cable networks in France, (such as Vidéopole and Régies), more than 80% of the homes capable of receiving cable could have access to digital signals by late 1999 (65% in 1998).

This dynamism has translated itself into a small increase in cable subscriptions, especially subscriptions to digital TV, which in June, 2000 became received in half a million homes (321,000 in December, 1999).

NC Numéricâble, Noos and FTC still control 98% of the digital subscribers to cable, with a 62% market share for Noos (20% for NC Numéricâble, 16% for FTC).

1.1.3 The ADSL Situation

On the French market, the ADSL technology remains dependent in its commercial expansion on the policy adopted by France Télécom. The French market for ADSL is still undecided. However, experiments are under way, especially in relation to video. For instance, there is the experiment being conducted jointly by LCI and France Télécom on the Rennes ADSL network which began in September 1999 and involved 400 homes. The experiment consisted in offering a range of video service packages, one of which was the option of being able to contact LCI digitally or "à la carte" from a personal computer.

1.1.4 The terrestrial digital television situation

In late 1999, a consultation of the main French market players was launched by the government in order to better define France's path to DTTV. Once completed, this consultation led to a new law, which came into force in the course of August, 2000.

The new law concerning Audiovisual transmissions covered a range of services including not only terrestrial digital television but also the reinforcement of public service television. The law made the following principal provisions:

- The creation of a holding company called France Télévision
- Reduction in the amount of time permitted for commercials on public television channels (8 minutes per hour starting from 1/01/2001 as against 12' at present)
- An end to the public channels' exclusive right to use TPS.
- A definition of the launch and operational conditions for terrestrial digital television services.

More specifically, as regards terrestrial digital television, the law provides:

- The allocation of the 36 terrestrial digital television frequencies (6 MUX for 6 networks) by the CSA. The CSA must promote the development of a free terrestrial digital television service
- In each existing national terrestrial television station, a channel must be allocated for the simulcast transmission of programmes in analogue format as well as another channel for launching new programmes
- Priority was to be given to allocating frequencies to public service television networks
- As for frequencies which are not pre-empted for terrestrial digital national networks, licences will be granted on a channel per channel basis (as opposed to multiplex per multiplex).
- A single company was entitled to accumulate a maximum of five permits to broadcast a terrestrial digital service
- A single company could not acquire both a national and a local permit
- It was forbidden to hold more than 49% of a terrestrial digital television service

There was an invitation for new players to tender, especially community television services

The broadcasting permits for terrestrial digital television were to last for 10 years, with automatic renewal for a further five years

The digital terminals used by the various service operators had to be inter-operable.

In view of these new terms of reference, the terrestrial digital timetable can currently be summarised as follows:

According to the CSA, the frequency planning programme for the six MUX will be spread over three years:

- By the end of the first half of 2001, frequency planning for the first thirty sites (37 million French people) will be complete
- By Christmas 2001, the first broadcasting permits for terrestrial national digital television will be issued
- By the end of 2002, frequency planning will have been completed. In terms of population coverage by late 2001, around 40 to 50% of the population will be covered by digital terrestrial transmitters, by late 2003 the figure should be 80% and in 2005 – 85%.

The first terrestrial digital television broadcasts should thus begin in the first quarter of 2002, at the earliest

Under the conditions imposed by law, the switch-off date for analogue television transmission is not likely to occur before 2010/2015.

The main players on the market were not very enthusiastic about this law. For one thing, it limits the broadcasting options of the specialist networks currently in existence on the terrestrial digital network, which are often controlled by the big French television groupings, because for many of them this would mean a change in the structure of their capitalisation if they are to comply with the law. Furthermore, it restricts their opportunities for developing a pay-TV service (and thus the possibility of a product offered by CanalSatellite and TPS) and is extremely challenging to the commercial TV networks such as TF1 and M6 as regards the advertising market.

Despite the arguments and the disappointment of the terrestrial TV market incumbents, DTTV in France has nevertheless been attracting attention, in 1999, notably via a series of technical DTT trials planned or under way such as:

The trial of two multiplexes being carried out in Brittany by TDF, which started in 1998 and was renewed in 1999. Trialling of a third multiplex is being considered

The two trials in Remiremont and Saint Dié to test low power in hilly and mountainous areas

The 6 month TPS' trial from its headquarters on UHF channel 38, testing the whole digital transmission chain

The 6-month M6 trial, also from its headquarters in Neuilly, testing the whole digital transmission chain using low power transmitters

The request made by France Television and Canal Plus for an authorisation to test DTTV transmission, over Paris for France Television and in Sannois and Dijon for Canal Plus.

1.1.5 Market development

By the end of 1999, 8 million French households (7.5 in 1998) had subscribed to, at least, one pay-TV service : 4.6 million to Canal Plus and 5.2 million to a multi-channel package (1.9 million had subscribed both to Canal Plus and another pay TV package).

Generally speaking, in 1999, French multi-channel packages have recorded good performances on the market. The satellite market segment observed a +29% annual growth in the total number of satellite household subscribers while cable recorded a 12% increase in its total number of subscribers and a very sustained growth in its number of digital TV subscribers (+46,5% or 100,000 new subscribers in one year).

The French digital Pay-TV market has therefore again enjoyed a relatively high growth rate both in terms of subscribers and revenues: at the end of 1999, it amounted to 2,689,624 subscribers (+ 31%) and in June 2000 it reached more than 3 million subscribers. It thus represented 51% of the total number of subscribers to a multi-channel package and 35% of the total French pay-TV market revenues (1,100 million Euros in December 1999).

The number of subscribers to digital satellite services has reached 2,369,000 (2,526,358 in June 2000) and a total estimated annual turnover of 1 billion Euros (756 million Euros in 1998, 409 in 1997). Though they recorded good market performance in 1999, cable digital services remain far behind digital satellite packages, both in terms of subscribers (321,000) and turnover (95 million Euros). However, since the beginning of 2000, digital cable TV had recorded a very promising growth in terms of subscribers because by June, 2000, the number of homes subscribing to a digital cable service had exceeded 500,000 (515,000 homes, to be precise).

In 1999, digital satellite services accounted for nearly 90% of French digital TV subscribers and 91% of digital pay-TV revenues. This "domination" can be explained by the continuity observed in CanalSatellite's and TPS' promotional and advertising policies. It is estimated that, alongside the regular promotional offers (free dish / price offer…), these two market players each invested more than 75 million Euros in advertising campaigns in 1999.

Multiple subscription is increasing among French DTH and cable households. The trend is translated into the consistent increase in the number of subscribers from the AB group. Besides, in December 1999, 59% of Canal Plus group French subscribers subscribed to both Canal Plus digital and CanalSatellite.

