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European Public Service Broadcasting Online

Services and Regulation

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Public Service Broadcasters

ARD	German National Broadcasting	www.ard.de
BBC	British Broadcasting Corporation	www.bbc.co.uk
BNR	Bulgarian National Radio	www.bnr.bg
BNT	Bulgarian National Television	www.bnt.bg
Channel 4	Channel 4, UK	www.channel4.com
Čro	Czech Radio	www.rozhlas.cz
ČT	Czech Television	www.ceskatelevize.cz
CyBC	Cyprus Broadcasting Corporation	www.cybc.com.cy
DLR	Deutschlandradio	www.dradio.de
DR	Denmark's Radio	www.dr.dk
ERR	Estonian Public Broadcasting	www.err.ee
ERSL	Radio 100,7, Luxembourg	www.100komma7.lu
ERT	Hellenic Broadcasting Corporation, Greece	www.ertopen.com
France Televisions	France Televisions	www.francetv.fr
HRT	Croatian Radiotelevision	www.hrt.hr
HU/MTV	Hungarian Television	www.mtv.hu
LR	Latvian Radio	www.latvijasradio.lv
LRT	Lithuanian National Radio and Television	www.lrt.lt
LTV	Latvian Television	www.ltv.lv
MR	Hungarian Radio	www.radio.hu
MT/PBS	Malta Public Broadcasting Services	www.pbs.com.mt
NPO	Netherlands Public Broadcasting	www.npo.nl

NRK	Norwegian Broadcasting Corporation	www.nrk.no
ORF	Austrian Broadcasting	www.orf.at
PR	Polish Radio	www.polskieradio.pl
Radio France	Radio France	www.radiofrance.fr
RAI	Italian Radio-Television	www.rai.it
ROR	Romanian Radio Broadcasting Company	www.srr.ro
RTBF	French language Radio and Television of Belgium	www.rtbf.be
RTÉ	Radio and Television of Ireland	www.rte.ie
RTP	Radio and Television of Portugal	www.rtp.pt
RTVE	Spanish Radio and Television Corporation	www.rtve.es
RTVS	Radio and Television of Slovakia	www.rtvs.sk
RTVSLO	Radio-Television Slovenia	www.rtvsl.si
RÚV	Iceland's National Broadcasting Service	www.ruv.is
SR	Swedish Radio	www.sr.se
SRG SSR	Swiss Broadcasting Corporation	www.srgssr.ch
SRTV	Romanian Television	www.tvr.ro
SVT	Swedish Television	www.svt.se
TG4	TG4, Ireland	www.tg4.ie
TVP	Polish Television	tvp.pl
TV 2	Denmark's TV 2	tv2.dk
UR	Swedish Educational Broadcasting Company UR	www.ur.se
VRT	Flemish Radio and Television Network	www.vrt.be
Yle	Finnish Broadcasting Company	www.yle.fi
ZDF	Second German Television	www.zdf.de

List of Abbreviations

API	Application Programming Interface
DG	Directorate-General
DRM	Digital Rights Management
EBU	European Broadcasting Union
EC	European Commission
EEA	European Economic Area
EEAA	European Economic Area Agreement
EFTA	European Free Trade Association
EME	Encrypted Media Extension
ESA	EFTA Surveillance Authority
EU	European Union
HTML	Hypertext Markup Language
Ofcom	Office of Communications, UK
PSB	Public Service Broadcaster
PSM	Public Service Media
PVT	Public Value Test
RTR	Austrian Regulatory Authority for Broadcasting and Telecommunications
SCPP	Société Civile des Producteurs Phonographiques
VOD	Video On Demand

Foreword

The aim of this report is to provide a brief overview of how different European public service broadcasters (PSBs) have engaged in online activities. This report will focus on highlighting the similarities and differences of the online services provided and how political and economic considerations have shaped their development.

The study is limited to 46 PSBs from the European Union (EU) as well as the European Economic Area (EEA).

A combination of sources were used for this study: interviews with various European researchers; a survey to select public service media (PSM); analysis of documents, such as legislation, reports and annual reports of PSBs; and academic articles. Information on the online services was gathered between August and September 2013, and thus some services might have been added, changed or retracted since then.

The report could not have been completed without the help and feedback of numerous researchers and policy experts. Our gratitude is expressed towards the representatives of the PSBs that partook in the survey: Cecilia Roos from SR, Jocke Norberg from Swedish Television, Sarah Kopse from SRG SRR, Bjarni Guðmundsson from RUV, Josef Lusser from ORF, Dr Hans-Martin Schmidt from ARD, Pascal Albrechtskirchinger and Jürgen Kleinknecht from ZDF and Per Helge Sørensen from DR.

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Executive summary

The aim with this report is to map what online services European public service broadcasters (PSBs) provide, and how both EU and national legislation affect the online activities. To this end, the services of 46 European PSBs have been examined, of which the public service broadcasters of Norway, Sweden, Finland, Denmark, Germany, Austria, Switzerland, the UK and France were chosen for closer inspection.

The pre-screening of new services: the *ex ante* test

On the EU level, PSBs have been affected by state aid rules and the inclusion of pre-screening of new services in a European Commission Communication from 2009. The so-called *ex ante* test requires that PSBs test a) the public value of a new service and b) its impact on relevant markets. If a service is to be accepted, the public value pros must outweigh the market impact cons. Eleven countries¹ have introduced the *ex ante* test and Belgium (Wallonia), Cyprus, the Czech Republic and Poland are likely to implement the test in the near future. Since the Communication is soft law and national implementation is not formally required, the legal bases for the *ex ante* tests varies, but three regulatory sources can be discerned: administrative law, broadcasting law² and the public service contract.

Most of the EU Member States that have incorporated the *ex ante* test in their media legislation have done so as a result of private competition complaints regarding PSB funding to the Commission. Austria, Belgium, Germany and Ireland all included the pre-screening of new services in their broadcasting laws after state aid negotiations with the Commission, and Norway did so after EFTA Surveillance Authority inquisitions. Finland and Iceland, on the other hand, implemented the test after private sector concerns.

The Netherlands incorporated the test in its broadcasting law following state aid negotiations as well, but the actual procedure follows general administrative law. Three countries have decided to use public service contracts instead of media legislation to incorporate the test: the UK (the BBC Agreement), Sweden (*Anslagsvillkor*) and Denmark (*Mediepolitisk aftale*). The UK was the first to introduce the test and it is widely regarded that the British test served as a source of inspiration for the Commission. Even though the legal basis may differ, this has few

¹ Germany, Denmark, Sweden, Finland, Belgium (Flanders), the Netherlands, Ireland, the UK, Austria and the European Economic Area (EEA) members Iceland and Norway.

² Depending on the country, the provisions regulating public service broadcasting might be incorporated into a more general broadcasting law. For the purposes of this report, the term ‘broadcasting law’ is used consistently to distinct between more general broadcasting law and the laws pertaining to public service broadcasting.

effects on how the test is carried out. What is more imperative is the choice of institutions vested with responsibilities of carrying out different parts of the *ex ante* test.

The institutions with the primary responsibility for the pre-evaluation and the balancing of the public value and the market impact can be divided into the following categories: the Expert Board, the Stakeholder Media Council, the Independent Regulator and the Political Agent. The Expert Board is highly characterized by its close connection to academia and long expertise from media. The UK, Denmark and to a certain extent Austria favour this model. The Stakeholder Council, employed by Germany and Belgium, consists of members from a wide range of sectors, such as the publishing industry, other broadcasters or civil society, among others. Although this means that interested parties are heard in the process, it also entails that the independence, objectivity and competence of the councils can be questioned.

The Independent Regulator is either a media authority or a converged communications regulator. The difference between the two is that the media authority is explicitly focused on monitoring media, whereas the communications regulator covers a wider spectrum of issues, with everything from postal services to Internet infrastructure and broadcasting licenses. This model is used in Sweden and Norway, where the Minister of Culture makes the final call, and in Austria, where an Expert Board also advises the regulator.

Finland, the Netherlands and Ireland employ the Political Agent model, which means that an elected official, usually the Minister of Media, has the primary responsibility in deciding whether or not a new service should be adopted. The Minister may be instructed on the issue by other parties, but makes the assessment quite independently. The Dutch *ex ante* procedure has faced much criticism from the private sector for a lack of a proper market impact assessment by the Minister, which is likely to lead to a restructuring of the test.

The market impact assessment, the second part of the *ex ante* test, is performed by three different actors in Europe: the competition authority, the media or communications regulator or an external consultancy firm. Although budgets for the *ex ante* tests are seldom disclosed, the market impact assessment is in many cases the most expensive part of the test. There is some confusion as to what constitutes a relevant market for the market impact assessment. A new service by a public service broadcaster may have negative effects in one sector but positive in another. How the relevant markets are defined are crucial for the results of the market impact assessment. Corporations suspecting negative effects and unfair competition are likely to voice their concerns very loudly, while positive effects might not be as regarded to the same extent, since they may be less foreseeable and lack clear advocates. Finding a balance between a) the costs of the test, b) its duration and c) in what cases it should be employed is consequently of utmost importance.

The least time-consuming and most cost-effective solution seems to be a dual model: an independent body performs the public value assessment, while a competition authority performs the market impact assessment. In cases where the evaluation of a new service has been highly prolonged (lasting over a year), it has usually been the result of lengthy political deliberation.

The tests have been employed to a various degree. Germany has carried out over forty tests, while other countries are yet to make their first assessments despite having introduced the test several years ago. This implies that the definition of what constitutes a new and significant service varies greatly in Europe. Furthermore, the lack of completed tests suggests that despite the Commission's requests, neither the national governments nor the PSBs are enthusiastic to carry out the *ex ante* test.

Although critics are afraid of *ex ante* tests leading to fewer PSB innovations, new services are, nonetheless, seldom rejected. Restrictive national legislation seems to limit the online activities of PSBs far more than the pre-evaluation of services. However, it is possible that the added bureaucratic burden leads PSBs to refrain from proposing new services.

Core online activities: web news, live streaming and catch-up services

The online services of PSBs reflect traditional broadcasts. Web news and providing access to programming either via live streaming or a catch-up service can be defined as the core online activities of PSBs. Somewhat paradoxically, web news rarely use multimedia elements that would provide a stronger connection to broadcasts and counter critique that PSBs compete with publishers and newspapers. Local news is an especially controversial issue and has been limited in the UK, Germany, Denmark, Austria and Switzerland. Providing regional news is, conversely, a top priority for most broadcasters, especially in larger countries. Rather than being an online strategy, it reflects classic radio broadcasting. Almost all broadcasters have either separate news sites for regional news or provide news feeds that can be modified to prioritize regional news.

All PSBs surveyed except Estonian ERR, Slovenian RTVSLO and Maltese PSB make programmes available on-demand. Most television broadcasters provide the on-demand service as a separate service, while radio catch-up is quite frequently provided as an integrated feature on the main website. On-demand availability of programmes varies quite a lot, ranging from 10 to 90 per cent of the broadcasts.³ An estimation would be that, on average, around 60 per cent of all programmes are also accessible on-demand. Sometimes national legislation might limit online availability.

³ This is based on individual assessments. Official statistics are scarce.

German PSB's may not offer acquired feature films or episodes of television series on their catch-up service (Interstate Broadcasting Treaty, 2013, art. 11d[5]).

The on-demand availability is also restricted by time limits, which vary depending on the programming category and national legislation. Although rights are usually agreed upon on a case-by-case basis, a couple of general observations can be made. First, foreign productions are usually available for seven days and only within national borders. This is probably due to the fact that the production companies have other broadcasting deals with commercial broadcasters or on-demand services. Second, most central European countries follow the seven-day deadline, while the Nordic countries tend to provide programmes for longer time periods. For example, Swedish broadcasters SVT and SR have a special license for some series, which allows them to show the whole series for 30 days after the last episode has aired (SR 2013, SVT 2013). In Germany and Austria the seven-day-limit is stipulated in broadcasting law and a 24-hour limit applies to sport broadcasts (Dörr, 2011, 78; ORF, 2013). Radio and programming produced entirely by the PSB are sometimes available for very extensive time periods.

Live streaming of television is available in all European countries except Latvia. Latvia has adopted a system where instead of providing online access to the channels, the individual programmes are available on-demand at the same time as they are broadcast. The live streaming offer differs mostly in terms of location-based restrictions, in other words, whether or not broadcasts may be accessed online from outside national borders or not. In countries where live television is made available from abroad, it must be noted that there are usually restrictions as to what programmes can be seen, resulting in interruptions in the live TV feed. As a general rule, television series and soaps, sport events and foreign productions are not accessible from abroad.

Added value: apps, social networks, online archives and educational content

A vast majority of the PSBs examined in this study provided some kind of mobile or tablet application for their users; only 10 broadcasters saw it unnecessary to provide applications. Half of these PSBs were radio broadcasters and seven of ten from Eastern Europe, the Western European public broadcasters were from Luxembourg, Malta and Iceland. Most broadcasters have decided to provide apps for at least iOS and Android, which reflects market shares of operating systems in Europe. The majority of apps available are made specifically for on-demand and streaming services and to a lesser degree, news.

Nearly all public service broadcasters provide buttons for sharing content on social networks. The dominance of Facebook and Twitter is apparent: Facebook and Twitter are featured on almost every PSB's website and almost all PSBs have several Facebook and Twitter accounts. The Scandinavian PSBs have a slightly more modest

approach to promoting social networks on their websites than their continental counterparts.

The Nordic countries have been pioneers in providing access to historical content, largely thanks to the extended collective licensing agreements that PSBs and copyright collectives have signed. Only seven of the broadcasters studied had proper online archives, and to no surprise, the Nordic archives were the most extensive. However, PSBs often have archives dating back to the beginning of the digitalization of programming (beginning of 2000s onwards).

The aim to educate is often stated as one of the key public service missions, regardless, PSBs seldom provide educational content online. Only nine of the PSBs examined had educational websites.⁴ The lack of educational content online may be attributed to three arguments. First, it may be argued that education as such is not one of the core missions of the PSB, even though ‘educating’ is. Second, some may argue that the private sector already provides educational material, and thus educational portals by PSBs are superfluous. Third, publishers may argue that free educational content distorts the market for educational publications and learning materials. It may be noted that these arguments form part of a competition discourse. It would be much more difficult to argue against the potential public value of educational services.

New possibilities: commercial activities online

The commercial activities of PSBs often face critique; notwithstanding, some PSBs have decided to capitalize on the possibilities of the web. For example, some PSBs have decided to provide commercial on-demand services.⁵ The practice of providing commercial VOD services is not very common and, looking at the French example, any public service broadcaster willing to engage in such commercial activities is likely to affect the domestic market heavily. In countries where the financial activities of broadcasters are more tightly regulated than in France, it is unlikely that such services will see the light of day. On the other hand, it is far more common for PSBs to have web shops with books and DVDs, and digital distribution of these same products might not be such a big step after all.

In most European countries, at least one of its public broadcasters has a web shop containing DVDs of the broadcasters’ shows, books and various merchandise such as clothes, pencils and other items branded with either the PSB logo or the logos of one of the PSB’s shows. Of the 46 PSBs examined, 27 had web shops.

⁴ BBC (UK), Yle (Finland), UR (Sweden), NRK (Norway), TVP (Poland), RAI (Italy), France Televisions, DR (Denmark) and SRG SSR (Switzerland).

⁵ German-French broadcaster Arte, France Televisions, Flemish broadcaster VRT, Polish TVP and (mostly) commercial public broadcaster TV 2 in Denmark.

Online advertising is quite common: 24 PSBs had advertisement on their websites. Generally, the countries with the shortest tradition of public service broadcasting nearly all allow advertising on PSB websites. The income generated by online advertising is, however, only 5 per cent of all advertising revenue. Looking at the negligible income online advertising generates, it is debatable whether its presence is worth the outcry from commercial publishers and broadcasters. Video-on-demand is still in its infancy, which means that even the most popular programmes online pale in audience numbers compared with the least popular programmes on television.

Conclusion: European PSBs face similar challenges

The overall impression is that European PSBs are facing similar challenges across Europe. The online offer varies to some degree, but the basic elements are the same. A multiplatform approach to web news is still lacking, and broadcasters could clearly invest more resources in integrating the different platforms online. Audio-visual content in web news and other articles is used scarcely, although using audio-visual material from broadcasts is what could legitimize the online services of PSBs in the face of the criticism from private publishers. The inability to develop online services may partly be explained by copyright legislation's poor applicability to the online environment, for instance when it comes to podcasts and making content available offline. However, examples from France and the UK show that PSBs can make agreements with copyright collectives that make offline access to television programming and music in podcasts possible. In order to develop online services, it is thus necessary to make headway on three levels. On a regulatory level, online services may be advanced via amendments to EU copyright legislation. On a contractual level, PSBs may enter into agreements with copyright collectives that make offline availability of content and audio-visual archives possible. On a strategic level, PSBs may allocate further resources to online innovation, which is inexpensive compared to launching new television series or channels. Simultaneous development on all three levels could greatly improve the current online service public value in all European countries.

1 Introduction

Notwithstanding European Union (EU) harmonization efforts, public service broadcasting remains a highly national issue. Researchers state both the difference in size (Nordahl Svendsen, 2011b) and historical developments (Brevini, 2013) as reasons behind divergent practices. With online services, the penetration of broadband Internet also influences the development of public service broadcaster's (PSB's) online offers (Brevini, 2010, 354).

The purpose of this study is to map the situation in Europe today. To this end, the online services of 46 European PSBs have been examined,⁶ of which the broadcasters of Norway, Sweden, Finland, Denmark, Germany, Austria, Switzerland, the UK and France were chosen for closer inspection.

The report aims to answer the following questions:

- a) What kinds of online services do European PSBs provide;
- b) as a result of what processes have they arrived at the present situation, and;
- c) how is the online environment of PSBs legislated for in the different European countries?

More specifically, this study aims to shed light on on-demand services, the scope of web news, live online streaming and the use of mobile and tablet applications as well as the use of social networks.

Although public service broadcasting is recognized as a national affair, European legislation, and state-aid provisions in particular, affect how public service broadcasting may be funded in the Member States. Public service broadcasting is formally recognized in the ninth protocol of the Amsterdam Treaty, which entered into force in January 1999.

