



# **Assessment of the Member States measures aimed at fulfilling certain general interest objectives linked to broadcasting, imposed on providers of electronic communications networks and services in the context of the new regulatory framework**

## **Country profiles**

by Eurostrategies

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The country profiles presented in this report are based on interviews of key players within each country and on desk research undertaken during the second and third quarters of 2002. These country profiles were completed in October 2002.



# Belgium

## 1 Broadcasting in Belgium

### 1.1 The market

Belgium is, with the Netherlands, the most densely cabled country of the European Union with a total of 93 percent of all households, 3.86 million, receiving their television broadcasts by cable. This is the equivalent of 97 percent of all tv households.

In contrast, the number of households receiving tv broadcasts by satellite is about 160,000. No satellite broadcaster has acquired performers' or authors' rights for the Belgian market. This means that Belgian households seeking a satellite service must subscribe to one in neighbouring France or the Netherlands. The rest of the satellite market is made up mainly of receivers for broadcasts from countries of origin of migrant communities (Turkey, Morocco, Albania, etc).

Attempts by Belgium to introduce an annual municipal tax on satellite receiver dishes (allegedly on aesthetic grounds) were overruled by the European Court of Justice<sup>1</sup>. The level of the tax was curiously close to the price of an annual subscription to a cable tv service.

Only the public broadcasters, RTBF (in French) and the VRT (in Dutch) broadcast over-the-air<sup>2</sup>.

Digital pay tv is offered over the cable by Canal+ in both the French and Dutch-speaking parts of the country. Canal+, already present on the French-language market, entered the Flemish market when it took over NetHold, the previous pay tv service provider in Flanders. Canal+ has about 340,000 subscribers, split almost evenly between the French-speaking and Flemish communities. A number of cable operators offer digital bouquets of their own.

A number of individual cable operators provide internet access and data services, while in Flanders, local cable operators have set up a joint company, Telenet, to offer internet access and voice telephony as well as multimedia services to households and small businesses. The US Callahan group announced it was taking a 54 percent stake in Telenet in spring 2001, but this was reduced in March 2002 to 24 percent.

At the end of 2001, Telenet had 195,434 internet subscribers and 204,880 subscribers to its telephone service, which is the equivalent of about 10 percent of the Flemish market for voice telephony.

According to cable operators' representatives, about 80 percent of the total cable network in Belgium has been upgraded for two-way communications.



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<sup>1</sup> Ruling CJE/01/61 of November 29<sup>th</sup> 2001 in case C-17/00 (François De Coster v. Collège des bourgmestres et échevins de la commune de Watermael-Boisfort).

<sup>2</sup> This means *inter alia* that broadcasters use up less scarce spectrum resources in Belgium than in some other member states.

## 1.2 The regulators

Because of its status as a cultural activity, broadcasting is regulated in Belgium, as in Germany, at the regional and not at the federal (national) level. The regulator for the Flemish (Dutch-speaking) community is the *Vlaams Commissariaat voor de Media (CvdM)*, while for the French-language community it is the *Conseil supérieur de l'audiovisuel (CSA)*. Broadcasting in bi-lingual Brussels, whose territory is common to both communities, is regulated by the federal service for scientific, technical and cultural affairs, which is directly attached to the prime minister's office.

The government of the Flemish community has set up a *Mediaraad* (Media Council) which, however, has only advisory powers.

Frequency allocation is devolved to the CvdM and the CSA, but the federal telecoms regulator, the *Belgian Institute for Posts and Telecommunications (BIPT)*, is in charge of overall spectrum management and international cooperation. In Belgium, the public service broadcasters in each community have a requirement to cover the whole population of their community.<sup>3</sup>

In Flanders, the main regulatory texts for broadcasting are a series of decrees dating from 1995, the *Vlaamse decreten betreffende de radio-omroep et de televisie*<sup>4</sup>. The equivalent text for the French-speaking community is the *Décret du 17 juillet 1987 sur l'audiovisuel* and its subsequent amendments.<sup>5</sup>

The government services of the French-speaking community has drafted a substantial revision of the 1987 *Décret* which (at time of writing the present report) had been submitted to the government of the French-speaking community for approval before going to the community's parliament for adoption.

Broadcasters and cable operators must obtain an authorisation from the CvdM or the CSA (depending on their location) before beginning operations. These are granted for an initial period of nine years in both communities. Authorisations cover only those programmes for which they are issued. The costs of these authorisations are set by decree and aim to cover the costs incurred by the CvdM and the CSA for issuing, modifying and monitoring the implementation of the authorisations.

The subscription price cable operators can charge their customers is subject to control from the federal ministry of economic affairs.

As in Germany, there is a general principle in Belgium that broadcasters should pay to have their services carried by cable network operators. The only minor exception concerns regional (local) public-interest programmes broadcast within the Flemish community, which must be carried free-of-charge by cable operators in Flanders. However, the market reality is somewhat different (see section 2.1 below).

Relations between cable operators and broadcast service providers are covered by the general provisions of competition law.

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<sup>3</sup> As an example, see for the RTBF Article 3 of the *Décret portant statut de la radio-télévision belge de la Communauté française (RTBF)*

<sup>4</sup> Published in their most recent consolidated version on 30 March 2001.

<sup>5</sup> Published in its most recent consolidation on 31 October 2000.

### 1.3 The players

The public service tv broadcasters in Belgium are the RTBF (for the French-speaking community) and the VRT (for the Flemish community). Each has two channels. There are also a number of local channels: one per area, except in Brussels where there are two – one in each language.

The French-language commercial broadcasters include RTL/TVI (two channels) and AB3. The main Dutch language commercial broadcasters include VMM (whose channels are VTM, Kanaal 2 and jimTV) and VT4. Canal+ provides digital pay tv services via the cable in French and Dutch to each community.

No commercial satellite operator offers a tv broadcasting service in Belgium.

There are in all 31 cable companies whose principal activity is the distribution of tv programmes. They correspond *grosso modo* to the publicly-owned former municipal (inter-communal) electricity distribution companies, who developed their tv distribution activities in the 1960s. The number of subscribers per operator varies from 20,000 to 300,000. Each operator has a monopoly over the territory he covers. The only exception is the city of Leuven where there are two competing operators (UPC and Iverlec).

The average number of channels offered by cable operators is about 35 (more in Brussels). In addition, they provide access to Canal+ and to some premium optional services, including digital bouquets.

Of the 31 cable operators, a total of 17 (seven in the French-language community and ten in the Flemish community) have entered into partnerships with Electrabel, the principal electricity distribution company in Belgium, which is now part of the French-based Suez group. The remainder are still run by the municipal authorities, except for three in Brussels which have been privatised.

These are Coditel, fully owned by Electrabel; UPC, which took over RadioPublic (which operated in Brussels and Leuven); and WoluTV, a small operator in the south-east of the city.

According to the CSA, Electrabel - through Coditel and its partnerships – has a market share of 50.3 percent in the French-speaking community. Equivalent figures for Flanders are not available.

In the Flemish community, all cable operators have joined forces to create Telenet to offer services other than tv programme distribution to their customers, including SMEs. These are mainly broadband internet access and voice telephony. Callahan of the US has a 24 percent stake in Telenet.

Despite (or because of) the fragmented market structure in Belgium, groups of local cable operators have created joint service subsidiaries to run such things as a common reception centre for receiving satellite broadcasts and those produced directly for cable distribution, and a communications network to distribute these to the different cable operators. There are, for instance, two such groups in the French-speaking community – Le Câble and Applications Câble Multimedia (ACM).



## 2 General interest obligations as applied to broadcasting

### 2.1 The carriage of broadcasters' programmes

In Belgium, the accepted principle, supported by current jurisprudence, is that the relationship between distributors of cable tv programmes and broadcasters is a commercial one, notwithstanding the status of must-carry for certain broadcasters. This means that cable operators are entitled to payment for carrying the programmers' signals.

A similar principle applies in Germany, but not in the Netherlands where, for instance, must-carry channels have to be carried free-of-charge.

The only exception in Belgium is the carriage of the programmes of local public-interest broadcasters of the Flemish community (one per locality) whose programmes must be carried without payment<sup>6</sup>.

But if the principle of payment is clear, the practice is less so. The confusion comes from the fact that in addition to carriage fees, royalties for authors' and performers' rights are also involved. Must-carry is a further complication. In a number of disputes, the courts and the regulators have had to intervene.

In one case, cable operators argued that the fact that they had to carry certain programmes (must-carry) dispensed them from the need to pay copyright for the material they carried. The court ruled otherwise, stating that the must-carry obligation did not remove the requirement to respect legal obligations under copyright (commercial) law<sup>7</sup>.

In another ruling, a Brussels court said that a must-carry obligation is not subordinated to a complete agreement between Canal+ and cable operators concerning carriage fees. The court ordered cable operator Coditel to distribute Canal+ programmes subject to must-carry obligations, and set provisional carriage fees for this distribution<sup>8</sup>.

In a third case, the CSA fined the local cable operator in Liège, ALE, the (modest) sum of €15,000 for refusing to distribute one of the Flemish public broadcaster's must-carry channels, unless the VRT paid the carriage dues, the copyright royalties and the cost of reception of its signal at the ALE cable head. The CSA said that ALE could not use these conditions to refuse a must-carry broadcaster access to its network.<sup>9</sup>



Although Belgian case law established that must-carry is not free-of-charge and that authors' rights and performers' rights need to be paid on programmes distributed by cable, it does not say who, between the broadcaster and the cable distributor, should pay the royalties.

The result is that there is no consistency in the arrangements between broadcasters and cable distributors. There is instead a patchwork of different kinds of deals and unsettled disputes with

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<sup>6</sup> See Article 112 §1: 3° of the *Decreten betreffende de radio-omroep en de televisie* (consolidated version of 30 March 2001).

<sup>7</sup> Civ Bxl (réf) ruling of 4 July 1997 in the case of RTD (Cable operators association) against RTBF, VRT and TVI (quoted in *Auteurs & Media* 1997/4, page 413)

<sup>8</sup> Civ Bxl (appel) ruling of 28 January 1999 in the cases of Canal+ versus Coditel, and Canal+ versus RadioPublic (quoted in *Auteurs & Media* 1999/2, page 259)

<sup>9</sup> CSA : decision of 10 January 2001, published in the CSA Annual Report for 2001.

net payments between cable operators and broadcasters flowing in both directions. Disputes over royalties have been a quasi-permanent feature of relations between broadcasters, cable operators and collection agencies in Belgium in recent years.

In some instances, broadcasters do not pay to have their signal carried. The French broadcaster, TF1, which does not have must-carry status, is paid by cable operators who carry its signal. This is on the ground that it should receive more from the cable operators to cover copyright royalties than it owes them in carriage costs. In general, it is the more recent broadcasters, like TV4 and the Discovery channel, who pay the highest carriage fees.

In any case, copyright costs are passed on to the end-customer by the cable operators and are often identified in their published tariff lists as in the following example of Brussels operator Coditel (all amounts in euros):

Cable operator	Subscription (one year)	Copyright	VAT	Total
Coditel	83.30	14.13	20.46	117.89

## 2.2 Must-carry regulations

Given the overwhelming percentage of Belgians who depend on cable to receive their tv broadcasts, cable distribution in Belgium is clearly an activity of general interest. As such, the competent authorities can (and do) set technical and quality standards for cable operators. But the biggest general interest obligation on them is the duty to carry certain programmes designated by the regulatory authority.

There are three sets of must-carry in Belgium, one each for the French-speaking and Flemish communities and one for bilingual Brussels. These are set out in the relevant decrees identified above<sup>10</sup>

There are 15 must-carry channels in the Flemish community:

- The two channels of the public service broadcaster (VRT)
- The channels of the following commercial broadcasters established in Flanders and whose broadcasts cover all Flemish territory: VMM (VTM, Kanaal 2, and jimTV), VT4, Vitaya, Event TV and Kanaal Z
- The one public-interest local channel available in the region served by the cable operator
- The two channels of the public broadcaster in the French-speaking community, (RTBF)
- The three channels of the Dutch public broadcaster (NOS).



Flemish cable operators are free to carry other channels, although prior authorisation is needed from the *Commissariaat voor de Media* for programmes falling under the jurisdiction of a country which is not a member of the European Union.

<sup>10</sup> See for example, Article 112 of the *Decreten betreffende de radio-omroep en de televisie*, or chapter VI of the *Décret du 17 juillet 1987 sur l'audiovisuel*. The relevant text for Brussels is the *Loi du 30 mars 1995 concernant les réseaux de distribution d'émissions de radiodiffusion et l'exercice d'activités de radiodiffusion dans la région bilingue de Bruxelles-Capitale*

There are nine must carry programmes in the French-language community:

- The two programmes of the public broadcaster in the French-speaking community (RTBF)
- The local public-interest programme available in the area covered by the cable operator
- The commercial television channels covering the territory of the Community (RTL/TVI and AB3)
- The programmes designated by the government of international broadcasters in which the RTBF has a stake (TV5)
- Pay tv broadcasters in which the RTBF has a stake (Canal+ Belgique)
- The two programmes of the Flemish public broadcaster (VRT).

The list of must-carry programmes in Brussels is the combination of the must-carry programmes of each language community, making a total of 17. But programmes launched since 1998 with must-carry status in a community do not have automatic must-carry status in Brussels. The number of must-carry channels in Brussels was reduced to 14 by a federal ministerial decision (*arrêté ministeriel*) of 17 January 2001.

In addition to their must-carry obligations, cable operators in the French-speaking community have acquired a kind of “must-pay” commitment. Walloon cable operators have concluded an agreement with the French-speaking Community through which they accept to pay a contribution to support the production of French-language films and audiovisual works and to support local public-interest broadcasters. This is currently the equivalent of about €4 per customer per year.

As in the Netherlands and Germany, the rules governing the cable distribution sector in Belgium are under review. The motivation is at least threefold:

1. To try to clarify current inconsistencies and inequalities of treatment and to create a level playing field for all players.
2. To adapt federal and community legislation to the new regulatory framework adopted by the European Union.
3. To review must-carry requirements and define the scope of a “basic” service accessible to all end-customers for an affordable price. As the Belgian cable market is saturated, the only way for the market to grow is to introduce optional or premium offerings for those willing to pay for them. But there is still considerable debate about the size of the basic package: the same or smaller than the present package? should there be a special service for the socially-disadvantaged? should the number of must-carry programmes be reduced? Etc.



It is the French-speaking community which has gone furthest in updating its legislation with a new draft decree currently under examination by the government of the French community with the intention of submitting a text for approval by the community parliament by the end of 2002. The thrust of the draft decree is set out in more detail in Section 2.5 below.

Belgian cable operators argue that in the future must-carry obligations should apply to all forms of broadcast distribution, be it cable, satellite, over-the-air or via the internet through a telephone connection.

## 2.3 Availability of digital offerings

There is limited offering of digital broadcasting in Belgium. Canal+, which operates in both linguistic communities, has about 165,000-170,000 subscribers in each. Its programmes are distributed via the cable operators. A number of individual cable operators have their own digital bouquet, including Coditel, Brutélé and UPC who are the main cable operators in Brussels. These are currently offered as add-on or premium services, which are separate from their basic analogue package.

There are at present no commercial offerings of digital terrestrial tv. The Flemish public-service broadcaster, VRT, has an experimental project with Belgacom, the incumbent telecoms operator, known as the Digital Home Programme which plans to offer broadcasting and multimedia services. The RTBF is experimenting with DTT but only for the distribution of broadcasting services.

## 2.4 Conditional access systems

Current EU legislation on conditional access systems is already incorporated in the relevant broadcasting legislation in each community.

In Flanders, CAS is regulated by the *Decreet van 3 maart 2000 inzake het gebruik van normen voor het uitzenden van televisiesignalen*. Articles three to five of the decree require those who produce or market decoders to make all necessary technical services available to all broadcasters who need the decoders to deliver their service on a fair, transparent and non-discriminatory manner. They must keep separate accounts for their CAS activities. Holders of industrial property rights for decoders or other conditional access systems must offer licences to other manufacturers of systems destined for the general public on a fair, transparent and non-discriminatory basis. Broadcasters offering digital services via a conditional access system must include the cost of buying or renting a set-top box in their published tariffs.

Regulation for CAS in the French-speaking community is contained in Chapter Vter, which has been added to the *Décret du 17 juillet 1987 sur l'audiovisuel*. It has the same content as the Flemish decree but adds the requirement (absent in the Flemish text) for a low-cost transcontrol system enabling a cable network operator to take control of its customers' access to digital services via its own conditional access system.

As in the Netherlands, Canal+ has direct access to its subscribers and owns their set-top boxes. The cable operators merely supply distribution capacity for the Canal+ signal.

## 2.5 The future regulatory context

Although Belgian legislation conforms to the present (and future) EU regulation on conditional access systems, a number of other aspects of present legislation will need to be changed to comply with the new EU directives. As in other EU countries, one major modification will be the need to separate broadcast content from transport.

Another problem will be to redefine the relationship between the Flemish and French-speaking communities on the one side and the federal regulator (BIPT) on the other concerning the new boundaries between broadcasting and telecommunications.



In addition, cable operators will need to introduce separate accounting for their activities as providers of services to their customers and for those linked to their function as network capacity providers. They will also have to open their networks to competitors seeking to offer similar services.

Although still in its draft stage, it may be worth looking at the main changes to the present system contained in the new regulatory decree which got its first reading from the government of the French Community in March 2002. The CSA commented on the draft on June 26<sup>th</sup> 2002.<sup>11</sup>

In its current version, the draft decree:

- Sets out the criteria which have to be respected by broadcasters in order to qualify for must-carry status.
- Separates the function of service provider (or service integrator) from that of network operator. Those performing both functions must have separate accounts for each
- Requires network operators to negotiate agreements on commercial terms with any service provider requesting access to their network. They cannot impose conditions which are unreasonable or discriminatory. If the network operator is also a service provider, he must offer access to others on the same conditions as he does for his own services
- Removes the requirement for cable operators to seek an authorisation from the regulatory authority; instead, they must submit a declaration prior to beginning their activities. However, operators of digital over-the-air networks will still require individual authorisations
- Permits cable operators to reserve two channels for non-stop music, technical information and an electronic programme guide (EPG).

Although not in the draft decree as it stands, the CSA proposes (in its comments) that the must-pay requirement for funding cinema productions and other audio-visual works be extended to satellite operators and over-the-air networks as well.



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<sup>11</sup> See the CSA website on <http://www.csa.cfwb.be>

## 3 Cost assessment

### 3.1 Belgium's special position

The number of channels available to cable tv subscribers in Belgium is among the highest in the EU. The cost of a cable tv subscription to the standard service package in Belgium is probably among the lowest, although there are minor local differences as the following sample shows. The international comparison is limited to the Netherlands and Germany, the two other EU countries with the highest levels of cable tv penetration.

#### Cable tv published tariffs

Country	Cable operator	Subscription (one year)	Copyright	VAT	Total
Belgium (Brussels)	Coditel	83.30	14.13	20.46	117.89
Belgium (Flanders)	Interelectra (Hasselt)	-	-	20.01	115.28
Belgium (French-speaking)	IDEA (Mons)	90.55 *	13.68	21.89	126.12
The Netherlands	UPC	-	-	-	126.-
Germany	Kabel Berlin/Brandenburg (DT)	-	-	20.97	152.04
Germany	Ish (NRW)	-	-	-	160.08

\* The IDEA subscription includes the equivalent of €4 as a contribution to the fund to produce French-language films and audiovisual works as well as to support local tv broadcasters.

As the Belgian customer, therefore, pays a low price per channel received, the assumption is that the cable operators in Belgium have a relatively low cost per channel. However, there are no easy ways of validating this.

There are several indicators as to why Belgian costs (and prices) are low. The market for the distribution of tv and radio broadcasts by cable in Belgium is a mature market with a mature product which has been close to saturation for some time. The subscriber base in Belgium grew on average by less than one percent per year between 1992 and 2002, compared with an annual average of 2.4 percent during the same period in the Netherlands.

