

International Journal of Digital Television
Volume 1 Number 2

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Keeping the balance: digital television in Denmark

ABSTRACT

1. *Denmark started DTT (digital terrestrial television) with public service stations in*
2. *2006. After a thorough information campaign, analogue TV was switched off on 1*
3. *November 2009. The policy goals for DTT are to keep a balance between public and*
4. *private channels; therefore new public channels were started along with a new DTT*
5. *pay service, which is hoped to stimulate competition with smaller packages against*
6. *the dominant cable and satellite distributors.*
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- 9.

1. DANISH MARKET

10. Denmark is a small and densely populated country. 43,000 square km where
11. 5.5 million people live in 2.564 million households, of which 97.8% have one
12. or more TV sets. Distribution is mainly by cable (66%), DTH (direct-to-home
13. satellite) covers 13% and terrestrial antennas 23%. There is some overlap
14. between DTH and terrestrial antennas. DTT was started on 1 April 2006 and
15. analogue switch-off (ASO) happened overnight on 1 November 2009.

16. Television started in Denmark in 1951 and until 1988 DR (Danmarks
17. Radio), as the fully licence fee financed public broadcaster, had a monopoly
18. and only one TV channel. TV 2 was launched by the state in 1988 as a compet-
19. ing 'pubcaster', mainly financed by advertising yet with a slice of the licence fee

KEYWORDS

digital
television
competition
public service
Denmark

revenue until 2004. TV 2 was then changed into a public limited company with the intention of privatization, which has been postponed because of pending cases in the European Court of Justice about state aid. TV 2 is planned to be a subscription channel on cable from 2012. In 1996, DR opened DR 2 as a satellite and cable channel with more demanding programmes, making room for the original DR 1 as a mainstream channel. This well-developed public service system also has eight licence fee financed regional TV stations transmitting in windows on TV 2. Private TV has only been allowed in Denmark as local stations with a national network, and private 'Danish' channels have operated by satellite from London for twenty years. The strong political support for public service TV in the analogue era set the tone for the introduction of DTT, as we shall see.

Community antennas or SMATV developed early in order to catch Swedish or German spill-over TV, when Denmark had only one channel, so 66% of households are connected to cable including SMATV. Denmark has over 7000 community antenna associations, but only 310 of them supply more than 500 homes. The explanation of this rather decentralized and non-profit organization of the SMATV sector in Denmark lies in the limitations on transmitting cable signals over a municipal border and on taking signals from satellites until 1987. The cable industry only developed after that time and is now dominated by the national telco TDC under the brand name YouSee, with Swedish Telia (Stofa) and Norwegian Telenor (Canal Digital) as minor players.

There are two satellite operators, selling both to SMATV and DTH: Swedish MTG, which integrates its distributor Viasat and its own channels of the TV 3 family; and Canal Digital, which has reserved the SBS channels. Both Viasat and Canal Digital can distribute the channels from the two public broadcasters, DR and TV 2. All channels from DR are public service, from TV 2 only the main channel TV 2/Danmark is public service, while five other subscription channels are not.

2. STRONG AND FREE PUBLIC SERVICE ON DTT

While satellite and cable are transnational platforms in the European Union, DTT is about more channels with complete, terrestrial distribution and still under national political regulation. Denmark had two main policy goals when using this capacity. First, the public service (DR) should be kept strong by having more channels and an early start on DTT. Second, most of the new distribution capacity should be used to create one new commercial player to give competition to the incumbent distributors, cable and satellite. New channels with Danish content were of course desirable, but in the small Danish market could not get the highest priority.

Denmark had eight multiplexes (MUXes) for DTT of which two are left to public service in a broad sense. The first MUX using MPEG 2 started in April 2006 with four channels: DR 1, DR 2, TV 2/Danmark and a fourth channel, used for sign language of news programmes on the other channels three hours a day as a service for the deaf audience. DR had launched DR Update, a news service on the Internet and cable, and DR was allowed temporarily to bring Update onto the remaining fourth channel. The immediate effect of this early start was that DR 2 finally – ten years after its launch as a satellite channel – became available with a traditional terrestrial antenna (and a box or a new TV). Over 500,000 households bought a box or a digital TV, and later

1. they were somewhat frustrated when the next MUXes were in MPEG 4. There
 2. is a political promise that this first MUX with the basic Danish channels will
 3. continue into 2012, from which point these households must get new equip-
 4. ment again.