The Amsterdam Protocol reads as follows:

THE HIGH CONTRACTING PARTIES,

CONSIDERING that the system of public broadcasting in the Member States is directly related to the democratic, social and cultural needs of each society and to the need to preserve media pluralism,

HAVE AGREED UPON the following interpretative provisions, which shall be annexed to the Treaty establishing the European Community,

⁶ See page 1

The provisions of the Treaty establishing the European Community shall be without prejudice to the competence of Member States to provide for the funding of public service broadcasting insofar as such funding is granted to broadcasting organisations for the fulfilment of the public service remit as conferred, defined and organised by each Member State, and insofar as such funding does not affect trading conditions and competition in the Community to an extent which would be contrary to the common interest, while the realisation of the remit of that public service shall be taken into account.

(Treaty of Amsterdam, 1997 OJ C 340/1)

The provision to take competition into account and subsequent private sector complaints to the European Commission (EC) competition authorities led to the introduction of the so-called *ex ante* test for evaluating new services of PSBs. The *ex ante* test was introduced in the EC's 2009 Broadcasting Communication, and since then, the practice of pre-screening new services has become quite common in Western Europe.

The *ex ante* test consists of both an evaluation of the potential public value of a new service as well as a market impact assessment, and has, despite protests by Member States (Biggam, 2011, 44), been introduced in several European countries. Although maintaining certain similarities with the Commission's Proposal for an *ex ante* test, the practices and stages of implementation differ. The differences in legislation, institutional responsibility and degrees of implementation will be highlighted in part 2.

In part 3, the focus lies in the core online activities of PSBs; namely, providing news to the public and making broadcasts accessible on all platforms. As D'Arma and Steemers (2010, 13) point out, PSBs have willingly developed their online services and ventured into the new media to better cater for audiences of all ages. The web news offer of PSBs is seen as controversial as it competes against commercial newspapers with its online audiences. The debate has been the most heated on a local level, causing loud protests by local publishers in Denmark, Germany and the UK. The other top online priority, accessibility, is reflected in practice by the inclusion of live streaming of channels online, and on-demand and catch-up services. This section examines how long programmes are offered for online, if restrictions apply and if programmes may be downloaded. An overview of regional differences in terms of what the online offer can consist of is also provided.

The activities of broadcasters reach further than their core activities, however. Part 4 focuses on activities that could be considered as services that are not central, but of added value. Given the popularity of smartphones, PSBs also have to take mobile and tablet applications into account. A short presentation of the use of apps is given in subsection 4.1. A connected development is the rise of social networks, which have

also become increasingly popular with the arrival of smartphones. With a select few social networks reaching unprecedented popularity, it has meant a certain erosion of national differences. Facebook and Twitter are, without a doubt, the most popular social media networks in the world in 2013 and this is also reflected in PSB practice. However, some regional differences exist, and policy approaches differ as well.

While apps and social networks are mostly used to reach users more effectively, some online services are more focused on increasing the cultural value of the PSB. To that end, PSBs are trying to make more effective use of their audio-visual archives. Many PSBs are presently struggling with the rights for the online presentation of their older programmes (see IRIS, 2010). Despite licensing challenges, most broadcasters aim to open online archives, as it corresponds to the public service mission to further democratic, social and cultural goals. A related question is that of educational websites, which complement educational programming. Educational programming has a long broadcast tradition, yet is usually not regarded as prime-time material. Educational material is most likely to be used in schools, and for that reason, access to websites is more convenient than relying on broadcasts. Websites also make the inclusion of interactive elements, such as games, a possibility. For example, BBC Learning offers Spanish learners crosswords with audio. Publishers and providers of e-Learning material are, however, highly critical of PSBs providing educational content online.

Since most critiques of the PSBs' activities are concerned with economic activities, the question of PSBs economic activities has come even more intensely under discussion as broadcasters expand their services online. With the Internet, new opportunities for additional income have surfaced. Web advertising in the form of banners, pre- and post-rolls in online broadcasts, but also web shops, are quite common in Europe, despite protests from the private sector. Part 5 will explore how the Internet has changed the playing field for public broadcasters' commercial activities.

Finally, some concluding remarks are offered. Although the purpose of this study is not to carry out a qualitative assessment of the actual content of the services, some general observations are provided. According to D'Arma and Steemers (2010, 14), 'financial, rather than regulatory constraints are more likely to limit the expansion of PSBs into digital media'. This study will raise some points that might contest the validity of this claim.

The method is a combination of document analysis, interviews and a survey that was answered by select public service media (PSM).⁷ The semi-structured interviews were carried out either in person, via video conference equipment or by email.

⁷ The following broadcasters took part in the survey: Yle (Finland), SRG SSR (Switzerland), DR (Denmark), SVT (Sweden), SR (Sweden), ARD (Germany), ZDF

The survey was conducted between 2 October and 10 November 2013. It was sent to eleven PSBs, of which nine took part. One contact person at the PSB gathered the answers and the survey was circulated within the PSB to ensure that all questions were answered accurately. The survey consisted of 50 questions that addressed five key areas: How on-demand services are provided and regulated, if a pre-screening of new services is in place, how social networks are used, if online audio-visual archives are provided and how online advertising is regulated. The survey results were compared in order to find commonalities and differences between different countries. The results were also compared with results of the document analysis.

A total of 63 documents were analysed for the purpose of this report.⁸ The documents were analysed to a varying degree: legal documents were analysed to see if online services were specifically regulated and how the *ex ante* test was implemented in national legislation, annual reports provided information on financial activities and new services and press releases and other reports supplied contextual information.

Additionally, a content analysis of the websites of the 46 broadcasters was conducted to examine how the web offer differed in Europe. This also included web portals that were on separate domains, as was often the case with the on-demand services. The results were coded into 15 categories.⁹

(Germany), and RUV (Iceland).

⁸ Laws; acts; decrees; treaties; official reports; annual reports; press releases; internal guidelines; calls for tenders; reports by third parties; agreements; contracts; guidance documents; web analytics; and position papers.

⁹ What kinds of web news are provided; are channels streamed live online; are podcasts provided; are foreign productions available online; do educational websites exist; can contents be shared on social networks; is the PSB active on social networks; are online audio-visual archives provided; does the PSB have a web shop; does the PSB offer games; is there online advertising, and if so, what kind; what are the online budgets; does the PSB have applications; may content be accessed from abroad; and what are the conditions for the delivery of on-demand services.

2 Pre-evaluation of new services

Discussions about the need to introduce pre-evaluation of the new services of PSBs arose at the beginning of the 2000s. Publishers and newspapers were worried that the PSBs with vast resources would expand into the online world and direct users away from advertising-funded websites. The first European country to include pre-screening of new services was the UK, which incorporated the public value test (PVT) in the 2006 BBC Agreement (DCMS, 2006b). The primary purpose of the PVT was to add elements of accountability and transparency to the process of introducing new services. The effects on the market were to be taken into account and the BBC was not to introduce services that were already provided by the private sector.

It is generally accepted that the PVT served as the inspiration for the Commission's *ex ante* test, as presented in the 2009 Broadcasting Communication. The BBC has, to some extent, been the golden standard of public service broadcasting, and for this reason it is not surprising that the *ex ante* test has its roots in British public service. There has thus been a policy transfer from the UK to other European countries, yet closer examination reveals that although legal similarities exist, practices differ quite radically. The Communication introduced the legal vocabulary, which is often repeated in national legal documents, but the procedures are equally affected by what institution carries out the tests, for example, which was not defined by the Commission.

Presently, Germany, Denmark, Sweden, Finland, Belgium (Flanders), the Netherlands, Ireland, the UK, Austria and the European Economic Area (EEA) members Iceland and Norway have incorporated the *ex ante* test.¹⁰ Tests including both a PVT and a market impact assessment have been carried out in Germany, Norway, Ireland, the UK and Austria. Denmark, Belgium, the Netherlands have each applied some kind of PVT, but have not yet performed full tests according to the *ex ante* procedure. Finland, interestingly enough, carried out an *ex ante* test before it was incorporated in Finnish broadcasting law. Sweden and Iceland have not carried out any tests at all. Belgium (Wallonia), Cyprus, the Czech Republic and Poland are likely to implement the test in the near future.

Subsection 2.1 provides a short presentation of the Commission's *ex ante* test and an overview of the similarities between the tests, while the following subsections focus on the differences regarding the legal basis of the test (2.2), the responsibilities of the different actors involved (2.3) and the market impact assessment (2.4). Finally, the

¹⁰ In Spain, the test has been included in national legislation, but according to the law, it is to be performed by the Audiovisual State Media Council, which was never established. It is thus unclear when and if an *ex ante* test will be instated.

question is raised as to how definitions of services affect the testing practices in different countries (2.5).

2.1 The Commission's *ex ante* test

The Amsterdam Protocol grants an exception to the ban on state aid for public service broadcasting. Public service broadcasting is generally regarded as a national issue, outside the scope of the EC's competences. However, the EC has laid down some conditions that need to be fulfilled for the state-aid exception in public service broadcasting to be legal, most notably through the Broadcasting Communication of 2009. The first Broadcasting Communication from 2001 (OJ C 320, 15 Nov. 2001, 5) had already covered state-aid rules to public service broadcasting, but due to technological changes and increased amounts of complaints to the EC's competition authorities, it was decided that it was necessary to update the Communication.

The 2009 Communication recognizes the need for PSBs to make full use of technological innovations (EC, 2009, para. 12), but at the same time, it also recognizes private publishers' concerns regarding the online services of public broadcasters (EC, 2009, para. 16). Some countries had already, at the time of publication, incorporated the pre-screening of new services as a result of state-aid complaints and negotiations with the Commission.

The Commission's definition of the *ex ante* test is based on the European Court of Justice's interpretation of the exceptions to the ban on state aid.¹¹ Section 6.7 of the 2009 Broadcasting Communication contains the provisions which spell out the *ex ante* test.

Paragraph 84 of the Communication lays down the foundations for the test:

As set out above, State aid to public service broadcasters may be used for distributing audiovisual services on all platforms provided that the material requirements of the Amsterdam Protocol are met. To this end, Member States shall consider, by means of a prior evaluation procedure based on an open public consultation, whether significant new audiovisual services envisaged by public service broadcasters meet the requirements of the Amsterdam Protocol, i.e. whether they serve the democratic, social and cultural needs of the society, while duly taking into account its potential effects on trading conditions and competition.

(EC, 2009, para. 84)

The *ex ante* test is for this reason also referred to as the Amsterdam test. A footnote to the paragraph reveals that the Commission does not regard simultaneous transmission

¹¹ See the Judgment in Case 172/80 Zuechner (1981) 2021; the Judgment in Case C-242/95 GT-Link (1997) 4449; and the Judgment in Case C-159/94 EDF and GDF (1997) I-5815.

of broadcasts on other platforms (such as mobile devices or online) as ‘new services’. In this respect, the Communication recognizes the principle of technological neutrality. Paragraph 85 continues to specify how ‘new’ and ‘significant’ should be interpreted:

It is up to the Member States to determine, taking into account the characteristics and the evolution of the broadcasting market, as well as the range of services already offered by the public service broadcaster, what shall qualify as ‘significant new service’. The ‘new’ nature of an activity may depend among others on its content as well as on the modalities of consumption. The ‘significance’ of the service may take into account for instance the financial resources required for its development and the expected impact on demand. Significant modifications to existing services shall be subject to the same assessment as significant new services.

(EC, 2009, para. 85)

It may be noted that the Communication merely suggests interpretations and no clear definitions are given. Pilot projects do not have to be assessed, but no definition of what constitutes a pilot project is given, except that it should be limited in scale and scope (EC, 2009, para. 90). Subsection 2.5 will address this question more thoroughly. The definition of the market impact assessment is equally ambiguous, leaving Member States with a lot of leeway:

In order to ensure that the public funding of significant new audiovisual services does not distort trade and competition to an extent contrary to the common interest, Member States shall assess, based on the outcome of the open consultation, the overall impact of a new service on the market by comparing the situation in the presence and in the absence of the planned new service. In assessing the impact on the market, relevant aspects include, for example, the existence of similar or substitutable offers, editorial competition, market structure, market position of the public service broadcaster, level of competition and potential impact on private initiatives. This impact needs to be balanced with the value of the services in question for society. In the case of predominantly negative effects on the market, State funding for audiovisual services would appear proportionate only if it is justified by the added value in terms of serving the social, democratic and cultural needs of society, taking also into account the existing overall public service offer.

(EC, 2009, para. 88)

Since there is no clear definition of what that market might be, this essentially means that the one who conducts the assessment can decide quite freely on which markets to include and which to ignore. The only guiding principle is that the market impact assessment ‘would only be objective if carried out by a body which is effectively independent from the management of the public service broadcaster’ (EC, 2009, para. 89). How does one compare market impact with public value? Can public value be monetized? A significant market impact for some may be insignificant for others. Furthermore, both the market impact and public value of a new service are in most cases very difficult to assess, especially when it comes to innovative services. This is

somewhat of a catch-22: if a service is of great public value, testing its potential impact on the market is needless, as the market assessment could not affect the end result. If, however, the service is not of self-evident public value, one may ask if the service is necessary at all regardless of its impact on the market.

Although Member States enjoy a wide margin of discretion, there are still noticeable similarities between the different *ex ante* tests in place today. In practice, the following procedure is followed in most countries:

- 1) The PSB submits an application of a new service to either a) an Expert Board (such as the BBC Trust); b) a Stakeholder Council; c) the Communications or Media Regulator (the Media Authority in Norway); or d) the Ministry of Culture or Media (Netherlands).
- 2) The Board, Stakeholder Council, Ministry or Regulator asks for a market impact assessment by either a) the Competition Authority (Austria); b) an independent consultancy firm (Finland); or c) the Communications Regulator (Ofcom in the UK).
- 3) Based on their own public value evaluation, and taking the market impact assessment into account, the Board, Stakeholder Council, Regulator or Ministry decide whether or not the service's public value outweighs the negative market impact.

The greatest differences between the national implementations are related to the legal basis of the test, the institutions involved and the market impact assessment. Although the duration of the *ex ante* test varies and deadlines differ, these are of minor importance, as exceptions might be made when necessary.

As a rule of thumb, most countries strive to complete the test in three to six months, but the final decision might take more time than that. In Norway, for example, the first *ex ante* test regarding a traffic portal was completed in due time (12 weeks), but the final (approving) decision was not made until over a year later (Kulturdepartementet, 2012).

2.2 Legal basis of the public value test

The Broadcasting Communication is soft law, and thus is more of an indication as to how the EC would like the Member States to act. This means that for the Communication's provisions to have any legal implications, they must be implemented at the national level. According to the Communication, the text has 'EEA relevance', meaning that signees of the EEA Agreement (EEAA) would also have to take the Communication into account. Exactly how a soft law instrument is taken into account by the European Free Trade Association (EFTA) Surveillance Agency (ESA) is unclear, however, but as both Iceland and Norway have decided to

incorporate *ex ante* tests in their legislation, its significance cannot be ignored. Since national implementation is not formally required, the legal bases for the *ex ante* tests vary, but three regulatory sources can be discerned: administrative law, broadcasting law and the public service contract.

Broadcasting law and administrative law

Applicable in the Netherlands.

Administrative law differs from broadcasting law in the respect that it contains general provisions for official procedures, while broadcasting law is drafted explicitly to regulate national media, and specifically, the PSBs. The advantage of relying on administrative law is that the procedure is clear and the decision is appealable in an administrative court. However, this also means that the specific character of PSM is to a certain respect disregarded. Although public consultation is included, per default, the stakeholders'¹² status in the process is not explicitly expressed and it remains uncertain as to what extent stakeholders can contribute to the process. There is thus nothing that requires the formal hearing of specific stakeholders, but interested parties may comment on the decisions if they so please.

In the Netherlands, the prior evaluation of services was introduced in the revision of the Media Act in 2008, but the actual procedure for the evaluation is laid down in general administrative law. According to administrative law, third parties are only allowed to comment after the Minister of Culture has submitted a draft decision (Bardoel & Vochteloo, 2011, 138). Donders and Pauwels (2012, 24) note that it is unlikely for the Minister to renege on a draft decision, as it could be seen as an expression of political uncertainty. New services are proposed in the appendix of the strategic plan every five years, but changes to new services can be made annually in the budget proposals. Experiments can start without approval by the Minister if they are limited in duration (one year), size (up to 2% of the annual budget) and scope (restricted audience) (Bardoel & Vochteloo, 2011, 139). The Minister may also make amendments to the proposed services. No formal market impact assessment is required.

The first new services were proposed in the budget proposal for 2008/9, which were changed into experiments by the Minister. Private publishers decided to appeal the decision in the administrative court (Bardoel & Vochteloo, 2011, 139). In December 2011, the court accepted the public value of the new services, but the evaluation of the market effects was deemed unsatisfactory. Both the government and commercial media decided to appeal against this ruling in the highest administrative court

¹² Such as commercial broadcasters, software companies, social network providers, copyright collectives and other rights holders, civil society and internet service providers, to name a few.

(Bardoel & Vochteloo, 2011, 140). The highest administrative court rejected the administrative court's decision, and now the question is in the hands of the Commission (Donders, 2013). Since 2008, no new services have been proposed.

Broadcasting law

Applicable in Austria, Belgium (Flanders), Finland, Norway, Germany, Ireland and Iceland.

Most of the EU Member States that have incorporated the *ex ante* test in their media legislation have done so as a result of private-competition complaints to the EC regarding PSB funding. Austria, Belgium, Germany and Ireland all included the pre-screening of new services in their broadcasting laws after state-aid negotiations with the Commission. In addition to the *ex ante* test, a clearer definition of the online service remit was usually required. Finland differs from the other Member States in that the test was incorporated without EC involvement.

Table 1 Legal basis of the *ex ante* tests in Europe. Brackets indicate that a test is either in progress or about to be initiated.

Country	Legal basis of the test	Entry into force	Tests completed
Austria	Broadcasting law	2010	12
Belgium(Fl)	Broadcasting law	2009	1
Denmark	Public service contract	2011	3* (2)
Finland	Broadcasting law	2013	1**
Germany	Broadcasting law	2009	45
Iceland	Broadcasting law	2013	0
Ireland	Broadcasting law	2009	5
Netherlands	Broadcasting law/Administrative law	2008	2*
Norway	Broadcasting law	2010	1 (1)
Sweden	Public service contract	2011	0
UK	Public service contract	2006	4

* No market impact assessment.

** The test was in place as of 19 October 2010 on the basis of a decision taken by Yle's Administrative Council, but no tests have been carried out after the test's formal inclusion into the Act on Yle from January 2013.