Consequently, a consideration of the number of subscribers reveals that the French digital TV market in June 2000 showed a total of 4.4 million subscriptions, (3.9 million in December, 1999). Table 2 shows the way the subscriptions were divided up between the various players.

Table 2 : Subscriptions to a DTV package in December 1999

	1999
Canalsatellite	1 371 672
Canal+ numérique	1 051 615
TPS	830 000
Absat*	400 000
NC Numéricâble	91 918
NOOS	157 000
FTC	64 000
Other cable operators	7 626
TOTAL DTV subscriptions	**3 973 831**

Source : Market players

* Cable + satellite subscribers

Despite the fact that the number of subscribers to digital television is increasing rapidly, the characteristics of TPS' and CanalSatellite's subscribers profiles did not really change between 1998 and 1999. They demonstrate that French digital pay TV households are younger than the national average[5] and consist of families with at least one child aged between 0 and 14 years[6]. They generally live in a small town of less than 20,000 inhabitants and have more TV, PC and video terminals than equivalent non-subscribers[7].

As a consequence of multi-channel package market development, specialist channels now can reach more than 10 million individuals.

The viewing share of specialist channels is therefore regularly increasing: 7.4% in 1999, 4.2% in 1998 and 3% in 1997. Although in homes receiving analogue TV the audience share for specialist channels is no greater than 5.1%, in homes receiving digital it is 31%. The most recent Mediamétrie survey showed that in general, digital households (home receiving a wider range of television services) watch slightly more television than those with access solely to analogue television. Consequently, in 1999, the total advertising turnover of specialist channels amounted to about 150 million Euros (94 in 1998), that is to say 4.5% of the total TV advertising revenues. A trend which reflects a certain increase in their advertising efficiency.

[5] 50% of CanalSatellite's subscribers are less than 50 years old. 35 years olds are over-represented in the TPS customer base.
[6] Families matching this criteria represent 70% of CanalSatellite's subscribers and 42% of TPS'subscribers (against 27% for the national average).
[7] Respectively 42% and 45% of TPS' and CanalSatellite's subscribers are equipped with a PC (compared with less than 20% for the national average)

Yet, general interest terrestrial TV still represents the core of the French TV services available:

70% of French households received only the six national channels in 1999.

Furthermore, according to Mediamétrie, the audience market share of the networks considered individually by digital household did not exceed 5%, 3.8% for RTL9, then 1,9% for Eurosport, 1.5% for Canal J or 1.2% for LCI. Audience market share of each of the other television networks was never more than 1%.

Nevertheless, French “alternative” television, which is mainly broadcast in digital standard, is becoming progressively significant. By the end of 1999, digital TV accounted for 13% of total TV market revenues (11% in 1998). Furthermore, according to a recent survey by the Institut français de Démoscopie-June 2000, 1.4 million French households intend to subscribe either to cable or satellite in the coming years.

Table 3: DTV platforms in France

Name of the service	*Ownership* *End of 1999/Early 2000*	*Launch date*	*No. of subscribers* *June 2000*
Canal Plus numérique	48.8%Vivendi 3.5% CDC 0.6% Société Générale	April 1996	1,111,837
Canal Satellite	66% Canal Plus 34% Groupe Lagardère	April 1996	1,434,109
TPS	25% TF1 25% France Télévision Etp (F.T et France TV) 25% Suez-Lyonnaise 25% M6	December 1996	905,000
Absat	50% MMP 40% C. Berda 10% JL Azoulay	December 1996	450,000
NOOS (ex Lyonnaise câble)	50.1% Suez Lyonnaise 49.9 % NTL* + Morgan Stanley	September 1997	*320,000*
NC numéricâble	28% Canal Plus 28% Exante * 42.5% France Télécom	April 1997	104,414
FTC	100% France Télécom	September 1997	*80,000*
Other cable-operator[8]	-	1998	*9,000*

* : foreign capital.

In italics : estimates.

1.1.6 Barriers to competition or market expansion

Barriers to competition

The launch of digital satellite TV in France has involved strong competition between CanalSatellite and TPS regarding film rights, since film channels appear to be the main determinant when TV households consider subscribing to a multi-channel package.

In light of this, TPS initiated legal action in 1998 against CanalSatellite in relation to the exclusivity rights that Canal+ acquires, covering both subscription pay TV and pay-per-view in respect of feature films that the group finances (co-production and pre-purchase). TPS claimed that it constituted abuse of a dominant position since:

> Under this condition a producer cannot pre-sell broadcast rights for pay-per-view to other TV operators9

[8] Vidéopole, Régies, SEM, Cuvelles…

These exclusive rights concern 80% of French feature film productions

Because of these rights, TPS' pay-per-view service, Multivision can only schedule north-American feature films.

In the first quarter of 1999, the French Competition Council decided that CanalSatellite was abusing its dominant position and that its co-production and rights pre-purchasing policy constituted a barrier to competition in the pay-TV and pay-per-view market. In August 1999, the Paris Court of Appeal confirmed the French Competition Council's decision. Henceforward, Canal Plus will no longer be able to prevent the producer of a film whose transmission rights it has pre-purchased from assigning the pay-per-view rights to any other operator. Furthermore, Canal+ was fined 10 million francs.

To summarise, if the "dominant" position of Canal Plus and especially of the Vivendi-Universal group on the French cinema and television market cannot be denied (See Table 4) and if it is logical to perceive this position as being a threat to competition, it would appear today that the French television market is opening up to more and more competition:

First of all, the year 1999 witnessed the increasing capability of TPS to challenge Canal Plus and Canal satellite on "all" fronts, i.e., first and foremost in the field of interactive media, then as regards cinema and finally as regards retransmissions of football matches. In the summer of 1999, TPS made the LNF an offer of 18 million francs (€275 million) for television retransmission rights to the D1 football matches normally acquired by Canal Plus. TPS was thus able to obtain an undertaking from the LNF to share the French Football Championship matches between the two competitors. Thus from late summer 1999, TPS was in a position to offer its subscribers a football-oriented package (Superfoot and Superstades on Multivision).

Furthermore, the new audiovisual law favoured the entry of new players in the terrestrial digital television sector.

[9] which is not relevant with the rules of feature films financing. In theory, a feature film producer generally seeks to maximise the financing of his project before going into production.

