ECONOMIC ASSESSMENT OF SANOMA’S STATE AID COMPLAINT CONCERNING VIDEO-ON-DEMAND AND LEARNING SERVICES
AUTHORS

Dr Henrik Balleby Okholm
Tuomas Haanperä
Dr Jouni Sohkanen
Kalle Kantanen
Stephanie Tizik
Hilla Inkinen
Verner Miettinen
PREFACE

An economic assessment of Sanoma's state aid complaint: competitive effects of Yle's Areena and learning material services

On 23rd April 2021, Sanoma Media Finland Oy (hereafter Sanoma) submitted a complaint to the European Commission concerning potentially unlawful state aid received by Yleisradio Oy (hereafter Yle), the Finnish public service broadcaster. Sanoma's complaint concerns two areas of service: Yle Areena, Yle's Video-on-Demand service, and online learning services. DLA Piper Finland (acting for Yle) asked Copenhagen Economics to assess Sanoma's complaint from an economic perspective. Our assessment, presented in this report, focuses on Sanoma's specific allegations regarding adverse effects on competition.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface</td>
<td>0</td>
</tr>
<tr>
<td>Introduction and Executive Summary</td>
<td>6</td>
</tr>
<tr>
<td>1 Overview of the complaint: Sanoma alleges that Yle's services distort video-on-demand and learning services</td>
<td>13</td>
</tr>
<tr>
<td>2 Framework for assessing competitive effects of state aid in the context of public service broadcasting</td>
<td>15</td>
</tr>
<tr>
<td>3 Sanoma overestimates the magnitude of the alleged aid</td>
<td>18</td>
</tr>
<tr>
<td>4 Evidence on market developments is not indicative of significant distortions</td>
<td>23</td>
</tr>
<tr>
<td>5 Sanoma substantially overstates Yle Areena's effects on the use of commercial VOD services</td>
<td>34</td>
</tr>
<tr>
<td>6 There is no evidence to suggest that Yle would distort content markets</td>
<td>53</td>
</tr>
<tr>
<td>7 Sanoma's allegations concerning Yle's effects on commercial learning services are unfounded</td>
<td>69</td>
</tr>
<tr>
<td>References</td>
<td>80</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1 Summary of assessment presented in Chapter 3 .......... 18
Table 2 Yle’s separated accounts........................................... 20
Table 3 Estimated breakdown of Yle’s audiovisual content costs in 2020 ................................................................. 21
Table 4 Summary of assessment presented in Chapter 4 ........ 23
Table 5 Summary of the assessment presented in Chapter 5 .... 34
Table 6 Key steps of Sanoma’s SVOD calculation of the counterfactual number of SVOD subscriptions in the absence of Yle Areena ................................................................. 36
Table 7 Summary of the assessment presented in Chapter 6 .... 53
Table 8 .................................................................................. 61
Table 9 .................................................................................. 64
Table 10 Summary of the assessment presented in Chapter 7 ... 69
LIST OF FIGURES

Figure 1 Yle's total expenditure on Content and Services, € million in 2020 euros ................................................................. 22

Figure 2 Change in consumer preferences: percentage of viewers considering it important to watch TV-content flexibly ......................................................... 25

Figure 3 Evolution of Average Time Viewed ........................................... 27

Figure 4 Evolution of reach 2015 – 2021, selected commercial VOD providers .................................................................................. 30

Figure 5 .................................................................................................. 32

Figure 6 What would have done if Yle Areena was not available? I would watch... ...................................................................................... 43

Figure 7 To which SVOD service would the respondent subscribe in the absence of Yle Areena? ............................................................... 45

Figure 8 Which AVOD services have you used in the past year? .. 47

Figure 9 What would you have done if Yle Areena was not available? I would watch... ........................................................................ 48

Figure 10 Reasons behind not watching more AVOD in absence of Yle Areena .................................................................................. 49

Figure 11 Overlap in Yle Areena and Ruutu viewership – a stylised Venn diagram .................................................................................. 50

Figure 12 What would you have done if Yle Areena was not available? I would watch... ........................................................................ 51

Figure 13 Which AVOD service would you use to replace Yle Areena ......................................................................................... 52

Figure 14 Yle's expenditure on drama in nominal and real terms .55

Figure 15 Comparison of BVOD services' content consumption... 57

Figure 16 Yle Areena viewers' content consumption differs from SVOD and AVOD content ................................................................. 58

Figure 17 Viewers consume content in their first language on Yle Areena ......................................................................................... 59
Figure 18