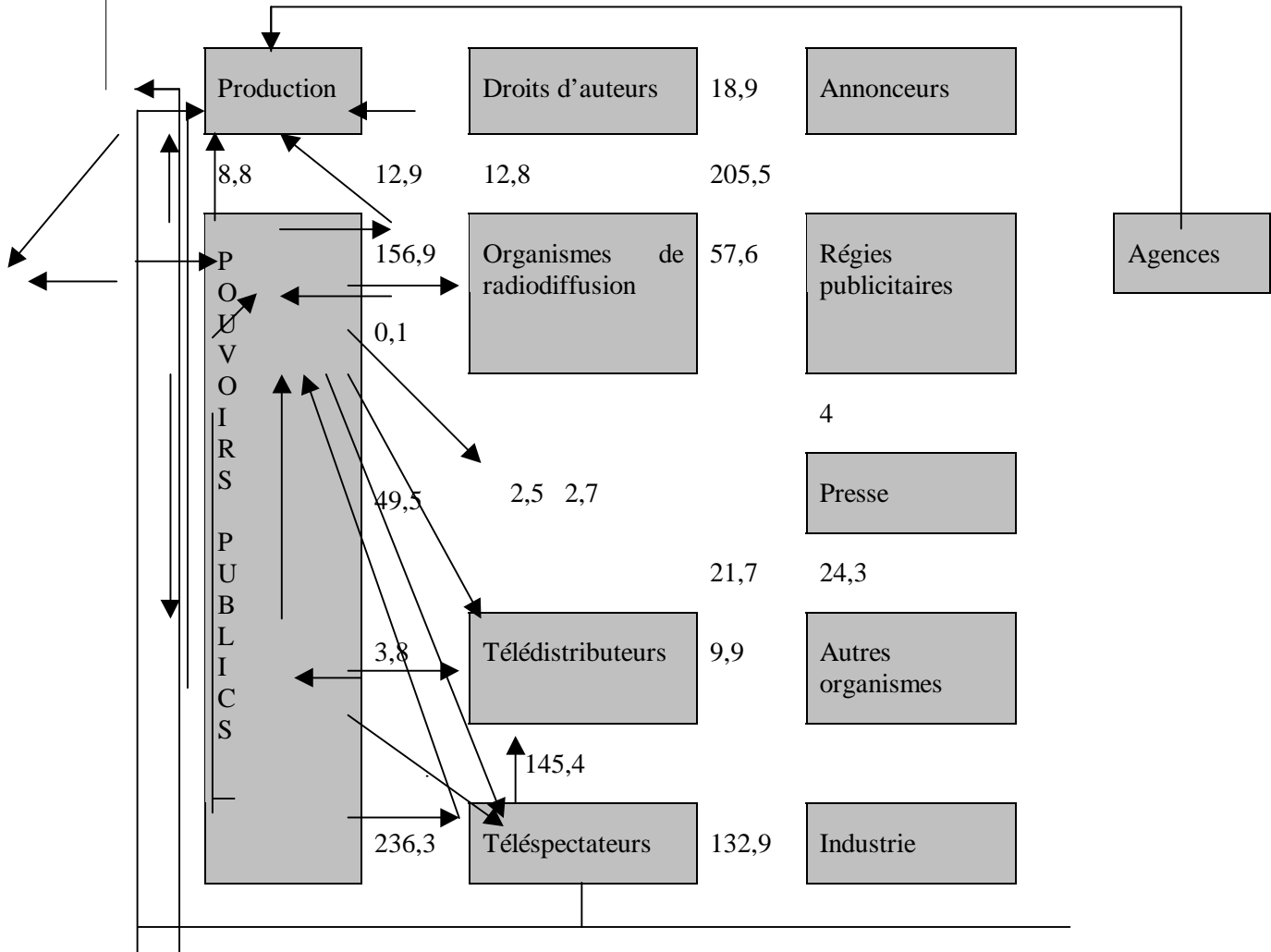
As the cable operators were, and still are in their vast majority, local utilities, they have long-established rights of way and access rights for their networks. These are written into the current regulatory decrees. In addition, the co-axial networks have long-since been amortised.

There are in Belgium, in contrast to the Netherlands, no guidelines for assessing and allocating the costs to the cable operators of providing their service.



As a regulatory authority, the CSA is concerned about the lack of transparency in the broadcasting sector as a whole. In its 2001 Annual Report, the CSA published the following schematic table in a bid to identify the main monetary flows between the principal actors. The figures are for 1996.

**Schéma synthétique des flux financiers en Communauté française en 1996**  
 (millions d'euros)



Commenting on the schema, the CSA says the figures should be treated as orders of magnitude rather than exact numbers. They are exclusive of VAT and other tax payments. The CSA also notes that they make no attempt to quantify the advantages inherent in the monopoly position of cable operators, or the advantages of must-carry status for programme providers.<sup>12</sup>

Within this structure, the CSA identifies the following specific activities for the cable operators, in addition to their normal administrative functions:

<sup>12</sup> CSA: *Rapport d'activités 2001*, pp 9 & 10.

- Selling capacity on their network (or, in some cases, buying in programmes for their network) and providing equipment to receive broadcast signals.
- Assembling and marketing their programme offer.
- Transporting and distributing programmes (both at the wholesale and retail levels).
- Owning and managing their transport and distribution infrastructure (fibre optic and coaxial cables).

Under current Belgian legislation, there is no requirement for cost separation by cable operators either between their functions as service providers and network operators or between their broadcasting and telecoms activities. However, in Flanders, there is *de facto* separation of broadcasting and telecoms activities to the extent that all cable operators participate in Telenet which operates their non-broadcasting activities (internet and telephony services) on behalf of all. Individual operators in Brussels and the French-speaking community claim they already operate internal accounting systems which can identify separate costs.

### 3.2 The broader context

Cable operators in Belgium, as in other EU countries, consider the respect of general interest obligations, such as must-carry, as an imposed additional cost. They claim it can limit the optimum selection of programmes to offer, clog up carriage capacities, and reduce their leverage when negotiating commercial deals with must-carry broadcasters.

But must-carry and other general interest obligations can also include advantages for Belgian cable operators. One is to provide them with guaranteed access to the principal national public service and (for the time being at least) commercial channels, whose value in a programme package or bouquet may offset the carriage of other less popular must-carry channels. However, putting a value on broadcast content is not part of the present study.

As quasi-monopolists, with 97 percent of the market for tv programme distribution in Belgium and with no local competition in their individual cable markets, Belgian cable operators still retain bargaining power when negotiating carriage fees with broadcasters. Their dominant position is unaffected by the new EU regulatory framework, although they will no doubt increasingly be treated as market players with significant market power (SMP) – as they already are in the Netherlands. The new regulatory framework will also encourage them in their ambitions to offer a full range of broadband services beyond television signal distribution to their customers. In this way, they will be able to allocate to new services some common or joint costs which presently fall only on their cable distribution activities.

Belgian cable operators already consider themselves as full-service providers with a wide range of service offerings, ranging from basic and premium cable tv services to multi-media packages (including video-on-demand), fast internet access and voice telephony services. They already see their cost structure in this broader context.

In establishing a cost of the general interest obligations of cable operators in Belgium, the first step would be to create a system of separate accounts in two directions: one would require the separation between broadcasting and non-broadcasting activities, and the second the separation between service provision on the one side and network operations on the other.



The following table sets out the results for a basic range of cost elements. This could be fine-tuned at a later stage. Such a cost separation is a requirement under the EU's new regulatory package and is already envisaged in the new draft decree under examination by the French-speaking community.

### Functions and cost structures of cable operators in Belgium

Functions	Direct costs: Broadcasting	Direct costs: Non- broadcasting	Shared costs: broadcasting & Non- broadcasting	Common costs: administration & management
<b>Service provider and service integrator</b>	<ul style="list-style-type: none"> <li>◦ Assembly &amp; packaging of programmes</li> </ul>	<ul style="list-style-type: none"> <li>◦ Multimedia services, internet access &amp; voice telephony</li> </ul>	<ul style="list-style-type: none"> <li>◦ Marketing of services</li> </ul>	<ul style="list-style-type: none"> <li>◦ <b>General management</b></li> <li>◦ <b>Human resources</b></li> <li>◦ <b>Billing</b></li> <li>◦ <b>Other customer services</b></li> </ul>
<b>Network owner/operator</b>	<ul style="list-style-type: none"> <li>◦ <b>Transport of broadcast signal</b></li> <li>◦ <b>Cost of inter-connection of network to others</b></li> <li>◦ <b>programme reception and insertion</b></li> </ul>	<ul style="list-style-type: none"> <li>◦ <b>Cost of transport of broadband internet access, VoD delivery, voice telephony traffic</b></li> </ul>	<ul style="list-style-type: none"> <li>◦ <b>Cost of network development, upgrading &amp; maintenance</b></li> </ul>	<ul style="list-style-type: none"> <li>◦ <b>General management</b></li> <li>◦ <b>Human resources</b></li> <li>◦ <b>Billing</b></li> <li>◦ <b>Other customer services</b></li> </ul>



# France

## 1 Broadcasting in France

### 1.1 The market

Two thirds of the 23.2 million households in France receive television services via terrestrial transmission. Satellite is the second most important reception mode<sup>13</sup>, with a market share of about 20 percent, while cable accounts for approximately 13 percent of the market.

#### Reception pattern (main set, analogue+digital)

	%	EU %
Cable	13 %	29 %
Satellite	19 %	21 %
Terrestrial	68 %	50 %

Source: SES-Astra 2001

#### Average Time spent watching TV in 2000

	France	EU average
In minutes	196	204

Source: Eurostat and Observatory of European Audiovisual market

Intense competition between satellite platforms has benefited households and led to the fairly high share of households' receiving television programmes via satellite. Aggressive marketing by Pay-TV operators has also been a major driver that has led more than a third of French households to subscribe to pay television services, 3.5m of which subscribe to *digital* pay TV services.

#### Pay TV subscribers at Mid-2001 (in thousands)

	Analogue	Digital	Total
DTH – TPS	NA	1,100	1,100
DTH – Canal Satellite	NA	1,900	1,900
Cable	1,430	570	2,000
C+ terrestrial	3,000	0	3,000
<b>Total</b>	<b>4,430</b>	<b>3,570</b>	<b>8,000</b>

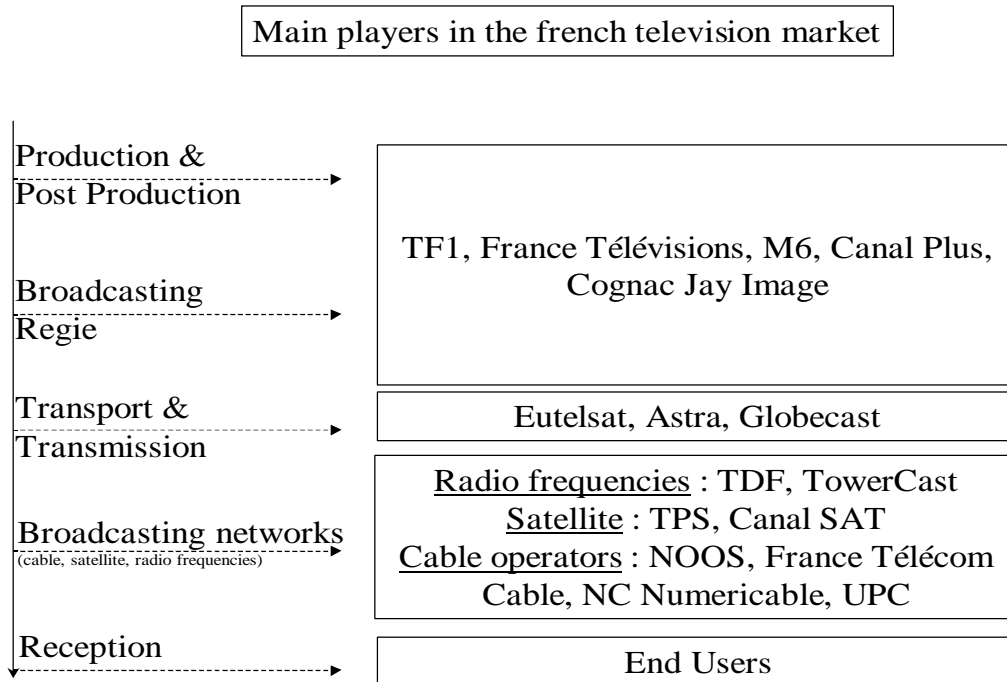
Source: BIPE from Digital Switchover in broadcasting report 2001

<sup>13</sup> Satellite digital TV subscribers generally maintain terrestrial TV for programs broadcast in terrestrial mode and not broadcast by satellite.



## 1.2 The Players

The diagram below shows the different players in the French television market:



### 1.2.1 The regulators

The French broadcasting sector is regulated by three organisations :

- The Conseil Supérieur de l'Audiovisuel (CSA), which is responsible for audiovisual issues
- The Agence Nationale des Fréquences (ANFR), which is in charge of spectrum management
- The DDM (Direction du Développement des Médias), responsible for drafting new Laws & Decrees and for monitoring the sector.



#### a) The ANFR

The ANFR (Agence Nationale des Fréquences) is placed under the control of the Ministry of Economy. It represents French interests in international bodies and at international conferences. At national level, the ANFR allocates spectrum bands to different sub-allocators (Ministry of Defence, police, ART for telecommunications, CSA for broadcasting).

Broadcasters do not pay for the right of use of frequencies. But the use of these public assets brings with it production and programming obligations.

**b) The CSA**

The CSA is an independent administrative authority created in 1989 to guarantee broadcasting freedom in line with the conditions laid down by the law of September 30<sup>th</sup>, 1986 with its subsequent modifications (Loi n° 86-1067 du 30 septembre 1986 relative à la liberté de communication modifiée et complétée).

The CSA :

- **nominates the presidents** and some board members of the public broadcasting companies (TV and radio);
- **issues opinions and carries out studies** on the fields of activity that fall within its remit. It can also be consulted by the Conseil de la concurrence (competition Council) on anti-competitive practices and mergers;
- **can be solicited by the Government on various issues:** the definition of the frequencies which are to be allocated or assigned by the CSA or to be allocated to government services; the setting of rules to be applied to cable radio and cable television; the definition of a regulatory framework for advertising on Radio France and on television; the broadcasting of film and television productions; the contribution of television channels to production and the independence of producers vis-à-vis broadcasters; the terms of reference of public radio stations and television channels; the technical specifications applicable to cable networks and also to the signals broadcast by radio and television;
- **manages the terrestrial frequencies:** planning for the FM waveband, allocation of broadcasting channels to television broadcasters (relay stations for "difficult reception" areas to ensure that border regions receive their own regional programmes (France 3), expansion of networks) and the frequency planning of digital terrestrial television all fall within the remit of the CSA. The CSA also plays a major role in the development of new broadcasting technologies: Radio Data System (RDS), Digital Radio Broadcasting (DAB), single frequency MF networks, terrestrial digital television;
- **issues licences for terrestrial broadcasting to FM radios and private television companies**, under "beauty contest" rules. For private-sector broadcasters, the list of frequencies available is published at the same time as the offer of licences and a public presentation is mandatory. The licences are granted for a maximum period of ten years. They can be renewed once for five years by the CSA, without a new bidding process. They are issued subject to the signing of a convention between the CSA and the licensed operator. The allocation of frequencies to public television stations is decided by the CSA independently of the bidding process. The Law is such that public broadcasters have priority access to spectrum when extra frequencies are necessary for them to perform their public service function;
- **issues licences to cable networks:** these are granted upon recommendation from the local entities (i.e. municipality, etc), individually or in groups. The licenses are granted for a maximum of 30 years and can only be issued to companies, public corporations or council housing organisations upon recommendation from the local entity. **All modifications to the programme portfolio on offer on a network are subject to the CSA's authorisation.** The CSA draws up agreements with the French cable channels establishing rules that are applicable to their particular service. These rules apply in particular to advertising, sponsorship, the production and broadcasting of films and television productions. Since 1997, European channels wishing to be broadcast on French cable networks only need to *register* with the CSA;



- **monitors broadcasting activities in several areas:** these are (i) pluralism and accuracy of information, (ii) conditions for the broadcasting of film and television productions, (iii) TV channels' financial contribution to the development of film production, (iv) protection of children and young people, (v) advertising, sponsorship and teleshopping, (vi) promotion of the French language, (vii) rules on competition and mergers in broadcasting;
- **can impose administrative sanctions** if commercial or public broadcasters fail to meet their obligations or commitments.

c) *The DDM*

The DDM is the « *Direction du Développement des Médias* ». The unit is attached to the services of the Prime Minister, and is in charge of drafting Decrees and Laws related to broadcast, press and information society, as well as of the economic monitoring of the sector.

### 1.2.2 *The broadcasters*

The French broadcasting sector is structured around:

- Five free-to-air (FTA) channels (TF1, M6 and The France Télévision channels with France 2, France 3, Arte and La Cinquième)
- One Pay TV channel (Canal Plus)

TF1 was privatised in 1987. It is the leading broadcaster in terms of audience, with around 34 percent of audience share, and has 50 percent of the advertising market in broadcasting. TF1 is broadcast on all the networks available in France. In 1996, TF1 participated to the creation of TPS (*Television Par Satellite*) with M6, France Télévision and France Telecom. The latter two have recently withdrawn, and TF1 has become the main shareholder.

Created in 1987, M6 is the second private free-to-air channel in France. As TF1, M6 participated to the launch of TPS with a 25 percent shareholding.

France Télévision is a public broadcasting holding. Its status changed in June 2000. Among the changes that came about, one relevant to the present study is the change in the radio frequency regime, whereby channels now own the right to use the frequencies. In the past, it was TDF which was granted these rights.

Canal Plus was the first premium channel to be launched in Europe, back in 1984, on the model of HBO of the United States, but via terrestrial transmission. In the early 1990s, Canal Plus Group launched an analogue DTH platform, Canal Satellite, which in 1996 became the first digital DTH platform in Europe. Canal Satellite is controlled by Vivendi/Canal+ (66 percent), and Lagardère (33 percent). Canal Plus premium claimss 4.9 million subscribers and Canal Satellite 1.9 million (but there is a large overlap in the respective client bases).

Groupe Canal Plus is fully owned by Vivendi Universal, and in turn owns 49 percent of Canal Plus. Since December 2000, several subsidiaries have been created (Canal Plus Distribution, Régie...) which make it difficult to get a clear picture of the trends in costs and revenues by segment over time.



### 1.2.3 *The network operators*

#### *a) Terrestrial infrastructure operators*

The main terrestrial network (110 transmitters, for a population coverage of 80 percent) and most of the secondary networks (4700 transmitters, to reach a population coverage of 99 percent) are owned and operated by Télédiffusion de France (TDF), owned by Charterhouse Capital Limited (45%), la Caisse des Dépôts et Consignations (CDC – 39%) and France Télécom (which is still 60 percent State-owned) (36%).

TDF charges about €50 million a year for nation-wide transmission. TDF reported revenues of nearly one billion<sup>14</sup> euro in 2000, around 80 percent related to television broadcasting.

A new regulatory framework has been set for DTT, and a call for proposals has been launched by the CSA. The official target date is end-2002 but expectations are that the first DTT broadcasts will start mid-2003 at the earliest. DTT will start progressively between 2004 and 2008.

At present, TDF has no real competitor in the television broadcast infrastructure market. In the radio broadcast market, Towercast<sup>15</sup> is a competitor with a market share of 25 percent Its revenue amounted to €14 million in 2001<sup>16</sup>, far below that of TDF.

#### *b) Cable operators*

Launched in the early 1980s, the French “*Plan Câble*” aimed at providing cable access to households in all major urban areas. The launch of the plan led to the emergence of a large number of cable operators - in fact too many for a market which did not grow in line with expectations. Although some rationalisation has since taken place, and despite the fact that regulatory measures give an advantage to cable over satellite in densely populated areas<sup>17</sup>, the share of cable in broadcast transmission remains limited. For regulatory reasons, cable has a *de facto* monopoly in the collective housing market, so that competition from satellite operators is not a big threat for local cable operators. This is not the case in the more rural areas, or in less densely populated areas (where individual housing dominates), where the majority of users receive television via satellite.

In mid-2001, there were 8.5 million homes passed (“*prises commercialisables*”), and a total of 11.4 million potential homes passed in the concession areas (“*prises à terme*”). Some 3.2 million cable users subscribe to all the services provided by the cable operator, through a full package which covers television, internet access, and/or telephone services where these are available. Another 3.1 million households subscribe to television services only. The number of digital TV subscribers is estimated at 570,000. Industry analysts consider that it might still be economical to pass up to 13 million homes in France, i.e. 15 percent more than the present number of “potential homes passed” but that beyond these figures the extension of the network would not be economically worthwhile. Today, cable subscriptions are growing at the rate of 10 percent a year.

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<sup>14</sup> 0.886 billion Euro in 2001

<sup>15</sup> Towercast is a subsidiary of NRJ Group, a radio broadcaster

<sup>16</sup> Estimated at 09/2001 in the quarterly report of Towercast.

<sup>17</sup> In apartment buildings, people are not allowed to have individual antennas except if they prove that they need to receive specific programs they can not have on cable. Buildings are therefore cabled, and the cable subscription is automatically included in the house rent.



The three main cable operators account for roughly 25 percent of the cable market each. The big players, especially NOOS and UPC, are implementing a broadband “triple play” strategy.