Table 4: Assessment of the Vivendi-Universal economic weight in the field of TV services, TV programmes production and audiovisual rights

Sector	Competitive positioning
Television	The only operator in the premium network (4.6 million subscriber base) Leader in satellite digital television (1.4 million subscribers as against 900,000 for the next-largest) Second in cable digital television (91,900 subscribers, as against 157,000 for the market leader) Third largest cable operator per number of subscribers to the entire service (672,447 as against 726,900 and 695,200 for the first two) Leader in the creation of specialist networks with 18 such networks of which 7 out of the 10 most watched and 11 out of the 20 most watched
Production and distribution of TV and cinematographic programmes/ catalogue of audio-visual rights	Leading cinema operator Leader in national distribution Leader in financial support for French cinematographic production Second-largest French producer of audio-visual product Leading animation producer Largest catalogue of French audio-visual rights containing 5,500 films and 6,000 hours of Canal+ television programming as well as the 4,000 films owned by Universal and 24,000 part of its television output Leading holder of rights over European football.

Source : IDATE

Barriers to market development

The barriers to market development mentioned in the previous report remain more or less valid for June 2000 :

Indeed, given that Canal+ currently finances 80% of French feature film productions, there is the risk of a decrease in price for rights paid by Canal+ (due to the loss of film rights exclusivity on PPV broadcasts). If the price paid by TPS to broadcast these films does not fully compensate for this reduction, then fewer French films will be produced, which may in turn have a negative impact on the subscription curve of the digital pay-TV satellite platforms in the medium term

Besides, the issue of service "continuity" and final user satisfaction remains real

- ABsat as well as the cable-operators, and, to a lesser degree, TPS and CanalSatellite, on the basis of their customer agreements, prevent the consumer from any legal recourse when one or several TV channels is removed from their product range without a decrease in the charge
- For instance, the fact is often mentioned that TPS has not really learned how to look after its customers. TPS's after-sales service to its subscribers is often criticised by them
- This lack of "customer care" could eventually constitute a barrier to market development.

However, it is probably in the area of digital terrestrial television that a certain number of obstacles to market development are most frequently mentioned by those involved. Their particular complaints are:

> The preference which the law gives to the development of free-to-air terrestrial digital television raises the question of financing, even if the reduction in the amount of advertising allowed on public networks opens a potentially rich seam of finance for these new services.
>
> Furthermore, in order to be distributed on the terrestrial digital network most of the existing specialist channels would have to change their capitalisation structure: specialists channels can be 100% owned by a single shareholder while a single company cannot own more than 49% of a digital (or analogue) terrestrial channel. There is no certainty that current shareholders of specialist channels will readily accept the change. Thus, the law favours the development of new French specialist channels, of which there are already many in existence. In view of the financial difficulties which the existing specialist channels are encountering, the problem of financing these new services becomes an even more serious one and consequently, the delicate matter of financing of the entire specialist television network sector. Out of the 49 specialist networks monitored by the CSA only 10 were in the black in 1999.

Finally, from the technical point of view, it would appear that in order to be able to receive terrestrial digital TV; at least 50% of the existing antennas for receiving ground-based television would have to be changed. This means that, if 36 digital terrestrial frequencies can be allocated to television services, the law does not seem to be taking this technical and economic reality into account, because it has not emphasised the need to encourage portability in such a context. It would thus appear that the cost of switching to terrestrial digital television for French households might turn out to be quite considerable (purchase or rental of a decoder and replacing the aerial). This situation could well hinder the expansion of the market.

1.2 Details of services

1.2.1 Number and type of services

At present, almost all the French television networks with national coverage are broadcasting digitally:

The French specialist channels are broadcast via satellite in digital form only though with the exception of TV5 which is transmitted as an analogue/digital simulcast. Channels are broadcast over cabel either in analogue or digital format.

The national land-based networks are also transmitted via satellite, usually as an analogue/digital simulcast.

Since December 1998, at least 10 new French-language specialist channels have been launched on the French market. This is representative of the continuous trend of specialist channel multiplication and hyper-segmentation experienced by the French TV market.

However, certain networks have disappeared or have “transformed themselves” into new networks. For instance, Canal Asssemblées has become LCP, RFM TV has replaced Nostalgie TV and Pathé Sport has replaced AB Sport.

If we exclude “promotional” channels and TV guide programmes, there are therefore more or less 80 French-language specialist channels, five of which are French versions of foreign TV channels (Bloomberg TV, Cartoon Network, TNT, Fox Kids and 13ème Rue).

Besides, the French TV market now numbers around 50 interactive TV services, most of which are permanent (24 in 1998). In fact, the range of interactive television services has expanded considerably in certain areas, in particular as regards financial services and on-screen banking, games, interactive shopping and voicemail services. Furthermore, the market seems to be developing towards the creation of services which are genuinely associated and synchronised with television programmes, such as, for example, the “i-sport” service on Eurosport, the home betting service linked to the Equidia horse-racing channel, the “Info Clips” service launched on MCM, the “Dico” [dictionary] launched on theCinquième, and the “impulse buying” services during variety shows .

Table 5: Structure of the French-language specialist TV market

Themes	*1998*	*1999*
"Barker" Channel / TV guide	9	≥10
"Mini" generalist	5	6
Childhood	n.a.	5
Entertainment	5	4
Information	4	7
Knowledge – Culture	13	15
Movie/ TV Fiction	14	18
Music	7	12
Pay-per-view services	2	2
Sport	7	7
TV- shopping	2	2
Others (Employment, Fashion, Health, Weather …)	8	8

The very progressive involvement of cable operators in the interactive field should also be noted. NOOS finally launched an electronic programme guide; on some of its networks, FTC offers an interactive game platform called LudiTV.

The second half of 2000 and beyond should see the launch of a relatively significant number of new specialist TV channels and interactive TV services. The continuing trend to create new services is partly the result of the prospect of launching digital television around 2001/2002. Consequently, no fewer than 19 new networks have already been announced as being in the pipeline (See Table 6).

Table 6: French specialist channel project

Promoters	Name	Themes
La Cinquième	Alix + 3 other projects in association with Arte	Labour market and Employment Education and Culture French Culture Culture world-wide
M6	M6 Famille	Programmes for the family
M6 / France Télécom	Multi-TV	Multimedia
TF1	TFX LCF	Programmes for young adults Finances
Arte- Sundance Channel	-	Cinema
Arte	Sagesse	
AB group	-	Senior citizens television
France Television	5 projects	Multiplexed version of France 2 and France Information, sport, education, art and cultural events
Allo Ciné	Allo Cine TV	Movie previews
CanalWeb	Canalweb TV	Specific interest programmes
Lagardère	“Elle” Mini -J	Programmes intended to the same audience target as that of the "Elle" magazine Programmes for 2-7 year olds

1.2.2 Details of the DTV offers

Satellite DTV offers

TPS and CanalSatellite packages each offer a full range of specialist channels (films, children, documentaries, music, sport, etc.). Most of these channels are exclusive to one satellite package, with the few exceptions being some of the AB channels (included in TPS' "Passions" and CanalSatellite's "Découverte" options) or, for instance, Eurosport which is offered by the two bouquets. Subscribers to these pay-TV packages also have non-exclusive access to numerous free digital satellite services, such as LCP, Game One or Fashion TV.