In the case of Belgium, and more specifically Flanders, private competitors issued complaints against Flemish broadcaster VRT's state financing in 2004 (Bulck, 2011, 156). The Commission asked for more effective supervision, a clearer public service remit and for VRT to define their new media services. As a result, a new Radio Broadcasting and Television Act entered into force in March 2009 (Flemish

Parliament, 2009; Bulck, 2011, 157). The Act stipulates that the Flemish Media Council (SARC), which was established in 2007, has to advise the government on new services, following an *ex ante* procedure (Flemish Parliament, 2009, art. 18 [1–3]). Moe and Van Den Bulck (2012, 39) note that the final advice copies the exact wording of the *ex ante* test as presented in the Broadcasting Communication.

In 2004 and 2005, the Austrian Newspaper Association (*Verband Österreichischer Zeitungen*) and the Association of Austrian Private Broadcasters (*Verband Österreichischer Privatsender*) made a complaint to the EC about the financing of Austrian PSB ORF. The complaints led to negotiations between the Austrian government and the Commission, which resulted in the new ORF Act that included an *ex ante* test (EC, 2009b; Haas, 2013).

Section 6a of the ORF Act lays down the conditions for testing new services. A test has to be conducted if the new programme or service concerns one of the two special-interest TV channels for sport and information and culture (ORF Act, 2012, art. 4c) or the online service (ORF Act, 2012, art. 4f; Haas, 2013). The *ex ante* test is also required if the planned programme differs considerably from an existing service or if the service is significantly changed (Haas, 2013).

Norway is an interesting case in the sense that it is not a member of the EU, yet it decided to implement the *ex ante* test nevertheless. However, it is a member of the EEA, and is thus bound by state-aid rules that are very similar to those of the EC Treaty. Due to complaints by private broadcasters, the ESA decided to assess whether the financing of NRK satisfied conditions laid out for state-aid exceptions regarding public service broadcasting in the EEAA (Lilleborge, 2011, 97).

The ESA concluded that the financing of NRK was not compatible with the EEAA and that a clarification of NRK's public service remit and financing model was needed. In 2010, this led to changes in both the NRK statutes as to what obligations the broadcaster had and the Broadcasting Act, which required the pre-screening of new services (Lilleborge, 2011, 98). The Broadcasting Act entered into force on 1 May 2010.

Germany was the second European country to introduce an *ex ante* test after a compromise was made with the Commission following a full DG Competition enquiry into the new media activities of ARD and ZDF (Biggam, 2011, 42). According to Article 11f (4) of the Interstate Broadcasting Treaty, the so-called three-step test (*Drei-Stufen-Test*) is meant to answer the following questions:

1. To what extent does the new offer meet the democratic, social and cultural needs of society?
2. To what extent does the new offer contribute in a qualitative manner to competition (*Publizistischer Wettbewerb*)?

3. How much financial resources are required for the new offer?

(Translation by Donders & Pauwels, 2012, 20)

Services, or ‘offers’, need to be tested if they do not refer to a broadcast on television or radio or if they remain online beyond the time limit of seven days following a broadcast (Donders & Pauwels, 2012, 20). The Broadcasting Councils (ARD and Deutschlandradio) and the Television Council (ZDF) carry out the tests. Due to the federal structure of Germany, the *Länder*, or the federal governments, appoint the different broadcasting councils. This wide-ranging definition means that of all the countries where an *ex ante* procedure exists, Germany carries out the most tests (over 40 to date); however, no services have been rejected, although modifications to the proposal have been made (ARD, 2013).

Similarly, complaints against Ireland’s RTÉ and negotiations between the Irish government and the Commission resulted in a new Broadcasting Act in 2009 (Bulck & Moe, 2012, 44). The Act established an *ex ante* test, which includes both a PVT and a market impact assessment for significant new services (Broadcasting Act, 2009, art. 103). The newly founded Broadcasting Authority of Ireland was authorized to assess the ‘sectoral impact of new activities’, as laid out in Article 100 paragraphs 1–3 (Broadcasting Act, 2009). The Broadcasting Authority carries out the test for sectoral impact, but the Minister for Communications, Energy and Natural Resources makes the final decision (Broadcasting Act, art. 100, 2009). Presently, five services have been tested (and approved), but they were concerned with digital channels, not web services (DCENR, 2011).

Finland followed a slightly different path. The Administrative Council of the Finnish Broadcasting Company (Yle) decided to pre-evaluate HD broadcasts and their distribution in 2010 before an actual legal responsibility to perform an *ex ante* assessment existed (Tarhonen, 2013, 61). The Administrative Council is made up of Members of Parliament, and thus reflects the political climate in Finland (Eduskunta, 2013). The 21 members of the Administrative Council do not have to be Members of Parliament, but have to possess expertise in science, art and business, and represent different social and language groups (Liikenne- ja viestintäministeriö, 2013, art. 5). In practice, however, the Administrative Council represents parliamentary power relations. The *ex ante* test was incorporated in the Broadcasting Act two years later and entered into force in January 2013 (HE 29/2012). One could say that the decision to incorporate the *ex ante* test was a response to domestic complaints regarding the public broadcasters’ financing. The Federation of the Finnish Media Industry (Finnmedia) had been especially critical of Yle’s online expansion (Finnmedia, 2011).

The latest country to introduce the *ex ante* test is Iceland, where a new broadcasting law introducing a pre-screening of services passed the Althingi (Icelandic Parliament)

in March 2013 (RUV, 2013). According to the new law, RUV cannot offer a new service that costs more than 10% of the income RUV receives from public funds without seeking prior approval from the Media Commission. If the Media Commission fails to give an answer on the new service, RUV may initiate the service as an experiment for a limited period of 24 months. For a brief period, RUV could only offer content that had previously been broadcast on either television or radio, but that provision was later retracted (RUV, 2013).

Public service contract

Applicable in the UK (the BBC Agreement), Sweden (*Anslagsvillkor*) and Denmark (*Mediepolitisk aftale*).

The public service contract is (usually) regularly reviewed, which means that it may contain a higher level of detail than a Broadcasting Act. It may be noted, however, that the contractual bases differ slightly in the UK, Sweden and Denmark. In the UK, the BBC's public service remit is defined by both the BBC Charter and the BBC Agreement. The present Charter entered into force in 2006 and runs until 31 December 2016 (BBC Trust, 2013). The Charter defines the core duties of the BBC Trust and the BBC's Executive Board. The Agreement lays out the responsibilities of the BBC, the BBC Trust and Ofcom. While the BBC Agreement was laid down in 2006, there is no date for renewal, but this Agreement has since been amended three times (BBC Trust, 2013). The Executive Board must propose new services to the BBC Trust, which then evaluates if a PVT is necessary. In order to determine whether or not a new service warrants a PVT, the BBC Trust evaluates the impact of the new service on both the market and audiences, the cost, its novelty and the duration of the service (DCMS, 2006b, clause 25[2]).

Should one be needed, the BBC Trust proceeds with a public value assessment of the service while Ofcom carries out the market impact assessment (DCMS, 2006b, ii). Stakeholders may offer their comments during a public-consultation period of four weeks. All four tests attracted a significant number¹³ of comments from stakeholders as part of the public consultation (Michalis, 2012, 22). After the market impact assessment and the public value assessment have been executed, the Trust decides on the new services. The whole process should not take longer than six months (DCMS, 2006b, clause 26[1]), but exceptions are allowed. The inclusion of a market impact assessment was a significant change from an ideological perspective, as the BBC, for the first time, not only considered the public interest, but took commercial interests into account as well (Barnett, 2006, 20 in Brevini, 2009, 208).

¹³ For example, the iPlayer consultation attracted 10,608 responses (Mather & Gill, 2007, 4).

In Sweden, it is not the actual broadcasting license that contains the provisions on the pre-screening of new services. The obligation to submit new services for pre-screening is in the so-called *Anslagsvillkor* or license terms. The license terms are reviewed annually, and although the provisions are usually the same from year to year, theoretically, it would be quite easy to make amendments. The responsibility of the Broadcasting Authority to carry out the test is stated in a separate Parliament Decision (Ku2009/1674/MFI).

The pre-screening procedure is, however, not as clearly defined as the British PVT. Although it contains the same basic elements, the process is not defined, and it is thus left up to the Broadcasting Authority's discretion to carry out the test in a way that it sees fit (SR, 2013). It is also the PSB's responsibility to initiate the test (Norberg, 2013). The management at Swedish Television (SVT) remains quite sceptical towards the pre-screening of new services, which would also explain why no tests have been initiated since the test was incorporated in the license terms (Cato, 2010; SR, 2013). The PSBs do not have to make proposals for services that are either limited in time (12 months), size (audience), scope (specific region) or if the aim of the service is to 'gather information and experiences on new technology or innovative services' (SR, 2013).

The PVT had existed in Denmark without a market impact assessment since 2007, but with the 2009 Broadcasting Communication, the centre-right government saw it as necessary to instate a full *ex ante* test (Nordahl Svendsen, 2011, 117–119). Complaints from the private sector probably affected decision-makers. In 2008, the Danish newspaper publishers' association, the DDF, published a pamphlet titled '*I konkurrence med staten*' (In competition with the state), which claimed that DR was threatening the businesses of newspapers online. According to the DDF, a full *ex ante* test, including a market impact assessment, was needed (Nordahl Svendsen, 2011, 119). In the subsequent public service contract, *Mediepolitisk aftale 2011–2014*, the government decided to introduce a full *ex ante* test (Kulturministeriet, 2010).

An executive order (*Bekendtgørelse*) by the Ministry of Culture contains specific guidelines for how the test should be carried out (Kulturministeriet, 2011). All new services that are launched on a separate platform, such as a separate website that is different from DR's main site, must be tested. Article 4 states that all new services or changes to existing services are regarded as significant if the service runs for more than three years and its costs exceed 1 MDKR annually (Kulturministeriet, 2011). Pilot projects that last for less than four months are not tested.

2.3 Institutional responsibility

Several institutions are usually involved in the *ex ante* procedure, but the responsibility of weighing the public service pros against market cons usually lies with one institution. In some cases (such as in Norway), the media regulator makes

the assessment but the Ministry of Culture makes the actual decision on whether to approve or reject a new service.

The institutions with the primary responsibility for the pre-screening and the balancing of the public value and the market impact can be divided into the following categories: the Expert Board, the Stakeholder Media Council, the Independent Regulator and the Political Agent.

The Expert Board

Denmark: The Radio and Television Board (*Radio- og tv-naevnet*).

UK: The BBC Trust.

Iceland: The Media Commission (*Fjölmiðlanefnd*).

The Expert Board is highly characterized by its close connection to academia and/or long expertise in the media field. Whereas the stakeholder council consists of members from a wide range of sectors, the Expert Board consists of professionals who have extensive experience working with or within media. While most certainly not a representative sample of the wider public, the Expert Board is specialized in the issues presented and is capable of evaluating the public value of services.

The Danish Radio and Television Board consists of ten members who represent expertise in legal, financial, business and media affairs. Eight of the Board's members are appointed by the Minister for Culture, while the umbrella organization for Danish viewers and listeners' organizations (ed., trans., *Samarbejdsforum for Danske Lytter- og Seerorganisationer*) and the Danish Judges' Association (ed., trans., *Den Danske Dommerforening*) appoint one member each (Kulturstyrelsen, 2013). The Board consists mostly of academics who are appointed for four years and reappointments are possible.

The public service contract states that the Radio and Television Board assesses the public value of the new service, while an independent consultancy firm gives a statement on the service's possible market impact, which the Competition Authority comments on before it is handed over to the Board (Kulturministeriet, 2010, 3). During a three-week public-consultation round, stakeholders have the opportunity to comment DR's service proposal. According to Nordahl Svendsen (2011, 123), the public consultation is mostly directed towards the private sector and not the public at large. The Radio and Television Board then decides whether the public value of the service surpasses the (negative) market impact (Kulturministeriet, 2010, 3). The Board must make its decision no later than 20 weeks after DR has applied for a new service (Kulturministeriet, 2011, art. 7).

The BBC Trust is a sovereign body within the BBC, and is independent from the BBC's Executive Board. The Queen appoints the 12 trustees, based on advice from

ministers after an open selection process (BBC Trust, 2013). The Trust differs from the Radio and Television Board of Denmark and the Public Value Advisory Board of Austria¹⁴ in the sense that most of its members are either former journalists or editors. The composition of the Trust and the Trust's duties and obligations are defined in the BBC Charter (DCMS, 2006a, clauses 12–27).

The BBC Trust is vested with the responsibility of performing the public value assessment, while Ofcom undertakes the market impact assessment (BBC Trust, 2012). The BBC Trust then balances the public value against the market effects. So far, four services have been tested, of which three were accepted. The rejected service was a local video news portal, which was deemed as too damaging for local newspapers and also as too vaguely defined (BBC Trust, 2009). BBC license fees cover all the costs of the tests, including the market impact assessment by Ofcom (Michalis, 2012, 19). The Trust can also decide that a PVT is needed after a service has been launched or amended significantly (Michalis, 2012, 18). No new services have been tested since 2009.

The five members of the Icelandic Media Commission are appointed by the Minister of Education, Science and Culture for terms of four years (Althingi, 2011, art. 8). The Standing Committee of Rectors of Icelandic Higher Education Institutions and the National Union of Icelandic Journalists each get to nominate one member while the Supreme Court of Iceland nominates two. The last member is appointed by the Minister without prior nomination.

The chairman of the Media Commission shall meet the requirements for serving as a district court judge, while the other members (and their alternates) must have 'special knowledge of media matters, or experience or education qualifications that are relevant in this field' (Althingi, 2011, art. 8). The Media Commission also has a director, who must be 'legally and financially competent' and who must not have been sentenced for criminal activities. The Media Commission performs the test after RUV applies for the approval of a new service. The Media Commission makes its evaluation of the service and asks stakeholders to comment during a three-week period. If it is suspected that the new service will have an impact on the market, competition authorities or a third party may be asked to perform a market impact assessment. In that case, RUV will pay for the assessment (RUV, 2013).

Although a service is yet to be tested, the composition of the Commission indicates that employing external consultants or asking the competition authorities for the market impact assessment will be necessary. In that case, the Icelandic broadcaster RUV would pay for the costs of the test.

¹⁴ See pages 23–24.

Table 2 Expert Boards in Europe

Country	Name	Length of terms	Criteria for nomination	Appointed by	Size (members)
Iceland	Media Commission	4 years.	The chairman shall meet the requirements for serving as a district court judge. s. Other members, and their alternates, shall have a special knowledge of media matters, or experience or educational qualifications that are relevant in this field.	The Minister of Education, Science and Culture, with nominations by a) the Supreme Court (2), b) the standing Committee of Rectors of Icelandic Higher Education Institutions (1), c) the National Union of Icelandic Journalists (1) d) without nomination (1). The Minister also appoints the chairman. 5	5
Denmark	Radio and Television Board	4 years. Reappointments are possible.	Must possess expertise in legal, financial, business and media affairs. The Chairman is a lawyer.	The Minister for Culture (8), the umbrella organization for Danish viewers and listeners' organizations (1), the Danish Judges' Association (1).	10
UK	BBC Trust	Maximum of 5 years.	Qualified by virtue of '(a) his knowledge of the culture, characteristics and affairs of the people in the nation for which he is to be designated.' The nations (England, Scotland, Wales and Northern Ireland) are each represented by one trustee.	The Queen, based on advice from ministers.	12
Austria	The Public Value Advisory Board*	5 years.	The Board members are qualified academics who have specialized in broadcasting law, media sciences or business administration and economics.	The Austrian federal government.	5

The Stakeholder Media Council

Belgium (Fl): The Flemish Media Council (*Strategische AdviesRaad voor Cultuur, Jeugd, Sport en Media*, SARC).

Germany: The Broadcasting Councils (*Die Rundfunkräte*) and the ZDF Television Council (*Fernsehrat*).

The Stakeholder Media Council is based on the idea that members of the public, and especially concerned parties such as publishers and broadcasters, can have a say in how PSM adopts new services. Although this means that interested parties are heard in the process, it also means that the independence and objectivity of the Council can be questioned. Secondly, the professionalism of the Stakeholder Media Council can be questioned, as many of the members lack a background in media and/or broadcasting law.

The Flemish Media Council replaced the old Media Council in 2007, and its members are media industry representatives, PSBs, independent experts, private broadcasters, publishers, Internet service providers, journalists, and copyright organizations among others (Bulck & Moe, 2012, 40). The members of the Council are appointed for a period of four years by the Flemish government (Flemish government, 2008, art. 6, art. 12). The Flemish Minister of Media must consult the Council on new legislation, but as Bulck and Moe (2012, 40) point out, the Council has no financial means to commission studies in order to give advice based on scientific research. Furthermore, some have raised concerns regarding the Council's independence, as its members represent the media sector (Appel, 2011, 169).

Germany has not one, but several media councils, the regional Broadcasting Councils (Rundfunkrat) for ARD, ZDF's Television Council (Fernsehnrat) and DLR's radio council (Dörr, 2011, 72). The number of members varies between the Broadcasting Councils, ranging from a little over 20 to close to 50 members.¹⁵ The ZDF Television Council has 77 members, who each represent different stakeholders (trade unions, academics, state governments (*Länder*), the federal government, newspaper publishers and so on). The Television Council has clear institutional and financial independence, which means that it has its own budget to carry out the *ex ante* tests (Dörr, 2011, 73). The decision to either approve or reject a new service must be taken with a majority of two thirds of the votes cast by the members present and with at least a simple majority of the votes cast by the legal members of the competent council (Interstate Broadcasting Treaty, 2013, art. 11f[6]). The Broadcasting Councils

¹⁵ The following broadcasters have their own Broadcasting Councils: Bayerischer Rundfunk, Hessischer Rundfunk, Mitteldeutscher Rundfunk, Norddeutscher Rundfunk, Radio Bremen, Rundfunk Berlin-Brandenburg, Saarländischer Rundfunk, Südwestrundfunk (Rundfunkrat Baden-Württemberg and Rundfunkrat Rheinland-Pfalz), Westdeutscher Rundfunk and Deutsche Welle.

must use external experts for the market impact assessment (Interstate Broadcasting Treaty, 2013, art. 11f[5]).

The Independent Regulator

Norway: The Norwegian Media Authority (*Medietilsynet*).

Sweden: The Swedish Broadcasting Authority (*Myndigheten för radio och TV*).

Austria: The Austrian Communications Authority (*KommAustria*).