5. Following the analogue switch-off (ASO), the second MUX using MPEG
 6. 4 has room for four new channels from DR: DR K (culture), DR Ramasjang
 7. (children), DR Update (news), DR HD (only transmitting HD programmes,
 8. mostly imports plus a few Danish series) and a new channel 'Folketinget',
 9. run by the Danish parliament itself. When DR Update left the fourth chan-
 10. nel on MUX 1, one hour (2000–2100) was given to the eight regional, public
 11. service stations, in addition to the windows on TV 2/Danmark, and twenty
 12. hours (2100–1700) were given to non-commercial stations, which are also
 13. granted some financial support and reduced payment for transmission. The
 14. non-commercial time is given by the independent regulator, the Radio and
 15. TV Board, after a beauty contest aiming for the most pluralistic output in each
 16. of the eight regions.

17. These two public MUXes are operated by Digi-TV, which is a gatekeeper
 18. owned by DR (two-thirds) and TV 2 (one-third). Digi-TV has a licence from
 19. the Ministry of Culture specifying, among other things, that Digi-TV in theory
 20. must penetrate all households in Denmark.

23. **3. BOXER: NEW PAY SERVICE ON DTT**

24. The next four MUXes (3–6) were put up for a beauty contest as one single
 25. offer to a private gatekeeper; the beauty contest meant the winner would not
 26. pay a price or fee for the licence. The European Commission asked: why only
 27. one operator? The Commission accepted the answer from Denmark, that both
 28. the total market and the terrestrial niche are too small for more than one new
 29. player to play a significant role in competition with cable and satellite. The
 30. Radio and TV Board was instructed by the government to evaluate the beauty
 31. of the candidates for gatekeeper on three criteria with specified weights: (1)
 32. how the applicant as gatekeeper would promote effective competition on the
 33. Danish TV market, and this would be given a 50% weighting; (2) applicants'
 34. plans for the programmes (where five specified genres must be represented
 35. at a minimum level, and many and cheap channel packages were evaluated
 36. positively) and these would be given a 25% weighting; and (3) applicants'
 37. competence to carry out their plans, including a business-related realism of
 38. the plans, which would also be given a 25% weighting.

39. The Board had three candidates: Boxer, who is the Swedish operator of
 40. DTT; Telenor, the Norwegian owner of Canal Digital in Denmark and operator
 41. of DTT in Norway; and MTG/Viasat from Sweden, producing and selling satel-
 42. lite channels in Denmark. Boxer got the licence as gatekeeper because it had
 43. no relations to the incumbents nor to any TV channels and it also had the most
 44. pluralistic and well-packed programme offers, though its business competence
 45. was not the best. The gatekeeper must bring channels from Norway, Sweden
 46. and Germany and must offer two new channels on the Danish market. This
 47. does not mean that the channels must be of Danish origin or content – even if
 48. that might be desirable – only that the channels were not already available on
 49. the market. In fact, the new Channel 9 is a sports channel with Danish football
 50. and foreign sports.

51. Boxer launched a limited service in parts of the country during 2009 and
 52. since ASO on 1 November 2009 it has been available from three MUXes with

31 channels (29 were promised) all over the country. Boxer will not offer HDTV channels because they take so much of the limited capacity. Thus, commercially, HDTV will be a unique selling point for cable and satellite. When or if Boxer decides on the new terrestrial standard, DVB-T2, the situation may change.

Boxer has the licence for one more MUX from November 2010. In the beauty contest it was evaluated positively to offer mobile TV (in DVB-H), and Boxer chose to use a whole MUX for DVB-H. At least 35% of the capacity must be offered wholesale to other private services and 15% to DR. Boxer can use the remaining 50% of the mobile capacity as it pleases. Now, two years after the offer was given by Boxer, there is some doubt that the market is ready for mobile TV yet.

The two last MUXes (7 and 8) were put away as a reserve in 2007. During 2009 MUX 7 was politically allocated for tele-purposes – mainly for mobile Internet. The use of the last MUX (which will not be fully available until all neighbouring countries switch off their analogue TV) will presumably be decided by a political media agreement during 2010. If left for broadcasting, it may be used for HDTV or for digital radio.

4. THE CAMPAIGN FOR ASO

With high penetration of cable and satellite, most Danes were not directly affected by ASO, since cable will still service analogue receivers (plus the digital ones) and all satellite homes were digitized years ago. Nevertheless, the government made available 50 million Danish kroner (€6.7 million) to fund a public information campaign about the digital switchover. The information campaign targeted the 23% of households that relied on the terrestrial platform for their television reception, but a survey conducted by DR in late 2008 showed that, out of the approximately 6 million television sets in use in Denmark, nearly half (2.5 million) use the terrestrial platform. A significant number of SMATVs were also affected.

The public tender to offer the information service was won by a consortium of two Danish agencies, Advice and Metaphor, who put in place a campaign secretariat 'The New TV Signal' in mid-2008. Despite being an unsuccessful bidder for the public information campaign, BDM, a forum created by the broadcast and distribution industries, also supported the campaign and coordinated information, in particular from manufacturers and to the retailers. Boxer as well as DR and TV 2 both directly and through their common gatekeeper (Digi-TV) provided strong support to the public information campaign. This cooperation was based on duties in the licences for Boxer and Digi-TV.