At the end of 1999, TPS numbered 131 TVstations of which 40 or so were French TV channels, 45 radio services and 35 interactive TV services. In 1999, TPS still organised its offer around 3 main bundles ("Tout TPS", "TPS cinéma" and "TPS Thématique"). By gaining access to the retransmission of D1 football matches, TPS also began developing its "Super TPS" package in September, 1999. This includes programmes from the Superfoot network. Besides 6 options are now available : "Passions" (AB TV channels), "Rhythms" (4 US music TV channels), "Music Choice" (Radio services), SIC (the Portuguese generalist TV stations) and "Arabesque" (8 Arab and Lebanese TV stations) and "Superstades" (a choice of 6 D1 matches every evening during the championship and a selection of the best D2 matches).

Since June 1999, TPS has also multiplied its promotional offers (free dishes, "The whole TPS package for140 FF instead of 155 FF/month for 6 months", "Free Superstades for the 1999/2000 for anyone subscribing before 31/09/99").

At the same time, CanalSatellite services amounted to 63 French-language and 58 foreign TV channels, plus 45 radio stations and about 20 interactive TV services, most of which are associated to specialist TV channels.

Since April, CanalSatellite has slightly increased its original pricing offer "CanalSatellite Thématiques" (30 TV channels) from 16.8 Euros/month to 18 Euros/month. The platform also offers "CanalSatellite Grand Spectacle" (30 TV Channels + 4 Movie Channels + Disney Channels) for 24 Euros/month (22.7 Euros/month in 1999) and 6 options priced between 4 and 12 Euros/month (Découverte, Chasse-Pêche-Nature, Classique Jazz, Téléchargement, Cinéma, Disney). Canalsatellite further offers its subscribers the option of subscribing to Canal + digital and thus benefiting from a special promotional price.

As in 1998, CanalSatellite's promotional offers have consisted of massive TV advertising campaigns and a "free-dish" offer.

Generally speaking, the French satellite DTV offers differ from the cable ones in that the two dominant platforms put emphasis on interactive TV services using OpenTV or Mediahighway technologies. Now, in addition to their EGP and their PPV services, the two dominant satellite platforms offer real interactive direct marketing services, transaction services, information services and interactive games accessible via the TV set. An increasing number of TV channels also develop their own interactive services (Canal Jimmy, Eurosport, Fox Kids, MCM, Voyages, etc.).

This position seems to be motivated by the threat presented by the multi-service capacity of cable, though the French cable infrastructure is still in the very early stages of Internet and telephony services development.

This last year has therefore been noteworthy for the launch of new interactive TV services via satellite.

During the course of 1999, Canalsatellite first launched Pikto Rezo, the first networked television action game, as well as Mini Mail, the first e-mail service between subscribers. Canalsatellite currently offers eight games and brings together more than 2 million players every month.

New services have been offered to subscribers since January, 2000 especially:

- Ability to consult a bank account, prices of stocks and shares and the development of the market into a complete service entitled "Canalsat Finances" which includes banking products from CIC, Société Generale, Crédit Mutuel de Bretagne, Crédit Agricole and BNP banks
- Economic information with Tribune TV
- Home-betting, Paris PMU, since April, 2000
- A shopping mall which has expanded with the introduction of a new store, added at the same time as the launch of the Liberty Channel network.

For the start of the 2000 school year, Canalsatellite intends to launch a new interactive games platform entitled "Play Jam". The short-term aim of Canalsatellite in the field of interactivity is to offer more and more interactive services that are genuinely synchronised with the network television programmes it broadcasts.

The TPS interactive television services have also begun to blossom with the successive launch of the following new services:

- AFP Infos (information and advice service)
- "TV"versions of websites such as "Lastminute.com" (discount travel), "Consors.fr" (on-line estate agents) or "GamePlay.com" (news about video games, demos, and a selection of games). TPS's policy as regards interactive services seems to be aimed at repackaging Web site content and multiplying the number of its agreements with "dot.com Companies"
- Ludi TV which is the pay-TV platform for 20 interactive games (sport, adventure, reflexes, skill, general knowledge) which offers one free game a month. This platform is offered in partnership with Ludiware, Ludi TV's production company

TPS Mail, which makes it possible to send and receive e-mails from the TV set, and which is available to anyone with an internet address. The messages can take the form of a fax, a mobile phone message or a virtual postcard.

In the short term, TPS is considering launching a PMU home betting service (the launch is planned for September, 2000) as well as an internet access service, probably in partnership with Wanadoo, before the end of the year 2000. Furthermore, as in the case of Canalsatellite, the synchronisation of the interactive content with TV programmes is well under way at TPS.

Table 7 : Satellite: Structure of the digital TV French-language offer (June 2000)

Channel type	*Number in type*	*Comments*
Free to Air	20	A majority of “promotional” channels France 3 Ouest, TV5 Europe, Fashion TV, AB sat Passion Promo, AB sat Promo, AB Moteur, Credit Agricole TV, LCP, TPS Accueil, Arte, Kiosque Promo, Game One, La Cinquième, Le sésame C+, Grand Tourisme, HOT le Grand Magasin, KTO, Liberty TV Wishline, No Zap
Pay-TV	71	On Canalsatellite, “Thematiques” (specialist channels) constitute the main package. They consist of 35 television stations. TPS “Théma” (33 TV stations) and/or “Cinéma” (4 stations) constitute the basic package. The subscriber then has the choice of options/packages after taking out the basic subscription: - On Canal satellite, there are seven optional packages (inc. Canal+ digital) - On TPS, there are five optional TV packages apart from those in the AB group which are exclusively foreign stations. In both cases, there is no limit to the options which can be taken up. In addition to the options offered by Absat (“Passion” and “Découverte”) on the two main satellite platforms, there is a still limited but growing number of television networks which are broadcast on both Canalsatellite and TPS (LCI, i-TV, Eurosport, etc.)
Premium pay TV services	1	Only Canal+ digital constitutes a genuine Premium service.
Pay-per-view	2	“Multivision on TPS” and “Le Kiosque” on Canalsatellite are accessible as soon as the viewer subscribes to the basic package.; Both services also offer films, and sporting events or repeat broadcasts.