The Independent Regulator is either a media authority or a converged communications regulator. The difference between the two is that the media authority is explicitly focused on monitoring media, whereas the communications regulator covers a wider spectrum of issues, for everything from postal services to Internet infrastructure and broadcasting licenses. One could say that the media authority is usually more concerned with content-related issues than the communications regulator, which remains more focused on technical questions.

Both Sweden and Norway follow a similar procedure, with the difference being that in Sweden, the Broadcasting Authority also performs the market impact assessment, while the Norwegian Media Authority simply has to balance the Competition Authority's assessment against its own public value assessment. Both authorities then make a recommendation (within three months) that the government responds to.

The Norwegian Media Authority has completed one test to date and another is underway regarding a new digital radio channel (Medietilsynet, 2013). Article 6 of the Broadcasting Act lays down the conditions for the pre-screening of new services (Forskrift om kringkasting, 2010). Although the pre-screening must be completed in 12 weeks, including the public consultation (3 weeks), and the Competition Authority's market impact assessment (8 weeks), no deadline is specified for when the Ministry of Culture must make its decision after the Media Authority has given its recommendation. This greatly impedes the effectiveness of the process, as it took over a year for the Ministry of Culture to decide on a new service, and even then, it decided to go against the Media Authority's recommendation (Kongelig Resolusjon, 2012).

The Austrian case is a combination of the Expert Board and the Independent Regulator model. Although KommAustria, Austria's Communications Authority, makes the final decision, the Public Value Advisory Board carries out an assessment of the new service's public value. The Austrian Public Value Advisory Board is very similar to the Danish Radio and Television Board. The members of the Board are appointed for five years by the Austrian federal government. The Board members are usually qualified academics who have specialized in broadcasting law, media sciences or business administration and economics (RTR, 2013). The Public Value Advisory

Board evaluates whether new services fulfil ORF's core public service remit and assesses the service's impact on programming diversity (Haas, 2013).

After receiving both the Public Value Advisory Board's and the Federal Competition Authority's assessments of the new service, KommAustria approves the new service or programme if it is consistent with the law and contributes to ORF's public service mission without too many negative consequences for the competition (Haas, 2013). KommAustria may also make adjustments to the new services to reduce market impact, but these can only relate to the technical design or availability, and not the actual content (Haas, 2013). The Austrian Economic Chambers and Austrian Chamber of Labour can also comment on ORF's proposal, after which ORF has the possibility of being able to redraft the initial proposal (Haas, 2013). No services have been retracted as a result of the *ex ante* test, and a 'Special Second Screen app' related to Alpine skiing has just been assessed (ORF, 2013).

The Political Agent

Netherlands: The Minister of Education, Culture and Science (*Ministerie van Onderwijs, Cultuur en Wetenschappen*).

Ireland: The Minister for Communications, Energy and Natural Resources.

Finland: The Administrative Council (*Hallintoneuvosto*).

In the Political Agent model, an elected official, usually the Minister of Media, has the primary responsibility of deciding whether or not a new service should be adopted. The Minister may be instructed on the issue by other parties, but makes the assessment quite independently. The Netherlands is the best example of this model. Although the Council for Culture and the Media Authority advise the Minister on the public value of new services, the Minister draws up a draft decision, and after stakeholder consultation, makes a decision based on market effects and public value (Bardoel & Vochteloo, 2011, 138). In other words, much depends on the sitting Minister's political agenda.

The difference between Ireland and the Netherlands is negligible, but from a political perspective, it is important to highlight that the Irish procedure includes a public consultation before any decisions are made, as opposed to the Dutch procedure (Broadcasting Act, 2009, art. 103[4]). Additionally, the Broadcasting Authority of Ireland will make the sectoral assessment, which the Minister bases the decision on. Even then, the Minister for Communications is vested with much responsibility.

In Finland, the Administrative Council both evaluates and decides on the new services. The Council is assisted by an 'expert on public service' (*julkisen palvelun asiantuntija*), who is vested with the responsibility of examining the public value of

new services.¹⁶ An external consultancy firm undertakes the market impact assessment, and the Council then decides whether the public value of the new service outweighs its negative market impact.

The Administrative Council is made up of Members of Parliament; however, and as such, changes in government do not affect the outcome of the *ex ante* procedure. In theory, the Council does not have to be composed only of Members of Parliament, but this has been the case in practice. Yle's personnel are also represented by two members in the Council, although they cannot vote on issues. It may be noted that the Broadcasting Communication expressively underlines that the institution that performs the *ex ante* test must be independent from the broadcaster (EC, 2009). A strict interpretation of the Communication would indicate that the presence of Yle employees in the Council renders it less independent than is formally required.

2.4 The market impact assessment

Testing the market effects of new services is, perhaps, the most controversial part of the *ex ante* test. The underlying logic of public service broadcasting is that it provides citizens with valuable information that cannot be measured in terms of the lost profits of the private sector. The idea that the market impact of specific services has to be taken into account surfaced when PSBs started to offer online news and, to some extent, competed with the offers of privately owned newspapers at the beginning of the 2000s. For example, in 2004, an independent committee set up by the UK government and headed by Philip Graf reported that the BBC's approval process for new services had notable weaknesses and that a better regime was needed for regulating BBC Online (Collins, 2011, 53). Taking the novelty of competition logic into account, it is rather unsurprising that the market impact assessment is a highly controversial issue, and a poorly executed assessment is likely to be criticized by both public broadcasters and commercial competitors. The competence of the institution performing the test is often scrutinized. Three different actors perform market impact assessments in Europe: The Competition Authority, the Media or Communications Regulator or an external consultancy firm. Although budgets for the *ex ante* tests are seldom disclosed, the market impact assessment is in many cases the most expensive part of the test.

All legislation or public service contracts that require an *ex ante* test also state that the effects on the market should be taken into account. The exact markets that should be taken into account, are, however, not specified. A strict interpretation would be only to take commercial broadcasters into account, but this interpretation does not seem to have gathered much support.

¹⁶ Professor Hannu Nieminen from the University of Helsinki serves as the expert on public service until the end of the current Council's term (Yle, 2013).

Table 3 The market impact assessment and institutional responsibility

Country	Market impact assessor	Financier
Austria	Competition Authority	Regulator*
Belgium	External consultancy**	Ministry
Denmark	External consultancy	Regulator
Finland	External consultancy	Regulator***
Germany	External consultancy	Broadcasting councils
Iceland	External consultancy/Competition Authority	PSB
Ireland	Independent Regulator	Regulator
Netherlands	No formal requirement	Ministry
Norway	Competition Authority	Regulator
Sweden	Independent Regulator	Regulator
UK	Independent Regulator	PSB

* KommAustria is, however, partly financed by the PSB.

** No formal requirement.

*** The Communications regulator in Finland is not involved in the actual testing procedure, but it finances Yle's Administrative Council.

At least the publishing sector should be taken into account, but as the web allows for quite a wide scope of services, other areas of business may be considered: on-demand services, music-streaming services, online bookstores and so forth. With on-demand video, for example, PSBs might be in direct competition with commercial video on-demand (VOD) services such as Netflix.

The above examples are all what one could call markets that could be negatively influenced by a strong PSB presence online. Positive market affects may be disregarded more easily, as the effects may not be as direct. A UK study showed that Channel 4 and the BBC are important business partners of the independent digital sector in Europe (Bennett et al., 2012). Thus, a new service might have a positive effect on some markets, even though the effects might be negative on others. A comprehensive review of methods that would take all of the relevant market effects into account seems to be missing.

The Competition Authority

Norway: Norwegian Competition Authority (*Konkurransetilsynet*).

Austria: Federal Competition Authority (*Bundeswettbewerbsbehörde*).

Iceland: The Media Commission may ask either competition authorities or external consultants for a formal evaluation.

The Competition Authority would seem to be the natural choice for a market impact

assessment, yet few countries have decided to opt for exhausting the Competition Authority's expertise. Before the *ex ante* test, the Norwegian Competition Authority had never been involved in broadcasting policy in Norway (Bulck & Moe, 2012, 39). The Competition Authority should complete the assessment within eight weeks, and it managed to complete the assessment within the timeframe when the first service was tested (Kulturdepartementet, 2010, art. 6[3]). There are no guidelines for how the Competition Authority should carry out its assessment, which means that the assessment method might vary from test to test.

The Austrian Federal Competition Authority carries out its assessment within six weeks (ORF Act, art. 6b[4]). Interestingly enough, the Federal Competition Authority may also appeal the decision to approve (or reject) a new service in the administrative court in order to safeguard competition (ORF Act, art. 6b[5]). In this respect, the Competition Authority can influence the process on two fronts: first, it may issue a negative market impact assessment, and second, it may appeal a positive decision made in court.

In Iceland, the Media Commission carries out its own evaluation on the basis of stakeholder comments, but if the new service will impact market conditions, then competition authorities or external consultants can be asked to undertake a formal assessment of the new service's impact on the market (RUV, 2013). Since no tests have yet been carried out, it is unclear how this will unfold in practice.

The Independent Regulator

UK: The Independent Regulator and Competition Authority for the UK Communications Industries (Ofcom).

Sweden: The Broadcasting Authority (with assistance from the Post and Telecom Authority).

Ireland: The Broadcasting Authority of Ireland.

The market impact assessment is carried out by Ofcom in the UK, as required by the BBC Agreement (DCMS, 2006b). There are no guidelines as to how the market impact assessment should be performed, and thus Ofcom is free to decide on what kinds of methods and markets it assesses. A Joint Steering Group, consisting of six members drawn equally from the Trust and Ofcom, oversees the results of the market assessment and formally approves it (Michalis, 2012, 20). Although Ofcom tests the new service's market impact, the cost of the test is covered by the BBC license fee – in other words, the BBC Trust commissions the test by Ofcom. According to a study by Michalis (2012, 20), there is 'a fair amount of mutual respect between the Trust and Ofcom'. The market impact assessments are quite rigorous, and thus they also come with a substantial price tag. The local video-news-market impact assessment, for example, ended up costing €1.1 M (Michalis, 2012, 22). The costs for the PVT were not disclosed, but even when those expenses are excluded, this is a significant

cost for testing a service that was never even introduced.

In Sweden, the Competition Authority was not vested with the responsibility of performing the market impact assessment, as it might later have to evaluate its own past decisions should complaints against the new service arise (Wormbs, 2011, 132). Although the procedure has yet to be tested, the Broadcasting Authority together with the Post and Telecom Authority will assess the market impact. The exact responsibility of the Post and Telecom Authority is not expressed. Essentially, this means that the Broadcasting Authority will perform both the public value assessment and the market impact assessment. It is not entirely clear whether the Broadcasting Authority possesses the expertise necessary to carry out a market impact assessment. As the procedure is yet to be tested in Sweden, it is unclear whether or not the Broadcasting Authority (along with the Post and Telecom Authority) would use external consultancy to assist with the market impact assessment.

The Broadcasting Authority of Ireland is also given *carte blanche* as to how the sectoral impact assessment should be carried out (Broadcasting Act, 2009, art. 100). While the impact assessment is primarily focused on broadcasting, ‘related markets’ are considered as well (Broadcasting Act, 2009, art. 100[2c]). The Broadcasting Authority may thus choose what markets it sees as relevant.

External consultancy

Finland, Germany and Denmark.

In Finland, Germany and Denmark, independent consultancy firms are given the task of performing the market impact assessment. In Denmark, the Competition Authority is also involved in the market impact assessment: Before the market impact assessment is handed over to the Radio and Television Board, the Competition Authority is consulted and comments on the report. The consultancy firm should provide its market impact analysis in no more than 12 weeks (Kulturministeriet, 2011, art.7), which is slightly longer than in other countries, as most countries strive to complete the full *ex ante* test in the same time span. No full *ex ante* tests have been completed, however, and so it is impossible to say how the Competition Authority’s comments would affect the outcome. The Radio and Television Board entered into a Framework Agreement with six consultancy firms in January 2012 (Kulturstyrelsen, 2013a).¹⁷ The Danish Competition Authority has also provided a six-page guiding document for what factors the consultancy firm should consider when performing the market impact assessment (Kulturstyrelsen, 2013b).

¹⁷ Advice AS, Rambøll Management Consulting A/S, Capacent Management Consulting A/S, TNS Gallup A/S, Oliver & Ohlbaum Associates Ltd. and Copenhagen Economics A/S.

In Germany, the Competition Authority is not formally involved in the process, and neither is the communications regulator. In Finland, the Administrative Council has to ask for the Competition and Consumer Authority's opinion, but the law does not require that the Finnish Communications Regulatory Authority is consulted (Liikenne- ja viestintäministeriö, 2013, art. 12). In both countries, communications regulators are thus excluded from the process. As a result of an open call for tenders Yle's Administrative Council chose a law firm, Attorneys at law Borenus Ltd., to carry out the market impact assessment for the current Council's term of office, which ends in 2015 when the next parliamentary elections are to be held in Finland (Yle, 2013).

Since there are several Broadcasting Councils in Germany, different consultancy firms perform the market impact assessments. No clear directions for how the market impact assessment should be carried out exist. In 2009, when the Television Council performed a three-step test of ZDF's new and changed services, the Television Council issued an EU-wide call for tenders (Dörr, 2011, 76). Eight offers were received, and a consulting consortium of Goldmedia GmbH, Salans LLP and Goldmedia Custom Research GmbH was chosen to carry out the market impact assessment. The consulting consortium was given three months to submit the analysis and the cost of the market impact assessment ran to nearly €500,000 (Dörr, 2011, 76).

Lack of a full market impact assessment

Private sector outcry has been the loudest in countries where no formal market impact assessment exists. In Belgium, for example, the Flemish Media Council has no budget for commissioning *ex ante* tests, and as a stakeholder council, they do not possess the means to carry out the test themselves. To obtain funds for an *ex ante* test, they thus have to turn to the Minister of Media (Bulck, 2012, 158). According to Appel (2011, 169), the Council is ill equipped to handle the pre-screening procedure.

In the Netherlands, a rigorous market impact assessment is not required by law, but the Minister of Media has to balance the public value against the market effects. Exactly how the market effects are estimated remains at the Minister's discretion. According to publishers, the lack of a proper market impact assessment means that the government has failed to fulfil its obligation to comply with the Broadcasting Communication of 2009 (Wolswinkel, 2011, 153). Unsurprisingly, private competitors have appealed the Minister's decisions to approve new services in the administrative court.

2.5 The question of new services

The question of what constitutes a new and significant service, or even the definition of a service, seems to concern most countries.

First, different institutions define services differently. In Norway, for example, NRK argued that they had seven services, while the Media Authority was of the opinion that NRK offered 120 services (Thoresen & Bolstad, 2012, 110). While NRK thought that the main channels and the web portal were their ‘services’, the Media Authority counted websites, blogs and online streaming as separate services.

Looking at the number of tests conducted in Germany (over 40), and comparing them to the number of tests in the UK (four), it becomes clear that although the pre-screening processes bear some similarities, the definitions vary quite considerably. In the UK, a service is not defined by law, which means that the BBC Trust has significant leeway in deciding when a pre-screening is required (Michalis, 2012, 17). In Austria, services that are new or considerably different will be tested. The cost of the service is an important factor: If it exceeds 2 per cent of the total budget, the service must be tested (ORF Act, art. 6[3]). In order to determine whether the service is new, the service concept, broadcasting schedules and service schedules will be compared with those of existing services (ORF Act, art. 6[3]). In the Netherlands, services can be seen as experiments if they are limited in scope (restricted audience), size (less than 2% of the annual budget) and duration (one year or less; Bardoel & Vochteloo, 2011, 139). In this respect, the political climate and the broadcasting culture of the country highly influence the approach taken.

Table 4 New services as defined by size

Country	Austria	Denmark	Netherlands	Iceland
New service as % of budget or annual income	2	2	2	10*
New service in €(according to 2011 income)	19.8 M	10.4 M	17.1 M	1.8 M

* In Iceland, a new service is related to the public income, which is approximately 60% of RUV’s total income.

Even in countries where a fairly clear definition exists, such as in Denmark, it might not be of much use, as PSBs may argue that they are, in fact, only improving existing services. For example, the local news video portal that was rejected by the BBC Trust could just as easily have been presented as an addition to BBC News, which would not have required a PVT. The PSB proposes the new services, and if it decides to define a service as an improvement of an existing one rather than a completely new service, it is highly unlikely that the BBC Trust will ever submit that service for

evaluation. In Denmark, for example, no new service has been proposed in the past three years. This is also the case in Sweden and Finland.

Although no *ex ante* test is alike, the processes behind its implementation share a couple of common features. For example, in many countries, a centre-right government has been in place, such as in Sweden and Denmark. Most of the tests were instated as a result of state-aid complaints to the Commission, and lack political support within national borders. Exceptionally, Finland and Sweden decided to instate the test without Commission involvement. Bulck and Moe (2012, 43) speculate that the Flemish government only ‘pay lip service to the EU’ by formally adjusting the legal framework for an *ex ante* test but not actually setting up the actual tests in practice.

Similarly, Nissen (2013), former Director General of Danish Radio, suspects that the implementation of the *ex ante* test is mostly just a pragmatic response to the European regulatory framework that no one is particularly interested in maintaining. Much seems to verify this assumption. Few tests have been concluded in the past three years and many countries have yet to make their first *ex ante* assessment despite having incorporated the procedure into national legislation several years ago. Dwindling finances, and thus a lack of innovation, might partly explain this, but at the same time, the bureaucratic burden of testing new services seems to be being met with a great degree of scepticism. Knowing how a service will eventually succeed is very hard to predict; the determination of public value by way of *ex ante* tests is, as Just et al. (2012, 62) point out, much more difficult than assessing *ex post* compliance with precise regulatory restrictions. For this reason, it is highly unlikely that Switzerland will ever include an *ex ante* assessment. On the other hand, the online services of public broadcaster SRG SRR are strictly regulated, which means that some sort of *ex post* assessment is possible. In countries where online activities are not as strictly regulated, an *ex post* assessment would be equally difficult to perform systematically and reliably.

