

IDATE

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**Development
of
Digital TV in
The
Netherlands
1998 report**

LENTIC

1. Digital TV market overview

The Netherlands are, together with Belgium, among the European countries with the highest cable penetration rate. The capacity available on the cable networks enables the transmission of a significant number of channels (about 30). The customer seems to be in general satisfied with this multi-channel provision he gets through the cable in the basic layer. This might partly explain the relatively poor success achieved by premium pay-TV services until now and influences the slow pace at which digital broadcasting is introduced in the Netherlands.

At this moment, there is only one actor on the digital broadcasting market. Indeed, *CANAL+*, which is by far the most important pay-TV actor on the market, is the only one who has a digital offer. Nevertheless, *CANAL+* has limited currently this offer to the satellite platform, partly because no agreement has been found for a digital transmission with the cable operators. However, this situation will probably evolve in the near future and attract other actors as might appear from the existing projects detailed in this document.

(Since there is only one operator, digital services will not be detailed in this section. Nevertheless, a fiche on *CANAL+* is available at the end of the Dutch report.)

1.1 Digital at stake in the cable sector

From 1990, the cable sector has known an important evolution. From a large number of scattered networks, the sector seems to consolidate around a limited number of networks and actors. This situation results from different evolutions:

- ✓ First, following the liberalisation process of the telecommunications sector, KPN, the historical telephone operator, the earlier Royal PTT Netherlands, has been forced by public authorities to disengage from the cable sector. Therefore, it sold out its main cable networks. This move contributed partly to the intervention of foreign companies in the cable sector. Indeed, the biggest cable network of KPN, which was managed by CASEMA has been sold for the main part to France Telecom. Today, France Telecom is the only shareholder of CASEMA.
- ✓ In the meantime, other networks have been overtaken by foreign companies. Like KPN, Philips withdrew from its cable activities. As a result, UPC (United Pan-European Communications) and Media-one (US West) are now both shareholders of A2000 which is the cable-operator managing the network around Amsterdam.
- ✓ Beyond a very clear internationalisation of the sector, important cable operators are seeking an enlargement of their networks, which leads to concentration. The best example of this process are UPC's and NUON's cable activities that were brought together under one holding, United Telekabel Holding (UTH).

- ✓ These two evolutions have to be placed in the regulatory context currently in force. The composition of a base package and the price of subscription are fixed through regulation. Public and regional broadcasters enjoy a “must-carry” which limits their access fees to the cable. At the opposite, the cable operator determines the access fee for the commercial broadcasters. A kind of opposition seems to appear between the original role of “carrier” of cable operators and their new packaging “role”.
- ✓ This regulatory context has contributed to a bottleneck situation today. All the cable operators in the Netherlands offer on average 31 channels as a standard package, of which about 15 from the base package, on their networks. The channels comprised in the standard package use an important part of the network capacity. In order to offer additional services and to enable transition to digital broadcasting, the networks need to be upgraded. Important investments have been made and still need to be made to that end. Cable operators need to recover this investment. A2000, which is quite far in its upgrading and offering of new services, charges important access fees which led MTV and CNN to retire from its network and which places CANAL+ today in a difficult financial situation. CANAL+ recently lost a court case concerning the access fees to the A2000 network. This situation might repeat itself on other networks.
- ✓ In this context, another evolution needs to be observed contributing to the actual positioning of the cable regarding digital broadcasting: most cable-operators are diversifying their activities in order to become full-service providers. A large number of cable operators are either Internet Access providers¹, or internet backbone operators². Some of them already offer telephony services via the cable³, others have tests-sites working in this field. Two of them offer analogue pay-per-view services⁴ and position themselves in this market as service integrators. Cable-operators seem to be developing similar plans regarding digital broadcasting, taking charge of not only access to the network and services but also the service provision itself. Mediakabel, a collaboration between ten cable-operators⁵, is developing a project to offer its own digital bouquet. It is today negotiating a collaboration with an eleventh cable-operator, CASEMA NV, as well. All these cable operators adhere to the Eurobox standard and intend to have a first digital offer in September 1999. The previously mentioned UTH is developing its own offer with a proprietary decoder, the Eurohit, taking advantage of the pan-European presence of UPC in cable activities. None of the cable operators exclude the possibility of including CANAL+ digital bouquet but they do not accept the use of CANAL+ Seca decoder.