Interactive TV services	≥ 50	The packages offered by both platforms also include information and advice services, share-dealing and shopping services, as well as games. With the exception of the LUDITV package on TPS, these services are usually free. When the response option is activated, the subscriber has to pay for telephone connection time, of course. In June, 2000 TPS had 35 permanent interactive services and CanalSatellite had about 20..
EPG	2	On both TPS and Canalsatellite, the programme guide is part of a second version of the e "contextual" information service about the programmes (the "Info" key / the "Pilot" key)
Internet services	Planned for 2000/2001	Currently, neither TPS or Canalsatellite offer Internet access via the television. TPS is going to be offering such a service from the end of 2000. Canalsatellite has announced a package of this type during the course of 2001. On the other hand, both competitors offer an email service (TPS Mail et Mini-Mail)

Cable DTV offers

In June 2000, the French cable infrastructure still mainly provides TV services.

All three major cable operators try to differentiate their TV offers from those of the satellite offerings by creating packages that were as comprehensive as possible thanks to the simulcrypt agreements they have with most of the specialist channels available on the satellite platforms.

Though they have been implementing digital offerings to their subscribers using different strategies, since the end of 1999, these three main competitors have adopted the marketing concept first developed by France Télécom Cable. Indeed, in the DTV field they now all have opted for a marketing strategy in modular form.

In September, 1998 France Télécom launched a variable TV package aimed at its entire subscriber base. "Modulo Câble", which is still available over a limited number of FTC's networks is based on a "Pick-'n'-Mix" principle and consists of three packages:

- "Modulo Direct" which allows a personal choice of 13 to 20 TV channels and can be provided in analogue or digital standard
- "Modulo Cartes" (36 TV channels)
- "Modulo Cinés" (20 TV channels).

At the end of 1999, with "Modulo Câble", 60% of FTC's new subscribers are "digital subscribers" (compared with 15% previously).

In November, 1999, NOOS (formerly Lyonnaise Câble) followed suit by offering “Etoiles” packages, which would enable subscribers to formulate their own packages. According to NOOS, a strong increase in digital subscribers had been noted over the year (+50%) and this was explained mainly by the introduction of this new marketing strategy, but also by improving its TV offering with the arrival of 15 new channels.

Finally, NC numéricable also developed an “à la carte” channels package for its digital service which enables the subscriber to choose the channels he/she prefers, which can be changed on a monthly basis.

Hitherto, given the very limited number of cable digital subscribers and the problems related to the network capacity management, the French cable operators have not been really involved in the development of interactive TV services.

After network digitisation, the investments of the French cable operators have been primarily dedicated to Internet access. NOOS introduced computer access to the Internet via cable on six of its larger sites. Since June 1999, Internet access has also been available on 10 FTC networks while NC Numéricâble has announced that high speed Internet access will be available for 50% of the cable households it controls.

Thus, though Mediahighway and Open TV are respectively incorporated in NC Numéricable and FTC or Lyonnaise cable’s digital STB, only a very few interactive TV services are available on the French cable networks. The ineractive LudiTV is, in fact, available on some of the FTC networks. However, NOOS appears to be the most advanced as regards interactivity. Since May, 2000, NOOS has implemented a video portal called “Nooszone” which provides access to a range of interactive television services and in particular to EPG and “Telescope”, “Noostrafic” (road traffic), “MetéoExpress” (weather), “AFPInfos” (information) and “A vendre, A louer” (classified ads).

Table 8 : French DTV Packages: Example of pricing schemes

Channels / Package	€ per month*
Canal + digital (Canal+ 16/9, Canal + Bleu, Canal+ Jaune, Canal+ vert)	
Minimum (for Canalsatellite subscribers only)	24
Maximum	28
Canalsatellite	
Minimum (“Thématiques”) (theme channels)	18
Maximum (“Grand Spectacle” + Canal+ Digital +”Musique” + “Terroir” + “Multimédia” + “Découverte”)	77
TPS	
Minimum (“TPS Cinéma” or “TPS Thématique”)	15
Maximum (“Super TPS” + “Superstades”+ “Passions”+ SIC+ “Arabesques”+ “Rhythms”+”Music Choice”)	69
Absat	
Minimum (“AB Digital”)	12
Maximum (“Tout AB sat”)	21
PPV services**	
Multivision	
film, documentaries, animation, tennis, golf	4
Soccer, rugby, boxing	5
Theatre, concert	6
“Superstades”	8 (137 for the season)
Le Kiosque	
Animation, documentaries	4
Films, TV Fiction	4 to 5
Music Shows, Cultural events	6 to 8
Soccer	8 (145 for the season)
F1	8 (79 for the season)

* decoder rental excluded

** the prices indicated represent the price per session

1.3 Operators and the market structure

1.3.1 Development of market organisation and structure

As mentioned above, the year 1999/2000 saw the continuation of the restructuring process in the cable distribution sector and the entry of powerful foreign elements into the market. These included UPC, NTL, Morgan Stanley and Exante. The entry of these new players revitalised investment and competition in the sector, and hopefully, the development of digital cable television.

With the rapid market penetration of CanalSatellite and TPS, the French specialist TV channels also strengthened their competitive position in terms of revenues and profit. Encouraging performances produced by what amounts to a limited number of specialist television channels continues to promote the creation of new channels (a dozen in 1999). If this dynamic observed in the television channels continues, the existing French specialist channels risk seeing their turnover "automatically" decrease with the increase in competition and the hyper-segmentation of the cable and satellite packages line-up.

With increasing competition in the domain of specialist channel production, changes in the relationships between the specialist TV channels and the French cable operators are also taking place. The conflict which occurred between FTC and Planète illustrates this development quite clearly. In October, 1998, FTC decided to withdraw Planète from its basic level in Biarritz and to replace it with Odyssée, (it had to pay Planète FF 5.15 per subscriber/month while Odyssée only costs FF 3 per subscriber/month). In June 1999, FTC withdrew Planète from five of its networks. In response to this Planète initiated legal action against FTC claiming that FTC's initiative will result in a negative impact on its turnover and on its capacity to support the French documentary production market. In September, 1999, the Paris court of appeal rejected an application by Planète, since in the court's view "the appearance of new cable channels was of such a nature as to favour competition" and Planète had not shown that viewers would be adversely affected by this change ".

In 1999, following Bolloré's speculative venture, Vivendi and Pathé temporarily merged. In September, 1999, Jérome Seydoux through his Fornier holding company, renamed Pathé, purchased the cinema and specialist channel assets of Pathé for FF 34 million Francs (Travel, Comedy! and Pathé Sport) as well as certain newspaper assets (Libération) and sports assets (Olympique Lyonnais). In exchange, Vivendi recovered 17% of its share in BskyB. In fact, in July, 1999, Vivendi had bought out the Granada and Pearson groups' shares of BskyB. Thus, by the end of 1999, Vivendi became the holder of a 25.4% share in BskyB (a blocking minority).