3 Core online activities

The Internet has changed how the public service mission may be carried out and even interpreted. Audience fragmentation may be taken into account to a larger extent, interactive elements are available to a higher degree and broadcasters can repurpose material that has been produced for traditional broadcasts. Public service broadcasting is, for this reason, more frequently defined as PSM, thus underlining the technology neutrality of public service.¹⁸

Regardless of technological developments, PSBs are still committed to broadcasting and that is also reflected in the online services, which, to a large extent, are either based on or inspired by traditional broadcasts. This means that the focus still lies in providing news and access to the same content that is produced for broadcasts. In this report, web news (subsection 3.1), on-demand services (subsection 3.2) and online streaming of radio or television channels (3.3) have been defined as the core online activities of PSBs. Other priorities might be prominent within different organizations, but these three services are what most PSBs have in common. At the same time, however, national definitions of those core online activities might also be a way to limit what the PSB may offer online. In some countries, there are even negative lists of forbidden services. These will be discussed in subsection 3.4.

3.1 News reporting¹⁹

There is quite a lot of variation in the presentation of web news. Some countries' media legislation recognizes the need for independent web news online, such as Denmark (Nordahl Svendsen, 2011, 120), while other PSBs are more focused on audio-visual content (e.g. ZDF and SRG SSR). There are few records on the number of web articles published by PSBs, but the publication intensity is likely to vary depending on the news-production budget. NRK in Norway, for example, does not seem to have a specific budget for its online content, which indicates that regardless of the platform that the content is initially produced for, it will eventually be published online, as is pointed out by the fact that 50 per cent of all news is published online (NRK, 2013, 34).

In the countries with strict online legislation for public broadcasters, such as Germany and Austria, web news is very limited in scope and usually only serves as an

¹⁸ See, for example, Bardoel and Lowe (2008).

¹⁹ These observations were largely based on examining the web offers of European public broadcasters (see p. 1). For a more comprehensive view of the news offer online, it would be necessary to trawl all of the news sites of PSBs and check for the prevalence of embedded material, third-party applications and the use of hyperlinks.

introduction to a broadcast that has been added online. Overall, the news on all German public broadcasters' sites (ARD, ZDF, Deutschlandradio) is among the most limited in Europe. Although no formal character limit exists, the ban on 'press-like' services indicates that articles longer than a thousand characters would be frowned upon. ZDF avoids written material altogether, and is thus one of the few PSBs in Europe that does not provide online news articles. The discourse that public service broadcasting needs to be limited in favour of newspapers has gained ground in most of Europe. For example, Bardoeel (2012, 6) quotes Dutch Freedom Party representative Geert Wilders, who stated that the 'avalanche of websites of the state broadcaster must stop, since it competes with newspapers and there is no scarcity on the internet'.

A possible solution to this issue would be to legitimize web news by adding clips from television and radio broadcasts to web news stories. In that case, articles would clearly be connected to a broadcast. However, remarkably few sites use audio-visual material effectively. PSBs that produce both radio and television are at an advantage, as they can add both audio and video clips to the news articles, yet many fail to do so. Few PSBs use the web's possibilities effectively; photo galleries, infographics and embedded elements (such as *Storify* for embedding tweets) are hardly used by most broadcasters.

Norberg (2013) admits, for example, that SVT's online news offer has not been as innovative as it could have been. The aspiration is to move away from focusing on the broadcast first and online news second. The aim is to try to find the right channel for the news, be it online, as a television broadcast or as social media, depending on the character of the news (Norberg, 2013).

Sjovaag et al. (2012, 96) also concluded that 64 per cent of NRK's news stories lacked 'multimedia content' and 'user involvement elements', 25 per cent contained one element, 6 per cent two elements and only 1 per cent more than two elements. The study was based on web sites that were scraped from 2009, and it is of course possible that the situation has changed since then, but the message is quite clear: As far as news production goes, the transition from PSB to PSM is still in the early stages in most countries.

Some of the most impressive news sites are ČT's and ČRo's respective websites. The news stories often contain several audio-visual elements such as picture galleries, audio and video clips. Almost every news item seeks to include at least one multimedia element, greatly outperforming the German PSBs. This shows that although the Czech public service broadcasting budget is less than 5 per cent of the German one (EBU, 2012, 11), the strict legal environment seemed to have not only limited the German broadcasters' online offer, but also its ability to innovate within the existing legislative framework.

Switzerland's SRG SSR's news stories are usually quite extensive and contain multimedia content. This is actually not only an editorial principle, but is directly related to Swiss media legislation, which requires SRG to connect longer news articles to a specific broadcast (SRG Act, art. 13). To verify whether the Swiss broadcaster complies with the legislation, an *ex post* assessment of the online offer is regularly carried out (Just et. al, 2012). Publishers are still concerned that SRG SSR's online activities, especially text-based news portals, compete with their own offers (SRG SSR, 2013).

Local news reporting online

Local news reporting is a highly debated issue, as local newspapers see PSBs as a threat to their revenue streams. This alleged threat is mostly based on assumptions rather than actual market impact assessments, but it is of course possible that free, wide-ranging local news coverage could affect local newspapers negatively if their online readers decide to follow the broadcaster's reports rather than their local newspapers. Part of the problem might be the fast circulation of news topics from one organization (in this case a local newspaper) to another (the PSB) in the online environment. Web news relies heavily on fast and frequent publication, which encourages using other sources for online articles, sometimes resulting in careless crediting practice. For example, in Denmark, the publisher's association DDF showed that DR had copied the news of local newspapers and put it up on the DR website (Nordahl Svendsen, 2011, 118). This embarrassing revelation led to DR withdrawing some of its ultra-local news coverage. In Norway, Sjøvaag et al. (2012, 101) state that NRK appears with a 'dual, if not contradictory, role online trying to combine head-on competition for the national news agenda with a broad, almost all-inclusive, dissemination of local news'.

At a highly local level, most PSBs tend to avoid online news reporting. In Germany, there is even a complete ban on 'comprehensive local news coverage' online (Interstate Broadcasting Treaty, 2013, art. 11d[5]). In the UK, the BBC Trust also rejected a proposal for providing local video news online, as the BBC Trust (and Ofcom) feared it would distort competition (BBC Trust, 2009). In Sweden, local newspapers alleged that SR was 'taking' their readers by providing web news, but the disagreements have since been resolved (SR, 2013; Norberg, 2013). SVT has also offered local newspapers the possibility of embedding SVT news on their websites, but local newspapers have not wanted to engage in such a partnership (Norberg, 2013). France is a clear exception in this instance. Radio France's France Bleu appropriates user-location information to create a stream of local news (France Bleu, 2013). Site visitors can submit their place of residence, after which the news stream changes from a national perspective into a local one, listing news stories close to home.

Providing regional news is, however, a top priority for most broadcasters, especially in larger countries. Rather than being an online strategy, it reflects classic radio broadcasting. Almost all broadcasters either have separate news sites for regional news or provide feeds that can be modified to prioritize regional news.

3.2 On-demand services

All PSBs surveyed (see p. 1), except for ERR, RTVSLO and MT/PSB, have an on-demand or a catch-up service, as it is also called. PSBs seem to devote many web resources to running catch-up services. In Italy, for example, 80 per cent of the programmes on RAI 1–3 and RAI 5 are available on the catch-up service (RAI, 2013). Almost all of RAI 4’s programmes are foreign productions, which would explain why the Italian PSB has refrained from providing those shows online. Still, licensing costs alone mean that along with news production, the on-demand service is one of RAI’s top online priorities. Similarly, Swiss broadcaster SRG SSR’s license contains a provision which states that ‘the emphasis of the online offerings is on audio content and audio-visual content’ (Swiss Federal Council, 2013, art. 13[1]).

The services differ in scope and size, but have a couple of similar traits. Most television broadcasters provide the on-demand service as a separate service, while radio catch-up is quite frequently provided as an integrated feature on the main website. On-demand availability of programmes varies quite substantially, ranging from 10 to 90 per cent of the broadcasts.²⁰ An estimation would be that, on average, around 60 per cent of all programmes are also accessible on demand.

The first catch-up services for television surfaced in Western Europe around 2007, with most broadcasters swiftly following suit. All of the broadcasters use either Adobe Flash or Microsoft Silverlight for their video players, but it is possible that next-generation Hypertext Markup Language (HTML) will change this.²¹ HTML5 provides the possibility of embedding video on websites without using Flash through a simple video tag. HTML5 video is likely to be supported by tablets and smartphones to a greater extent, but as the video file is not hidden within code, it also means that videos could easily be saved locally, which is usually not included in the screening licenses. This means that PSBs would have to develop new digital rights management (DRM) technologies to ensure that the content is not ripped off and stored locally on viewers’ computers. For example, the BBC, Netflix, Google and Microsoft have lobbied for the inclusion of ‘encrypted media extensions’ (EMEs) in HTML5, which

²⁰ This is based on individual assessments. Official statistics are scarce.

²¹ HTML5 introduces new markup and application programming interfaces (APIs) that can be used for web applications without installing external plugins. This means that it is easier to include multimedia and graphical content on websites. HTML5 is an open standard, which means that its development is not dependent on a private company.

would provide control playback for protected content (Geere, 2013). However, critics say that EME would be easy to defeat (Sporny, 2013).

The question regarding how long programming may be made available is perhaps the most important one and, in this respect, practice varies greatly between the broadcasters. In some respects, the time limit might be a financial solution. Providing the content online for longer than, for example, seven days, can be expensive due to licensing and perhaps not that rewarding, as few viewers might want to access the broadcast after one week. More often than not, it is probable that the rights holder might wish to limit the availability of the programme as they have other contracts with commercial providers or DVD/BluRay retailers. However, it is worth noting that the limits might also be imposed as a result of a political discussion, as is the case in Germany and Austria (see below).

Table 5 Common deadlines for programming available through on-demand services

Deadline	Type of programming
24 hours	Sport events of national or international importance
7 days	Series, acquired programming (foreign TV series and films)
14 days	Commissioned programming (domestic productions)
30 days	Documentaries, other commissioned programming
30+ days	Series rights. Whole series available for 30 days after last broadcast
Unlimited	Own productions (such as news and current affairs), radio programmes (without music) and programmes in online archives

In the UK, the BBC's on-demand service iPlayer was one of the first services to go through the PVT. The service itself was not opposed, but the time limits for the availability of shows were a concern for market players. The BBC had proposed that programmes would be available as downloads for 13 weeks. The programmes are stored within the iPlayer and not as widely accessible video formats in order to make it harder to copy the shows. Private competitors were worried about the impact this might have had on the market and thus the BBC Trust decided to limit the availability of downloaded content to 30 days (Donders & Pauwels, 2012, 19).

German PSBs were also required to impose specific availability periods by demand of the German legislators (Dörr, 2011, 74). With the exception of cultural and educational programming, programmes are available for seven days – if the programme is available for longer, a three-step test is required. Sport broadcasts were an especially controversial issue, and online availability was limited to 24 hours

(Dörr, 2011, 78). The same 24-hour limit for broadcasts of sport events is in force in Austria (ORF, 2013). Additionally, German PSB's may not offer acquired feature films or episodes of television series on their catch-up service (Interstate Broadcasting Treaty, 2013, art. 11d[5]).

In this respect, Germany differs from most European countries, since most PSBs have some foreign productions on their on-demand service. It is usually the producer of the television series who might want to restrict online access, but in this instance, it is the German legislator that imposed the requirement. Dörr (2011, 78) also highlights that despite the negative market impact of ZDF's online activities having been deemed as minimal, the Television Council still wanted to limit the scope of the services. While German legislation is very strict as to what public broadcasters may provide online, it is also clear that the political climate is restrictive and seems to limit innovation in the sector. For example, ZDF's Mediathek is completely in Flash, largely regarded as an outdated programming language for websites.²²

Although rights are usually agreed upon on a case-by-case basis, a couple of general observations can be made. First, foreign productions are usually available for seven days and only within national borders. This is probably due to the fact that the production companies have other broadcasting deals with commercial broadcasters or on-demand services. Second, most central European countries follow the seven-day deadline, while the Nordic countries tend to provide programmes for longer time periods. For example, Swedish broadcasters SVT and SR have a special license for some series, which allows them to show the whole series for 30 days after the last episode has aired (SR 2013, SVT 2013).

Third, a broadcaster's own productions are usually available for viewing abroad and the time limit is usually much longer; sometimes programmes do not have a deadline at all. Then again, it is questionable as to what extent people might wish to access news broadcasts and talk or game shows years after the broadcast. Fourth, few PSB's have made downloads possible. This is probably because of DRM purposes. Some rights holders are concerned that making downloads available would increase illegal file sharing of the shows. The BBC's iPlayer is the exception to this rule, as the possibility of being able to download programmes is consistently provided. Fifth, radio programmes are available for a much longer time than television broadcasts, but music from the webcasts or podcasts might be removed.

Issuing regular deadlines for viewing shows has both pros and cons. On the one hand, a clear, consistent, seven-day deadline for programmes makes it easy for users to know how long programmes are available for. On the other hand, it still follows the

²² Flash is usually avoided by web developers, as search engines have trouble finding content on sites written in Flash. The sites are also far heavier than HTML-based sites and thus require more bandwidth.

viewing patterns of linear television. A programme is made available for seven days following a broadcast, after which the next episode is broadcast, provided that it is a weekly series. Strictly speaking, this is not really VOD – it just makes re-runs obsolete. This is perhaps why most broadcasters have chosen to call their services ‘catch-up services’ or ‘just missed’ instead of on-demand television. An interview with a BBC employee reveals part of the problem: ‘There was a moment when Vision²³ as a whole gave a huge sigh of relief when iPlayer came out [and they said] “I get the web, I get it, it’s like telly”’ (IV29) (Bennett et al., 2012, 36). Viewers that might stumble upon a show halfway through a series have thus no way of going back to the first episodes to catch up properly with the show.

One interesting exception to the otherwise quite similar catch-up services is Belgium. Belgian broadcasters VRT and RTBF only provide catch-up services via digital television. The Flemish broadcaster VRT’s service is only available for a separate fee (part 5 will address the question of alternative sources of income more closely). Similarly, France Televisions has a commercial VOD service in addition to its free catch-up service, Pluzz Replay. *La charte des antennes*, which lays down fundamental principles for France Televisions operations, specifically mentions the importance of on-demand television and wide access to all of its content (France Televisions, 2013b, 16), but only for seven days. After that, consumers can buy or rent the programme on Pluzz VAD (France Televisions, 2013a).

Radio programmes are more steadily available than television series, largely due to the fact that most productions are made in-house and there are fewer rights holders involved. The big question is, of course, music. Webcasts and/or podcasts are provided by almost all broadcasters, but the availability of music in the on-demand content varies greatly. Much depends on the agreements between copyright collectives and broadcasters. Radio France, for example, has entered into an agreement with copyright collective *Société Civile des Producteurs Phonographiques* (SCPP), which allows them to include music in podcasts for up to a year after the broadcast (SCPP, 2012). This impacts the French podcast market greatly, as Radio France is the most popular provider of podcasts in France (50% of all podcasts downloaded) and its applications have been downloaded over 3 million times (Radio France, 2012). Between 9 and 10 million podcasts are downloaded each month (Mediametrie, 2013).

There is great variation between PSBs, but, as a rule of thumb, radio programmes are available as webcasts, with music, for a period of between three and six months. It is also not uncommon for PSBs to provide access to radio webcasts without time limits. Stricter rules usually apply for podcasts, as those may be downloaded to the user’s own device in a format that can be read by several different players.

²³ Previously, this was the business division of the BBC, responsible for programme production, commissioning and broadcast operations.

New music services will likely cause the biggest changes to how radio broadcasters operate online. For example, Radio France has announced that they will launch a new music service, RF8, with over 1.6 million free songs (Métreau, 2013). The service will be launched shortly, and it allows the user to export playlists to *Itunes* and *Deezer*, a French music-streaming service. Following the same logic, Radio Romania provides a service that seems slightly odd from a rights-holder perspective. The service includes the tracks of ‘top 100 rock artists’, in some cases even full albums, such as The Beatles’ *Sgt Pepper’s Lonely Hearts Club* (Radio Romania 3, 2013). These artists are notoriously expensive to broadcast and it seems strange for the Romanian broadcaster to have obtained world licenses for making these songs available online.

Partnerships with music-streaming services such as *Deezer* or *Spotify* may change how Radio broadcasters operate. The BBC recently launched its *Playlist* service, which allows users to create their own playlist based on BBC DJ recommendations and top-played songs. The songs are only available as previews on the *Playlist* service, but can be listened to in full-on music-streaming services. The users listen to the previews on *Playlist*, and then export the playlists to *Spotify*, *YouTube* or *Deezer*. The partnership is based on reciprocity and according to the BBC, ‘no money has changed hands’ (BBC, 2013). There are no restrictions on where you can use the service, as it is up to the streaming services to have the necessary licenses. The *Playlist* service is thus a lighter service than Radio France’s RF8, which actually provides music for free. SR in Sweden also adds programming and music playlists to music streaming services *Spotify* and *Wimp*. P4’s primary purpose is to introduce music to its listeners, and thus providing the radio’s playlists on music streaming services is logical next step.

3.3 Live streaming

Nearly all countries examined have included live streaming of their channels in one way or another. The inclusion of live online streaming has not raised much discussion, as the offer online is the same as on the actual channels, meaning that the only thing which has changed is the technological distribution, while the service remains the same. This is perhaps why *ex ante* tests regarding live streaming online have generally not been required.

Live streaming of television is available in almost all European countries, except Latvia. Latvia has adopted a system where instead of providing online access to the channels, the individual programmes are available on demand at the same time as they are broadcast. This means that the continuous programme stream is inaccessible online, even though the individual programmes may be available at the same time. In practice, the difference is trivial, but strictly speaking, it is not live television. The positive aspect of this system is that online viewers are not subjected to interruptions

in the live-streaming service due to a lack of online licenses; the downside is, of course, that users need to be active and cannot idly follow a channel from programme to programme, which means that the online platform does not work as a substitute for broadcast television.

The live-streaming offer differs mostly in terms of location-based restrictions, in other words, whether or not broadcasts may be accessed online from outside national borders or not. There are a couple of regional similarities, but decisions seem to have been made irrespective of what neighbouring countries do. It is safe to say that no 'Nordic Model' or 'Southern European Model' exists in this instance. Rather, there are two blocks: countries where live television can be accessed online from abroad and countries where it is not possible.