In France, as elsewhere, the cable business is no longer just a question of selecting the most attractive channels in a package offered to consumers, and of developing a sophisticated pricing scheme around a basic package, with premium add-ons, etc. Competition in the broadcasting market and the forthcoming launch of digital terrestrial television are creating a need for cable operators to diversify their offer and launch new value-added services. This presupposes network upgrades on their part to shift to digital.

Although there are no official figures on the share of cable networks already upgraded for digital transmission, the process is generally considered to be well advanced. UPC for example invested €150 million in 2001. All operators marketing digital television own at least a part of their network. AFORM (*Association Française des Opérateurs de Réseaux Multiservices*) expects that the complete digitisation of networks may be achieved before 2004. It is, however, possible that some smaller networks will not be upgraded, while in the upgraded networks, digital TV will only be offered progressively.

With capacity becoming less of a constraint on those networks that have completed their upgrade to digital and can now offer this as the standard package, cable operators have increased the number of broadcast programmes offered. They now carry all existing French channels plus a selection of international channels. On all digitally upgraded networks, subscribers pay either a “standard” fee for the basic package, or « *à la carte* », based on their channel selection.

Given the big investments in network upgrades, and despite a rise in the number of cable subscribers, cable distribution remains essentially a loss-making activity; it will take a number of years for past investments to be paid back. Yet, more investments in the sector are still required. This situation has led the shareholders of the top three operators to consider whether or not to withdraw from this business activity, where it is becoming harder and harder to make money. However necessary, further industry consolidation through mergers or acquisitions will not be easy (owners reluctant to sell at a low price, reluctant buyers unable to finance their acquisition, even at a low price). This could further delay the consolidation of the French cable landscape, which is, by comparison, well advanced in the UK.

Given their fragile economic condition, cable operators are currently seeking to change the types of commercial agreements that they have with broadcasters (or channel publishers). At present, contrary to what happens with satellite, broadcasters do not pay the cable operators for carrying their signal. This is the case whether the programme concerned has must-carry status or not. French cable operators would like to see the channels pay a flat fee for their carriage, which would come on top of the revenue received from subscriptions.

In networks already upgraded to digital, although analogue offers are no longer advertised, previous analogue contracts are still valid and, if customers so request, cable operators still sell the former analogue packages. The standard package offering, however, is for digital television.

Typically, about one third of the cable TV subscribers in France, most of which live in urban areas where multiple housing dominates, only pay for the so-called « antenna service » or basic package, which is charged automatically as part of their house-rent. For these customers, the ‘standard’ cable package is an attractive alternative to the individual antennas (*antennes-râteaux*) of terrestrial television, as the transmission quality is much better. This market is thus in some ways a “captive” one for cable operators. It is not surprising therefore that these do not



ASSESSMENT OF MEMBER STATES MEASURES LINKED TO BROADCASTING  
 WITHIN THE CONTEXT OF THE NEW REGULATORY FRAMEWORK

view the must-carry obligation attached to the standard service as much of a constraint (see more on this later).

	Opérateurs Prises à terme Prises commercialisables Abonnés tous services Abonnés TV Abonnés Télécoms
NOOS	3 165 160 2 494 371 856 685 837 791 327 581 84 843 2 316
France Télécom Câble	2 031 582 1 522 424 801 326 784 280 109 961 38 689
NC Numéricâble	2 595 737 2 270 183 711 504 711 504 149 635 14 608
UPC France	2 656 459 1 290 700 504 800 425 100 8 800 19 900 59 800
Est Vidéo-communication	297 024 295 652 135 469 130 809 7 264 8 538
NTL France	274 494 217 645 75 534 75 534 2 747 397
Autres câblo-opérateurs	458 392 349 266



	195 302
	199 138
	3 056
	2 327
<b>Total</b>	<b>11 478 848</b>
	<b>8 440 241</b>
	<b>3 280 620</b>
	<b>3 164 156</b>
	<b>609 044</b>
	<b>169 302</b>
	<b>62 116</b>

**c) Satellite operators**

Direct-To-Home (DTH) television is almost exclusively a pay TV platform in France. Free-to-air satellite reception only applies to the “gaps” in terrestrial coverage or for ethnic/linguistic minorities (accounting for about one percent of TV households each). In such cases, most households use both delivery mechanisms (terrestrial for national channels, and DTH).

There are two satellite platforms:

- TPS, set up in 1997 as an alliance between all the other major players (TF1, M6, Suez, France Télévision and France Télécom). TF1, M6 and Suez each controlled 25 percent of the shares. France Television and France Telecom have just withdrawn, leaving TF1 as the main shareholder with 50 percent of the shares. TPS is the second satellite platform and still loss making, though the break-even point is expected to be reached in 2003.
- Canal Satellite is the analogue and digital product of Canal Plus. It almost reached break-even in 2000.

France is one of the European countries with big restrictions on satellite dishes. Many examples exist of legal disputes between apartment tenants and their landlords, or housing authorities. As already indicated, this situation has led to the dominance – in fact, to a quasi-monopoly and unchallenged position - of cable operators in urban centres where multiple housing is the rule.

In mid-2001, TPS and Canal Satellite together had three million subscribers. According to Strategy Analytics, the number of digital DTH homes (including FTA) reached 3.5 million by the end of 2001.



## 2 Changes in the regulatory regime

The law of August, 1<sup>st</sup>, 2000 revised and expanded that of September, 30<sup>th</sup>, 1986 relative to freedom of communication (*Loi n° 86-1067 du 30 septembre 1986 relative à la liberté de communication modifiée et complétée*).

The main objectives of the new law were to:

- Transpose the European Directive *Télévision Sans Frontières* into national legislation
- Reinforce the public broadcasting companies
- Set-up a new regulatory regime for cable and satellite broadcasting and define a regulatory framework for digital terrestrial television (DTT).

It also changed some of the obligations concerning content. These latter changes are, however, not relevant in the context of the present study.

### 2.1 The regulatory framework for satellite broadcasters

The Law imposes a preliminary declaration for satellite broadcasters. The declaration must be proposed by a company and the information package must contain information on:

- The composition and structure of the portfolio
- Sales conditions
- Relationships with content providers
- The shareholding structure of the broadcaster
- Commercial agreements concerning the CAS

The satellite broadcasters have to broadcast France 2, France 3, Arte France La Cinquième and a Parliamentary Channel.

The conventions with editors include conditions related to:

- broadcasting (programmes...)
- advertising, teleshopping, sponsorship
- services dedicated to self promotion
- contributions to movie production...

In addition, the authorisation to editors is only granted for a limited number of years.

Any change to the portfolio has to be notified to the CSA. The CSA may oppose the change within a month if the new services offer is not compatible with law (*Article 34-2 dernier alinéa de la loi du 30 septembre 1986 modifiée*).



### 2.2 The regulatory framework for cable operators

The Law imposes slightly different rules for cable operators. These have to request an authorisation from the CSA, upon recommendation and via the communal authorities upon whose territory the cable network is established. The request for authorisation must include:

- A general presentation of the project (potential number of homes passed, concession areas...)
- A technical description of the network
- The business plan
- Technical conformity documents

Only the channels which have a convention with the CSA can be broadcast by cable operators.

The authorisation is granted to cable operators for a maximum period of 30 years; it is only valid for one entity (company, regional or multi-regional public entity).

General conditions are attached to the authorisation, namely that:

- Channels which are already broadcast in the area must be carried by the cable operator
- The portfolio of programmes carried must respect certain composition conditions, in particular with respect to the language in which these are broadcast (a minimum share of French-language programmes has to be broadcast).

Other conditions that can be attached to the authorisation are:

- A channel dedicated to the local council
- A channel dedicated to a specific 1901 Association (a kind of non-profit organisation)
- The payment of a fee to the local council

Any modification to the structure of the programme portfolio has to be notified to the CSA. It may oppose the change within a month if the CSA considers that the change impacts on the initial authorisation.



## 3 Cost assessment

### 3.1 Authorisation and rights of use of radio frequencies

#### 3.1.1 *Right of use of radio frequencies in terrestrial broadcasting*

Rights of use of radio frequencies are granted by the CSA to the broadcasters. Frequencies are granted free-of-charge, but conditions are attached to the use of the frequency. These are positive programming obligations (outside the scope of this study), conditions related to transmission quality, as in the TF1 convention, and coverage. Clearly, broadcasters can only use the frequencies for the use provided for in the authorisation agreement, unless explicitly authorised to do otherwise.

#### **Example : Article 4 of the TF1 convention**

TF1 distributes directly, or relies on other carriers to distribute, its programmes in terrestrial analogue mode throughout the territory of metropolitan France.

The company communicates to the CSA the conventions that have been agreed with the organisation(s) which carry its signal.

It is, however, TF1 (the broadcaster) which is responsible for the distribution and for the quality of distribution. Hence, if quality problems occur in transmission, the national authorities will act against the broadcaster, who will in turn have to act against the carrier.

The example of TF1 illustrates that the conditions attached to the rights of use of radio frequencies entail a control and a transaction cost. These costs are bound to impact on the strategy of the broadcasters and the types of agreements that they sign with their service suppliers.

These transaction costs are either actual costs, or latent costs and can potentially impact on the economic situation of the players.

#### 3.1.2 *Authorisation procedures for cable operators*

Article 2 of the Decree of January 31, 2002 gives cable operators the “*authorisation to operate a network distributing sound and television broadcasting services via cable*” for a period of 30 years.

This maximum length of time of 30 years may have consequences on the costs and on the definition of the operators’ commercial and investment plans. Indeed, this length of time has to be seen in the context of the normal depreciation of equipment, and of the accounting rules related to depreciation of equipment.

On the other hand, the “*authorisation decision specifies the number, denomination and composition of the portfolio of services that the operator of the network distributes, from a list in points 1, 2, 3 and 4 of the Decree*”.



## 3.2 Must-carry

In France, the ‘must-carry’ obligation applies to cable network operators. The must-carry obligation on satellite applies to transmission by satellite, hence to ASTRA and EUTELSAT, but does not to the commercial diffusion of broadcast services (by TPS and Canalsat). The two satellite network operators are not covered by the telecoms package as service providers, except for CAS.

The channels that benefit from must-carry status are not explicitly mentioned in the Decree; Only the number and characteristics of broadcast programmes potentially benefiting from must-carry status are mentioned.

Cable operators claim that they have to support high distribution and investment costs as a result of the must-carry obligation, due to the need to build sufficient capacity to be able to meet this obligation *and* to supply other services (including the carriage of non-must carry broadcast programmes). There is no reference in the Decree to any financial remuneration for the service. But it is not specifically ruled out either.

### 3.2.1 Analogue must-carry

On analogue, cable operators must carry five channels free of charge.

Without prejudice to the fact that analogue must-carry is progressively disappearing, the cable operators’ standard package nowadays is for digital cable, with analogue packages only offered when customers require it explicitly. The fact that about one third of cable customers still only subscribe to the “standard” package (which gives them the same service offering as terrestrial television though with a higher quality of service), leads cable operators to consider that the must-carry requirement for these five analogue channels is not a burden. Indeed, the “standard package” customers who subscribe to cable only to receive the basic package instead of relying on an antenna (*antenne râteau*) for the same bouquet, give cable operators a regular revenue flow which is likely to more than offset the cost of carrying these channels<sup>18</sup>. In other words, the cable operators would probably carry these channels even without the must-carry obligation.

Indeed, a broadcast channel is estimated to cost 0.15 euros per month and per household. The antenna service costs a minimum of 1 euro per month and per household, so that this service can be considered to be a highly profitable activity for the cable operators. To that extent, must-carry represents more an opportunity revenue for cable operators in France than an opportunity cost.

The same does not hold for digital, however, where the number of (potential) must-carry channels is much higher (16).

### 3.2.2 Digital must-carry

The obligation for cable operators to transport free-of-charge all the FTA programmes available via digital terrestrial television (DTT) is viewed by the cable operators as discriminatory. Indeed, they consider that the measures are equivalent to “requisitioning” a certain distribution

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<sup>18</sup> There is a must-carry obligation for cable operators which is to provide this antenna service. This obligation is directly related to the universal service obligation. A remuneration for this service is provided for in the charges of multiple housing complexes (charges de copropriété), along with the fee for the maintenance of the antenna. The regulatory package does not say explicitly that the cable operator can obtain a revenue from maintenance of the antennas – but this has been accepted by jurisprudence in the “Epoux Molard” legal case).

mode (cable) to make it available to another directly competing distribution mode (terrestrial digital) in order to facilitate the launch of this other mode (DTT).

The development of networks has picked up speed in recent years, with several hundreds of thousands of homes passed being added annually. Millions of euros have been invested in this network extension over the last three years, generating more than 6 000 direct and indirect new jobs. Yet, the economics of cable distribution remain fragile. In the past three years, the sector has undertaken major investments in order to extend and upgrade networks. It will take several years to see the pay-back on these investments, given the slow take-up of new services and the structurally low profit margin of the sector.

The must-carry obligation limits the room for negotiation of cable operators, and conditions the composition of the service portfolio they can offer. This has implications on the whole of their commercial offering. Cable operators consider that the must-carry obligation puts them in a difficult situation by making the development of high-speed internet services, or of telephony services on cabled networks more difficult (and costly), due to capacity constraints. One must, however, look at the capacity which is used up by the must-carry channels in comparison with the total capacity of the operator, and not in absolute terms. In France, 6 analogue channels out of 40/45 possible channels to be carried on cable benefit from must-carry status. On digital networks, the capacity is very large so even if 16 channels will benefit from must-carry, this will only be a small share of the total capacity. The broadcasters which will benefit from must-carry will, however, be subject to public service missions, defined to meet certain general interest objectives.

To illustrate the above, we present below the case of NOOS, the biggest French cable operator (which accounts for 26 percent of households served by cable). There are three other cable operators: numéricable, France Télécom Câble et UPC.

NOOS is a highly integrated network operator which owns and operates its network, but also provides services to end-users and distributes services. According to NOOS, two obligations impact on its cable business plan :

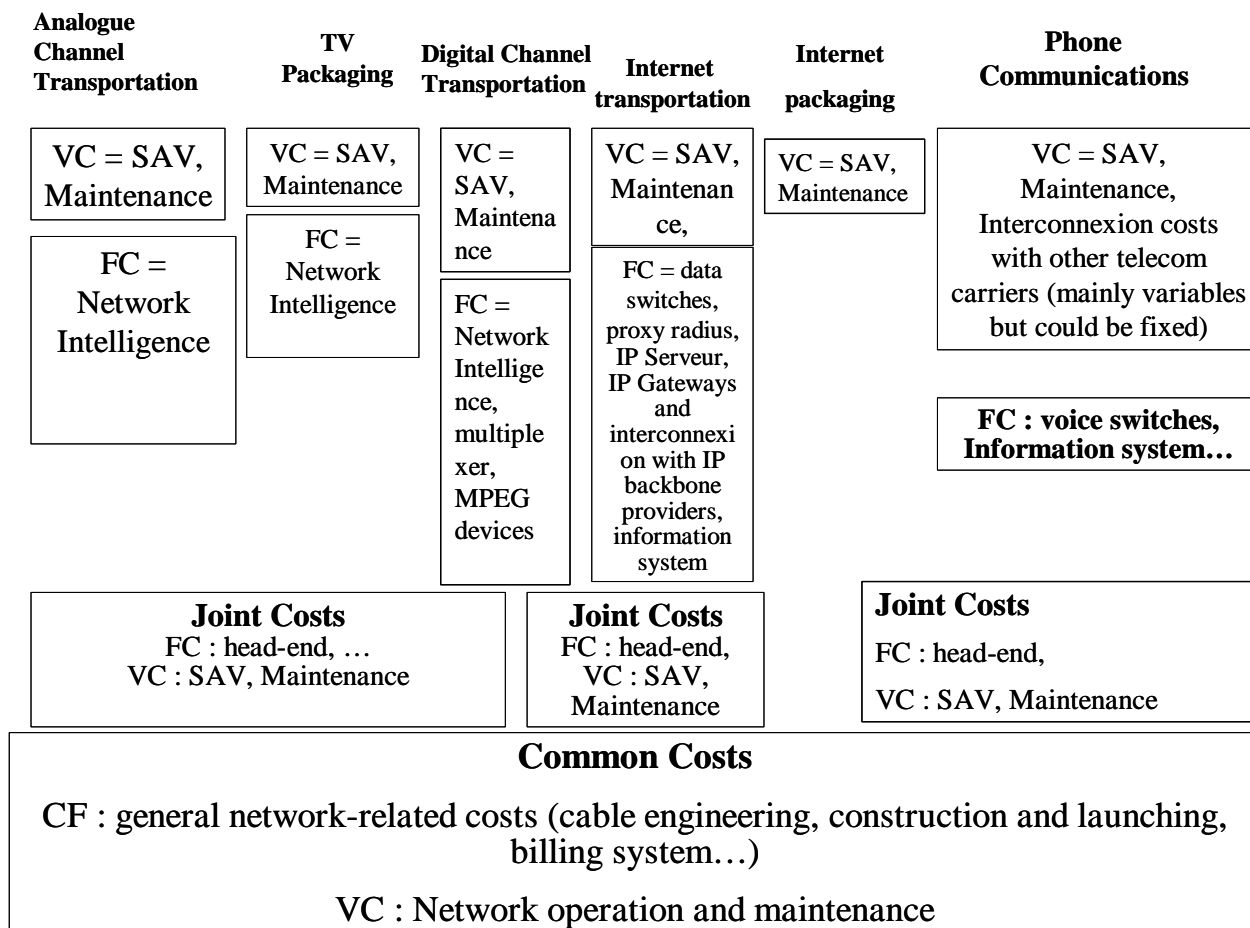
- The must carry obligation;
- Access to conditional access systems.

The must-carry obligation is, of the two, the one which is viewed as being the most problematic by NOOS.

NOOS claims that its integrated structure operator implies that the previous model which dominated in France before the new regulatory framework came in force can no longer be maintained.



### Cost structure of NOOS



### 3.3 Access to conditional access systems

Providers have to inform the CSA of any change to the technical distribution conditions, in line with the provisions of Article 25 of the Law of September 30, 1986, as modified. They must also inform the CSA of projects impacting on the conditions of distribution or the development of new technologies and services.



# Germany

## 1 Broadcasting in Germany

### 1.1 The market

Germany has the biggest national broadcasting market in the European Union, with a total of 38.8 million households. According to the telecoms regulatory authority, the Regulierungsbehörde für Telekommunikation und Post (RegTP), a total of 58 percent of households (21.8 million) receive their television broadcasts via cable, against 33 percent via satellite and nine percent over-the-air. The figures are for end-2001. The number of subscribers using satellite reception is rising faster than the cable subscriber base, while the number of over-the-air viewers is falling. In some parts of Germany, there are now no available frequencies for additional over-the-air terrestrial broadcasters.

Digital television programmes received by satellite dish or cable have a modest market share at present, limited mainly to the pay-tv platform of the Kirch group's Premiere World. Digital terrestrial television (DTT) is still mainly at the pilot stage although a commercial digital service was launched on November 1<sup>st</sup> 2002 in the region of Berlin-Potsdam.

According to the RegTP, the number of cable tv subscribers using the cable for broadband access to the internet was expected to rise from fewer than 50,000 in 2001 to around 150,000 in 2002.

### 1.2 The regulators

The broadcasting sector in Germany is regulated at two levels – federal and state (Land). Because of its cultural nature, the main regulation of broadcasting is carried out by the 16 individual Länder or states. They do so by means of an Interstate Treaty on Broadcasting, the Rundfunkstaatsvertrag, and their own individual Rundfunkgesetz, or broadcasting law. In addition, each has a Landesmedienanstalt, or media agency. These agencies coordinate their actions through a Conference of their Directors. This conference is currently (until end-2002) chaired by the Agency for North Rhine-Westphalia (Landesanstalt für Rundfunk Nordrhein-Westfalen – LfR)

National legislation transposing EU directives on electronic communications networks and services into German law, refer to Article five of the German Constitution (Grundgesetz) which guarantees freedom of opinion and freedom of information.

At the Federal level under the Telekommunikationsgesetz (Law on Telecommunications), the RegTP is responsible for transmission licences and frequency allocation for broadcasters. These are issued once a broadcaster has obtained an authorisation from his state media agency. Another federal law, the Fernsehsignalübertragungsgesetz, regulates the application of standards for the carriage of tv signals, including conditional access systems.

The federal and Länder regulators agree that the current review of German broadcasting legislation and the requirements of the new EU legislative package for electronic



communications will risk shifting the regulatory balance more in the direction of the federal authority. A statement by the Directors' Conference of the media agencies, the *Direktorenkonferenz der Landesmedienanstalten* recognises this, but states that the role of the Länder regulators should not thereby be diminished<sup>19</sup>.