The Lagardère Group (Hachette) which was aiming to reinforce its position on the French TV market finally concluded a deal with Canal+ in mid-1999. The Largardère Group acquired 34% of the capital of Canalsatellite and 27.4% of Multithématiques. The group spent 70 million francs on the purchases. Canal+, for its part, acquired 1.3% of the

Lagardère Group. The agreement further resulted in the creation of three new entities dedicated to increasing the presence of the two partners on the international scene.

1.3.2 Agreements between satellite operators, cable operators and DTT operators

AB Sat, the smaller satellite DTV service provider, having failed to establish its own subscriber base, and with insufficient resources to rent and subsidise the decoder, has been looking for agreements with its two main competitors, CanalSatellite and TPS. A simulcrypt agreement has been reached with CanalSatellite. A similar agreement between TPS and CanalSatellite seems harder to reach, as both offers compete more directly.

The cable operators, who will tolerate no competition within their franchises, initially chose to remain neutral in the competition between the three satellite packages, willing to propose “ the best ” of the satellite packages over cable.

With regards to the competition between several children's, sport and music channels to obtain carriage, cable-operators tend to choose among all proposed channels. However, as they need to differentiate their offer from those of the satellite operators, the cable operators try to conclude as many simulcrypt agreements as possible with specialist channels.

Cable-operators include the channels in their own line-up, under their brand names, and retain subscription management, even for the movie channels. However, one exception is the Canal+ channel, which benefited from a “must carry” provision as a terrestrial analogue channel and used to manage directly its subscribers over cable. Due to its market power, Canal+ also keeps control of the subscribers to its digital multiplexed channel carried over cable, thanks to Simulcrypt agreements with two of the three major cable-operators, NC Numéricâble and France Télécom Câble.

1.3.3 Market integration

Despite the strong vertical integration process which has taken place between service provision and television channel production, strong international brands (such as Disney or Fox,) as well as independent TV service providers, such as FUN radio (50% of FUN TV), Infogrames (50% of Game One), Equidia (100% France Courses) and the Amaury group (100% of L’Equipe TV), have managed to enter the market.

However, few truly independent TV channels whose financing is totally private and not supported by a multinational group of communication such as Fashion TV or OMTV also offer specialist programmes.

The French television market, especially the digital market, thus remains largely dominated by two large groupings, all of them involved to a certain extent in the wider field of communications.

Indeed, in addition to the AB group, Lagardère-Hachette and Pathé[10] groups are also becoming inevitable French market players in the TV field.

Following its agreement with Canal+, the Lagardère Group which owns MCM, MCM Afrique, CanalJ, the Météo chain, Muzzik and Medecine Plus, entered into a joint venture with Multithématiques to create new specialist channels and a new company (51% of which was owned by Lagardère and 49% by Canal+) whose aim was to create interactive services for the stations. A third company is 51% owned by Lagardère and 49% by Canal+ and is responsible for managing the supply of programmes for the existing specialist channels.

Now that it has regained its independence, Pathé seems to want to position itself more as a supplier of content and producer for the networks, like the independent group AB.

In June 1999, Pathé already owned 22.5% of “Comédie!”, 51% of “Pathé Sport” (formely ABsport) and 100% of Voyages; Pathé is now involved in running the “Olympique Lyonnais” football club TV station. Besides Pathé enjoys strong competitive advantages with its interests in the domain of film and TV production, and catalogue of audio-visual rights.

Furthermore with the Vivendi- Seagram-CanalPlus merger, the French communications market has seen the emergence in the course of 2000 of a major player involved in all of the sectors of which the market consists. The new Vivendi Universal conglomerate is present in the music, television, production, distribution and audio-visual rights management sectors, as well as in telecommunications, publishing and the internet.

The merger will only become effective in Autumn, 2000 and the operation is still subject to the approval of the shareholders, Vivendi shares being quoted on the New York Stock Exchange, examination by the regulatory body and the various approvals required from the European Union, the United States and Canada.

If Vivendi Universal indisputably occupies a central place in the media sector in France, it must be emphasised, however, that the main characteristic of the merger is that the activities of each of those involved complements the others. Vivendi and Seagram are both involved in different activities, and the merger of these activities does not reinforce their positions in any of the sectors in which they are present, but simply enables them to present a vast range of activities and a complete range of content. The merger would thus not appear to have serious repercussions on the French market in the sense that it will not translate itself into the creation of new leaders in certain niches of the market. The only sector that is seeing a real reinforcement of its weight in France is that of audio-visual rights management because the extensive catalogue of Canal+ will be added to the already large Universal catalogue. Similarly, as regards film distribution for cinemas, the new set-up will be occupying a key position due to the addition of the forces of UGC Fox Distribution and Universal Pictures. In both cases, this merger contributes to the reinforcement of the leadership position which Vivendi already held.

As regards television, music publishing, the Internet and telecommunications, there will unlikely be much change from the previous situation, except as regards the already numerous channels belonging to Canal+ to which Seagram’s only French-language channel (*13ème Rue*) will be added.

[10] Pathé is mainly positioned on film distribution and exhibition industries

Table 9 : Main TV market players' participation in specialist TV channels capital

	Control)
TPS	Cinéstar1, Cinéstar2, Cinétoile, Cinefaz, Teletoon, Infosport, Multivision
TF1	LCI, Odyssée, Shopping Avenue, Eurosport France, TV Breizh
M6	Série Club, TEVA, M6 Music, Club Teleachat
National Public TV channels	Festival, Histoire, Mezzo, Regions
Canal+ Group	Canal Jimmy, Planète, Cinecinéfil, Cinécinemas, Cineclassics Seasons, C:, Spectacle, Eurosport, Comédie!, Demain, Le Kiosque, i-TV
ABsat	RTL9, AB1, La Chaine Histoire, XXL, Mangas, Encyclopedia, Automobile, AB Animaux, Musique Classique, FIT TV, Chasse et Pêche, Escales, Nostalgie la TV, Action, Polar, Rire, Romance, Cinepalace, Onyx TV

1.4 Technical issues

1.4.1 Decoder issues

As regards DTV decoders, no major events can be reported for the 1999/2000 year. Information on that subject can be summarised as follows:

French DTV service operators continue to promote the rental of their specific STB. However, the start of the 2000 academic year will see the direct in-store sale of the PACK TV/Internet (decoder+ modem) which will make it possible to use the "TV+ Internet access via the TV set" package offered by NOOS

Direct-sales of DTV decoders to the consumer are therefore negligible even if some manufacturers such as Echostar or X-Com have launched "universal"[11] DTV STB in France

ABsat's decoder is being progressively withdrawn from the market, since ABsat is stopping direct marketing of its STB and has dropped any marketing actions dedicated to its own promotion

Canalsatellite plans to launch a new decoder based on MHP technologies (the Net-top-box) in 2001. TPS has not made any announcement in that respect

Regarding APIs, although TPS and CanalSatellite do not use the same system, they both act to "open" the market for interactive services technical design and development. Indeed, with the help of TPS, IDP has developed software that allows advertisers and other facilities to produce and develop their own interactive applications using OpenTV.