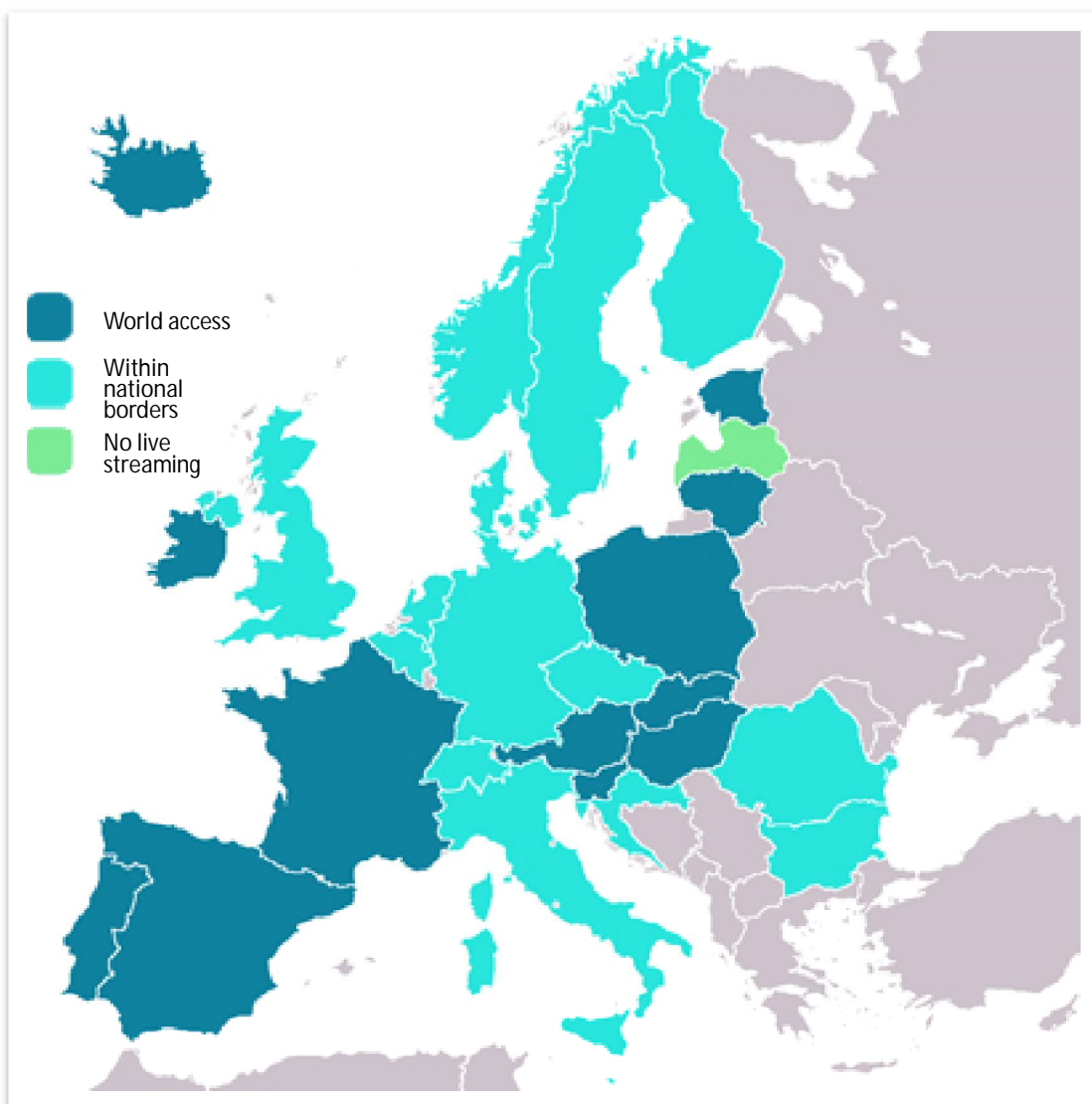


Figure 1 Live streaming of television online in Europe

In countries where live television is made available from abroad, it must be noted that there are usually restrictions as to what programmes can be seen, resulting in interruptions in the live TV feed. As a general rule, television series and soaps, sport events and foreign productions are not accessible from abroad. In Germany, there is a complete ban on showing foreign series online, which means that, for example, 90 per cent of Das Erste's live programming may also be accessed from other countries (ARD, 2013). The continuity of the service is thus directly dependent on how much of its own programming and how many foreign or commissioned productions the broadcaster shows on its channels.

Regardless, making live television available online and watchable from abroad means that citizens residing in other countries are still able to follow news from their native country in real time. The PSBs that do not provide live television streaming still have many programmes available on demand, yet choose not to show any live streams.

This choice might be based on several factors. First, one possibility is that a technical solution for blocking out parts of the live stream is not available and the investment in new technology is not regarded as worthwhile. Second, it might be because the public broadcaster does not wish to interrupt the continuity of the programme stream (Norberg, 2013).

Third, commercial interests might be at play. For example, the BBC receives quite a lot of additional income via its commercial BBC Worldwide. If they started to show programmes for free online, the Worldwide revenues could diminish.

Fourth, license fees are collected from residents of the country. The public broadcaster's primary responsibility is to provide services for those who actually pay for them – citizens living abroad might be equally interested in what the public broadcaster has to offer, but the fact remains that they do not pay for the service.

When it comes to radio, however, there are few limits to the availability of programming. Live radio is available in all countries, and listeners from all over the globe can listen to all programmes, including music. In this instance, radio and television differ greatly. Live television streaming and on-demand programming seem to operate on the same premises, as shows that can be seen live can also be accessed on-demand at a later stage. For radio, however, music might be removed from the webcasts, especially for listeners who reside abroad. In other words, the live-streaming offer differs greatly between radio and television.

3.4 Negative lists of services

In some countries, the PSB's online offer has to be connected to a broadcast. In Sweden, for example, online activities are listed as 'supplementary services' and should thus have some connection to the broadcasts, but the connection can be quite vague (Norberg, 2013). In Switzerland, that connection has to be expressed in all cases when an article exceeds 1000 characters (without spaces) (Just, 2013). Although a list of explicitly forbidden services does not exist in Switzerland, SRG SSR may not provide 'auction-like' services, according to Article 13 paragraph 5 of the SRG SSR Licence (SRG SSR, 2013). In addition, games and forums may only be offered as long as they have a direct chronological and thematic connection to a broadcast (SRG SSR, 2013).

In two countries, Austria and Germany, regulation is far more extensive and legal documents provide a list of services that cannot be provided by the PSBs. In Austria, for example, Article 4f paragraph 2 of the ORF Act lists price-comparison portals, route planners, music downloads of commercial third-party productions, search services, online auctions and job portals as forbidden services. Additionally, event calendars, games, forums, chats and advice portals are not allowed unless they are connected to a broadcast. News reports can be provided without connection to a broadcast, but they 'may not be comparable to that of the online services of daily or weekly newspapers or monthly magazines' (ORF Act, art. 4e[2]). Provincial news is limited to 80 news pieces a week and local news can only be covered if it is of national or provincial interest.

Similarly, German broadcasting law authorizes only online content that is directly related to a broadcast. However, if an online concept has passed the three-step test, it may be offered without relation to a broadcast (ARD, 2013). The German Interstate Broadcasting Treaty (*Rundfunkstaatsverträge*) also provides an extensive list of forbidden services. First of all, all 'press-like' services are banned. This was a result of private broadcaster and publisher complaints, who argued that online news services should be limited to audio and video (ARD, 2013). The negative list actually resulted in an extensive de-publication of websites (Donders & Pauwels, 2012, 21).

The Nordic PSBs enjoy quite a lot of freedom from legislation and may provide online services that contribute to their overall public service mission. How that public service mission is defined and interpreted is thus what limits their online offerings. Legislation in Denmark, Norway and Iceland even mandates the PSBs to offer online services.

Table 6 Online content restrictions in the Nordic countries and Austria, Germany and Switzerland

Country	Restrictions on online services
Austria	No ‘press-like’ news; limitations apply to provincial and local news. Other content must be related to a broadcast and online services are also restricted in time. There is also a negative list of services that cannot be provided.
Denmark	No restrictions.
Finland	Does not have to relate to a specific broadcast, but should relate to the public service mission.
Germany	‘Press-like services’ cannot be provided and there is also a list of negative services. Must be connected to a broadcast, unless the service has passed the three-step test.
Iceland	No restrictions.
Norway	No restrictions.
Sweden	All online services are regarded as supplementary services. This means that there must be some connection to a broadcast, but Swedish PSBs enjoy a wide margin of appreciation.
Switzerland	Games and public forums can be offered only if they have a direct connection to a broadcast. Text-based offerings such as news, sports or regional information must relate to a specific broadcast if the articles exceed 1000 characters (without spaces).

Although Sweden’s online services are defined as supplementary services that need to be connected to broadcasts, this does not seem to have many implications in practice. The strict restriction on online services seems to be characteristic of German-speaking countries. The appendix of the Interstate Broadcasting Treaty is almost exactly the same as the one provided by the ORF Act, indicating that there has been a policy transfer from Germany to Austria, as the Interstate Broadcasting Treaty amendments precede the ORF Act amendments. Although Swiss broadcaster SRG SSR enjoys a little more freedom than its German and Austrian counterparts do, Swiss legislators have clearly been inspired by the policies enacted in Germany and Austria.

4 Added value: Supplementary services

The core online activities of PSBs are also supported by a wide range of services that can be defined as something of added value, yet as non-essential for the public service mission. These services are usually provided to make audience engagement easier and the content more accessible.

The list of supplementary services provided by different broadcasters is long and not all of them can be addressed in this study. In this report, the focus has been limited to applications for different devices (4.1), social networks (4.2), online archives (4.3) and educational websites (4.4). The first two services were included since most PSBs use either applications or social networks to some extent. The latter two services were not included because they were frequently provided, but rather because both historical and educational content resonate with the public service mission.

4.1 Applications

Of the PSBs examined, the vast majority of broadcasters provided some kind of mobile or tablet application for their users; only ten broadcasters saw it as unnecessary to provide an application of some sort. Half of these PSBs were radio broadcasters and seven of ten were from Eastern Europe, and the Western European public broadcasters were from Luxembourg, Malta and Iceland. All of these broadcasters have significantly lower budgets than the broadcasters with apps do (with some exceptions), which indicates that the decision to not have applications is at least partly based on financial reasons rather than on strategic ones.

This study covers only the apps listed on the PSB websites, however. In some cases, the broadcaster might have made apps available, yet has chosen not to advertise them on the main website. Why a PSB would choose not to advertise its own apps is difficult to comprehend, but it is probably safe to assume that the vast majority of broadcasters with apps also want to make them as visible as possible. Sweden might be the exception, however, as Swedish broadcasters prefer that users use their responsive websites instead of applications. According to Norberg (2013), this has to do with two aspects: First, mobile devices require different copyright licenses for productions than the main site, and second, it simply means maintaining more platforms and keeping them all up to date is a challenging task, especially when a PSB cannot limit itself to providing apps for only one platform.

Most broadcasters have decided to provide apps for at least iOS and Android. An estimated 85 per cent of all smartphones used in France, Italy, the UK, Spain and Germany use either of the two operating systems, while Android devices continue to dominate sales (Comscore, 2013; Kantar, 2013). This figure is likely to be similar in other European countries, and although some variations probably exist, iOS and

Android smartphone market penetration is probably around 70–85 per cent, with Windows Phone and Nokia Symbian lagging far behind. The distribution of different platforms is also reflected in the applications offered by PSBs: iOS and Android applications are almost always offered, while Windows Phone applications are quite rare.

Italian broadcaster RAI's annual report sheds some light on the distribution of apps between different operating systems: 19 of its apps were for the iPhone, 10 for the iPad, 4 for Android phones, 2 for Android tablets and 1 was for the Windows Platform (RAI, 2013, 48). The higher number of iPhone apps is explained by the fact that iPhone apps have a longer history than Android apps, and the high number of iPad apps could be due to two key factors: First, modifying an iPhone app to fit the iPad format is only a minor change and second, iPads dominate the tablet market, although Android devices are gaining ground. It may also be noted that while the iPhone and iPad apps only have to work on one provider's device, Android smartphones and tablets exist in all shapes and sizes, meaning that more time needs to be devoted to testing and ensuring that the application actually works on all devices.

The iOS web browser does not support Flash, which most online video players use. This means that iPad users are unable to access the VOD services of PSBs, unless a separate application is provided. This is an argument for creating applications for iOS first and Android second, since Android devices can read Flash. This might change in the future, however, as HTML5 provides a video player without Flash. For the time being, it is still unlikely that PSBs will completely abandon apps in favour of responsive web design.

Bearing in mind that most video players use Flash, it comes as no surprise that the majority of apps available are made specifically for on-demand and streaming services. In other words, the apps are seldom 'complete' in the sense that they would feature the exact same content as the PSB website. Instead, most have opted for creating separate news, educational and children's apps. Responsive web design might, to some extent, render news apps unnecessary; on the other hand, providing an official app can be an effective way of committing users to reading news more often.

As a side note, some PSBs also provide so-called Connected TV apps for either Samsung Smart TV, HbbTV or Sony Bravia. Additionally, some apps are also available for game consoles, mainly for Microsoft's Xbox and Sony's PS3. The purpose of these apps is perhaps slightly different, as they try to get viewers to use an existing platform (television) more effectively and more diversely instead of trying to reach the audience on as many different platforms as possible. These apps will not be discussed further in this study, as regulation regarding Connected TV is still quite unclear.²⁴

²⁴ See the Green Paper on Connected Television (EC, 2013).

4.2 Social networks

With around 250 million²⁵ Facebook users and counting, social network penetration in Europe is remarkably high (Internet World Stats, 2013). As 50 per cent of a country's Internet users are probably already on some sort of social network site, it is rather self-evident that PSBs will have at least some social media presence.²⁶

Table 7 Social network user penetration in Western Europe, by country, 2011–2017 (eMarketer, 2013)²⁷

Country	2011	2012	2013	2014	2015	2016	2017
Netherlands	59.5%	64.7%	69.6%	71.8%	74.4%	76.1%	77.3%
Norway	59.0%	64.3%	69.2%	73.0%	75.5%	77.9%	79.8%
Sweden	54.4%	59.6%	64.5%	68.2%	70.8%	73.2%	75.1%
Finland	46.7%	51.7%	56.3%	59.9%	63.0%	65.3%	67.2%
Denmark	46.5%	51.4%	56.0%	59.5%	62.6%	65.5%	67.3%
UK	43.5%	47.7%	50.2%	52.6%	53.9%	55.0%	55.6%
Spain	33.1%	37.2%	41.2%	44.5%	46.9%	49.2%	50.8%
Germany	31.5%	35.9%	39.9%	42.8%	45.1%	47.2%	48.9%
France	30.6%	33.5%	35.9%	37.8%	39.1%	40.3%	41.2%
Italy	25.9%	29.6%	32.6%	35.0%	36.8%	38.3%	39.7%

Two observations are worth noting. First, nearly all PSBs provide buttons for sharing content on social networks. Facebook and Twitter are featured on almost every PSB's website. Some have decided to include Facebook statistics in 'likes' and 'shares', while others simply make sharing possible. Although Google+ has failed to engage users to the same extent as Twitter and Facebook, a number of PSBs also provide the possibility of sharing articles and programmes on Google+.

Some PSBs are consistent in their use of 'share buttons', but others have specific social media networks listed on different channel websites. This makes sense, as certain channels wish to target specific users (such as young adults) and therefore try to match what social networks these target groups are using. For example, the image-sharing site Pinterest might be featured on the entertainment channel's website but not on the main news site. Some broadcasters also use regionally popular social networks.²⁸ YouTube is also actively used, especially by Italian RAI and Spanish

²⁵ This statistic includes countries that are not within the scope of this study, such as Russia, Belarus and Serbia, for example.

²⁶ According to an EC (2012, 46) report, 42% of Europeans use online social networks at least once a week.

²⁷ These estimates vary between different sources. This is likely due to the fact that the exact definition of what a 'social media network' is and what networks one takes into account can affect the results greatly.

²⁸ For example, Hyves (the Netherlands), Draugiem (Latvia), Nasza Klasa (Romania

RTVE. For the 2008 Spanish General Elections, RTVE created a YouTube channel and invited citizens to submit questions to candidates via video, which were then broadcast live on television (Medina & Ojer, 2011, 91).

The full extent of social media accounts within the PSBs is difficult to assess, since individual programmes, journalists and even soap characters might have their own personal accounts. A 2010 survey of NRK's news services' use of social media revealed 30 accounts on Twitter and 20 on Facebook, and these did not even include the individual accounts of journalists (Moe, 2013, 118).

Although all PSBs have at least some social network presence, their approaches to these sites differ slightly. Some provide links to their social network channels at every opportunity (follow us on Twitter, join the discussion on Facebook), while others, such as DR in Denmark, NRK in Norway and SVT in Sweden, tend to avoid reference to the social networking sites, at least on their main sites (programmes might still advertise their Facebook pages, for example). This was not always the case, however. Moe (2013, 118) points out that '[b]y late 2010, invitations to join NRK programs on Facebook and Twitter were routinely put on the top of specific program pages on nrk.no'. Three years later, the approach taken towards promoting social networks has been significantly toned down. According to Moe (2013, 119–120), the Norwegian broadcaster has matured from an experimental stage and has now entered into a 'second phase' that is characterized by a more strategic approach in line with the organization's strategy. In late 2012, NRK also revised their internal guidelines for social media activity (Moe, 2013, 119).

In Sweden, the Media Authority found that SVT was guilty of undue promotion of commercial interests when it mentioned Facebook in a broadcast, which violated the Television and Radio Act (Moe, 2013, 119). SVT argued that Facebook was like a public square, but the Media Authority did not accept this explanation, and the public broadcaster was instructed to revise their principles for promoting participation in social networks. In Denmark, DR's 'viewers and listeners' editor' (*Lytter- og seerredaktør*), Jacob Mollerup, sometimes referred to as DR's own watchdog, criticized DR's uncritical approach to Facebook. The primary concern was that of accessibility, and that DR, to some extent, provided content on its Facebook pages that was not available on the main site (Mollerup, 2011). Mollerup also stressed the need for basing social media presence on editorial grounds so as to avoid indirect marketing of social media networks. As a result of this critique, DR incorporated new internal guidelines for DR's use of social media in September 2012 (*Lytternes og seernes redaktør*, 2013, 5).

The difference between Scandinavian PSBs and French broadcasters Radio France

and Poland,) Tuenti (Spain), Wykop (Poland), Dailymotion (France) and Svejto (Bulgaria).

and France Televisions is remarkable. Radio France and France Televisions seem categorically to provide links to all kinds of social networking sites.²⁹ Radio France is also one of the very few broadcasters who have tried to create their own social network, *Votre vu d'ici*, a localized media-sharing service where users upload photos and video clips which are then geographically located and placed on a map. The site does not seem that popular, however, as new updates are only uploaded every few days. Such a service could not exist in other countries. In Austria, there is even a total ban on creating own social media services and ORF has also been excluded from using Facebook. The exclusion of using social media has been withdrawn by the Constitutional court in 2013 and returned to the Court of first instance, where a decision is yet to be made (Trappel, 2013). In Germany, it is not certain whether a PSB may provide a social media service of their own, as discussion forums without editorial supervision are forbidden (ARD, 2013).