### 1.3 The players

The main content producers in Germany are the national public broadcasters, ARD 3sat and ZDF, plus a series of commercial channels including RTL, Pro Sieben, Sat1, VOX, n-tv, etc. These channels can be received directly by viewers over-the-air and/or by satellite. They are also distributed by cable.

In Germany, cable distributors of tv channels operate at two levels: the so-called network level 3 (carriage from the point of signal reception to the curb) and level 4 (from the curb to individual households). Only those operating at level 4 have direct contact with the end-users.

Cable distribution at level 3 is largely in the hands of Deutsche Telekom (DT) and two commercial companies – *ish GmbH & Co. KG* which operates in two Länder, North-Rhine Westphalia and Baden-Wuerttemberg, and *iesy Hessen GmbH & Co. KG*, which operates in Hessen.

Deutsche Telekom, whose cable tv operations were transferred to a wholly-owned subsidiary, Kabel Deutschland GmbH, in 1999, retains a minority holding in ish and iesy. A total of 55 percent of the shares of ish are owned by the US-based Callahan group and 45 percent by DT. DT retains 35 percent of iesy while the majority is controlled by international and German partners headed by NTL of Britain which has a 32.5 percent holding.

These distributors supply their signal to retailers and wholesalers who operate cable networks at level 4. They themselves directly own a small number of retail service providers and distributors at level 4. But the large majority of households are supplied by, and are contractually linked to, one of about 4,000 local companies who control network level 4 in their district or city. Ish, for example, claims that among the 4.18 million households taking its service, only 180,000 were direct level 4 customers as at 31<sup>st</sup> March 2002.

DT owned the whole of the national level 3 distribution networks but is in the process of divesting itself of these in order to open the German network market to competition. Besides selling controlling interests in three regions to Callahan and to NTL and its partners, DT entered negotiations with Liberty Media of the US (parent of UPC) to sell its cable distribution business in its six remaining regions. But the deal was vetoed by the German cartel authority in February 2002. Part of the reason for the failure of the Liberty bid was the US group's desire to obtain control over level 4 networks as well, in order to obtain direct access to subscribers. Another point of difference was the question of network upgrades.

At time of writing, Deutsche Telekom had launched another attempt to sell off controlling interests in the six remaining cable regions. One again, Liberty Media was among the bidders, but the price it offered was said to be one of the lowest.

In Germany, as in other EU countries, the business plans of cable operators are predicated on the expansion of their activities from distributors of broadcast programmes to full service providers offering multiple broadcasting packages, multimedia services as well as rapid internet

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<sup>19</sup> *Resolution der Gesamtkonferenz zur Neuordnung der Medienaufsicht* (adopted on 20 November 2001)

access and telephony. This represents a major financial challenge in itself, requiring *inter alia* an upgrade of most of their networks to include a back channel for two-way communications. The absence in many instances of direct access to end-users is seen as a further major obstacle by the cable network operators to their ability aggressively to market new services.

Commercial voice telephony services over cable operators' networks are virtually non-existent at the present time. Ish has launched a commercial telephone service over its network but with a very limited uptake.

However, it is not surprising that ish and iesy argue, as do cable operators in the Netherlands and Belgium, that any cost-allocation model for their networks should be based on their function as full-service providers, offering interactive broadband communications in addition to their function as packagers and distributors of tv channels.

As in other European countries, the broadcasting sector in Germany is suffering from the combined effects of the sharp slowdown in the expansion of telecoms and internet activities, the fall in advertising revenues, the slow uptake of internet and voice telephony via broadband cable and the delayed switchover to digital services. The Kirch Group and ish have experienced considerable financial difficulties.



## 2 General interest obligations as applied to broadcasting

### 2.1 A commercial relationship

The principle is established in Germany that a content producer pays a carriage fee to the cable network operator so that his channel(s) can be distributed to end-subscribers over the cable network<sup>20</sup>. This is set on the basis of a freely-negotiated contract between the two parties. But the cable network operator has to pay copyright or performers' rights for the programmes he then distributes. As in other EU member countries, the level of the copyright and performers' rights charges and their means of collection have given rise to legal disputes in Germany.

The agreements between content producers and cable operators have to be submitted to the media agency of the Land in which the broadcasts are being distributed (see for example Art 39 of the Broadcasting Law of North-Rhine Westphalia – *Rundfunkgesetz des Landes Nordrhein-Westfalen*)<sup>21</sup>. The cable network operator then sells on to his end-customer, or to the level 4 network operator where appropriate, his selection of programme channels.

The capacity of German cable networks is generally the equivalent of about 30-35 analogue channels. In general, content producers pay carriage fees on the basis of the amount of the cable operator's capacity their programme uses.

### 2.2 Must carry regulations

The basic must-carry package for cable operators is set out for each of the Länder in their individual *Rundfunkgesetz*. These are broadly similar in nature, although there are local differences. The additional must-carry requirements concerning digital programmes distributed by cable is set out for all Länder in the Interstate treaty, the *Rundfunkstaatsvertrag* (Art. 52). This states that must-carry conditions should be transparent, fair and proportionate.

In Germany, must-carry is an obligation imposed on the cable network operator. Its function as a requirement in the general interest of the population is implicit rather than explicit. The operator is required to carry on his network public broadcasters (national, regional and local), and commercial broadcasters operating across their whole area of territorial coverage, plus other programmes with a social or cultural significance. In addition, the totality of the programmes carried must express the diversity of broadcasting opinions as broadly and as completely as possible, providing in this way, comprehensive information (*Rundfunkgesetz NRW*, Art 41 (2)).

#### 2.2.1 Analogue must carry

The following are the analogue must-carry requirements in the Land of North-Rhine Westphalia (Art 41. of its *Rundfunkgesetz*). Although, as stated above, there are minor differences from one Land to another, the case of North-Rhine Westphalia can serve as a general example for the purposes of the present study.

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<sup>20</sup> The only exceptions are local community channels, so-called Open Channels, one of which must be carried free-of-charge by each local cable operator.

<sup>21</sup> CNN was not initially available on German cable networks because it declined to pay a carriage fee to the cable operators.



- Programmes from national public broadcasters (ARD and ZDF), programmes distributed throughout the territory of NRW, local broadcasting programmes within their dissemination area, including so-called Open Channels for local community use.
- If there is insufficient capacity to carry all the other authorised or licensed tv programmes or programmes that can be received over-the-air, then the NRW Media Agency can draw up a priority list. This is based on criteria like programme diversity, educational and cultural value, etc.
- In border areas, at least one programme from the neighbouring country that can be received over the air with a normal antenna must be retransmitted by cable.
- The Media Agency may designate up to two foreign language programmes for foreign nationals in areas where they make up a significant share of the population.

*In concreto*, the must-carry programmes in NRW are:

- 3 Sat
- Arte
- ARD
- Der Kinderkanal (children's channel)
- RTL
- The Open Channel (where authorised)
- Phoenix
- Sat 1
- VOX
- WDR Fernsehen
- ZDF

In border areas:

- |                      |                |
|----------------------|----------------|
| • <i>Netherlands</i> | <i>Belgium</i> |
| NOS 1                | RTBF 1         |
| NOS 2                | VRT 1          |
| NOS 3                |                |

In addition to these must-carry channels, a range of more than 30 other channels are potentially available to subscribers in NRW, depending on their local region. These include sports programmes (DSF and Eurosport), other thematic channels, programmes from other EU countries (BBC World and TV5), TRT International (for the Turkish community), CNN and NBC, etc.

Given the capacity of cable networks, not all optional programmes can be included in the distributors' offering. This means that selective channel allocation for non must-carry has to be undertaken by the NRW Media Agency, according to procedures under Article 41 of the *Rundfunkgesetz* as described above. This sets out in great detail the criteria to be applied in order to identify the best possible programme mix in the general interest. In North-Rhine Westphalia, a further 17 can-carry channels are designated in this way, leaving the cable operator, if he still has the capacity, to allocate additional channels according to his own choice among licensed broadcasters.



This situation, however, gives rise to complaints from cable operators that they have little, if any, free choice in deciding on the programmes they wish to offer their subscribers. While they admit that they would include many of the must-carry programmes or those allocated by the Media Agencies in their offers, they would not willingly carry others. This is particularly the case for minority or thematic channels of little commercial interest. The operators say that carrying such programmes prevents them from offering more commercially attractive channels on their network. The designation of must-carry for a particular broadcaster reduces the cable operator's scope to negotiate a straight commercial deal with that broadcaster.

The NRW Media Agency has to review the list of programmes in the must-carry category and the non must-carry category (to the extent that these have been allocated by it) at least once every 18 months (Art. 41 of the *Rundfunkgesetz*).

### 2.2.2 Digital must-carry

To facilitate the migration from analogue to digital television signals, the *Rundfunkstaatsvertrag* sets out requirements for digital must-carry<sup>22</sup>. This is part of a broader allocation schema which divides the offering of cable operators into three parts. The result is to leave much more discretion to cable operators in their choice of programmes than the analogue must-carry and can-carry rules.

a) The first of the three parts is must-carry. Here, the cable network operator has to ensure :

- The necessary transmission capacity for the dissemination of broadcasters established under public law (ARD and ZDF), including their programme bouquets. This capacity is defined as the equivalent of three analogue channels.
- Transmission capacity for regional, local television stations and open channels. This capacity is the equivalent of one analogue channel.
- The transmission capacity for must-carry is technically equivalent to the transmission capacity devoted to other digital channels.

b) The second part defines what may be called can-carry programmes. These can represent up to one-third of the cable operators capacity. They must take account of such factors as the interests of existing subscribers, the plurality of programme providers, programme diversity, general programmes offering full coverage as well as thematic channels, free programmes, foreign language programmes and media services. Priority should be given to programmes already retransmitted by cable distributors in analogue form. The Media Agencies of the Länder may intervene to ensure respect of these factors in the cable operators' offerings.

c) The third part applies to the remaining digital transmission capacity. Here the cable operator is free to allocate his capacity as he wishes in accordance with general law.

The directors conference of the Media Agencies has created a working group (*Gemeinsame Stelle Digitaler Zugang*) to consider the issues linked to the switch over to digital transmission including cable and satellite transmission, common standards (in particular MHP), digital access and conditional access systems.

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<sup>22</sup> Specifically Article 52, paragraphs 2 to 5

### 2.2.3 Satellite broadcasts

In Germany, there are no must-carry obligations for satellite broadcast channels. But the Rundfunkstaatsvertrag (Art 51) sets out procedures for allocating channels in case of excessive demand from satellite broadcasters. Where interested parties cannot reach an agreement, channels are allocated jointly by the Länder on the basis of a number of criteria including the assurance that the basic services are supplied, that there is a balance between public and private broadcasters, programme diversity and that public broadcasters are associated with all new technologies and new programme forms.

## 2.3 Availability of digital offerings

At present, the offer of digital programmes over cable networks in Germany is a limited one. The only significant digital broadcaster is the Kirch group's Premiere World pay-tv platform. In the cable networks, six channels (with around eight programmes each) are allocated to Premiere World. Under current regulations, Kirch group controls its programmes and bouquet, it has direct contracts with its subscribers and it also owns the set-top box used by subscribers to decrypt the programmes. The cable operator is only a simple carrier of the Premiere signal.

Deutsche Telekom closed down its digital pay tv platform, MediaVision, in June 2002.

There is limited capacity on cable networks at present to expand their digital offering. In addition, network upgrades to include two-way communications reduces the number of channels available for broadcast transmission. Because of this bottleneck, there is not enough capacity for simulcast of all programmes carried by cable networks during the transition to digital. Decisions will have to be taken concerning which of the non must-carry analogue programmes will only be available in digital format.

The first commercial digital terrestrial television service began in the region of Berlin-Potsdam in November 2002. Others will follow in 2004. Tests and pilot projects have been under way in several regions of Germany for some time. Given that cable and satellite reach more than 90 percent of German television households, some experts believe that DTT will have its main impact with regional and local programmes and services.

## 2.4 Conditional access systems (CAS)

Conditional access systems in Germany are regulated at federal level by the Fernsehsignalübertragungsgesetz referred to in section 1.2. above, and at the level of the Länder by Article 53 of the Rundfunkstaatsvertrag. The Fernsehsignalübertragungsgesetz requires (in §6) cost-effective transcontrol so that cable operators can directly manage services which use CAS. Both texts refer to the need for owners and operators of such systems to make them available to any broadcaster wishing use them or to manufacture them on fair, reasonable and non-discriminatory terms, as well as to the requirement to keep separate accounts for their CAS activities. The same rules which apply to CAS also apply separately to Electronic Programme Guides (EPGs). In addition, EPGs must give equality of access to public and commercial broadcasters. They must also give direct access to individual programmes.

Article 53 goes on to give details of what is meant by fair, reasonable and non-discriminatory conditions. These include the provision of information on all relevant technical parameters, the indication of the financial charges, and the timely announcement of coming technical changes.



Non-discrimination requires the use of open Application Programme Interfaces (APIs) and the use of recognised open European standards.

Compliance with the CAS requirements is monitored by the respective Media Agencies who have to be informed by the owners and operators of such systems as soon as they commence their activities.

## 2.5 The future regulatory context

As already indicated in the present paper, German federal and Länder regulators expect the implementation of the new EU regulatory package to have an impact on the current regulatory balance between the federal government and the Länder. Its full transposition into German law could for this reason take up to two years. Issues which would create an overlap between current federal and Länder responsibilities could raise constitutional questions.

However, regulators are confident that under German legislation as it stands, nearly all aspects of the EU package concerning the network infrastructure for electronic communications services and its use can be handled at the federal level. The same is true of frequency allocation.

For example, the RegTP undertook an examination into the position of cable operator ish to see whether it has a dominant position in the market for broadband cable services and if so whether it abused this position when it increased its prices on May 1<sup>st</sup>, 2002. This action follows the receipt by the RegTP of “numerous protests” from among those affected by the price increases.

The RegTP closed the case on September 5<sup>th</sup> 2002, concluding that the price increases introduced by ish were justified, and did not breach regulatory requirements. The RegTP did not address the issue as to whether ish had a dominant position, since no abuse occurred to require such an investigation.



## 3 Cost assessment

### 3.1 The competitive position

German cable operators consider themselves to be in a particularly difficult competitive environment. Their share of the market for delivering broadcast channels to end-users is growing less fast (under two percent a year) than that of satellite. The migration to digital broadcasting is moving more slowly than forecast, limiting their ability to offer a wider range of broadcasting and multimedia services, while investment upgrades in their networks for interactive services have been costly yet have not produced the expected number of subscribers to the internet and other broadband services.

Whereas cable operators' costs go up (for network upgrades and the like), the cost of a satellite receiver is coming down. Moreover, satellite operators offer a wider range of channels for a one-off payment. A satellite receiver costs less than €100 whereas a yearly individual subscription to a cable tv operator costs from €152 (DT) to €165 (ish) for a basic tv connection.

But cable operators believe that the market is not particularly price sensitive. The determining factor is convenience. So long as cable operators continue to provide a sufficiently wide range of services of the kind customers want, at reasonable cost, and with no more than one set-top box to handle, there will be little incentive to switch from cable to satellite.

However, anecdotal evidence suggests that technical problems and outages encountered by cable operators during their recent network upgrades have encouraged thousands of subscribers to move to satellite reception.

Cable operators' relationship with level 4 distributors is also not an easy one. When cable network operators seek to raise prices, level 4 operators threaten to cancel their cable contract and to create their own programme offering of channels which they can themselves receive directly by satellite. The absence of direct access to the end-user already referred to is an increased obstacle to expanding their subscriber base. Potential competition from satellite operators for internet access is another area of concern.

In addition, the continued presence of Deutsche Telekom as the dominant cable operator at network level 3, and its perceived preference to provide its customers with DSL internet access in preference to broadband cable, remains a check on investment by other cable operators. This situation is unlikely to change until DT's remaining cable subsidiaries are sold off.

For these and other reasons, cable operators in Germany, as in the Netherlands and Belgium, see the cost of the must-carry general interest obligation in the wider context of an expansion of their operations to provide value-added broadcasting services, not just the carriage of basic tv programmes, as well as the development of new multimedia services and the provision of high-speed internet access and voice telephony services as well. This is the so-called triple play of the full-service provider, offering the customer broadcasting, internet and residential telephony on a single network.

But the first step for some at present is to have more freedom to buy broadcast content and to add value by packaging and marketing the result. Because digital has not developed as expected, present restrictions on their analogue operations are felt more acutely. In addition, cable operators claim that the must-carry requirement prevents them from selling their service at the



best price since their offer may include services the customer is not interested in but has to buy along with the rest.

## 3.2 Identifying the costs

There are at least two ways of looking at the cost of the must-carry obligation. The first is in isolation, as part of a monopoly structure where the cable is used only to distribute broadcast channels with little or no added-value other than collecting and packaging the offer. The second is to consider it, as the operators do, as part of a package of value added services.

### 3.2.1 *Must carry in isolation*

As stated in section 2.1 above, the German cable network operator receives from the broadcaster a fee for carrying his programme(s) on the cable network. These fees have to be paid by broadcasters with must-carry status as well as by commercial broadcasters. The only (small) exception is the so-called open channels for local community events, which have to be carried free-of-charge. The cable operator has to pay copyright and performers' rights for the tv programmes he carries. This is a direct cost. It is generally passed on to the subscriber.

German cable operators argue that although they would carry most of the must-carry channels in any commercially-based service they would offer, there are a number of minority and thematic channels they would not willingly carry. These would be dropped in favour of channels with a broader consumer appeal or for which the cable operator could get a better fee.

According to one cable operator, there is little incentive to allocate your costs when you are selling the same basic package to all your customers for the same basic price. In this situation, you do not need to calculate separate rates for the network and the services carried across it, as all expenses are shared equally by all subscribers.

This is, however, an oversimplification. There are several levels of costs associated with must-carry that can be identified and measured. By far the biggest is the cost of the network (up to 80 percent of total costs). Others include the transmission elements used, management and administration costs (including billing and collection), network depreciation, as well as the opportunity costs linked to the imposition of must-carry requirements (see part I of the main report for more on this).

The impact of must-carry on these costs can be broken out if desired. But other costs associated with the lack of direct access to customers through the separation of level 3 and level 4 networks are harder to quantify. This is considered by cable operators in Germany as being as big a problem as must-carry obligations.

### 3.2.2 *Elements of an alternative cost model*

An effective costing methodology needs to be based on the full range of activities of a business undertaking, with the costs generated by each activity identified and apportioned.

As part of the investigation by the RegTP into ish's pricing policy (see section 2.5 above), ish submitted, at the regulator's request, detailed information concerning its operations and costs. Ish has made this information available to Eurostrategies for the purpose of the present study. The relevant information concerns in particular:



- a. Information on ish's network activities, at the different levels, on behalf of its customers.
- b. Details of bought-in services concerning the reception of broadcasting content and technical and operational administration.
- c. The purchase of new telephony and broadband internet products.
- d. Network upgrade and leased lines and equipment.

**a) Network activities**

At network level 2 (reception of broadcast signals and feeding them into ish's broadband networks), ish lists the following activities:

- Operation and maintenance of its central network operation centre
- Operation and maintenance of 150 primary broadband amplifier points
- Supply of signals via microwave links to the broadband amplifier points
- Reception and carriage of satellite and terrestrial signals into the broadband distribution network and into ish's new upgraded fibre network
- Development and operation of a new monitoring system for central network management and fault clearance.

At network level 3 (supply and delivery of analogue and digital tv and radio signals to the transfer point of level 4 networks), ish identifies the following:

- Operation and maintenance of network level 3, including fault clearance
- Delivery and supply of signal to level 4 operators and owners at the desired quality level
- Extension of service scope by means of network upgrade and associated frequency extension
- Modernisation and replacement of devices in the distribution networks operated by ish
- Transfer of signal delivery and network coverage to modern fibre network
- Network extension (increase the number of homes passed and connected)

At network level 4 (supply of signals to the home, or the operation of a level 4 network), the following are listed:

- Operation and maintenance of level 4 network
- Fault clearance on customer premises
- Modernisation and replacement of level 4 network devices.

**b) Bought-in services**

Ish has a series of agreements for services performed by Media Services GmbH (MSG), a wholly-owned subsidiary of Deutsche Telekom. These concern:

- Operation and development of the digital platform by MSG and allocation of costs to MSG and the regional cable companies, including contract management with digital broadcasters and billing for ish and the broadcasters;
- Customer management and operation of a foreign-language call-centre for the foreign-language product, Vision Globe;
- Contract management of analogue contracts including the billing and collection of carriage charges from broadcasters to the regional cable companies.