The major evolution to keep in mind is this trend of diversification of the cable operators, which are moving from a technical role to a “full service” role. They will compete directly with CANAL+.

¹ Casema, Telekabel, Multikabel, Zekatel, A2000...

² ENECO

³ A2000

⁴ A2000 (Moviehouse) and CASEMA.

⁵ ST. CAI Alkmaar, NV ENECO, NV GAMOG-CAI Netwerken, NV Nutsbedr.Heerlen, St. CAI Ijselstein, Kabeltex, Nutsbedr. Maastricht NV, Mega Limburg Telediensten NV, NV PNEM Teleservices, Zekatel BV.

1.2 Alternative or complementary digital TV projects

Today, one operator – CANAL+ - offers digital broadcasting services via satellite. Additionally, important projects are being developed by other platform or infrastructure operators. We have already mentioned the various cable projects that intend developing such services on the cable networks. Besides those projects, an important Terrestrial digital video broadcasting (DVBT) project is being developed by a consortium gathering different operators active in programming, service provision and in the infrastructure.

The DIGITENNE consortium, which has taken the initiative to offer nation-wide DVBT, includes 4 main actors: NOZEMA (national terrestrial broadcast infrastructure operator), NOS (co-ordination body of the public broadcast), VESTRA (association of 14 commercial broadcasters) and CANAL+ . Negotiations are on their way to offer KPN the possibility of joining the consortium.

NOZEMA, which is at this moment a semi-public company⁶ has been the only actor managing access to the terrestrial broadcast infrastructure. Until now, only the public and regional channels are using this platform.

This monopoly ended on the 1st of January of 1998 and NOZEMA will probably be privatised in the very near future. Privatisation has been encouraged by the public authorities in order to have a clear separation between content provision and infrastructure.

Together with the other parties in the consortium, NOZEMA is developing the DVBT offer. Each of the parties has clearly its own motivations for participating in the project. First, NOZEMA has to go over to a digital platform, at the risk of losing any reason to exist in the future. The intervention of NOS might be understood as a way of protecting public broadcasting. The presence of VESTRA and CANAL+ is motivated by the availability of an alternative platform to the cable, where Canal + has been denied access. In order to introduce interactivity capabilities, the negotiations with KPN aim at joining a partner who could intervene for an upstream solution in interactive services, for instance using the GSM-infrastructure.

The DIGITENNE consortium has not yet chosen a decoder. In any case, the participation of CANAL+ does not mean that the choice will necessarily be set on the SECA decoder.

⁶ 59% State-owned, 40% NOS (public broadcast) and 1% Radio Nederland Wereldomroep.

1.3 Development of a platform competition policy

Several political moves have already been taken in order to encourage the development of competition between communication infrastructures in the Netherlands. When telecommunication market liberalised, a clear policy - between others with the obliged withdrawal of KPN from cable activities - was taken to stimulate alternative infrastructure owners, and more specifically cable operators, to offer telephony services and to avoid abuse of dominant position by the historical operator.

Today, with the development of digital television, political support is given to DVBT, a potentially competitive platform solution to the cable, in order to accelerate market development and to stimulate new services development for the information highway.

The DVBT project has been examined by the competent ministries during the second half of 1998 and has been approved. The frequency planning is in revision. The frequency allocation will take place in 1999. Five multiplexes will in a first time be available. The modalities for frequency allocation are not yet determined. Two consultation sessions of the different market parties have been organised and will probably influence political decision on this point. DIGITENNE consortium is of course interested in all the multiplexes as it seems almost the only way to offer a solution that is able to compete with the cable.

Besides, the Dutch government asked NOZEMA to set up a large-scale experimental plan in 1999 in order to test the infrastructures and to evaluate the potential development of the digital terrestrial television.

DVBT should be operational by January 2000 in the main part of the Netherlands.