4.3 Online archives

Online archives containing older productions for radio and television have started to surface over the past few years. A generally accepted definition of an 'online audio-visual archive' does not exist, and there are many types of online archives available. However, for the purposes of this study, for a service to be defined as an online audio-visual archive, it must fulfil the following criteria:

- Access is provided to full television and/or radio programmes (completeness criteria).
- Programmes must span several decades (historical criteria).
- Access to archived programmes is not limited in time (access criteria).

The online archive is thus seen as separate from the on-demand services and often includes an additional service, such as staff recommendations or other curated content.

The Nordic countries have been pioneers in this respect, largely due to the extended collective licensing agreements that PSBs and copyright collectives have signed. These agreements make it easier for broadcasters to obtain online publishing rights for works that were produced before the Internet. In a position paper by Nordic PSBs (2009), the importance of having a 'one-stop-shop' for clearing copyright rights is stressed. Especially television productions include, *inter alia*, writers' rights, actors' rights, music rights and producers' rights, easily amounting to up to a hundred rights holders in total. Finding each and every one and signing new contracts with the rights holders is difficult, especially if the production was made 30 years ago. The collective licensing system allows public broadcasters to make contracts with copyright

²⁹ Radio France is on at least Facebook, Twitter, Soundcloud, Instagram, Dailymotion, Pinterest and YouTube.

societies without the need to contact every single rights holder personally.

There are over 2.2 million television programmes and 10.5 million radio programmes in the archives of European broadcasters, and for the most part, they lie collecting dust (Representation of Nordic PSBs, 2009). Giving these programmes new life online is thus in the public interest.

In Denmark, a collective license for archives was introduced in the Danish Copyright Act that made an agreement on online archives with copyright collective Copy Dan and DR possible (Nordic PSBs, 2009). DR's online archive, Bonanza, is one of the most extensive online archives in Europe. The archive is even accessible from abroad and the programmes have been viewed over 30 million times as of August 2013 (DR, 2013). The archive contains only DR's own productions and co-productions that are more than seven years old and, for drama productions, the time limit is ten years (DR, 2013).

Table 8 Online archives of Nordic public service broadcasters

Broadcaster	Name of service	Type of programming	Full programmes available	Launched
SVT	Öppet arkiv	TV	100–1000	2013
SR	Minnen	Radio	1000-5000	2004*
DR	Bonanza	TV and Radio	10,000+	2008
YLE	Elävä arkisto	TV and Radio	100–1000	2006

* SR Minnen is also a radio channel, and not only a web service.

Only eight of the broadcasters studied had proper online archives, and unsurprisingly, the Nordic archives were the most extensive. NRK did not have a proper online archive, however. The PSBs with online archives are Finland's Yle (*Elävä arkisto*, the 'Living Archive'), Sweden's SVT (*Öppet arkiv*, the 'Open Archive') and SR (*Minnen*, 'Memories'), Denmark's DR (*Bonanza*), Lithuania's LRT (*Mediateka*), Spain's RTVE (*Filmoteca* and *Fonoteca*), the BBC (*Archive*) and Switzerland's SRG SSR (*Archives*). Interestingly enough, Swiss broadcaster SRG SSR only provides an online archive on its French site (rts.ch), while the German site (srf.ch) and the Italian one (rtr.ch) have no online archives.³⁰

LRT's archive is integrated with its on-demand service, Mediateka. Some PSBs are already in the process of creating new online archives. For example, Cyprus PSB CyBC has commissioned a new archive and has issued an EU-wide call for tenders (eProcurement, 2013).

³⁰ SRG SSR has an archive for radio broadcasts with over 10,000 clips available from 2005 (SRG SSR, 2013).

While many PSBs have some older broadcasts (usually beginning from when the on-demand services were launched), LRT's archive differs in that it provides full access to much older programming, for example, to movies from the 1960s. From a user's perspective, it would be better still to separate the online archive from the on-demand content, as there is a risk that people might not be aware of the archived content. A completely separate online service for the audio-visual archive is thus preferable.

Swedish broadcaster SVT's 'Open Archive' actively promotes programmes to the site's visitors, so that younger viewers are more likely to stumble on hit shows from the past than if the programmes were just listed alphabetically or by year. There are about 550 programmes in SVT's archives to date, and the service costs about 45 million SEK (€5.1 M) annually (Norberg, 2013). Swedish radio has also invested a significant sum (100 MSEK or €11.4 M) to digitalize its central archives, of which 8 million SEK are used to make the archives accessible to the public. The public can access part of the archives online on *SR Minnen*, where there are an estimated 1500 full programmes and 10,000 clips (SR, 2013).

Differences in legislation can, at least partly, explain why there are big differences in the quality of online archives. In countries where a collective licensing system is not in place, the maintenance of an online archive is cumbersome and expensive. Clearing the rights for the BBC's entire archive would, according to estimates, require 800 staff working for three years at a cost of £ 72 million (€86 M) (Kirkham, 2010, 34). Even re-clearing existing licenses of a limited scope is a significant cost, which amounts to 250,000 person hours a year at a cost of over £ 4.5 million (€5.4 M) (Kirkham, 2010, 34). Due to the present system, the BBC has to seek clearance on a case-by-case basis and there have been difficulties in acquiring online licenses for programmes that were broadcast before 2002 (Kirkham, 2010, 33, 35).

This particular difficulty would also explain why most broadcasters do not provide extensive online archives of older material. It is quite common for broadcasters to provide access to slightly older content that has been produced after the introduction of on-demand services. Others have taken a more historical strategy and provide access to really old programming, yet few productions from the 80s or 90s are included in the archives.³¹ In some countries, another institution is vested with the responsibility of archiving audio-visual material. In France, for example, the National Audiovisual Archive (*l'Institut national de l'audiovisuel*) provides access to old television programmes, but its online archive is quite limited (INA, 2013). The National Audiovisual Archive's focus might be more historical than entertaining, however.

³¹ Spanish broadcaster RTVE is a good example. The Fonoteca and Filmoteca archives for radio and television span from 1943–1981. The archives consist mostly of news and documentaries, but some short films and a couple of feature films are also included.

Another issue is that of clearing rights for several countries. Despite aiming for a single market, copyright still has to be cleared for all Member States separately (Hugenholtz, 2010, 51). This problem is recognized by both the Commission and copyright collectives (see e.g. Trettenbrein, 2010; Despringre, 2010), and therefore it is possible that this issue will be resolved in the foreseeable future. Presently, a new EU Directive for the collective management of copyright is in the making, which might make it easier for PSBs to make archives accessible online. The Commission's Proposal is presently being discussed in the European Parliament (2013).

4.4 Educational websites

Educational websites are a strong part of the public service tradition. Providing educational content online makes perfect sense: The Internet makes interactivity possible and all educational content may be equally distributed across the platform. Educational content is seldom on prime-time television or radio, and is thus marginalized to less-attractive timeslots and providing the content online is a highly practical solution to the problem. The aim to educate is often stated as one of the key missions of PSBs, regardless, PSBs seldom provide educational content online. Only nine of the public broadcasters examined had educational websites: the BBC (UK), Yle (Finland), UR (Sweden), NRK (Norway), TVP (Poland), RAI (Italy), France Televisions, DR (Denmark) and SRG SSR (Switzerland).

Other broadcasters may present science news as a separate category, but these sites often lack a pedagogical characteristic. It is characteristic for the educational websites to combine multimedia content with more traditional articles. While some sites are more focused on schoolchildren (NRK Skole, UR), others are clearly more oriented towards adult education (BBC Learning, RAI Edu). TVP launched their educational website in August 2013, which shows that providing educational content online is still a priority for broadcasters, and that other broadcasters may follow suit and publish educational sites of their own. The BBC has the widest range of games and interactive content on their website; however, most of the content has not been updated since 2011. Many PSBs also have an extensive partnership with academia. DR's *Danskernes Akademi* (The Danes' Academy) features various researchers presenting their focus of study in 3-minute video clips. These clips are professionally produced, while, for example, RAI features videos of researchers with significantly lower video and audio quality.

It is worth noting that the BBC was to launch an online learning service for 5–16-year-olds, BBC Digital Curriculum (later branded as Jam), but the newly instated BBC Trust decided to terminate it in 2008 before it was fully operational (Michalis, 2012, 944). According to Michalis (2012, 945), the service and its termination represents 'probably one of the most controversial pages in the history of British public service broadcasting'. The termination of the service was largely due to

complaints from commercial educational suppliers, such as publishers and educational software providers (Michalis, 2012, 946). Although a market impact assessment by PricewaterhouseCoopers showed that the service would stimulate the market rather than affect it adversely, private sector criticism did not decrease (Michalis, 2012, 947). In the aftermath of the soft launch of the service in 2006, commercial interests approached the EC, which proceeded to pressure national authorities to review the service (Michalis, 2012, 951). As nothing happened, the BBC Trust decided to intervene and it shut down the service in March 2007 (Michalis, 2012, 951).

The case of the BBC Digital Curriculum might be instructive in finding arguments for why most PSBs in Europe have decided not to include educational material on their websites. First, it may be argued that education as such is not one of the core missions of the PSB, even though 'educating' is. Second, some may argue that the private sector already covers the area of education, and thus an educational portal would be superfluous. Third, publishers may argue that free educational content distorts the market for educational publications and learning materials. What is perhaps telling is that these arguments form part of a competition discourse. Nevertheless, it would be much more difficult to argue against the potential public value of such a service.

5 Alternative sources of income

PSBs have clearly intensified their online expansion, but contrary to privately owned media corporations, the primary purpose has been to be more accessible instead of finding new revenue streams. Nevertheless, the Internet does open up for a whole range of commercial activities that, depending on national legislation, fall within the scope of permissible funding of the broadcaster. In most cases, these activities are merely sidelines of minor financial importance, but they cannot be disregarded for that reason alone.

PSBs that are partly financed by advertising can, for example, receive additional income from both online banners and so-called pre-roll ads for online video. Additionally, web services, such as VOD or web shops, can be a source of additional income. It may be noted, however, that these business ventures could not finance all of the online activities of any PSB in themselves.

5.1 Commercial on-demand services

Although still uncommon, some PSBs have decided to provide commercial on-demand services: German-French broadcaster Arte, France Televisions, Flemish broadcaster VRT, Polish TVP and (mostly) commercial public broadcaster TV 2 in Denmark.

Arte and France Televisions showcase a combined model: content is available for free for seven days (catch-up service), after which the programmes may be either bought or rented. The pricing of Arte's VOD service and France Televisions Pluzz VAD (short for video à la demande) depends on the programme, but is usually between 1 and 5 euros, with a higher price paid for buying than renting. Pluzz VAD was launched in 2012 and it has also been launched on other platforms, including Dailymotion and Freebox (IPTV) (Cousin, 2012). What is exceptional is that Pluzz VAD and Arte VOD are completely commercial services, meaning that they offer programmes that have never been shown on the main channels as part of broadcasts. In other words, they are in direct competition with video-streaming services such as Netflix or HBO. Netflix is yet to launch its service in France, but France Televisions has local competitors instead, Allociné and French telecom Orange, for example. Pluzz VAD is only available in France, while Arte's VOD service is subject to some location-based restrictions.

Polish broadcaster TVP relies heavily on private income, which is why it comes as no surprise that part of the content that is available on demand, such as sports, is not available for free. TVP used to have a 'technical fee' for accessing the VOD service from abroad – 12 zloty per month (€2.90), but this fee has subsequently been removed (TVP, 2013a). The service can be accessed from other European countries as

well. TVP offers different ‘packages’ for buying episodes of series or films, which are then available for 24 hours: Depending on the package bought, one episode costs between 3 and 6.15 zloty (€0.70–1.50) (TVP, 2013b). Access codes can also be bought via SMS, which is the most expensive alternative. The SMS service is also available in Germany (€1.99), Ireland (€2) and Great Britain (£ 1.50) (TVP, 2013b).

Table 9 Commercial VOD services

Country	Belgium	Poland	Germany and France	France	Denmark
PSB	VRT	TVP	Arte	France Televisions	TV 2
Type of service	Catch-up for 7 days and on demand.	Pay-per-view, episodes available for 24 hours after transaction.	Catch-up beyond the 7 days that are available for free.	Catch-up beyond the 7 days that are available for free.	On-demand and live streaming.
Price	€5.95/month for catch-up, 0.50–1 for one episode on demand.	€0.70–1.50 per episode, depending on package deal. SMS service also available, but it is more expensive.	€1–5 per episode or film, higher price for buying episodes than renting.	€1–5 per episode or film, higher price for buying episodes than renting.	€16/month for all channels, €10.60 for either live or on-demand services and €5.20 for live streaming of the main channel.

VRT is an interesting case as its on-demand service is solely offered via digital television³² and only available after payment, with a few exceptions. News, weather reports and the current affairs programme *Terzake* and youth news programme *Karrewiet* are offered for free. *Net gemist*, the catch-up service, allows viewers to access most programming for up to seven days for a fee of €5.95 per month.³³ *Ooit gemist*, the VOD service, costs between 50 cents and 1 euro for access to one episode (VRT, 2013).

Privately funded PSB TV 2 in Denmark provides a subscription-based service for its

³² The following providers of digital television are listed: Telenet Digital TV, Belgacom TV and SNOW (VRT, 2013b).

³³ This is subject to some copyright restrictions.

on-demand television. TV 2 offers six channels in total: TV 2 NEWS, TV 2 Charlie for entertainment, music and series, TV 2 Zulu for comedy and satire, TV 2 FILM, TV 2 Fri for shows related to outdoor activities and TV 2's main channel that spans all categories (TV 2, 2013). TV 2 has divided its offer into live access and on-demand access on a service called TV2 Play. To access all channels live and on demand, Danes have to pay a fee of 119 DKK (about €16), 79 DKK (€10.60) to access either live streaming or only the on-demand service and 39 DKK (€5.20) to see TV 2's primary channel live online (TV 2, 2013b). Some foreign productions are only available for seven days, but otherwise, the deadlines for watching programmes vary greatly.

It is understandable that broadcasters that rely heavily on commercial income would offer commercial VOD services. It allows for content that is more diverse and covers costs for obtaining online licenses. It is therefore slightly surprising that one of Europe's best-funded broadcasters, France Televisions, has opted-in for providing a service that directly competes with commercial equivalents, even to the extent that the same series and films may be offered. On the other hand, it is highly convenient for French viewers to be able to access all content on one platform. It is still unclear how much revenue Pluzz VAD will generate for the French broadcaster, but the market research institute GfK estimates that the French VOD market was worth €191 M in 2012 (Pascoal, 2013). Media research company Mediametrie (2012) has estimated that 13.4 million people use commercial VOD services. Bearing in mind that Pluzz VAD has several competitors, a market share of anything between 10 and 25 per cent is likely. On France Televisions, with annual revenue of over €3 billion, the financial impact is likely to be minimal, but significant effects on the French VOD market are to be expected.

All in all, the practice of providing commercial VOD services is not very common and, looking at the French example, any PSB willing to engage in such commercial activities is likely to affect the domestic market heavily. In countries where the financial activities of broadcasters are more tightly regulated than in France, it is unlikely that such services will see the light of day. On the other hand, it is far more common for PSBs to have web shops (see subsection 5.3) with books and DVDs, and digital distribution of these same products might not be such a big step after all.

5.2 Web shops

Most PSBs in Europe have some sort of web shop. Figure 3 shows that, in most European countries, at least one of its public broadcasters has a web shop containing DVDs of the broadcasters' shows, books and various merchandise such as clothes, pencils and other items branded with either the PSB logo or the logos of one of the PSB's shows. The books are usually side products of television shows, for example, children's books that are based on the same concept as the youth programming. Many marketing products are also available. It is slightly dubious as to whether or not

selling programme-branded clothing actually contributes to fulfilling the broadcasters' public service mission. Of the 46 PSBs surveyed, 27 had web shops.