**c) *New telephony and broadband internet products and services***

- Ish has established contractual relationships with what it calls “key vendors”. These are:
- Motorola for a multimedia terminal adaptor (MTA), an access device to give customers access to the ish internet and telephony services;
- KPNQwest as interconnection partners for data services, providing the backbone link from the ish network to the internet;
- Deutsche Telekom as interconnection partner for voice telephony services supplying all voice connections between the ish network and those of Deutsche Telekom and all other service providers;
- Nortel Consortium to provide the basic network upgrades and the switches and interfaces for voice telephony and internet access.

**d) *Network upgrade and leased lines and equipment***

Ish has service agreements with a number of suppliers for services linked to its network upgrade. It also purchases services from Deutsche Telekom such as the leasing of lines, premises, cable head-ends, cable ducts and IT systems.

### **3.2.3 *Broadening the cost base***

As the network is the biggest cost for cable operators, the parameters for assessing this cost need to be defined. Historically, the network served to deliver analogue tv channels to subscribers. Now it is increasingly becoming a full-service broadband network offering a wide range of electronic communications services. Operators want the value of the network to be on a current or forward looking basis, where the cost is that of building a similar network today. This would include recent and future upgrades to expand the scope of services offered over the network to include value-added broadcasting services and multimedia products as well as internet access and telephony.

These investments are partly to enhance the offer of broadcasting services of which the must-carry channels are a part and the cost should, the network operators argue, also be borne by the must-carry channels. Already today, some cable operators offer other services including internet access and telephony. As a result, consumers face an unequal allocation of these costs, since not all subscribers take all services offered. This situation is taken by cable operators as a justification for seeking to revise their tariffs charged to consumers.



In the model proposed by the operators, there would be a revised cost allocation, particularly for network management and maintenance and for billing and collection. The requirements of simulcast during the transition to a fully digital environment will involve extra costs.

In their business plans, German cable operators see themselves as dynamic full-service providers operating as near as possible to market conditions, competing on service offerings not just with telecoms operators on internet and telephony but also for certain service functions with the broadcasters themselves<sup>23</sup>. As such they also plan to develop and provide their own set-top boxes when they are able to offer their own range of services – on condition that a common interface has become mandatory by then.

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<sup>23</sup> There is no question, of course, of cable operators seeking to produce content themselves.

In this context, must-carry obligations can be seen in two ways. On the one hand, the impact of must-carry as an obstacle to the profitability and commercial efficiency of network operators is diminished. On the other hand, by sharing some of the network upgrade costs with other services offered by the cable operator, must-carry helps reduce the cost of the upgrade for the other internet and telephony services offered by the cable operator.





# Italy

## 1 Broadcasting in Italy

### 1.1 The market

Italy had a total of 22.8 million households in 2001. Most households (89 percent) receive their television broadcasts over the air<sup>24</sup>, while 10 percent receive their TV signals via a satellite dish and only one percent via cable. However, it should be noted that whereas two million households are contractually entitled to receive satellite programs, nearly six million households are in fact equipped with satellite dishes. One can only conclude that piracy is widespread.

Digital television has yet to be launched commercially. The experimental period, which is currently under way and is due to last until the end of 2002, will provide useful information to regulators, network operators and broadcasters, especially in relation to spectrum management. Spectrum management is in fact a major current concern in Italy because of the very large number of free-to-air (FTA) television broadcasters (around 800 of them).

### 1.2 The Players

#### 1.2.1 The regulator

The *Autorita per le Garanzie nelle Comunicazioni (AGCOM)* is the Italian regulatory authority in the communications sector. AGCOM was established by Law n. 249/1997 to carry out the regulatory tasks assigned under European Union legislation for both the telecoms and audiovisual sectors.

AGCOM's policy approach is one of supporting a liberalized and competitive market while encouraging new entrants to invest in Italy. Its structure is made up of a council and two commissions, one for infrastructures and networks, the other for services and products.

The Council :

- advises the Government on strategies and policies in communications matters;
- carries out studies and research on technology issues;
- ascertains the existence of dominant positions in the broadcasting sector;
- gives advisory opinions in proceedings pending before the Italian competition authority;
- prepares an annual report to Parliament on the activities of AGCOM.

The Commission for Infrastructures and Networks:

- advises the Ministry of Communications on frequency matters;
- draws up the national frequency allocation plan;

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<sup>24</sup> Source : SES-ASTRA 2001

- defines transparent criteria for interconnection pricing;
- provides mediation for dispute resolution on interconnection matters;
- ensures that telecommunications services are provided to meet all reasonable demands;
- determines non-discriminatory criteria for the national numbering plan.

The Commission for Services and Products:

- monitors compliance with regulations and policies;
- adopts guidelines on the quality of services and on standards;
- monitors the daily distribution of programming and advertising;
- monitors the compliance with regulations on the protection of minors;
- ensures the right of reply;
- ensures the application of regulations concerning advertising and political pluralism.

### 1.2.2 *Other players*

The Italian broadcasting sector is made up of:

- hundreds of free-to-air (FTA) local and national channels, and two main networks (Mediaset and RAI)
- 2 satellite platforms: Stream and Telepiu
- 2 cable operators: Stream and E.biscom

The cable operators account for a very limited share of the market. Stream and E.biscom have each launched a cable service but still only have a low market penetration (around 15 000 customers for both of them). E.Biscom has launched a new business development to provide customers with broadband fibre to the home. In this way, E.Biscom will be able to offer the full range of multimedia services such as telephony over IP, pay TV, video on demand and broadband internet access. As a real multimedia network operator, the company faces a number of new entrant regulatory problems and obligations stemming from both the telecom and audiovisual sectors.

Of the 2.5 million “paying” subscribers of the two satellite platforms, 1.5 million are Telepiu customers while about one million subscribe to Stream. The viewing habits of the four million households who receive satellite services without paying are not documented



Negotiations are currently under way between Vivendi Universal and Rupert Murdoch, which could lead to the merger of the two Italian satellite platforms. What will happen to those platforms in case of a merger is, however, still un-clear. Will they disappear and be merged into a new third brand or will they co-exist for a while? Will Stream disappear for the benefit of Telepiu? Nobody can tell what Rupert Murdoch may do in the coming months.

The future of the satellite platforms in Italy has potential implications for the business model of the future digital terrestrial television (DTT) service since Telepiu is involved in developing this type of broadcasting technology.

In the light of the various ongoing activities, it is clear that there will be major changes in the Italian broadcasting sector in the coming months.

## 2 General interest obligations as applied to broadcasting

Italy intends to change the regulatory framework for audiovisual services by the end of 2002 or early 2003. This reform, the third since 1990, is expected to increase the powers given to the national regulator, improve antitrust laws, redefine the role of RAI, and in the end lead to its privatisation.

The first of these reforms, which took place in 1990 and is known as the Oscar Mammi laws (a reference to the then minister in charge of broadcasting), brought some order to the previously unregulated audiovisual market that had caused a total fragmentation of the market (with the emergence of hundreds of local channels), though without changing the duopoly situation of the RAI and Mediaset.

In 1997, Antonio Maccanico introduced the separation of ownership between the written press and the broadcasters by forbidding a TV broadcaster to own a national newspaper. The goals of this reform were firstly to liberalise the audiovisual market, and secondly to develop fair competition. After four years, it can be said that, if the first goal has been achieved, the second one needs further action since Mediaset and RAI between them still account for 75 percent of TV audience and 90 percent of the advertising market.

### 2.1 Right of use of radio frequencies in terrestrial broadcasting

The allocation of terrestrial radio frequencies is a big problem in Italy. On October 30th, 1998, AGCOM approved the television frequency plan which should have restructured this market which had been completely deregulated in 1976, with the consequences described above.

The television frequency plan proposed 11 national radio frequencies. Three of those frequencies were given to the public broadcaster (RAI) and the remaining eight were offered to private broadcasters on the basis of a competitive beauty contest procedure.

Twelve private broadcasters competed for the eight licenses. Four broadcasters (Telepiu, Retequattro, Retecapri, ReteA) did not obtain a license although they were already exploiting the frequencies and therefore had already deployed their infrastructure to use these frequencies. These four broadcasters were thus in theory not allowed to continue using the frequencies which they had been using until then, which created a major business issue. In order to facilitate a transition period, two of these four broadcasters were nevertheless granted temporary licences by the government to enable them to launch a digital satellite platform and shift their customers onto that platform. These two broadcasters are Telepiu and Retequattro. It was initially proposed that those broadcasters would have the right to use the frequencies as long as the penetration rate of digital satellite television hadn't reached 50% of Italian homes. However, the two channels are still exploiting the frequencies today.

In contrast, one of the eight to obtain a licence (a newcomer, Europa 7) has not yet been able to launch an operational (broadcasting) service. In fact, it has obtained the right to exploit a frequency, but in practice has been unable to do so because the frequency in question was already used by another broadcaster. Europa 7 has therefore started legal procedures to obtain its right but its complaint has not yet been settled.



However, the new regulatory framework that will accompany the introduction of digital television should solve the problems that emerged during the previous period. In March 2004, AGCOM is due to publish a decision which will clarify relations between digital TV players in Italy. Meanwhile, the government and AGCOM prefer to leave the different players to work with each other. The latter are currently discussing amongst themselves to see how those broadcasters who want new frequencies for digital broadcasting can obtain them. Therefore, the big analogue players such as Mediaset buy the frequencies on an audience basis. That is to say, the local analogue player which prefers to stop using its frequency can sell its equipment to Mediaset for a price which depends on the number of houses that this equipment enables to reach.

## 2.2 Must-carry

Cable operators are marginal players in Italy. Therefore the must-carry obligation is not an issue for them. In fact, some see it as potentially a good thing because they have difficulties in negotiating packages with TV broadcasters, who do not wish or need to be carried by cable, and hence are too “demanding” in the conditions they set to be carried. For cable operators, it is very important to be able to include terrestrial programmes in their package in order to attract more customers.

Nevertheless, the launch of digital terrestrial television (DTT) will introduce a new form of must-carry obligation. Indeed, infrastructure providers who transmit the digital signals will have to offer at least 40 percent of the total transmission capacity to other broadcasters. For example, the subsidiary of Mediaset, which owns and exploits the network infrastructure, will have to transport at least 40 percent of signals which do not come from Mediaset.

These conditions are to apply to access to the broadcasters’ infrastructure during the switch-over period from analogue to digital, until AGCOM publishes the new regulatory framework (expected in March 2004). The tariffs for this carriage function are not fixed by the regulator. With the March 2004 decision, AGCOM will set the new framework. It should be based on commercial agreements between players whose conditions should be fair, proportionate and non discriminatory.

## 2.3 Access to conditional access systems (CAS)

In 2000, AGCOM deliberated<sup>25</sup> on this issue. It took a decision to force the two satellite platforms to agree on common conditional access system (CAS) technology. That is to say, the two satellite platforms should use compatible encryption procedures. Instead of using multicrypt for their signals, they were to use simulcrypt technology. The two satellite platforms agreed but AGCOM decision has been only partially applied because of technical problems. Not all programmes on their platforms (pay per view, video on demand, etc) that use API are presently interoperable using simulcrypt technology. Customers do not therefore fully benefit from this decision.

It should be noted that in Italy decoders are not subsidised by the operators. The customers may either buy a decoder from a retail shop, or rent it from the platform operator. In the latter case, the rental fee for the decoder is included in the subscription price paid to the operator; hence the cost of the decoder does not have to be “allocated” to the various channels, as is the case in the UK for example.

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<sup>25</sup> Delibera 127-00

With the partial interoperability between satellite platforms, the issue of the acquisition cost to the customer for access to the first satellite platform has been resolved. The customer who, say, buys a decoder from, and subscribes to, Telepiu may switch to Stream. So long as Telepiu does not subsidise the initial acquisition of the decoder, Stream does not obtain any significant advantage from its position as the second satellite platform to serve the customer. Therefore, Telepiu does not charge anything to Stream for the decoder, and vice versa.





# Netherlands

## 1 Broadcasting in the Netherlands

### 1.1 The market

The Netherlands is probably the most densely cabled country in Europe. A total of 93 percent of all households receive their tv broadcasts via cable – the equivalent of 98 percent of all tv households. Satellite broadcasts are received directly by about 300,000 subscribers, although the number is said to be rising relatively fast. Only the national public tv broadcaster NOS broadcasts over the air.

The main supplier of digital tv programmes is Canal+. There is currently no commercial offering of digital terrestrial tv in the Netherlands, although Digitenne, a consortium including KPN, NOS, RTL, SBS, Canal+, KinderNet and Nozema (the publicly owned supplier of terrestrial transmission services), was due to begin commercial operations in October 2002 in the Amsterdam and Hilversum area. Digitenne is a consortium of broadcasters and transmission networks – but which deliberately excludes cable operators.

According to Vecai, the association of Dutch cable operators, a total of 65 percent of cable homes passed now have access to two-way digital services.

Figures from the *Onafhankelijke Post en Telecommunicatie Autoriteit (OPTA)*, the telecoms regulator in the Netherlands, show that the number of internet subscribers using a cable connection rose from 11 percent in 2001 to 15 percent in 2002. This compares with only three percent with an ADSL connection.<sup>26</sup>

### 1.2 The regulators

Cable broadcasting is regulated by a series of laws and bodies in the Netherlands, some of whose responsibilities overlap. These include the *Mediawet* (Media Act) and the *Commissariaat voor de Media* (the media regulator), as well as the *Telecommunicatiewet* (Law on Telecommunications) and OPTA. The *Nederlandse Mededingingsautoriteit* (the Competition Authority) also plays a role.

Section 82 of the Media Act<sup>27</sup> sets out the requirements imposed on operators of cable networks concerning their main general interest obligations, including must-carry obligations, and the requirements to carry a further series of public broadcasters on their networks. Together, these two elements make up the core of what cable operators can offer to the public. Article 8.7 of the Telecommunications Law gives OPTA the power to settle access disputes with cable network providers brought before it by programme and/or service providers.

To avoid confusion, OPTA and the Media Commissioner have developed a working agreement, whereby the office of the Media Commissioner is responsible for settling access disputes

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<sup>26</sup> OPTA: *Visie op de markt, Jaarverslag 2001* (published in March 2002)

<sup>27</sup> The Media Act dates from 1987 but has been amended many times, most recently in December 2000.



concerning programmes belonging to the basic package and OPTA for the rest. OPTA and the Competition Authority have also reached a series of agreements, including one to cover the present guidelines for settling disputes over access to broadcasting networks<sup>28</sup> issued jointly by both organisations on 17<sup>th</sup> August 1999. These guidelines, which set out current procedures for defining a cost-based price per channel for cable network providers to offer users of their network, are analysed in detail in section 3.1 below.

In this context, it should be noted that OPTA considers that cable operators in the Netherlands have significant market power and regulates them as such.<sup>29</sup>

Frequency allocation for broadcasters and other service providers is granted by the Ministry of Transport and Water Management, on the basis of an authorisation to broadcast issued to the applicant by the Media Commissioner via the Ministry of Education, Culture and Science. Under the Media Act, public broadcasters have an obligation for their programmes to “be accessible to the entire population in the area for which the programmes are intended”<sup>30</sup>

In the Netherlands, the Ministry for Economic Affairs has the possibility of imposing a price cap on the subscription rates charged by cable operators to their customers, although it has not so far made use of this option. This is partly because many cable operators committed themselves to relatively long-term price freezes when they bought their networks from local public operators in the mid-1990s.

### 1.3 The players

The main programme providers in the Netherlands are the public service NOS group (three channels), the RTL group, SBS, Canal+ and a number of local tv broadcasters. Nozema, a publicly-owned company, offers NOS and other over-the-air broadcasters transmission facilities.

The majority of cable tv services in the Netherlands are provided by three major companies, which operate on a regional basis, and a number of small local independent cable network providers who cover the few remaining regions. The three are UPC, Casema (owned by France Telecom), and Essent. They put together their networks by buying local distribution networks from the municipal authorities when they were privatised in the mid-1990s. These have survived within the major groups as “group” companies. Casema has for instance 70 of these, covering the two regions of the country where it operates.

As, indicated above, in many instances, the cable operators agreed, as part of their purchase agreements, not to increase subscription rates for a number of years. To limit the impact of this restriction on their bottom-line, however, they have in some places reached agreement with the local authorities to introduce choice viewing, enabling customers to choose between a standard package and a premium package.

In the summer of 2002, Casema became a take-over target of Liberty Media of the US, parent company of UPC. Liberty is also bidding for a major share of Deutsche Telekom’s remaining cable networks in Germany. Liberty’s bid for Casema, submitted in August 2002, needs approval from the Dutch competition authority. Together, UPC and Casema control about 60 percent of the Dutch cable market.

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<sup>28</sup> *Richtsnoeren met betrekking tot geschillen over toegang tot omroepnetwerken*

<sup>29</sup> See *Consultatiedocument “Toegang tot de kabel”* (page 5): OPTA, 26 April 1999

<sup>30</sup> Media Act, Section 13c, para 2(a)

Besides the provision of 30 or more analogue programme channels, the cable operators also carry the digital platform of Canal+. They also offer internet access and, in some cases, voice telephony.

As in Germany, cable operators in the Netherlands are concerned at the low take up of digital services and Casema in its 2001 annual report warned of “the near financial impossibility for the company to continue providing digital service in the Netherlands”<sup>31</sup>.

As in other heavily cabled countries, like Germany and Belgium, Dutch cable companies seek to become full service providers, offering multiple broadcasting packages, their own value-added broadcasting service as well as rapid internet access and voice telephony. High-speed internet access is the fastest-growing part of their business. However, they all lack investment resources rapidly to complete the necessary network upgrades they have embarked on.

### Competition: present and future<sup>32</sup>

	Programme carriage	Fixed telephony	Mobile telephony	Data/Internet
<b>Present</b>	Cable Nozema Broadcast Partners	KPN national Cable operators Regional carriers (pre) select	KPN Telfort (O2) Vodafone Dutchtone(Orange) Ben (T-Mobile) Carrier (pre) select	KPN Other DSL Cable GPRS
<b>Future</b>	Cable Nozema Broadcast Partners Digitenne DSL Glass	KPN Cable operators National carrier (pre) select	KPN O2 Vodafone Orange T-Mobile Carrier (pre) select	KPN/MXStream Other DSL Cable Glass UMTS



<sup>31</sup> Casema Annual Report and Accounts 2001 (page 3), January 2002.

<sup>32</sup> Reprinted from OPTA: *Herbalancing van de Kabeltarieven* 16 May 2002 (page 5)

## 2 General interest obligations as applied to broadcasting

### 2.1 The carriage of broadcasters' programmes

There is in the Netherlands no established general principle, as there is in Germany, whereby providers of programmes pay the cable operator for access to his network. Moreover, again unlike its neighbours, broadcasters with must-carry status in the Netherlands do not pay cable operators a carriage fee.

The result is a situation where net payments between broadcasters and cable operators flow in both directions. For instance international broadcasters like CNN, Eurosport or MTV insist on receiving payment for allowing their programmes to be carried in cable networks. On the other hand, broadcasters like RTL and SBS receive income from commercials directly targeted at a Dutch audience and pay cable operators for transmission. The payment situation is further complicated by the fact that cable operators have to pay copyright fees for carrying broadcasters' programmes. Copyright collection agencies claim that cable operators will have to pay twice over, if they simulcast both analogue and digital signals of the same programme during the period of switch-over period from analogue to digital transmission.

The role of the municipal authorities adds a further complication to the situation. In addition to the national must-carry obligations imposed on cable operators, which concern seven programmes (see below for details), local authorities have created programme service councils<sup>33</sup>, who can select a further eight programmes for general broadcasting purposes to be carried by the cable operator.

This means that, with an average of 30-32 channels, cable operators have the freedom to select only half of their full service offering. In addition, broadcasters designated by programme councils know that they have virtual must-carry status, which puts them in a strong position when negotiating the payment of carriage rates, if any, with the network operator.

Vecai, the national association of cable operators, has calculated that income from providers of broadcast services for access to cable networks should be an average of €2.35 per subscriber, if all broadcasters paid a carriage fee. The actual revenues received amount to the equivalent of €0.27 per subscriber/per year.



### 2.2 Must carry regulations

In an amendment of 1995, the Media Act first introduced must-carry obligations, designating a total of 11 channels as must-carry: the three channels of the Dutch public broadcaster NOS, the two Dutch-language channels of the Belgian (Flemish) public broadcaster and at least six public broadcasters drawn from three or more EU states, three of which had to be in German, French and English.

The size of the package was reduced by a subsequent amendment to the act which took effect in 1997. The must-carry requirement for the six non-Dutch-language public broadcasters was removed while one regional and one local broadcaster were added, bringing the total to seven.