1.4 The Conditional Access Directive and the intervention of the competent regulatory body

Two laws, which have recently been revised so as to adapt to the convergence of telecommunication and audiovisual markets, have to be considered in the digital television field. On the first hand, the “Mediawet” appoints the “Nederlandse Mededingings Autoriteit”, the regulatory body for the respect of competitive market conditions, as authority in charge of controlling the respect of reasonable access conditions to the cable infrastructure for broadcasters.

What conditional access is concerned, the “Telecommunicatiewet” which must be approved by the first Chamber and which should be operational in November 1998 has integrated the transposition of the conditional access directive and appoints the OPTA (Onafhankelijke Post-en Telecommunicatie Autoriteit), the national telecommunication regulator, to the respect of the dispositions of the conditional access directive.

2. Key figures for the Dutch market

2.1 Country fundamentals

	1993	1994	1995	1996	1997	1998	1999
Population (millions)	15,290	15,382	15,459	15,494	15,567		
Households (millions)	5,973	6,032	6,125	6,235	6,354		
GDP (in ECU billions)	266,7	284,4	304,0	312	325,5		

Source : OECD

2.2 Equipment

<i>As of 31 of December</i>	1993	1994	1995	1996	1997	1998	1999
TV households (millions)	5,543	5,622	5,727	5,848	5,973		
TV households (% of total households)	93%	93%	93%	94%	94%		
TV Households with 2 TV sets or more (millions)	1,386	1,574	1,775	1,924	1,971		
TV Households with 2 TV sets or more (% of TV Households)	25%	28%	31%	33%	33%		
TV Households with 16:9 Television sets (millions)	n.a.	n.a.	n.a.	n.a.	n.a.		
TV Households with 16:9 Television sets (% of TV Households)	n.a.	n.a.	n.a.	n.a.	n.a.		
VCR Households (millions)	3,658	3,800	4,097	4,198	4,299		
VCR Households (% of TV Households)	66%	68%	72%	72%	72%		
Digital STB Households (millions)	0,000	0,000	0,000	0,010	0,020		
Digital STB Households (% of TV Households)	0%	0%	0%	0%	0%		
Digital TV Households (millions)	0,000	0,000	0,000	0,000	0,000		
Digital TV Households (% of TV households)	0%	0%	0%	0%	0%		
Digital Households (millions)	0,000	0,000	0,000	0,010	0,020		
Digital Households (% of TV households)	0%	0%	0%	0%	0%		

Source : E.A.O./L.E.N.T.I.C. estimation

2.3 Television market estimates*

<i>Millions ECUs</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>
Analogue TV Market							
Public funding	356	336	356	359	363		
Advertising	293	349	375	366	359		
Subscriptions	47	58	65	55	74		
Total analogue TV	695	743	797	780	795		
Digital TV Market							
Public funding	0	0	0	0	0		
Advertising	0	0	0	0	0		
Subscriptions	0	0	0	3	5		
Total digital TV	0	0	0	3	5		
TV Market							
Public funding	356	336	356	359	363		
Advertising	293	349	375	366	359		
Subscriptions	47	58	65	57	79		
Total TV market.	695	743	797	783	801		

Source : E.A.O./Trends/L.E.N.T.I.C. estimation

* "Public funding" comprise grants and licence fees; "Advertising" also includes sponsoring expenditures whereas "Subscriptions" cover subscriptions to the basic multi-channel package as well as subscriptions to Premium pay-TV services.

2.4 Distribution mechanisms

Cable

	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>
Home passed (millions)	5,310	5,442	5,567	5,702	5,847		
<i>of which digital (millions)</i>	0	0	0	0	0		
Home passed (% of TV households)	96%	97%	97%	98%	98%		
<i>of which digital (% of TV households)</i>	0%	0%	0%	0%	0%		
Analogue Basic Subscribers (millions)	5,195	5,350	5,510	5,544	5,596		
Analogue Optional services subscribers (millions)	0,155	0,180	0,190	0,156	0,204		
Digital package subscribers (millions)	0,000	0,000	0,000	0,000	0,000		
<i>Analogue Basic Subscribers (% of TV households)</i>	94%	95%	96%	95%	94%		
<i>Analogue Optional services subscribers (% of TV households)</i>	3%	3%	3%	3%	3%		
<i>Digital package subscribers (% of TV households)</i>	0%	0%	0%	0%	0%		