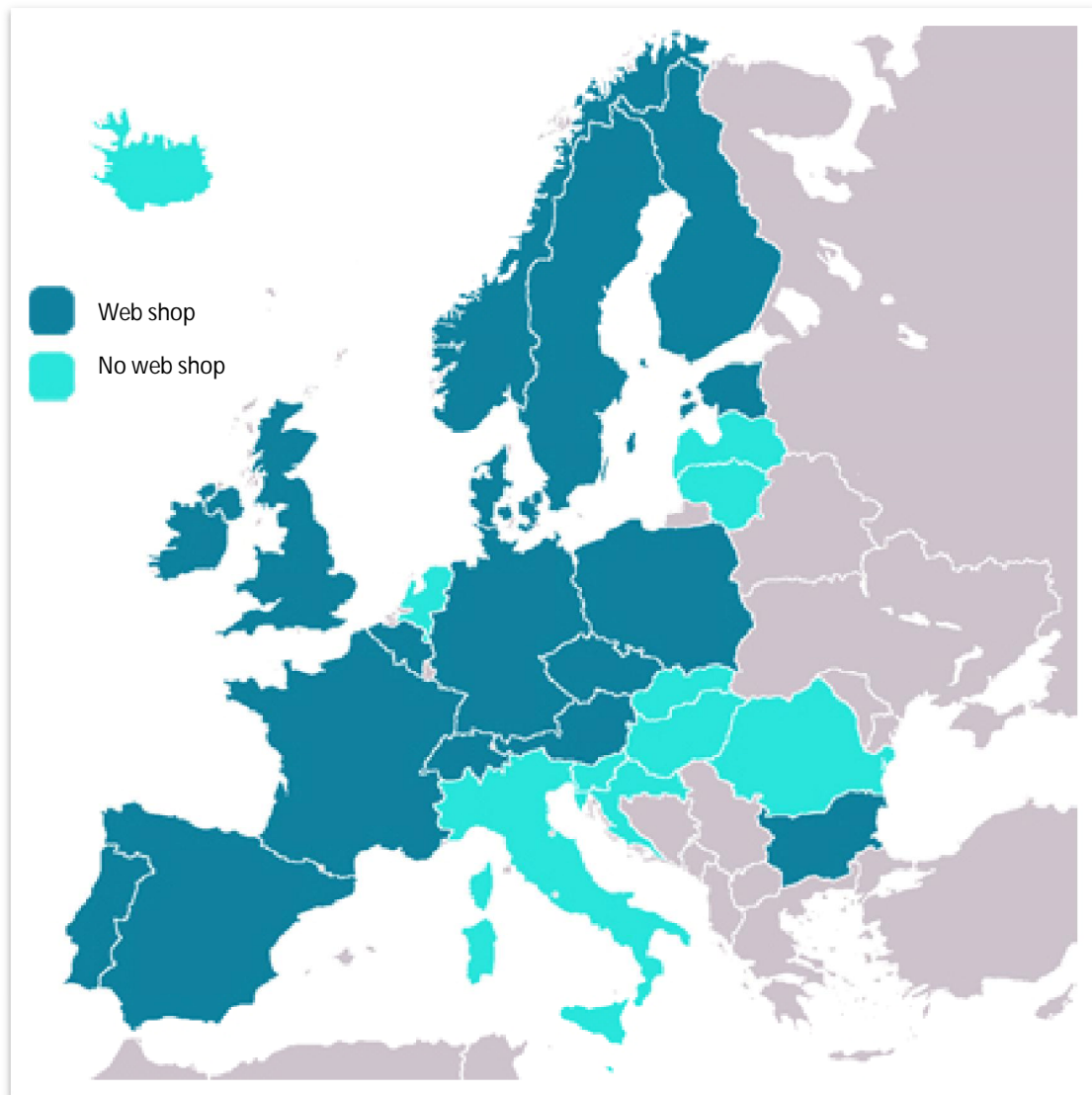


Figure 3 PSB web shops in the EU, including Norway, Iceland and Switzerland

The web shops usually qualify as side activities and their impact on the broadcasters' finances is usually minimal. For example, NRK's subsidiary company for commercial activities, NRK Aktivum, reported an income of 66 million NOK in 2012 for selling services and products, which equals roughly 8 million euros (NRK Aktivum, 2013, 2). Similarly, Irish RTÉ's total income from 'content, merchandising and related sales' amounted to nearly €11 M (RTE, 2013, 93). BBC Worldwide Ltd, which benefits from a global audience and a large domestic market, reported an income of £ 211 M (€253 M) for selling consumer products in 2012, but consumer products is still a smaller business than the international television channels (£ 344 M) or sales and distribution of content (£ 293 M) (BBC Worldwide, 2013, 67). However, the sale of

goods (£ 49.1 M) is more profitable than the channels (£ 42.3 M), even though the overall income from sales is lower. Operating costs are clearly quite high for the web shops, which means that PSBs cannot really rely on the commercial income to increase their yearly budget. This would also explain why SVT discontinued its web shop in 2012.³⁴ Most PSBs also choose to list the income from their web shops under ‘other income’, meaning that sales figures are not specifically disclosed.

Although advertising is usually banned in most countries, self-promotion is not. This means that, in theory, the broadcaster could promote items in their web shops alongside editorial content. This practice seems uncommon, however, and the web shops are sometimes hard to find, as they are not necessarily promoted on the main website, but are more easily found via search engines.

It is also somewhat odd that commercial VOD services are much more uncommon than web shops. The broadcasters could easily transition from providing access to older shows online instead of issuing DVDs, which, arguably, are probably more expensive for the broadcaster. The answer might be that PSBs sell their programmes to existing VOD services instead of providing a service of their own. For example, RTÉ in Ireland sold its productions to Netflix (RTE, 2013, 50). This means, however, that only the most popular series will be available on demand.

5.3 Online advertising

Online advertising on public broadcasters’ websites is fairly common in Europe, usually taking the form of web banners that direct users to third-party websites.

Figure 2 shows that a slight majority of countries have advertisements on their websites (24 against 22). The image shows that the countries with the shortest tradition of public service broadcasting nearly all allow advertising on the public broadcasters’ websites. This was not always the case, however. In a widely debated decree from 2009, President Sarkozy decided to ban advertising from France Televisions (Radio France was unaffected) between 8pm and 6am (Saez, 2010). The initial plan was to introduce a full ban on television ads, but advertising was permitted during the day due to a budget deficit of 300 to 400 million euros. During the summer of 2013, the debate resurfaced, and advertising after eight seems to be on the table again (Renault & Debouté, 2013). Nothing has been said about online advertising, however, but it is likely that a removal of the ban would also affect online advertising.

³⁴ Swedish Radio still has a web shop, which explains why Sweden is still registered as a country with PSB web shops.

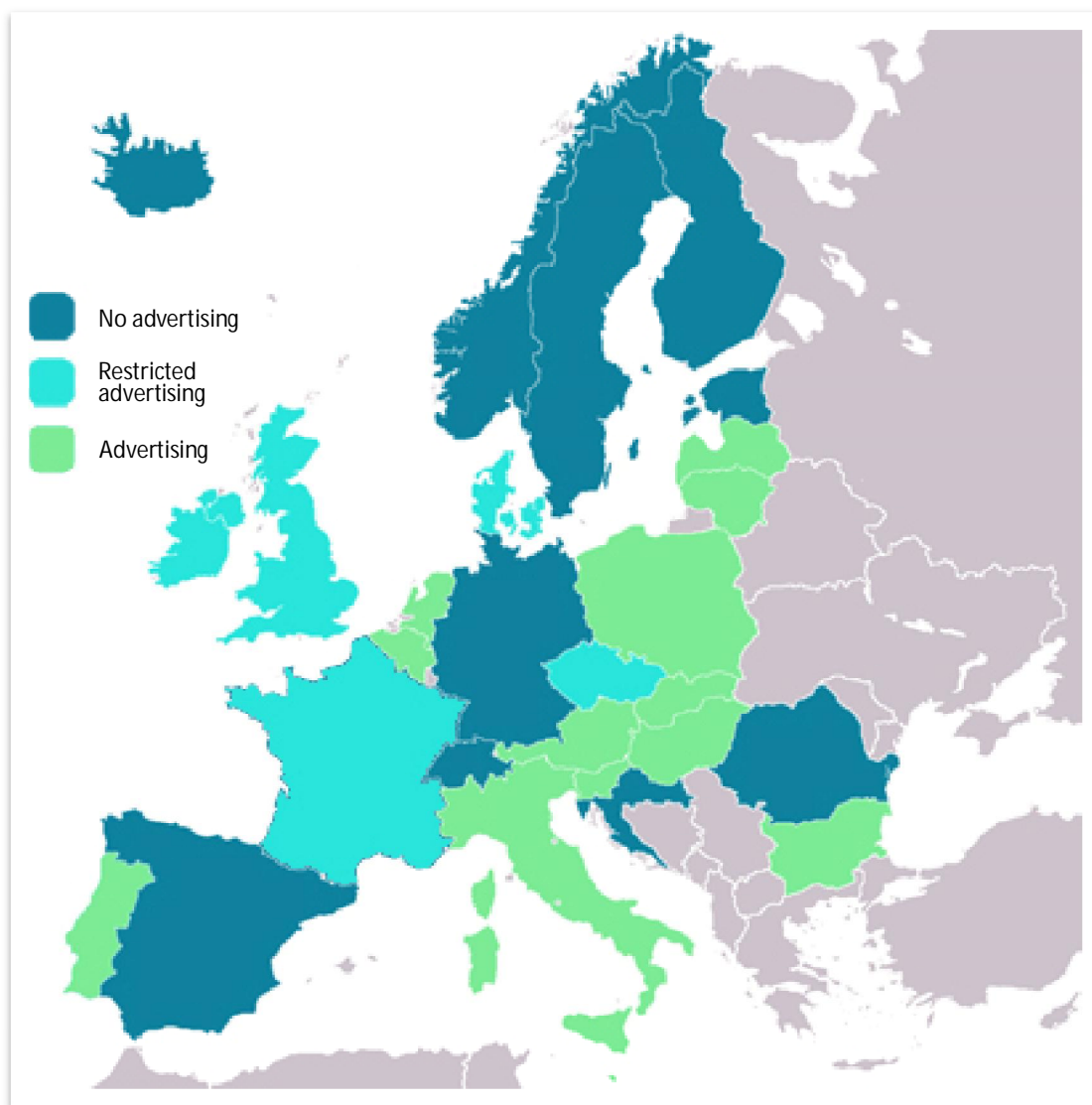


Figure 2 PSB online advertising in the EU, including Norway, Iceland and Switzerland

As noted above, Radio France still has advertising, including some banners on their websites. However, only 6 to 7 per cent of Radio France's annual income comes from advertising, amounting to about 40 million euros (Radio France, 2012b, 74).³⁵ The Spanish government banned advertisements from RTVE in 2010, inspired by the French example and encouraged by private broadcasters (Brevini, 177, 2011). It is not sure whether or not the ban will last, as government officials have also implied that there may be the possibility of removing the ban (Del Valle, 2013).

Austrian ORF has also limited its online advertising to its television site, but then again, ads are also shown in mobile applications. The rules for advertising are laid down in Article 18 of the ORF Act. For example, online advertising income may not exceed 4 per cent of the license-fee income in the preceding calendar year (5% from

³⁵ Radio France does not disclose how much of this comes from online advertising.

January 2016 onwards) (ORF Act, art. 18[1]). BBC Online is ad-free for British visitors, but shows ads to visitors residing outside the UK. In Denmark and Ireland, one of the broadcasters shows ads (TV 2 and RTÉ, respectively), while the other does not (DR and TG4).³⁶ TV 2 is, however, mostly financed by advertising and receives public funds only for its regional output. In that sense, one can say that advertising in Denmark is more restricted than in Ireland.

Austrian ORF has actually been able to increase its online advertising income by 7.7 per cent (RTR, 2013, 145). The net revenues were, nevertheless, only €9.7 million in 2012, which is less than 3 per cent of all advertising income. Online advertising expenditure was €160 million in Austria in 2012, meaning that ORF's share was about 6 per cent (RTR, 2013, 145). Similarly, RAI (2013, 172) reported an online advertising income of 6.6 million euros in 2012, less than 1 per cent of RAI's combined advertising revenues. This is a noteworthy increase from 2011, when online advertising sales were only 5.4 million, but the income would have to increase significantly to cover the decline in television advertising revenue (RAI, 2013, 172). Although few broadcasters disclose how much of their budget is used on online content (when made known, it is usually between 5 and 10% of the content production budget), it becomes clear that online advertising hardly covers the production costs, especially in smaller countries. The BBC could be somewhat of an exception, as its website is accessed by a worldwide audience.

Looking at the negligible income that online advertising generates, it is debatable whether its presence is worth the outcry from commercial publishers and broadcasters. VOD is still in its infancy, which means that even the most popular programmes online pale in audience numbers compared with the least popular programmes on television. Online advertising income reflects this, and the easy access to ad-blocking add-ons for browsers makes the situation even more difficult.³⁷

³⁶ There are plans to privatize TV 2 but no suitable buyer has been found.

³⁷ For example, Adblock for Google Chrome has over 15 million users worldwide (Google, 2013).

6 Concluding remarks

The purpose of this report was to map the online services and their regulation in Europe. To that end, 46 PSBs were examined, of which the Nordic countries and Germany, Austria, Switzerland, the UK and France were chosen for more thorough analysis.

In the introduction of this study, Steemers and D'Arma's hypothesis that financial resources are more likely to limit online innovation of PSM than legal restraints was presented. While that may be true in some countries, this report shows that strict regulation can have adverse effects on innovation as well. The German-speaking countries within the EU and the EEA have the most heavily regulated PSM within the region: negative lists of services that cannot be provided, strict time limits for programmes on catch-up services and bans on 'press-like' services as well as local news reporting. Even with those bans taken into account, especially ORF's and ZDF's websites are among the least developed in Europe. Economic restraints cannot be the issue, as these broadcasters are two of the best financed within Europe.

Furthermore, the practice of pre-screening new services seems to have solidified its position in European media legislation, yet implementation remains incomplete. Complaints from the private sector have resulted in an increasing number of countries introducing the *ex ante* test. It is unclear whether there is enough domestic political will to implement the test effectively. Three trends point to this: First, there has been a lack of initiatives requiring testing in the last couple of years. For example, the PVT in the UK has not been used in several years, and Belgium, Sweden and the Netherlands have not carried out full *ex ante* tests. Similarly, Denmark has not tested a single service in three years; however, two tests are currently in the pipeline. Nevertheless, the tests are probably not going to be retracted, even though few services are likely to go through the pre-evaluation procedure.

Second, PSBs are reluctant to subject themselves to the testing procedure and are critical to the test. Since the PSB drafts the services that ultimately will be submitted for evaluation, this might have the implication that broadcasters are simply planning their services differently in order to escape the pre-screening procedure. In some countries, a service's significance is partly defined by its cost, usually 2 per cent of the annual budget. However, Internet services are not likely to reach the 2-per-cent threshold, as the online activities as a whole hardly ever amount to more than 5 per cent of the budget. For this reason, it is more likely that traditional services, such as new channels, will be tested more often than online services. Bearing in mind that most *ex ante* tests were introduced because of a fear of unlimited PSB online expansion, one may speculate whether the *ex ante* test has actually realized its initial goal.

Third, testing is expensive, especially the market impact assessment, with costs ranging from 50,000 to over 1 million euros. Although some of the services have been modified as a result of these evaluations, nearly all have eventually been accepted. Is this rigorous testing and use of public funds proportionate to the possible legitimacy gains? PSBs often refer to the interests of their viewers and the need to use the income from license fees (or other public income) in a way which benefits their viewers and listeners. It is therefore slightly questionable whether *ex ante* tests, which are often funded by license fees, benefit the greater public. A significant aim with the *ex ante* test is to secure business interest, which is why the test was instated in the first place. In other words, the *ex ante* test is advancing private interests with public resources that should be used to produce better editorial content.

Additionally, the testing procedure, when prolonged, greatly impedes fast innovation in the online environment. If the evaluation of a new online service takes over a year, that service may already have become out-dated by the time it is approved. Finally, there is the question of choosing relevant markets for the market impact assessment. A new service by a public service broadcaster may have negative effects in one sector but positive in another. How the relevant markets are defined are crucial for the results of the market impact assessment. Corporations suspecting negative effects and unfair competition are likely to voice their concerns very loudly, while positive effects might not be as regarded to the same extent, since they may not be foreseeable and lack clear advocates. Finding a balance between a) the costs of the test, b) its duration and c) in what cases it should be employed is consequently of utmost importance.

Some countries (Cyprus, the Czech Republic, Belgium [W] and Poland) are presently planning to introduce *ex ante* tests, and it will be interesting to see to what extent the experiences from other countries are taken into account. The least time-consuming and most cost-effective solution seems to be a dual model: a separate body performs the public value assessment, while the competition authority performs the market impact assessment. In cases where the evaluation of a new service has been highly prolonged (lasting over a year), it has usually been the result of lengthy political deliberation.

In terms of services, the traditional role of the broadcasters is also reflected in the online offer. Almost all broadcasters provide web news, and the vast majority of broadcasters offer catch-up services. Programmes are available for slightly longer in the Nordic countries than in continental Europe, where a seven-day deadline is quite common. Foreign productions are, however, almost always available for only a week. Television programmes are virtually never available for download, which is clearly a disadvantage for viewers. Whereas regular broadcasts may be easily recorded, Internet webcasts are not available. In practice, this distinction is arbitrary, as computers fitted with TV cards may easily record programmes, but downloading the same content via the Internet is not possible. It is questionable as to whether the idea of technological neutrality is fulfilled in this respect. Furthermore, even if PSBs

themselves do not have programmes available for download, programmes that can record online video streams are readily accessible. Similarly, geoblocking may be avoided by using proxies from other countries, thus changing the user's IP address.

The use of social media networks and applications reflect market conditions: The social networks with the greatest market share (i.e. Facebook and Twitter) are used by nearly all PSBs and, similarly, most broadcasters have apps for either Apple iOS or Google Android devices. Both cases display dependence on private companies listed outside national borders. Social networks provide an excellent platform for interacting with audiences, but at the same time it results in continuous promotion of for-profit corporations. Critical discussions about the use of social media have ensued particularly in Denmark and Sweden. Similarly, PSBs have to choose for which operating systems they create apps, and in the process strengthening the oligopoly of a few key players. However, with responsive web design becoming increasingly popular and modern tablet devices supporting either Silverlight or Flash, PSBs might choose to stop providing apps and instead focus on streamlining their websites so that they work on all devices. This particular strategy is already (partly) employed in Sweden. The increased use of commercial social networks is not the only public/private crossover that the new media climate has brought forth. In the UK and France, radio channels are teaming up with streaming services, or at least integrating their services with the likes of Spotify and Deezer. Although no one benefits financially from this deal, this still means increased media exposure for private corporations. On the other hand, the services are probably to the audience's liking. It is highly probable that other broadcasters will be inspired by the French and British examples and enter into similar partnerships.

Rather surprisingly, services that could benefit the public service mission greatly, such as online archives or educational websites, are still quite uncommon. The lack of archives is partly explained by the difficulties in obtaining online licenses for older content, but it would seem that there is much political will to make more content available. The lack of educational websites is perhaps due to the fact that private sector opposition to educational content has been quite strong (as exemplified by the case of the BBC Digital Curriculum). However, Polish broadcaster TVP recently launched a new educational website, which indicates that perhaps more educational content will be launched on web platforms in the future.

The overall impression is that European PSBs are facing similar challenges across Europe. The online offer varies to some degree, but the basic elements are the same. A multiplatform approach to web news is still lacking, and broadcasters could clearly invest more resources in integrating the different platforms online. Audio-visual content in web news and other articles is used scarcely, although using audio-visual material from broadcasts is what could legitimize the online services of PSBs in the face of the criticism from private publishers. The inability to develop online services may partly be explained by copyright legislation's poor applicability to the online

environment, for instance when it comes to podcasts and making content available offline. However, examples from France and the UK show that PSBs can make agreements with copyright collectives that make offline access to television programming and music in podcasts possible. In order to develop online services, it is thus necessary to progress on three levels. On a regulatory level, online services may be advanced via amendments to EU copyright legislation. On a contractual level, PSBs may enter into agreements with copyright collectives that make offline availability of content and audio-visual archives possible. On a strategic level, PSBs may allocate further resources to online innovation, which is fairly inexpensive compared to launching new television series or channels. Simultaneous development on all three levels could greatly improve the current online service public value in all European countries.

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