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<sup>33</sup> As authorised under Section 82k of the Media Act.

But, in addition to these seven nationally-designated must-carry channels, cable operators were required by the 1997 amendment to carry a further eight channels selected by the municipal programme service councils. This list of programmes is reviewed each year. The cable operator is not obliged to carry the programmes designated by the council but he must, as described in the second paragraph of Section 82k, have “weighty reasons” for not so doing.

In selecting their eight programmes, the programme service councils have to work on the basis of a diverse package of general interest programmes, paying due heed to the social, cultural, religious and spiritual needs of those living in their municipality. These 15 channels form the core of the service offering of the cable operators.

Not surprisingly, cable operators are unhappy when faced with a situation in which they have to carry seven must-carry programmes, for which they receive no carriage fees, and a further eight where their scope for negotiating commercial tariffs is limited by the virtual must-carry status of the programme providers. In many municipalities, Canal+ is included in the virtual must-carry package.

The cable operators argue that the resulting situation means they are dependent on the remaining 15 or so broadcast providers for their main revenues, thereby providing a cross-subsidisation from these channels to cover the free must-carry ones.

While this is true, it is also true that cable operators pass on part of the cost of carrying must-carry programmes to their end-customers. It can also be argued that in a heavily cabled country like the Netherlands and with a resulting near monopoly on the delivery of broadcast services, cable operators retain some negotiating leverage with programme providers. Moreover, their access to 93 percent of all Dutch households puts cable operators in a strong position when marketing other non-broadcast distribution services (multimedia, video on demand, internet access or voice telephony).

Cable operators also argue that must-carry represents a significant cost burden. They say the current OPTA guidelines for calculating per-channel costs, which date from 1999, are outdated. They welcome the review undertaken by OPTA which is currently under way into cable tariff rebalancing (see section 3.2 below for details). One of them, UPC, identifies the following cost elements linked to the present system:

- Legacy costs, relating to:
  - The blockage of certain channels for must-carry broadcasters which could be used to carry other electronic communications services ;
  - The costs implicit in revenue lost because of previously agreed price caps with municipalities.
    - Opportunity costs: the fact that must-carry as applied in the Netherlands prevents cable network operators from charging commercial rates for programmes carried on their networks.
    - Investment costs including the cost of network upgrades, and goodwill.
    - Direct costs: transmission costs, the payment of copyright dues, other payments to broadcasters for carrying their channels (where relevant).
    - Operating costs: these include billing and customer management costs plus a share of general and administrative costs.



To overcome the negative affect on it of the current situation, UPC has set out a number of options. Some of these are also referred to in the OPTA review paper. *Inter alia* UPC suggests:

- A general increase in customers' subscription rates, accompanied by a reduced lifeline package for those who cannot afford to pay more.
- Rates would be made up of a standing charge for connection to the network, plus a charge for the services received over the network.
- A fully digital structure that would allow customers to select what they pay for.
- The basic subscription rate should include all the costs of must-carry programmes (plus a reasonable rate of return).
- Programmes like Canal+ should not be part of the basic package.

Cable operators in the Netherlands, as in Germany, complain that their main competitors, including satellite and digital terrestrial tv (DTT), are exempt from the burden of must-carry. But with a 98 percent market share, cable operators in the Netherlands are not much affected by such competition at present.

### 2.3 Availability of digital offerings

The situation in the Netherlands concerning digital broadcasting is that there are few available services, with relatively few people watching them. Canal+ offers a digital platform, which is carried by cable operators. UPC and Mediakabel (a group of smaller cable companies) also offer limited digital services.

The first commercial offering of DTT, from Digitenne, was due to begin in October 2002 in Amsterdam and Hilversum. The expectation is that it will offer about 25 channels. Digitenne's backers forecast national DTT coverage by the end of 2003 or early 2004. Given the overwhelming dominance of cable distribution in the Netherlands, experts expect that Digitenne will focus on the mobile market by providing a small set top antenna rather than relying on rooftop or cable reception, and on the market for local or regional programmes.

### 2.4 Conditional access systems

Conditional access systems are regulated under Articles 8.5 to 8.7 of the Law on Telecommunications<sup>34</sup>. These require providers of conditional access services to provide the necessary technical facilities on a fair, transparent and non-discriminatory basis to providers of broadcast services with whom they have reached agreement. In addition, the provider of a conditional access system has to offer a system with the necessary technical capacity for cost-effective transcontrol. This system is to be set up in a way which allows the provider of a network to take over full control of the services which are distributed by means of the conditional access system.

Providers of conditional access systems are bound to keep separate accounts for this activity. Disputes between providers of conditional access systems and programme providers are settled by OPTA in accordance with 8.7 of the Law on Telecommunications.

There is currently no specific legislation concerning standards for CAS set-top boxes in the Netherlands, and no agreement among providers and users of the systems on a single standard. But the general principles of competition law apply. Canal+ currently owns the set top boxes used by subscribers to cable networks which distribute Canal+ services. The only function

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<sup>34</sup> *Telecommunicatiewet* of 19 October 1998

performed by the network operator is that of carriage of the Canal+ signal. Cable network operators like UPC are developing their own set-top boxes.

## 2.5 The future regulatory context

Current Dutch legislation is broadly in line with the requirements of the EU's new package of directives for electronic communications services and networks. Cable operators have separated their accounting operations for the supply of internet access from that of distributing tv programmes. Current OPTA guidelines already sub-divide their activities into three functions (see section 3.1.below) those of network infrastructure providers, broadcasting service providers, and providers of value added and telecoms services. But content and carriage will need separation.

Cost accounting requirements in the Netherlands for cable operators are in line with EU requirements, although cable operators will welcome Article 31 of the universal services directive, with its reference to a proportionate remuneration for cable network operators for the burden of must-carry.

The current review of the OPTA cost-based model will also bring Dutch legislation more closely into line with the EU Directives. In its review document,<sup>35</sup> OPTA states (paragraph 17) that current Dutch draft legislation and the new European regulatory directives “introduce a far-reaching harmonisation of the regulatory frameworks for the cable and telecommunications sectors. The board (of OPTA) will aim therefore, to the extent necessary and useful, to anticipate these new regulatory frameworks.”



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<sup>35</sup> *Herbalancing van de Kabeltarieven*, 16 May 2002

## 3 Cost assessment

### 3.1 The OPTA cost-based model

As already noted, OPTA has the authority to intervene in disputes regarding access to networks under Article 8.7 of the Telecommunications Act. Following a number of disputes between cable operators and programme providers over access conditions and carriage charges for their programmes, OPTA issued a series of guidelines in August 1999, in cooperation with the Dutch competition authority, the *Nederlandse mededingingsautoriteit*<sup>36</sup>.

These are still in force, although they are currently under review and are likely to be modified. The approach suggested by OPTA in its review document is inspired by ONP legislation for telecommunications.<sup>37</sup>

The present guidelines are based on the principle of establishing a cost-based price per channel offered by the cable operators. After studying both options, OPTA decided to use the model of historic costs (Fully-Allocated Costs), in preference to the system of Long-Run Incremental Costs (LRIC). OPTA says that it decided against LRIC because the system is more suited to determining the costs of “new” services rather than existing ones.

The guidelines make a distinction between the three functions that a provider of a broadcasting network can fulfil:

1. Provider of infrastructure
2. Provider of the standard package of services
3. Provider of other services, including programmes, internet access and telephony

The guidelines relate mainly to the first two. Given that the providers of cable networks in the Netherlands are deemed to have significant market power, the guidelines state that they must apply transparent and non-discriminatory access conditions to all programme and service providers using their infrastructure. They must also calculate a cost-based price per channel.

This price is based on the following elements:

- Prices are calculated in accordance with the principle of fully allocated costs, whereby costs are determined by the different elements making up the network. These costs include depreciation and a reasonable rate of return on investment, in so far as this is relevant for the particular service or activity in question.
- Only the costs for the elements of the infrastructure which are specifically used for the transport of the service in question can be allocated directly to the channel price, in proportion to the use made of this element. Costs that cannot be specifically allocated are distributed across the different service and programme providers on the basis of their effective capacity utilisation.
- Cable network providers must determine their unused and reserve capacity in a rational and transparent manner. All programme and service providers must pay a share of the costs for the unused and reserved channels.



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<sup>36</sup> See *Consultatiedocument “Toegang tot de kabel”* (page 28) OPTA 26 April 1999

<sup>37</sup> The OPTA review document, issued on 16 May 2002, is entitled *Herbalancering van de Kabeltarieven*

- Providers of digital programmes and services should not in principle pay for the full use of an analogue channel if they use only part of this capacity for their programmes or services. However, exceptions can be made in the case of a low uptake of digital capacity.
- Within reasonable limits, a network operator can grant to a new service or programme provider a temporary rebate on the cost-based channel price for a period not exceeding two years, providing he, the operator, carries the cost. The value of the rebate must be recovered from the service or programme provider over the following five years via a supplement on the cost-based channel price he has to pay. Rebates have to be based on transparent, objective and non-discriminatory rules, and must be published in advance.
- Goodwill is not included as an infrastructure cost.

For determining the final carriage charge, the cost-based channel price – established as set out in the preceding section – plus the specific costs involved in transmission of the channel in question, must represent the maximum carriage charge to be paid.

In the case of channels which must be carried free-of-charge, as per Article 82i of the Media Law, the carriage of these programmes must be financed by subscriber revenues. This means no cross-subsidisation.

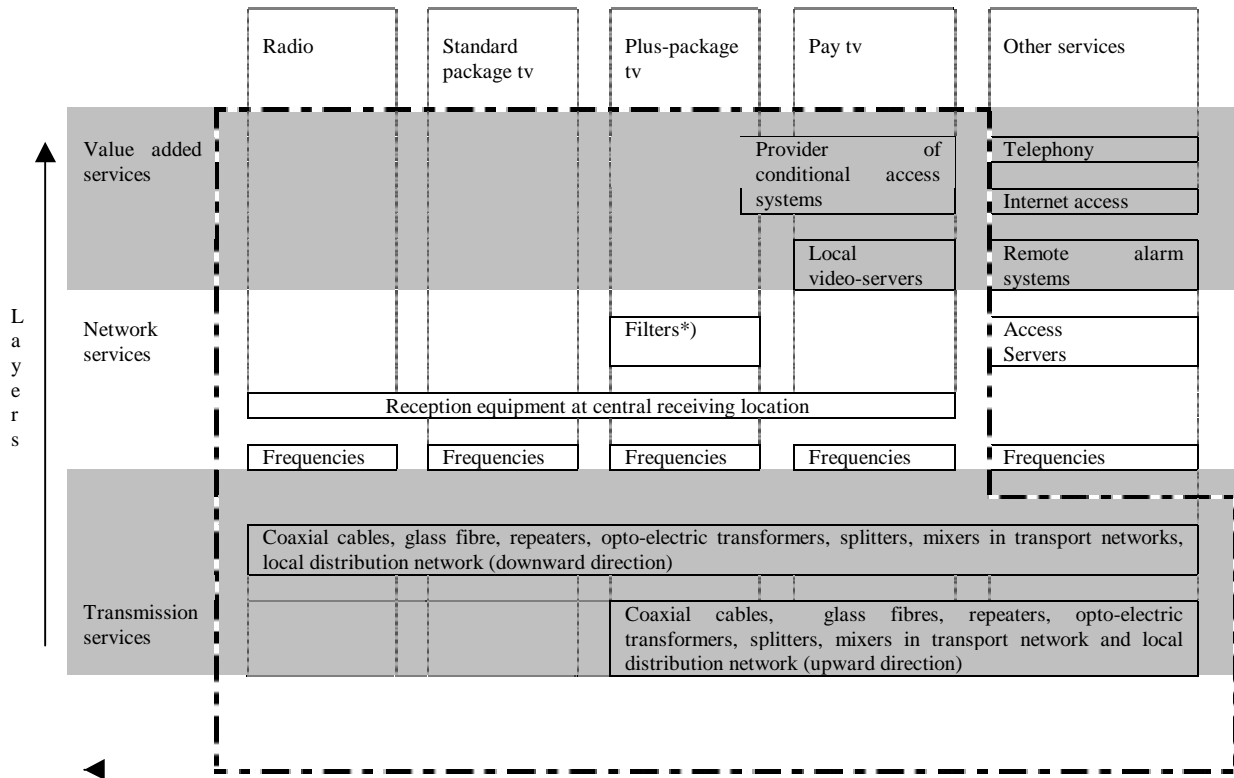
In the case of the standard package, the carriage costs paid by providers of services included in the standard package must not be higher than the cost-based channel price

- plus programme-specific transmission costs (such as copyright or performers rights) and a proportional share of the specific costs linked to the programme package, such as collecting subscription revenues;
- but minus a share of any net subscription revenues generated by the standard package which can be attributed to the individual programmes.

Using the three-layered model of transmission services, network services and end-user services, OPTA has produced the following model for a cable television network. It identifies only those network elements that are used to produce infrastructure services. These infrastructure services are then used to produce final services. Some of the functions are common to more than one service; others apply to individual service categories.



### The layer model for a cable tv network



\*) for the plus package supplied without decoder

### Legal definition of the broadcast network

## 3.2 The thrust of the current review process

The review of the existing guidelines was launched by OPTA in a new consultation document *Herbalanceren van de Kabeltarieven*, (Rebalancing Cable Rates), published on 16<sup>th</sup> May 2002. In this document, OPTA suggests moving away from the purely channel-based cost model to one where a standing charge would cover a portion of the costs of the shared infrastructure. Under this model, the costs of the final access network would be covered entirely from the subscription fees paid by the end user.



For his or her part, the end-user would receive a network connection plus a package of choices, possibly including digital services and access to the internet. The minimum package could be the current legally required basic package of must-carry programmes. An alternative could be to make the current standard package the minimum one.

Given the importance of cable for broadcast distribution in the Netherlands, the question of the minimum package – and its cost to the consumer - is a delicate one. OPTA recognises that the rebalancing will mean that the cable subscriber will pay more for what he gets presently, and asks the question as to how much. For the consumer the choice is clear: pay more for what you get or get less for what you pay.

The regulator refers to the tariff balancing of KPN's rates for fixed voice telephony in 1998 and the accompanying creation of a special social package, the so-called *Belbudget*, as a possible precedent for customers who could not afford the higher costs which resulted from rebalancing cable tariffs.

OPTA also asks whether the cost-based principle is the best suited to dispute settlement given the time taken to examine company accounts and documents during an investigation. It suggests that an alternative would be to create a single bottom-up efficient cost model which would then apply nationally. This model could be developed in conjunction with providers and users of the network infrastructure. Such a model would provide a simulation of a hypothetically efficient network as a means of determining what tariffs would be in fully competitive market.

### 3.3 OPTA's wider agenda

The current review of the guidelines launched by OPTA is not, however, motivated by any intrinsic problems attached to the current guidelines or the cost-allocation rules as such.

It is much more an attempt to break out of the present difficult situation in which the whole cable sector finds itself in the Netherlands. The current guidelines were drawn up during a period of expansion for communications services and for the economy as a whole.

The present situation is much gloomier - characterised by the low uptake of digital pay tv programmes by consumers, the slow digital programme roll-out, the difficulty of cable operators to raise capital for network upgrades, particularly for additional services like internet access and voice telephony, the inability of programme and service providers to bear the additional costs of network investments and the relatively cheap price Dutch consumers pay for their cable tv programmes.

In short, OPTA is offering a trade off to cable operators. This is that if they invest in upgraded digital networks, they will be allowed to charge higher fees to their customers if this is justified by the underlying costs for the services a customer chooses. It is appropriate to quote paragraphs 69 and 70 of the rebalancing consultation paper in extenso:

69. *It is also important that as a result, the cable operators genuinely switch to digitalisation. In the view of the board (of OPTA), it would be undesirable if the rebalancing was introduced without the investments being made.*
70. *The ideal situation is one where rebalancing takes effect at the moment when a fully broadband, digital two-way transport infrastructure is on offer, along with a number of new services. However, the board can imagine that at a given time during this process when the creation of the ideal situation became a concrete prospect the transition can be made to the new tariff structure.*

The trade off, in OPTA's view, will be in the longer term to the advantage of the consumer if cable networks can then mount a serious challenge to the current network dominance of KPN for telecommunications services.





# Spain

## 1 Broadcasting in Spain

### 1.1 The market

Spain has a total of 12.4 million households. According to a survey by SES Astra in 2001, the reception pattern is as follows:

#### Reception pattern (main set, analogue+digital)

	%	EU %
Cable	4 %	31 %
Satellite	16 %	19 %
Terrestrial	80 %	51 %

Source: SES-Astra 2001

Terrestrial delivery is presently the most important reception mode for television broadcasts in Spain. Digital Terrestrial Television was launched commercially in April 2002, but the model chosen by Spain has turned out to be unsustainable commercially due to lack of customers. Some explanation of this failure may be found, in the case of Pay TV market, in the influences of too numerous numbers of players in a reduced market (cable, terrestrial and satellite), and, in the case of the Free-To-Air TV market, in the limited capacity assigned to some of the agents, in the lack of decoders widely deployed in the households, and in a declining advertising market in 2001.

Other digital media have a rather small market share. The table below presents the breakdown among digital subscribers:

#### Digital subscribers

	Digital TV penetration	EU Average
Cable	0 % (under 0.05 millions of households)	4 %
DTH	19 %	12 %
DTT	3 %	1 %
<b>Total DTV</b>	<b>22 %</b>	<b>18 %</b>

Source: BIPE from Digital Switchover in broadcasting report 2001



## 1.2 The Players

### 1.2.1 *The regulators*

There are two national bodies:

- The secretariat of State for Telecommunications and the Information Society, regulated by Royal Decree 1451/2000 of 28<sup>th</sup> July 2000, which forms part of the Ministry of Science and Technology.

The Secretariat of State for Telecommunications and the Information Society is the governmental organization in the telecommunications, audiovisual and interactive services, as well as in the regulating and supporting the Information Society in Spain.

This organization has the main functions in the regulation of the telecommunications, audiovisual and interactive services, except the function related with the protection and the development of competition.

In particular, some of the functions of the Secretariat of State for Telecommunications and the Information Society are:

- Study, proposal and execution of the general policy about telecommunications, audiovisual sector and development of Information Society.
- Redaction and proposal of regulating and making of rules and laws of telecommunications, audiovisual services and the instruments in order to pull the development of Information Society.
- Promotion and development of infrastructures and enhanced telecommunications and Information Society services.
- Reporting to Economy Ministry in prices, financing and costs in the providing of telecommunications services.
- Planning, managing and control of the scarce resources of telecommunications, specially radio spectrum and numbering, including the assignment of the Internet names and directions.
- Control of public service obligations imposed to operators
- Control, inspection and sanction in items of telecommunications, audiovisual and Information Society.
- Proposal, managing, monitoring and control of I+D+I programmes, specially in the telecommunications sector and development of Information Society.



- CMT (*Comisión del Mercado de las Telecomunicaciones*) is an independent Spanish regulatory body for the telecommunications' market, which also has responsibility for audiovisual and interactive services. It was created by the law of June 7, 1996.

The protection and the development of free competition are the first and essential functions of the CMT. Its role is to:

- Advise: the CMT has global competition advisory powers. It can, on own initiative, report to the Government on any question or issue relative to telecommunications. It is also a specialized consultative body, advising the Government whenever requested to do so (this consultation may be obligatory, depending on the subject).

- Regulate: the CMT may impose obligations on operators in order to protect competition and ensure a level playing field for network operators and service providers in the market. With respect to the licenses granted, the CMT is authorized to ensure that their terms and conditions are compatible with the requirements of upholding free competition.
- Control and monitor: the CMT fulfils functions of permanent control and monitoring of services in order to promote competition and to ensure that services are cost-based and non-discriminatory.

CMT has several other major functions:

- Guarantee the correct funding of the universal service obligations imposed on operators
- Manage scarce resources (numbers and radio spectrum) by guaranteeing number availability and portability
- Guarantee access to networks and services, the interconnection between networks, and the interoperability of services

The CMT has the power to impose solutions on the actors of the sector. This arbitration function can be used at the request of one of the players or in order to resolve disputes between players. It has therefore sanction attributes.