Figure 19

Figure 20

Figure 21 Employed labour force in mass media industries in Finland, 2008 - 2018

Figure 22 The median percentage change in turnover for TV production companies in Finland

Figure 23 Yle's spending on Abitreenit

Figure 24 Annual revenues of selected providers of matriculation examination preparation services in Finland
LIST OF BOXES

Box 1  International research on PSBs' crowding out effect ........29
Box 2  Sanoma's counterfactual scenario in an international
       context ...........................................................................36
Box 3  Description of the sampling method ....................................40
Box 4  Quantifying the stacking effect ........................................42
Box 5  Statutory obligations and general principles for Yle's
       content offering ...................................................................56
INTRODUCTION AND EXECUTIVE SUMMARY

An assessment of Sanoma’s state aid complaint concerning Yle’s Areena and learning services

Yle seeks to generate public value while ensuring its services do not have distortive effects on the market

Public service broadcasting is identified by the European Commission as a public service. Designated providers delivering these services are eligible for public funding according to the EU Treaty and, as such, are subject to state aid regulation. Member States can provide funding for public service broadcasting, insofar as the funding is aligned with the services defined by the Member State and does not affect trade and competition in the EU against common interest.

Within this legal framework, Yleisradio Oy (hereafter Yle) seeks to discharge its public service remit set. To stay relevant for audiences now and in the future, Yle constantly adapts to ongoing changes in technology and consumer preferences. Any material investments in, and changes to, Yle’s services can potentially affect commercial providers. The effects can be positive and stimulate demand and promote innovation, or they may, if taken too far, have adverse effects on competition to the detriment of consumers. In any case, Yle’s material service changes are subject to rigorous scrutiny before being implemented. A key question is whether competition is significantly affected, and whether any effect on competition is manifestly disproportionate to the objectives pursued.

Sanoma alleges that Yle’s VOD and learning services give rise to market distortions and amount to unlawful state aid

On 23rd April 2021, Sanoma Media Finland Oy (hereafter Sanoma) submitted a complaint to the European Commission concerning allegedly unlawful state aid received by Yle. Sanoma’s complaint concerns two areas of Yle’s service: 1) the Yle Areena, the Video-on-Demand (VOD) service of Yle (hereafter Yle Areena); and 2) online learning services.

In its complaint, Sanoma alleges that the state funding for Yle’s provision of these services grants a selective economic advantage to Yle and distorts competition. Sanoma considers that the funding attributable to these services constitutes aid incompatible with the internal market. According to Sanoma, Yle provides these services for free, entering existing competitive markets and distorting competition on these markets as a direct consequence of their free services. Sanoma further alleges that, due to Yle’s allegedly unlawful activities, Sanoma’s ability to generate revenues is seriously affected. According to Sanoma, Yle crowds out domestic commercial providers who “struggle to survive”.

---

1 Yle Areena offers both a video library and catch-up service where content already broadcast can be watched. Yle Areena also provides audio-on-demand service which contains (most of) Yle’s radio programs and Areena-only podcasts.
2 Online learning services of Yle include Yle Oppiminen, Abitareenit and Tripplet, amongst others.
3 Namely, the existing markets as described by Sanoma are markets for 1) audiovisual content (both linear and non-linear), 2) digital learning materials, and 3) acquisition of broadcasting rights.
4 In this report, we label MTV (owned by Telia), Ruutu (Sanoma) and Elisa Viikku Viislay as ‘domestic commercial providers’ and Netflix, Disney and HBO as ‘global commercial providers’. This is consistent with the labelling in Sanoma’s complaint (para. 86, Table 4).
Copenhagen Economics was asked to assess whether economic evidence supports Sanoma’s allegations of market distortions

Against the backdrop of Sanoma’s complaint, DLA Piper Finland (acting for Yle) instructed Copenhagen Economics to investigate whether Yle’s activities could indeed result in market distortions as alleged by Sanoma. We were asked to assess Sanoma’s specific allegations concerning the adverse effects Yle may have on the VOD and learning markets. While equally relevant, it is beyond the scope of our assignment to assess the public value created by Yle, i.e. the societal benefits against which any distortions should be weighted.

Sanoma’s complaint suggests three main ways in which competitive distortions could arise:

1. Crowding out commercial Video-On-Demand (VOD) - Yle’s free provision of VOD Yle Areena decreases the number of paid Subscription-based Video-On-Demand (SVOD) subscriptions and the viewing of Advertising-based Video-On-Demand (AVOD) to the detriment of commercial broadcasters.
2. Distorted rights acquisition - Yle’s in-house production and acquisition of content rights distorts the functioning of the audiovisual content rights market.
3. Commoditising learning materials - Yle’s free provision of online learning materials commoditises the market for digital learning materials.