[11] That is to say, which offer a Multicrypt solution with a PCMCIA interface and Viaccess or Mediaguard module

On the other hand, NPTV is the first company to obtain from Canal+ a Mediahighway license to develop interactive TV services

The new audio-visual law requires the digital terminals used in France by the various terrestrial broadcasters to be inter-operable. Within a two-month period from the date of issue of permits to use the various frequencies, the service-providers must have entered into the necessary agreements, under fair, reasonable and non-discriminatory conditions, to ensure that their programmes can be received by any type of digital reception terminal.

1.4.2 16:9

The wide-screen French market was and still is one of the most important in Europe.

Table 10 – French households equipment rate in 16:9 TV Set

1993	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
0.2%	0.5%	0.9%	1.4%	2.1%	3.3%	5.0%

Source : GFK, 2000.

In 1999, the household provision rate in 16:9 TV sets represented around 5% of the households with TV sets. Gradually the household provision rate increased. Today, France takes the third place in Europe after the Netherlands (number one) and the UK (number two).

Four main factors explain the advance of the French market in comparison with the other markets in Europe :

wide-screen broadcasts were quickly available

The advantage for the use of D2 MAC as the wide-screen transmission standard was that this technology was not affected by the delays in the introduction of PALplus. Thus, the spread of 16:9 was possible as early as 1993.

wide-screen TV set prices have “rapidly” fallen

In France, the prices of the less expensive 16:9 D2 MAC sets have “rapidly” fallen to the level of « High End » 4:3 sets. Today, wide-screen receivers prices are now less than 6,000 francs. This is comparable with high end 4:3 TV sets. For the same price, the consumers choose the more advanced technology.

consumer confidence in wide-screen television became established with the development of satellite (digital) Pay-TV.

The development of (digital) pay-TV by satellite is probably also partly at the origin of the (relatively recent) infatuation of French households for the wide-screen format.

Thanks to the launch of digital satellite platforms, the numbers of hours broadcast in 16:9 has more than tripled between 1997 and 1999, jumping from less than 10,000 hours to about 30,000 hours per year in 1999.

Beginning in 1998, a new 16:9 offer appeared : in addition to Canal Plus and Cine-Cinemas 1 which is part of Canalsatellite's digital package, TPS' and some cable operators' digital TV service package offer programmes in 16:9 format.

On TPS, the main national terrestrial TV stations (TF1, France 2, France 3 and M6) propose programmes in 16:9 format. 16:9 also concerns the cinema theme channels which TPS took over (Cinestar 1 and 2, Cinefaz and Cinétoile) as well as Multivision, the pay-per-view service, whose 16:9 offer is also available through some cable networks. In effect, the 7th channel of Multivision is devoted to 16:9 broadcasts.

DVD market development

Since 1998, the supply of DVD titles offer consumers a large number of films from recent movies. Over 730 titles were edited in DVD in 1999, compared with 2,238 titles edited in VHS, which reveals the already significant weight of the DVD supply on the video market. DVD was launched only recently, but 360,000 households were already equipped by the end of 1999. A significant part of them is also equipped with 16:9 TV sets.

Thus the DVD market development and the French satellite DTV package operators have allowed the public to appreciate the benefits of the 16:9 format. Thus for a certain category of French consumers, it now is important to acquire a 16:9 TV set.

Over the years 1998/1999, the market increased quickly. The increase rate was more than 70% in 1998 and nearly 60% in 1999 whereas over the 1993-1997 period, the average annual growth rate had been 40%. In 1999, the 16:9 share as % of CTV total sales thus was 11% in volume and 27% in value.

In 1999, the French demand for 16:9 TV sets seems to have concentrated mostly on the larger sizes. 58% of the units sales are 27"-29" models. Besides, in 1999, the share of "+29'" models increased to 34% to the detriment of the smaller models (principally 24"). The French 16:9 TV set market thus experiences a continued "sustained" growth in sales.

According to GFK's forecasts the market should again increase this year to reach 581,000 units, that is to say an increase of 46.3%..

The effort of intense promotion as well as the evolution of DVD toward a mass market, the increasing popularity of the concept of Home Cinema, the retailers' resolve, lower prices, and a renewed commitment by TV stations to foster 16:9 observed since 1998/1999 allow one to think that the middle-to-high end market segment will very soon be entirely converted to the 16:9 format.

There remains however one large grey area: what will the programming policy be for the digital terrestrial channels ? Digital terrestrial TV will grant access to all households, not only to those that subscribe to a pay-TV offer. In the middle term, it could have a significant impact on the audiovisual consumption of the households. But today, the strategy of potential digital terrestrial TV operators, as far as 16:9 is concerned, remains practically unknown.

1.4.3 Portability

No clear decision has been announced as regards the portability of reception. According toTDF's engineers, 40% of households will benefit from portability. Extending portability up to all population covered by DTT would require a 200% increase in power in the relay transmitters a tenfold increase in the number of transmitters and no decision has been made so far in that respect.

1.5 Conclusion

The French DTV market has again shown real dynamism in 1999. With a 30% growth rate, (that is to say nearly 2.7 million digital subscriptions[12]) and revenues getting over one billion Euros, (1,100 MEuros), the French digital pay-TV market certainly ranks first at European level with a TVHH penetration rate of 12%.

Besides, the rapid development of CanalSatellite and TPS, this year the DTV offer of the French cable operators will have, no doubt, also contributed to this performance.

On the market segment of DTH satellite reception, TPS' success and ability to exist despite Canal Plus' market strength demonstrates that valuable strategic choices have been taken. In particular, TPS' capability to obtain a share of TV soccer rights as well as to offer films of interest through legal actions and discussions with professionals in the cinema industry, demonstrates that overcoming the advantage of the first mover is possible in the DTV domain.