### 1.2.2 *The broadcasters*

The panorama of Spanish broadcasting is structured around:

- Analogue terrestrial channels:  
There are 5 national channels (4 Free-To-Air channels: TVE-1, La 2, Antena 3, Tele 5-; and 1 Pay-TV channel: Canal +), and 8 regional channels (Galicia, País Vasco, Cataluña, Valencia, Andalucía, Canarias, Castilla-La Mancha y Madrid). All of them are public and Free-To-Air.
- Some 800 local Free-To-Air (FTA) channels.
- Digital terrestrial channels:  
7 national channels ( Veo TV, Net TV, TVE-1, La 2, Antena 3, Tele 5, Canal +)All of them are Free-To-Air channels, except Canal +  
9 regional channels (Madrid: Onda Seis, La Otra y Quiero TV; La Rioja: Rioja TV, Cope TV;; Cataluña: TV-3 y Canal 33; País Vasco: ETB-1 y ETB-2). All of them are Free-To-Air channels, and they are public channels, except Onda Seis, Quiero TV, Rioja TV y Cope TV.
- Two satellites platform that are Canal Satellite Digital and Via Digital.
- Two main cable operators: Auna/AOC and ONO

Radio Television Espanola (RTVE) is controlled by a central administration which operates the two public national television channels (TVE-1 and La 2).



### 1.2.3 *The radio infrastructure operators*

There are several television network operators:

- RETEVISION which provides a national coverage of Spain
- Regional competitors which are:
  - Tradia (in Catalonia), controlled by ACESA, specialized in highways infrastructures.
  - Medialatina (in Andalusia and Valencia) which is a subsidiary company of TDF

- Retegal (in Galice) which is still a public company
- An operator for the Basque Country also public

RETEVISION is, among other services, a telecommunication and audiovisual infrastructure operator. RETEVISION is about to be restructured into three different parts (one for fixed telecommunication, other for mobile telecommunications and another for audiovisual networks) in order to sell the audiovisual network infrastructures.



## 2 General interest obligations as applied to broadcasting

The development of the audiovisual market in Spain may be stimulated by upcoming changes in the present regulatory regime. The government has issued a draft paper which should be published in its final form by early 2003. The new framework will take into account the requirements and specifications of the new European regulatory package for electronic communications networks and services. The main expected change in Spanish law will be to enable the CMT to carry out market analyses in order to determine whether, on a particular market, one or more players enjoy significant market power (SMP). This would empower the CMT to act in order to prevent the abuse of a dominant position by any individual player. The update of the law also presupposes the transposition into Spanish legislation of the new European directives for electronic communications.

### 2.1 Right of use of radio frequencies in terrestrial broadcasting

The Spanish Digital Terrestrial TV National Plan adopted by Ministry of Science and Technology (formerly, Ministry of Development) on October 9, 1998, established the number of digital multiplexes for national and regional areas in Spain.

In this Plan, there are coverage obligations for all operators, national and regional::

- 50% of coverage before June 1999 (national operators) and October 1999 (regional operators)
- 80% of coverage before June 2000
- 95% before 2012

Therefore, there are national and regional licences.

National digital licenses were granted to the broadcasters by the State Government via two calls for tender in September 1999 (Quiero TV: Pay TV-three multiplexes and a half) and in November 2000 (Net TV y Veo TV: Free-To-Air-a quarter of multiplex each one)

Regional digital licenses are granted to the broadcasters by the Regional Government via calls for tender. To date, there are two solved beauty contests and two granted licenses in each one of two Regions (Madrid: Onda Seis y Quiero TV; La Rioja: Rioja TV y Cope TV).

Those licences enable the TV broadcaster to ask the infrastructure operators to deploy their network and to place transmitters in accordance with the requirements of the frequency granted by the government. It has to be noted that the network infrastructure operators do not take part in the license procedure.

Finally, Spanish Government has included in the draft of Tax, Administrative and Social Measures Law, which is being studied in the Parliament and will be approved before the end of the year, the basis of a new local terrestrial TV, which will be deployed only by digital technology.



## 2.2 Must-carry

In the Spanish TV sector, there are only must-carry obligations on cable operators. Cable operators are not much deployed in Spain, as they had a little more than 1 million users as of May 2002. Therefore the must-carry obligation is not a significant one for the Spanish market and has not been addressed in any detail by the CMT.

## 2.3 Access to conditional access system

In 2001, the CMT launched a consultation process with digital players on the question of decoders. Together, they defined a series of elements essential for user access to services and for access by digital broadcasters to their customer base. These decoders which should be interoperable on different platforms, will be used by subscribers of digital television services for satellite, cable and TDT platforms. The analogue-to-digital switchover is due to be completed in Spain around 2012.

The existence and development of decoders that can be shared by different operators provide evident advantages for the development of the market. Yet the consensus among market players was to let the market, ie the customers, decide the type and timing of the new decoders and the means of transmission (satellite, cable or terrestrial) according to their needs, instead of having technological requirements imposed in advance by the CMT.

The CMT, therefore, decided to wait before taking any regulatory measures concerning the development of conditional access systems. It will review its position within a reasonable time period, when it will take full account of the position of consumers. The CMT will act in the following cases:

- if there are real or potential conflicts between operators
- if the principles of technological neutrality are not respected, or
- if there are threats to free competition.

Anyway, the Ministry of Science and Technology, on 15<sup>th</sup> February 2002, has signed a MOU with digital TV operators and TV set industry in order to support the MHP standard, as the universal and open source technology prepared to share the signals of the different TV operators (terrestrial, cable and satellite).



# Sweden

## 1 Broadcasting in Sweden

### 1.1 The market

Sweden has a population of 8.8 million, with 4.2 million households (many Swedes have summer houses in addition to their normal place of residence). According to the latest figures from the Svenska Kabel-TV Föreningen, 2.5 million households (nearly 60 percent) are connected to a cable network. Figures for satellite television are more difficult to ascertain accurately as the broadcasters only publish trans-Nordic results, however it is estimated that around 20 percent of households have satellite television subscriptions (which are now almost exclusively digital), leaving around 21-22 percent relying solely on terrestrial television. At the time of writing the Digital Terrestrial Television service (DTT) had around 100,000 subscribers.

A survey conducted in March 2000 showed that 53 percent of the population aged between 12 and 79 had surfed the internet that month. There is an ongoing debate about the roll-out of broadband services including whether the Swedish government should pay for or subsidise the roll-out of optic fibre networks.

### 1.2 The players

#### 1.2.1 The regulators

The broadcasting sector in Sweden is regulated by two authorities and, for some services, directly by the government.

The Swedish Radio and TV Authority (*Radio- och TV-verket* – RTVV) is responsible for setting the licence conditions for broadcast services, which it does through the Radio and Television act of 1996 (1996:844). The act sets out the regulators' obligations in ensuring a fair licensing regime as well as outlining the conditions for licences given for each of the services (including broadcast television and radio, and re-transmission by cable) that it regulates. The 1996 act also stipulates the conditions under which a cable service must operate which includes services provided to 10 households or more (different regulations apply once the service is provided to 100 households or more).

The use of radio spectrum for broadcast purposes is regulated by the National Post and Telecom Agency (*Post-och Telestyrelsen*, PTS). The PTS (at the request of the RTVV or the Government) identifies frequencies for use for a particular service within international frequency plans. The RTVV or the government then conducts a process to award the use of that frequency. The licence is issued by the RTVV or government for the service and by PTS for the use of the radio spectrum. For national radio and television services, the licence is awarded directly by the government. For local or regional services, the RTVV is responsible.



### 1.2.2 The broadcasters

There are three broadcast organisations with terrestrial licences in Sweden:

- **Sveriges Television AB (SVT):** SVT is a public service broadcaster. Operating as a trust under licence from the government, SVT provides two national analogue television services (SVT 1 and SVT 2), and two digital only channels (SVT 24 – a news service begun in March 1999 and SVT extra). SVT is funded almost exclusively from the television licence fee, though some programmes attract limited sponsorship. SVT is available on all platforms including digital satellite (but only on CSD and not ViaSat – although it is available on a satellite at the same orbital position as ViaSat but using a different encryption system). SVT is owned by a foundation called *Förvaltningsstiftelsen för Sveriges Television AB, Sveriges Radio och Sveriges Utbildningsradio AB*.
- **The Swedish Educational Broadcasting Company (Sveriges Utbildningsradio - UR):** UR is also a public service broadcaster. It receives 4.7 percent of the licence fee received by SVT and has the responsibility to make educational programming. It has no television broadcasting facilities of its own, its programmes are shown on SVT. It is owned by the same foundation as SVT.
- **TV4:** TV4 began broadcasting in March 1992 and is a commercial operation being funded in the main through advertising revenue. It is listed on the Stockholm stock exchange (the SBI) and is owned by Alma Media (23.4 percent), Bonnier (16.7 percent), MTG<sup>38</sup> (22.4 percent), Fidelity (11.8 percent) and LRF (7.8 percent). TV4 is available on analogue and digital terrestrial as well as on cable and digital satellite (CD).

There are a number of other broadcasters whose main mechanism of diffusion is via satellite, however some are also now licensed to operate on the DTT platform. National channels include:

Station	Ownership	ViaSat	CSD	DTT
TV3	MTG (100%)	Yes		
Kanal 5	SBS Broadcasting S.A. (100%)		Yes	Yes
Canal + (3 channels)	Canal+ France (100%)		Yes	Yes
TV8	MTG (100%)	Yes		
TV1000	MTG (100%)	Yes		
ZTV	MTG (100%)	Yes		
ViaSat Sport	MTG (100%)	Yes		



There are also a number of local or regional stations plus some satellite only channels (largely owned either by CSD or MTG) as well as pan-European channels such as those provided by Turner (TNT, Cartoon Network, CNN), Viacom (MTV, VH-1) and Discovery networks. Many are tailored to suit a Nordic audience instead of a specifically Swedish one.

<sup>38</sup> The Modern Times Group (MTG) are large investors in media in the Nordic countries and are listed on the NASDAQ and the SBI. Major investors in MTG include Invik & Co AB and Jan Stenbeck.

### 1.2.3 *The network operators*

#### *a) Terrestrial infrastructure operators*

The only terrestrial television network operator in Sweden is Teracom AB (indeed some channels, including TV4, are mandated to use Teracom as their network provider as part of their licence for analogue terrestrial broadcasting). Teracom is entirely state owned. It operate 54 main stations plus around 20 relays as used by TV4 to provide 98 percent population coverage as well as an additional 600 relays to reach the 99.8 percent population target for SVT1 and 2 (SVT1 has slightly fewer stations as it uses some VHF channels which have wider coverage, whereas SVT2 [and TV4] are UHF only).

Teracom are also heavy investors in DTT, operating the multiplexes and the transmission network as well as being the major shareholders in Senda (who provide and control the distribution of smart-cards) and Boxer (who rent the set top boxes). To this extent, Teracom are basing a lot of their future financial and commercial viability on the success of DTT in Sweden. In 1998 (before the introduction of DTT), Teracom's revenues were just over 1.2 billion SEK.

The situation with respect to DTT is rapidly evolving in Sweden. It was announced on 27 June 2002 that the DTT multiplex and service operator, Senda, had changed ownership from a joint venture between Teracom and SVT to become a wholly owned subsidiary of Teracom. The public face of DTT in Sweden is Boxer, a joint venture between Teracom and finance company Skandia. It has been announced that Boxer and Senda are to merge. After these changes, Teracom will own and operate the transmission network and the combined Boxer/Senda (whose majority shareholder will be Teracom) will operate the DTT multiplexes, conditional access system and be the public face of DTT. Licensed services must come to a financial agreement with Boxer/Senda who will either collect or share revenues depending on whether the service is free-to-view or is on one of the tiers of subscription.

#### *b) Cable operators*

There are about 70 network owners in Sweden operating 101 registered networks. No licence from any authority is required to install and own a cable network, other than obtaining the necessary permissions from the landowner, the owner and sometime the occupants of buildings. Many of the smaller cable networks are run by 'not-for-profit' organisations in order to distribute content throughout a small town or neighbourhood, however most are part of larger commercial organisations. No licence is required in order to operate a cable network. Networks supplying a service to more than 10 households must abide by the regulations of the 1996 Act and those supplying a service to over 100 households are subject to further obligations under the act.

The four largest cable operators in Sweden and the number of connected households is shown in the table below:

Operator	Subscribers (as at March 2000)
Com hem AB (Telia)	1,348,000
UPC Sverige AB	455,000
Kabelvision AB	350,000
Sweden On Line AB	250,000

Source: Svenska Kabel-TV Föreningen



The move to digital cable is gathering pace. Even in 2000, com hem AB said that over 90 percent of its customers could already receive digital cable services, requiring only a set-top box to be installed in order to allow reception. Up-to-date figures on digital cable penetration are not currently available, however according to com hem, it had 126,000 digital cable subscribers (and 447,000 broadband internet customers) in the first quarter of 2002.

*c) Satellite operators*

There are two competing satellite systems, Canal Digital (owned and operated by Norwegian company, TeleNor) and a Swedish-owned company, ViaSat (owned by MTG Modern Times Group AB). The two services are not on the same satellite (CSD is on Thor 2 and 3 at 1°West and ViaSat on Sirius 3 at 5°East) nor do they employ the same conditional access system (CSD uses Conax and ViaSat uses Viaccess).

Some of the television stations (notably TV3 and Kanal 5) are broadcast and uplinked from the UK rather than from Sweden in order to avoid Swedish (content related) broadcast regulations.



## 2 General interest obligations applied to broadcasters

It must be noted that, at the time of writing, a draft of new legislation was about to be published that would bring Swedish broadcast law in line with the new EU regulatory framework. The discussion below is based on the tenets of the previous system as the full details of the new legislation are not yet known.

### 2.1 Authorisations for use of frequencies

According to the 1996 Act, broadcasting licences issued by the government may be subject to obligations including:

- Broadcasting the programme throughout Sweden or to a certain part of the country;
- Utilising certain radio transmitters;
- Designing the transmissions in a manner which ensures reception is not confined to a limited section of the general public in the transmission area.

The way in which licences are awarded effectively imposes these (and other content related) obligations on the use of the frequencies. However the way in which the licences are issued attempts to separate the two. Frequencies are first identified as being free then offered for use. Hence the licence to broadcast implicitly incorporates the use of a radio frequency. The two licences are issued separately. It is clear, however, that one is of little use without the other.

As an example of the first condition, the three government-licensed television channels (SVT1 and 2 and TV4) are all obliged to reach 99.8 percent of the population, however SVT1 and 2 must do this by terrestrial means, whereas TV4 need only provide for 98 percent terrestrial coverage and is allowed to complete coverage using other mechanisms and in practise provides its service to the remaining population by satellite.

### 2.2 Must-carry

#### 2.2.1 Analogue cable

The Swedish Broadcasting Act of 1996 states that any facility which distributes television programmes via a cable network to reach more than ten homes must ensure that residents of connected properties can receive '*broadcasts conducted under a licence from the Government and which are intended to be received in the area without conditions for special payment*'. Thus the actual channels included in the must-carry obligation are described in the same manner as under German legislation. For the majority of the country this directly translates into must-carry obligations for SVT1 and 2 (and UR) and TV4, the terrestrial analogue broadcasters. It further states that it must be possible to receive the transmissions in a satisfactory manner and with no charge for the actual reception. Hence should any of the existing services decide to become a pay service its right of carriage under this obligation would be removed. Notable is that the must carry-obligations do not apply to networks where only terrestrial broadcasts are retransmitted (originated from terrestrial transmitters below 3 GHz). The reason for this, of course, is to exclude communal aerial antenna systems.



The act goes on to define the number of channels as not more than three that are financed by the television fee and not more than one programme broadcast by another licence holder. Thus the obligation is restricted to a theoretical maximum of four channels and a practical maximum of only three.

For entities owning or controlling a cable transmission facility in which television programmes are relayed to more than 100 homes, they must provide, without charge, a specifically determined frequency for television programme broadcasts by one of more undertakings appointed by the RTVV (local cable transmission undertakings) in each municipality in which the entity has such a facility.

### **2.2.2 Digital cable**

The Broadcasting Act is quite clear about which digital channels should be carried and how. It states, '*A programme which has been transmitted exclusively by means of digital technology only needs to be re-transmitted if the facility transmits other programmes employing digital technology. In this case, the programme need only be re-transmitted in digital form.*' Hence DTT channels in any given area if they are free-to-view, have must-carry status on any digital cable platform. This may cause problems for cable operators if channels decided, from time-to-time, to change from being a pay service to being a free-to-view service. However in practice, this rarely occurs. It is worth commenting that the obligation to provide these channels 'without conditions for special payment' does not appear to hold true.

It is also worth noting that these obligations apply to every cable network if they are connected to over 10 properties.

## **2.3 Conditional access systems**

There are no restrictions regarding conditional access systems within the Swedish Broadcasting Act other than the general precept that broadcasting must be characterised by, amongst other things, freedom of information.

The restrictions as described above on the re-transmission of digital services do imply that digital re-transmission of free-to-view digital services over cable networks should not be subject to payment for reception but other than that no restrictions apply.

There is no cross-platform requirement for CAS commonality either, evident from the fact that the DTT and two digital satellite services all utilise different CAS systems.



## 3 Cost assessment

### 3.1 Right of use of radio frequencies for terrestrial broadcasting

The specific obligations which have a bearing on the cost of the operators are those relating to the extent to which coverage must be provided. The obligation being, for the three government licenced channels, to reach 99.8 percent of the population (noting that for the commercial operator, TV4, coverage beyond 98 percent can be completed by means other than terrestrial transmission).

The national public service broadcaster, SVT, receives its income based on the licence fee paid by each household. As with the UK, it is likely that, were the obligation for coverage to be removed or reduced and thus the outlay of SVT on broadcast transmission facilities be reduced, the licence fee and thus funds available to SVT would be likewise reduced – with a zero net impact on SVT. Teracom, the provider of the network transmission facilities, would be left with some stranded assets which it would have to recover somehow. However it is difficult to see how the cost of this obligation can be simply derived.

The situation for the commercial broadcaster is slightly more enlightening. There must be a level of (terrestrial) coverage beyond which it becomes commercially unattractive to continue roll-out, ie the cost of the additional coverage would exceed the additional income that could be generated from advertising income. It is generally regarded that the annual advertising revenue available in television broadcast markets in EU countries is €100 per viewer per annum. Thus, if the costs associated with the provision of the additional coverage could be ascertained, the point at which it ceases to become commercially viable to extend coverage could be identified. Any expenditure incurred by TV4 in providing coverage beyond this point could therefore be regarded as being the cost of meeting the obligation.

### 3.2 Must-carry

#### 3.2.1 *Analogue cable*

The obligation in respect to analogue cable must-carry in theory relates to the carriage of four channels, however in practise this is limited to only three as the fourth channel for which the obligation applies (UR) is carried on SVT1 and 2.

One question, as in other EU member states, is whether the channels which form part of the must-carry obligation would be carried regardless of the imposition of the obligation. In all probability this is so. The majority of cabled households do not have television antennas installed and as such would have no other way of receiving the must-carry channels. Of course an antenna could be installed but there is a cost involved in doing this.

#### 3.2.2 *Digital cable*

The number of channels that could potentially form part of the must carry 'bouquet' for digital services is much greater than for analogue. However, the actual capacity required service this obligation in terms of the number of equivalent analogue channels on the cable network is likely to be similar.





# United Kingdom

## 1 Broadcasting in United Kingdom

### 1.1 The market

The United Kingdom has a population of 57 million, with 24.8 million households. The average number of television receivers per household is 2.2. According to figures from the ITC, as of the end of March 2002 the number of households connected to digital services was 9.2 million, or around 40 percent of the population. Of those households receiving digital services, 5.9 million were satellite subscribers, two million were digital cable subscribers, and as of the point at which the service went into receivership, the digital terrestrial television service, ITVdigital, had around 1.3 million subscribers. An additional 1.5 million households were still connected to multi-channel analogue cable services.

Around 40 percent of households have a PC with the majority of these having internet access. However, just over 1 million households (four percent) were connected to broadband internet services as of March 2002.

### 1.2 The players

#### 1.2.1 *The regulators*

Television broadcasting in the UK is controlled by two regulators:

The Radiocommunications Agency (RA) is responsible for licensing all (civil) spectrum use in the UK including that used for terrestrial television broadcasting and for uplinking to satellites. Provisions, in a new Communications Bill, if accepted by Parliament, also allow for so-called Recognised Spectrum Access associated with satellite downlinks. The Government, with the RA in the lead determine the amount of spectrum to allocate to television broadcasting as opposed to non broadcasting services. The Government, led by the Dept for Culture, Media and Sport (DCMS) determines the split of spectrum for use by BBC services and by independent services. The former spectrum is made available to the BBC via the BBC Charter and Agreement. The latter spectrum is made available to the Independent Television Commission by the Agency through provisions in the Broadcasting Acts with related provisions enabling the Secretary of State to take away spectrum. The ITC and the BBC plan their respective allocations within the Television Planning Group (TPG) which is chaired by the RA. TV spectrum planning experts (NTL and Crown Castle) support the BBC and ITC in this work while the RA (and DCMS who may attend and, in any event see all the papers) ensure that the plans are spectrum efficient and deal with any conflicts of spectrum and broadcasting policy that may arise. The plans agreed at TPG are then passed through required national and international co-ordination procedures as required by ITU. The RA is officially the designated national regulatory authority for the UK and as such has responsibility for the UK internationally including responsibility for the long-term spectrum strategy for the UK; this impacts broadcasting to the extent that spectrum may be reallocated between services.