The 'New TV Signal' had four major campaigns including several nationwide postal circulations. It also offered in-store material to retailers, put in place a detailed website and operated a call centre. Detailed interactive coverage maps were made available, allowing viewers to assess the quality of the outdoor or indoor coverage based on a specific address location.

The commercial industry – both retailers with new TV sets and distributors with new package offers – of course campaigned heavily. It is estimated that on top of their normal advertising they spent ten times the amount of the public information campaign. The brief of the public campaign was to focus on the switch-off and in a neutral way help people clarify their own needs for a few or for many channels and, on the basis of information about the different platforms, make their own firm decisions about what to go for. Specifically the aim of the campaign was to avoid anyone experiencing a 'black screen', on

1. the main set only, in their home on 1 November. The same applied to institu-
2. tions where people live, like hospitals or old people's homes.

3. The result was very comforting. A quick survey from TNS Gallup, done for
4. the 'New TV Signal', showed that 2% of all households had some TV prob-
5. lems on Sunday 1 November, and only 6000 households were not prepared
6. at all. The official evaluation, also by TNS Gallup based on 1000 interviews
7. during November, showed that only 2000 households had not done anything
8. about going digital. But 85,000 had trouble even though they had bought
9. the relevant equipment. Problems could be with boxes, TV sets, antennas or
10. reception hindrances, even though Digi-TV had a 99.8% theoretical coverage
11. of the population from the first day. Boxer uses the same transmitter towers
12. and according to its licence it must penetrate 97%. In 2010 Boxer has reported
13. penetrations for its three MUXes at 99.2%–99.5%.

14. 5. IN CONCLUSION

15. The choice of distribution and channel offers in Denmark after ASO can be
16. summed up like this (see Table 1):

Denmark November 2009			Channels from				
Distribution platform			DR	TV 2	Viasat	SBS	Others
	DTT	Digi-TV (free) MUX 1–2	6 free channels	TV 2/ Danmark	No	No	Non-comm. only
		Boxer (pay) MUX 3–5	No	5 pay channels	No	Yes	Yes
	Satellite (pay)	Viasat	Yes	Yes	Yes	No	Yes
		Canal Digital	Yes	Yes	No	Yes	Yes
	Cable (pay)	YouSee Stofa, etc.	Yes	Yes	Yes	Yes	Yes

38. *Table 1: Choice of distribution and channel offers in Denmark after ASO.*

39. The Danish introduction of DTT has given the consumers new offers. If
40. you want just to have free public service TV and some non-commercial chan-
41. nels, Digi-TV offers that free-to-air in the most basic form (MUX 1, MPEG
42. 2) or with the new DR channels (MUX 2, MPEG 4). In this way, the balance
43. between free public service and private TV by subscription is upheld even after
44. Boxer's launch of pay channels on terrestrial antennas.

45. The second aim was to stimulate competition between distributors. A
46. recent survey from the Consumers' Agency showed that 89% of consum-
47. ers pay for more channels than they use. The most important parameter for
48. choice of distributor according to the survey is 'that we can get the channels
49. we want'; price is only second. The private Consumers' Council has organized

a price comparison for TV channels from the four distributors (Boxer, Viasat, Canal Digital, YouSee.) It is not fully transparent, because you cannot buy all channels from all distributors, in particular Viasat keeps its own channels away from Boxer and Canal Digital. If we make a package of six channels: the three from SBS (channels 4, 5 and 6) and three from TV 2 (Film, Charlie and Zulu) and find the prices for two years' subscription, YouSee is the most expensive, the price with Canal Digital is 58% of YouSee and Boxer's price is 56% of YouSee. It seems that Boxer, as hoped, will increase the competition by offering smaller packages, but it will go more slowly than expected, as Boxer had only 45,000 customers (households) by 1 January 2010.

Also in order to stimulate competition, the National Telecom Agency decided on 22 December 2009 that TDC (YouSee) must open both the company's copper and cable television network to other broadband companies. This means that other operators will be able to compete with TDC on equal terms for broadband customers.

REFERENCE

The tender material for the DTT gatekeeper is available in English: <http://www.bibliotekogmedier.dk/medieomraadet/medieprojekter/arkiv/dtt-udbud/> – find the second PDF file under UDBUDSMATERIALE.

SUGGESTED CITATION

Svendsen, E. N. (2010), 'Keeping the balance: digital television in Denmark', *International Journal of Digital Television* 1: 2, pp. 239–244, doi: 10.1386/jdtv.1.2.239_7

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