As regards the cable sector of the market, the trend among all those involved has been to create more and more tailor-made packages, showing that cable can differentiate itself from satellite even as regards television services. The current investments will contribute to rendering this medium more and more attractive in the short and medium term, especially with the development of a "bundle" offer combining TV service, Internet access and telephone.

The dynamism of the digital TV market has also in part taken the form of additional specialist TV channels, which now number 140 or so and achieve a 7.4% viewing share. The development of interactive television services has also been very significant. In June 2000 this market covered around 50 services and was received in 2.5 million homes.

But this last year has experienced the final adoption of the new Audio-visual Law and debates regarding the operating conditions for the new terrestrial digital television services that it defines.

Indeed for certain market players, this new law partly jeopardises chances in the medium term of maximising return on investment. Although the DTT strategies of the different market players are not clearly known, in certain cases initiatives for launching a Pay-DTTV platform seem to already be discouraged.

Clearly, the content of this new law has come as something of a surprise to those players already on the scene and the market structure and economic model it assumes do not at first glance appear to be easy to implement. It is a praiseworthy aim to promote free-to-air digital terrestrial television, but will advertising generate sufficient funds to finance the new services? All the suppliers of private national television services favour a cable and/or

[12] See note 3

satellite digital television platform and will be faced with difficult choices to make. For example, should they refrain from developing new terrestrial digital services and give an opportunity to new entrants to better compete in their basic operations or should they enter the terrestrial market.

It is therefore probable that:

- The sector will experience new movements of capital in the coming months, which will involve the shareholdings in the specialist television channels
- The question of financing new terrestrial digital television services, and more generally specialist television channels, will be at the centre of the discussions in the short term
- Research and implementation of new economic models based on the opportunities linked to interactivity will become more and more frequent in the field of direct marketing, brand-name marketing or e-commerce
- The digital television cable and satellite platforms will try to gain maximum profit in the years 2000/2001 in order to increase their penetration levels and from 2001 they will be competing strongly with the terrestrial digital television sector.

2. Key figures for the French market

2.1 Country fundamentals

	1994	1995	1996	1997	1998	1999
Population (millions)	57.9	58.1	58.4	58.8	58.9	59.1
Households (millions)	22.5	22.7	22.9	23.2	23.6	24
GDP (in Euros billions)	1041.1	1181.8	1212.2	1253.9	1305.7	1344.4

2.2 Equipment

	1994	1995	1996	1997	1998	1999
TV households (millions)	21.1	21.2	21.5	21.8	22.2	22.7
TV households (% of total households)	93.80%	93.40%	93.90%	94.00%	94.10%	94.6%
TV Households with 2 TV sets or more (millions)	7.2	7.4	7.6	8	8.25	9.4
TV Households with 2 TV sets or more (% of TV Households)	34.10%	34.90%	35.30%	36.70%	37.20%	41.3%
TV Households with 16:9 Television sets (millions)	0	0	0.3	0.5	0.824	1.2
TV Households with 16:9 Television sets (% of TV Households)	0.0%	0.0%	1.4%	2.3%	3.7%	5.3%
VCR Households (millions)	14.1	14.6	15.5	16.1	16.5	17.3
VCR Households (% of TV Households)	66.80%	68.90%	72.10%	73.90%	74.30%	76.2%
Digital STB Households (millions)	0	0	0.3	1.2	2.058	2.690
Digital STB Households (% of TV Households)	0.00%	0.00%	1.40%	5.50%	9.30%	11.8%
IDTV Households (millions)	0	0	0	0	0	0
IDTV Households (% of TV households)	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%
Digital Households (millions)	0	0	0.3	1.2	2.058	2.690
Digital Households (% of TV households)	0.00%	0.00%	1.40%	5.50%	9.30%	11.8%

2.3 Television market estimates

Millions Euros	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Analogue TV Market						
Licence fees	1,716	1,855	1,935	1,857	1,919	2,011
Advertising	2,357	2,548	2,660	2,793	2,972	3,239
Subscription	1,509	1,655	1,801	1,694	1,647	1,919
Total analogue TV	5,582	6,058	6,396	6,344	6,538	7,169
Digital TV Market						
Licence fees	0	0	0	0	0	0
Advertising	0	0	0	0	0	0
Subscription	0	0	76	444	823	1,099
Total digital TV	0	0	76	444	823	1,099
TV Market						
Licence fees	1,716	1,855	1,935	1,857	1,919	2,011
Advertising	2,357	2,548	2,660	2,793	2,972	3,239
Subscription	1,509	1,655	1,877	2,139	2,471	3,018
Total TV market.	5,582	6,058	6,472	6,789	7,361	8,268

*"**Public funding**" comprises grants and licence fees;*

*"**Advertising**" also includes sponsoring expenditures*

*"**Subscriptions**" covers subscriptions to the basic multi-channel package as well as subscriptions to Premium pay-TV services + PPV .*

2.4 Details of the subscription-TV market

Cable TV

	1994	*1995*	*1996*	*1997*	*1998*	*1999*
Home passed (millions)	5	5.4	5.9	6.6	6.99	7.227
of which digital (millions)	0	0	0	3.5	4.6	5.8
Home passed (% of TV households)	0	0	0	30.3%	31.5%	31.8%
of which digital (% of TV households)	0	0	0	16.1%	20.7%	25.6%
Analogue Basic Subscribers (millions)	1.3	1.6	1.9	2.1	2.331	2.545
Digital package subscribers (millions)	0	0	0	0.1	0.219	0.321
Analogue Basic Subscribers (% of TV households)	6.2%	7.5%	8.8%	9.6%	10.5%	11.2%
Digital package subscribers (% of TV households)	0.0%	0.0%	0.0%	0.5%	1.0%	1.4%
Total Câble	1.3	1.6	1.9	2.2	2.55	2.86602

Satellite TV

	1994	1995	1996	1997	1998	1999
Satellite households (millions)	0.7	1	1.3	2.5	3.26	3.92
Satellite households (% of TV households)	3.3%	4.7%	6.0%	11.5%	14.7%	17.3%
Satellite subscribers (millions)	0.2	0.3	0.5	1.2	1.838	2.369
Satellite subscribers (% of TV households)	0.9%	1.4%	2.3%	5.5%	8.3%	10.4%
of which digital (millions)	0	0	0.3	1.1	1.838	2.369
of which digital (% of TV households)	0.0%	0.0%	1.4%	5.0%	8.3%	10.4%

Terrestrial TV

	1994	1995	1996	1997	1998	1999
Analogue Pay-TV services (millions)	3.5	3.9	4.1	4.2	4.3	4.6
Analogue Pay-TV services (% of TV households)		18.4%	19.1%	19.3%	19.4%	20.2%