The Independent Television Commission (ITC) is responsible for licensing all television broadcast services that emanate from the UK including satellite, cable and terrestrial channels other than BBC licence fee services and S4C. Where competitive processes are required in order to assign a licence (for example for a national analogue or digital terrestrial service), the ITC is responsible for holding the competition. For non-competitive programme services (such as satellite channels), any applicant can submit an application directly to the ITC for approval. There are currently around 600 licensed television services operating in the UK. The ITC is also responsible for issuing licenses for cable networks (these were originally awarded through a competitive process).

The Office of Telecommunications (OfTel), although primarily responsible for licensing telecommunications services, also has responsibility for certain aspects of the economic regulation of broadcasting. In particular, it requires providers to offer conditional access services and electronic programme guide listings on a fair, reasonable and non-discriminatory basis, and BSkyB to offer access control services on a similar basis for interactive television services. OfTel also regulates the price paid by broadcasters for terrestrial analogue transmission.

The UK Government has proposed bringing a number of regulators together into one 'super-regulator', which will be known as OFCOM (the Office of Communications). OFCOM will comprise:

- the RA;
- the ITC;
- the Radio Authority (RAu) which is currently responsible for licensing broadcast radio services;
- the OfTel;
- the Broadcasting Standards Commission – the statutory body for standards and fairness in broadcasting.

This will not in itself impact the licensing regime in the first instance, although it may be expected that closer working between the relevant parties may bring about future changes in how the UK broadcast regulations are structured. In any event, and subject to the passing of the Communications Bill, the process of allocating spectrum to television broadcasting, and between the BBC and independent services, will be determined by OFCOM subject to the Government using its powers of direction.



### 1.2.2 *The broadcasters*

The major organisations in the UK are:

- **The British Broadcasting Corporation (BBC):** Operating under a Royal charter and Agreement funded by a licence fee (currently £110 per household per annum) the BBC provides two national public service analogue television channels (BBC1 and BBC2) both of which contain regional content plus a number of national, digital only channels (BBC Choice (soon to be renamed BBC Three), BBC Four, BBC News 24, CBBC, CBeebies and BBC Parliament) plus occasional special interactive services during major events such as international tennis at Wimbledon and the Football World Cup. BBC services are available on all platforms with the digital only channels being available on all digital platforms and some of them also being

available on analogue cable services.

- **Independent Television (ITV):** The ITV1 network comprises 15 regional services, separately licensed. With the exception of Grampian and Scottish TV in Scotland, Ulster TV in Northern Ireland, and Channel TV in the Channel Islands, all ITV services are now under the ownership of two main players, Carlton and Granada. The services are advertising funded. ITV produces one digital channel (ITV2). Following the collapse of ITVDigital, ITVSport and ITVSport Extra ceased. ITV services are available on all platforms. ITV's public service obligations relate only to its ITV1 service.
- **Channel 4 (C4):** Channel 4 is a public corporation, funded by advertising revenue. Channel 4 runs a number of digital only services which are all subscription funded (E4, plus three FilmFour film channels). Channel 4 provides analogue and digital services on all platforms to all parts of the country.
- **Channel 5 (C5):** C5 operates a national analogue network with around 85% population coverage as well as having half of one of the national DTT multiplexes; it is also available on the Sky digital satellite platform. It is a wholly advertising funded, commercial service.
- **Sianel Pedwar Cymru (S4C):** In the principality of Wales, the fourth public service channel is reserved for the Welsh language broadcaster, S4C. S4C is a statutory corporation funded by Government grant, supplemented by advertising revenue. S4C's analogue service broadcasts Channel 4's English language programmes outside peak time. S4C Digital simulcasts the Welsh language analogue service and provides additional Welsh language programmes outside peak hours. S4C also runs an additional digital channel (S4C2). Terrestrial analogue and digital services (and cable services where such exist) provide coverage to the principality of Wales, and S4C is on the national Sky satellite platform. S4C2 is a joint venture between the BBC and S4C and is broadcast on DTT in Wales and nationally on satellite.

### 1.2.3 *The multiplex operators*

- **Digital 3 and 4 (D34):** D34 is a consortium of ITV and Channel 4 who banded together to operate a multiplex licence. D34 operates one national DTT multiplex carrying ITV and Channel 4 programmes.
- **Sianel Digital Networks (SDN):** SDN is jointly owned by S4C and ntl and successfully bid for one national multiplex, on which they have to reserve capacity for Channel 5. SDN produces no material of its own (other than a daily, one hour long programme in Scottish Gaelic for Scottish viewers) but uses its capacity to provide digital terrestrial coverage of S4C and S4C2 in Wales, and other programmes both in Wales and elsewhere across the UK.
- **BBC/CCI consortium:** During the period that this report was written, the national DTT multiplexes previously operated by the now defunct ITVdigital were re-tendered by the ITC. The winning bidder was a consortium of the BBC and Crown Castle International (CCI – see section 1.2.3). The BBC is to operate one multiplex (in addition to their own existing one) and CCI will operate the other two. All programmes will be free-to-view.



### **1.2.3 The network operators**

#### **a) Terrestrial infrastructure operators**

There are two national terrestrial infrastructure operators, NTL and Crown Castle International (CCI) who divide the UK between them – there is minimal overlap between transmission sites. Formally the transmission of television and sound broadcasts were the responsibility of the BBC or the Independent Broadcasting Authority. As part of the Broadcasting Act 1990, the Government replaced the IBA with the ITC and reformed the transmission arrangements, with a view to giving greater scope for private sector involvement. Accordingly the infrastructure arm was sold to private owners (currently NTL), but the ITC has a supervisory role. CCI was originally the transmission arm of the BBC and was sold to private owners in 1996. CCI owns and operates the transmission infrastructure for the BBC (including both analogue and digital television and radio services) and was responsible for the transmission of the terrestrial ITVDigital service. NTL provides transmission services to ITV, Channel 5, S4C, D34 and SDN, and CCI provides transmission to the BBC. In order to achieve national coverage, the transmission companies operate a site sharing agreement whereby they can install equipment and offer services from each others' sites. This also enables the two companies to compete for transmission contracts (such as those for Five and the DTT channels).

Both NTL and Crown Castle are regulated for their provision of broadcasting transmission services, with a price control for analogue transmission, and a requirement to maintain a site sharing agreement to allow for national coverage.

There are a few, very local, television stations in the UK, some of whom provide their own transmission facilities as well as a few small isolated communities who have funded their own terrestrial relay station as coverage in their area was poor and not scheduled for improvement.

#### **b) Cable operators**

Two main cable operators (NTL and TeleWest) provide analogue and digital cable services which pass 12.5 m homes (around 50%) in the UK. There are also a number of smaller operators providing service in total to less than 5% of the households in the UK. Each licensed operator covers a pre-defined, non-overlapping area so that there is no current competition between cable providers for the provision of cable television services in any given area. Through deregulatory measures, it is now possible for any operator to roll out cable/DSL services in an area or nationally to deliver services, including broadcasting. Both analogue and digital services are still in operation though analogue services are slowly being phased out in favour of digital. Interactive services are beginning to be rolled-out and broadband internet connectivity is also available in many areas using cable modems via the cable networks (as well as via DSL.)

#### **c) Satellite operators**

There is only one satellite operator, British Sky Broadcasting (usually referred to as Sky) offering television services to the UK, however other pan-European services can be received with the appropriate equipment. Sky's service is now completely digital with analogue services having ceased in 2001. Sky use satellite capacity provided by Astra SES of Luxembourg, located at 28.2° East and that of Eutelsat at 28.5° East. In addition to Sky uplinking its own programme material through its own uplink facilities, other broadcasters have made services available on the Sky platform but uplink from other facilities (NTL are one of the major uplink providers for non-Sky provided services). In this instance, the broadcaster pays Sky a fee for a position on the Electronic Programme Guide (EPG). There are also some free-to-view services



on the Sky platform, however a viewing card is still required in order to protect the copyright on the programme material which could otherwise be viewed all over Europe. Pay-to-view and subscription services are also protected and this service is regulated as conditional access (by Ofcom). For this, broadcasters agree terms with Sky for conditional access services. Retail packages from Sky cost between UK£10 and UK£40 per month depending on which programme content the viewer has chosen to view. Sky has around 5,880m subscribers (March 2002).

#### **d) DSL operators**

There are two operators who deliver television through DSL enabled telephone lines, Kingston Communications in Hull and Home Choice (Video Networks) in London. Both operators offer a subscription service for video on demand television, coupled with broadband services. There are approximately 30 000 DSL television subscribers in the UK.



## 2 General interest obligations applied to broadcasters

Television broadcasting licences are awarded in the UK under the auspices of the 1990 and 1996 Broadcasting Acts.

### 2.1 Authorisations for use of frequencies

The licence for use of frequencies (under the terms of the Wireless Telegraphy Act 1949) is separate from the entitlement to broadcast, however as with many other countries the two are intimately entangled. The broadcasting licence for analogue ‘Channel 3’ (ITV) licensees only makes reference to the ‘Licensed Area’:

*“‘Licensed Area’ means the coverage area achieved when the programmes included in the Licensed Service are transmitted from the stations specified in Part II of the Annex...”*

Thus whilst no coverage roll-out obligations exist as such, the licensee must maintain the coverage as currently provided by existing stations. Indeed the licence for the Channel 4 service specifically excludes any coverage guarantees:

*“Nothing in this Licence shall constitute or imply any warranty, representation or obligation on the part of the Commission as to the size or location of the areas actually capable of receiving the programmes provided by the Corporation pursuant to the Licence”*

A good, recent example of the way in which the two licences interplay would be to consider the case of Channel 5. The Broadcasting Act 1990 required the ITC to make provision for the service making the most effective use of the frequencies provided (and the Government made available channels 35 and 37 which were then used for linking TVs by cable to video recorders.) The ITC made proposals to the TPG for assignments using these channels (and other frequencies) albeit without being able to match coverage of the other 4 analogue services. Following TPG agreement, the ITC packaged the use of these frequencies together with other (content) requirements and offered the licence to broadcast to potential bidders subject to gaining international co-ordination of the frequency plan. Channel 5 succeeded in winning the licence which enabled it to use the frequency blueprint agreed by the TPG subject to the provision of a licence under the 1949 Wireless Telegraphy (WT) Act. The WT Act licence is issued by the RA and is awarded to the broadcaster or, at the broadcaster’s discretion, a person contracted by the broadcaster to provide transmission facilities. In the case of Channel 5, this was ntl who thus takes responsibility for abiding by the terms of the WT Act licence, including payment of fees. It is worth noting that Channel 5 do not have coverage obligations relating to the use of their frequencies.

A different process is followed for local television services. In these cases, applicants register their interest for a licence in a given locality. The ITC then proposes a frequency assignment to the TPG in that locality. If an assignment is available, a broadcasting licence is awarded to the applicant subject to the provision of a WT Act licence issued by the RA.



## 2.2 Must carry

### 2.2.1 *Analogue cable*

All cable services in the UK are licensed by the ITC. Indeed each was awarded as the result of a competitive process. Each operator owns and operates its own infrastructure and is typically responsible for all aspects of the service from customer liaison to the head-end systems. All analogue cable services have ‘must-carry’ responsibility for those services deemed by the ITC to be ‘qualifying services’. At present this includes BBC1, BBC2, ITV, Channel 4 (outside Wales) and S4C (in Wales).

### 2.2.2 *Digital cable*

Digital cable services are subject to the obligation to carry the same qualifying services as their analogue counterparts. However there is currently some discussion as to what other services may be required to be carried, particularly the BBC’s additional digital services, such as BBC Four and CBBC. At present these services are carried by digital cable services without regulatory intervention (ie commercial arrangements have been reached) so that the issue as to which service may or should be included in a list of ‘digital qualifying services’ has not been of critical importance. As analogue cable services close and more bandwidth becomes available for digital services, it is unlikely that there will be pressure to remove channels - rather there will be space for more to be added.

One unresolved issue is over interactive services and EPG positions on cable networks. It would be usual (in fact this is currently the case) that the main (analogue) qualifying services to be the first four channels on the EPG. Again current practice by cable operators is to give them these positions. This has not been a major issue, although it may require resolution at some future date.

## 2.3 Conditional access systems

At present conditional access providers are all obliged to offer their services to any broadcaster who seeks them, on a fair, reasonable and non-discriminatory basis.

The only closed system is the satellite service operated by Sky. In this instance Sky offers an indicative ratecard of prices for access to its CAS and EPG. However for more complex services (such as regionalisation for different parts of the UK) commercial arrangements would be agreed between Sky and the programme service provider, with the ratecard serving as a starting-point for negotiation. There is no sense in which the Sky ratecard represents ‘officially approved’ prices. In the event of a dispute over prices or terms of supply, the broadcaster may refer a complaint to Oftel.



## 3 Cost assessment

### 3.1 Right of use of radio frequencies for terrestrial broadcasting

Excluding content obligations (which are outside the scope of this study) on the BBC and Broadcasting Act licence holders, obligations relating to the use of frequencies for BBC, ITV and Channel 4 analogue TV services include the need to obtain a WT Act licence and to provide coverage nationwide (and, particularly via a programme of relay building, coverage now reaches 99.4%. Analogue Channel 5 however only needs to provide service to those areas where it is commercially viable to do so and though it has been offered frequencies in areas where it does not currently broadcast, it has turned them down. This would suggest that the coverage of Channel 5 is at a point where additional coverage does not make business sense. The cost of the obligation to roll-out coverage beyond this level must therefore be a close analogy to the difference between the cost of Channel 5's broadcast network and that of BBC1, BBC2, ITV or Channel4/S4C.

The WT Act licence permits the broadcaster (or its transmission operator) to use frequencies in particular ways from particular sites (including frequency channel, power, antenna characteristics etc.). The licence makes provision for purpose of use of the spectrum (and makes a link to the requirement for the services being carried over the airwaves being a legitimate BBC service or a service which holds a Broadcasting Act licence), payment of licence fees as well as provisions for stations to be closed down temporarily or permanently in the case of national emergency, interference or, more generally, at the Secretary of State's discretion. WT Act licences are annually renewable.

Whilst figures for the value of the contracts in place between the broadcasters and their respective transmission service providers are not known, it was suggested by more than one interviewee that the difference in contract values was around a factor of 3. That is to say, that the cost of providing coverage to 99.8% as compared to the 80-85% which Channel 5 have found it commercially viable to achieve is three times higher. However, comparisons are not easy, as Channel 5 has no regional variations.

Interestingly, one industry commentator has suggested that the cost to the BBC of meeting the coverage obligations in its licence were effectively zero as it is funded by the licence fee which is priced in order to recoup the cost of the service. Were the BBC no longer required to meet the coverage obligations for terrestrial analogue television, it would expect the licence fee to be reduced by the requisite amount effectively having a nil financial impact.



### 3.2 Must-carry

No cost assessments have been carried out relating to must-carry obligations for cable operators.

## Appendix

### Persons interviewed

Country	Organisation	Persons interviewed
<b>Belgium</b>	Conseil supérieur de l'audiovisuel (CSA) Brussels	<i>Evelyne Lentzen</i> (President)
	Ministry of the Flemish government Brussels	<i>Marc Chatelet</i> (Deputy director, media and films) <i>Caroline Uyttendaele</i> (Expert, media innovation)
	BIPT (Belgian telecoms regulator) Brussels	<i>Michael Vandroogenbroek</i> (Adviser, frequency management)
	RTD (cable operators' association) Brussels	<i>Pierre de Wergifosse</i> (Chairman RTD, and honorary director general, Brutélé)
<b>France</b>	DDM (Direction des Médias)	<i>François-Xavier Georget</i> (Chargé de mission)
	DDM (Direction des Médias)	<i>Simon Barry</i> (Directeur Adjoint)
	AFORM (Association Française des Opérateurs de Réseaux Multiservices)	<i>Danièle Blangille</i> (Secrétaire Générale)
	Eutelsat	<i>Genta Daniala</i> (Responsable des relations extérieures)
	NOOS (Opérateur du câble)	<i>Patricia Maillard</i> (Juriste – Affaires Européennes)
	NOOS	<i>Thierry Berthelot</i>
	NOOS	<i>Pierre-Yves Chabrol</i> (Directeur du contrôle financier)
	NOOS	<i>Olivier de Baillenx</i> (Directeur délégué aux affaires extérieures)
	TPS (Télévision Par Satellite)	<i>Gilles Maugars</i> (Directeur technique et Directeur Général adjoint)
	TDF (Télédiffusion de France)	<i>Vincent Audin</i> (Direction du Développement/ Délégation à la Stratégie)
TDF	<i>Sophie Fallot</i> (Direction ingénierie du réseau gestion du spectre)	
TDF	<i>Charlyse Bagé</i> (Direction juridique)	
TDF	<i>George Lombard</i> (Direction juridique)	
<b>Germany</b>	Media Agency for North Rhine-Westphalia (LfR) Düsseldorf	<i>Jürgen Brautmeier</i> (Deputy Director, and Head of division for programmes and technology)
	Ish GmbH & Co KG (independent cable operator)	<i>Eric Heitzer</i> (Director, regulatory affairs)



ASSESSMENT OF MEMBER STATES MEASURES LINKED TO BROADCASTING  
WITHIN THE CONTEXT OF THE NEW REGULATORY FRAMEWORK

	Cologne	
	RegTP (the German telecommunications regulator) Bonn	<i>Michael Heringer</i> (Director, international affairs) <i>Alfons Knichel</i> (Market observatory) <i>Annegret Groebel</i> (RegTP representative on ONP Committee)
<b>Italy</b>	AGCOM (the Italian telecommunications regulator) Naples	<i>Perruci Antonio</i> ( <i>Servizio analisi economico e di mercato</i> ) <i>De Martino Roberto</i> ( <i>Servizio analisi economico e di mercato</i> ) <i>Mini Federico</i> ( <i>Servizio analisi economico e di mercato</i> ) <i>Lupi Paolo</i> ( <i>Servizio analisi economico e di mercato</i> )
	Mediaset	<i>Lazzarini Giovanna</i> ( <i>Head of communication</i> ) <i>Lorenzon Carolina</i> ( <i>International affairs Director</i> ) <i>Pinetto Luigi</i> ( <i>Regulatory Affairs Dept</i> ) <i>Cruciatti Manlio</i> ( <i>Director Dept. Engineering and Development</i> ) <i>Serio Alessandro</i> ( <i>Regulatory Affairs Dept</i> )
	E.Biscom	<i>Corsi Alessandro</i> ( <i>Regulatory and Institutional Affairs</i> ) <i>Vulterini Alessandra</i> ( <i>Regulatory and Institutional Affairs</i> )
<b>Spain</b>	Retevisión	<i>Ventosa Josep</i> ( <i>Director de la Unidad de negocio Audiovisual</i> ) <i>Aubel Monica</i> ( <i>Regulatory and Institutional Affairs</i> ) <i>Mestre Mollins Alex</i> ( <i>Gerente unidad de negocio audiovisual</i> ) <i>Lopez Garcia Maria</i> ( <i>Direcion de planificación y desarrollo del negocio</i> ) <i>Luminari Andrea</i> ( <i>Director of business development and planning</i> )



ASSESSMENT OF MEMBER STATES MEASURES LINKED TO BROADCASTING  
 WITHIN THE CONTEXT OF THE NEW REGULATORY FRAMEWORK

Country	Organisation	Persons interviewed
<b>Netherlands</b>	UPC (United Pan-Europe Communications) Amsterdam	<i>Manuel Kohnstamm</i> (Managing Director, corporate affairs) <i>Chris Hutchins</i> (Manager, regulatory affairs)
	VECAI (Dutch cable association) The Hague	<i>Ad van Loon</i> (Manager, legal and regulatory affairs)
	Commissariaat voor de Media Hilversum	<i>Dirk Oudenaarden</i> (Head, broadcasting time & cable affairs) <i>Hans Ottenhoff</i> (Broadcasting time & cable affairs)
	OPTA (telecommunications regulator) The Hague	<i>Johan Keetelaar</i> (Division interconnection and special access)
<b>Spain</b>		
<b>Sweden</b>	PTS	<i>Per Kjellin</i> , PTS
	Teracom	<i>Percy Pettersson</i> , Teracom <i>Jan-Peter Bengtsson</i> , Teracom