Source : E.A.O./L.E.N.T.I.C. estimation

Satellite

	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>
Satellite households (millions)	0,140	0,160	0,200	0,250	0,320		
<i>Satellite households (% of TV households)</i>	<i>2%</i>	<i>3%</i>	<i>3%</i>	<i>4%</i>	<i>5%</i>		
Satellite subscribers (millions)	0,000	0,000	0,000	0,010	0,020		
<i>Satellite subscribers (% of TV households)</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>		
of which digital (millions)	0,000	0,000	0,000	0,010	0,020		
<i>of which digital (% of TV households)</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>		

Source : L.E.N.T.I.C. estimation

3. Presentation of the major digital services

3.1 Satellite services

Canal+ Nederland

<i>Presentation</i>	
<i>Name</i>	Canal+ Digitaal
<i>Date of launch (digital service)</i>	March 96
<i>Shareholders</i>	CANAL+ Group (100%)

After taking over in June 1997 of Nethold's activities (including the Filmnet, Supersport, and MultiChoice channels), CANAL+ integrated and redefined the existing programming into two separate channels CANAL+1 and CANAL+2. These two channels represent their core business, on an analogue transmission base via cable, as well as in their digital offer via satellite.

As far as digital transmission is concerned, CANAL+ offers a two-tiers digital bouquet under the CanalDigitaal brand. This is a result of what had been launched earlier, in March 1996, by Nethold. Nethold decided to offer a first basic tier as a free incentive to anyone buying a box. This basic tier comprised all the public and commercial Dutch channels (except TV10/Foxkids). The second tier concerned a premium channel, comprising the specific Nethold channels as well as several other foreign channels, which could be accessed by subscription.

CANAL+ took over this two-tiers offer. The basic tier remained unchanged on a free basis. The second tier was progressively recomposed to offer exclusively the CANAL+1 and CANAL+2 channels. Mid 1998, CANAL+ had 30.000 subscribers for its digital offer.

One particularity of the digital offer of CANAL+ in the Netherlands, is that it does not include the rental of the decoder and that it offers basically the same programming base as in their analogue offer.

Although Canal+ has developed a digital offer only via satellite, they do not exclude having a multi-infrastructure offer of their digital bouquet. Several actions go in that direction. For instance, CANAL+ is taking part of the DIGITENNE Consortium, which is developing a main DVBT project (see infra).

At this moment, CANAL+ could not find an agreement for a digital transmission via the cable. But regarding the projects which are in development by the cable in that field, they could possibly reach an agreement on content provision.

At this moment, CANAL+ has no specific projects to enlarge their digital offer. Nevertheless, we might expect that CANAL+ will proceed in the longer run to diversify their digital offer. A new decoder, using SECA technology, will be launched in October 1998, intended to replace progressively the IRDETO decoder. In a first time, a transitional period will maintain the two access technologies in parallel use.

The SECA decoder includes possibilities to offer PPV services, internet, 16:9 broadcast and has an integrated modem.

History of subscription

	(thousands)						
	1993	1994	1995	1996	1997	1998	1999
Number of subscriptions				0,010	0,020		
Of which digital				0,010	0,020		

Source :

Channel line-up

Offer	Price per month
Basic tier (Dutch public and commercial channels)	Free
CANAL+1 and CANAL+2	49 Gulden ⁷

Major channel providers

Channels	Provider
Dutch public and commercial channels	
CANAL+1, CANAL+2	CANAL+ Nederland

Distribution

Network	Owner	Potential reach (thousands)
Satellite	ASTRA	320.000 (estimation of the number of satellite dishes in the Netherlands)

Source : CANAL+ 1997 Annual Report

Conditional access

Name of the decoder	SECA
Technology	Mediaguard Mediahighway
Available for sale/price	Yes / 1.500 NLG
Available for rent/price	No
CA agreements	No

⁷ Subscription only (decoder excluded)