The European Union and its Member States, through the Amsterdam Protocol, acknowledge the special nature of the media sector and public service broadcasting, which needs to be reflected in assessment of state aid and distortions created. In particular, the General Court has confirmed that in context of public broadcasting, the aid must affect “competition significantly and to extent which is manifestly disproportionate to the objectives pursued by the Member State” and that such aid should render “it impossible or excessively difficult for a private operator to conduct business in the [Spanish] broadcasting market”.

Generally, an economic analysis of the impact of a state-funded public service on commercial enterprises typically proceeds in steps. First, the affected markets are defined, and their competitiveness is investigated. The magnitude of the aid used to fund the public service is compared with the size of the affected markets and closeness of competition between the public service and the commercial enterprises is assessed. A rigorous economic assessment would seek to establish a counterfactual (i.e. market outcomes in the absence of the aid) and build on testable theories of harm. Sanoma’s complaint includes elements of these steps but, as we explain in this report, generally falls short of substantiating its allegations with reliable, transparent evidence.

Focusing on specific allegations put forward by Sanoma, we sought to inform an assessment of whether Yle’s contested services could amount to unlawful state aid, thereby making it excessively difficult for commercial operators to enter, or remain in, the relevant markets concerned. We found that Sanoma’s allegations generally rest on erroneous assumptions not supported by transparent evidence. Consequently, Sanoma substantially overstates any adverse effects Yle’s contested services may have on commercial providers.

---

5 Judgement of the General Court, Case T533/10, 11 July 2014, paras. 155 and 160.
6 For a framework to assess the impacts of state aid on competition, see, for example, a study commissioned and published by the European Commission: Opera (2017). Ex post assessment of the impact of state aid on competition, p. 11.
Sanoma overestimates the magnitude of alleged aid received by Yle

The relative magnitude of the aid could be informative as regards the magnitude of the distortions to competition.6 If the magnitude of the aid granted is small relative to the size of the affected market, any aid measure is unlikely to have an appreciable effect on competition. Put another way, each of the above theories of harm are more likely to be credible if the aid is large relative to the size of the relevant markets.

With regards to VOD services, Sanoma estimates the cost of Yle Areena services beyond catch-up services – i.e., the allegedly unlawful expenditure. Sanoma bases its calculation on TV-related content costs of 32 million annually, out of which 8 million is attributed to Yle Areena’s beyond catch-up functionality.7 Sanoma’s estimates lack transparency and are impossible for us to replicate. It appears that Sanoma significantly overestimates the magnitude of funding attributable to the contested features of Yle’s ‘beyond catch-up’ services. Sanoma’s estimates are significantly higher than our conservative estimates, which are based on our assessment of the relevant cost drivers and accounting data from Yle.

Sanoma’s allegation that Yle Areena would crowd out commercial providers is not supported by evidence of market developments

The way media content is consumed is undergoing significant changes. Traditional commercial broadcasters face increasing competition from global SVOD providers, such as Netflix, HBO and Disney, and tech companies with social media and video services, e.g., Google (YouTube), Tik Tok, Amazon and Facebook. The use of linear TV is in decline and consumers increasingly want to access audiovisual content when convenient for them, not necessarily when the content is first broadcast. Audiovisual content is consumed via computers, mobile phones, tablets, and smart TVs. To achieve its public value objectives and to stay relevant for diverse audiences, Yle needs to adapt to the ongoing changes in media consumption and has sought to do so by developing and updating its Areena service.

Sanoma alleges that Yle Areena’s functionalities go beyond what would be needed for Yle to meet its public service remit. In particular, Sanoma alleges that in the digital age consumers would have willingness to pay for commercial VOD services, and the growth of Yle’s Areena crowds out private investment in these services.

Our analysis of data from Yle and the public domain did not identify market developments that would support Sanoma’s allegations. The Finnish VOD market does not appear to underperform in international comparisons in terms of market entry, concentration, and consumer uptake of commercial VOD services. We found no evidence to suggest that the launch of Yle Areena’s contested features would coincide with any significant decline in the use of commercial services. On the contrary, many of these services show rapid growth over recent years, and there is no evidence to suggest that commercial providers’ profitability is under strain due to the presence (and functionalities) of Yle Areena. Furthermore, Yle’s data shows that the increased use of Yle Areena reflects the decline in the viewing of Yle’s linear TV over 2016 – 2019 (before the Covid 19 outbreak).8 Yle Areena enables Yle to maintain some of its prior overall viewership amid changing consumption patterns. In all, Sanoma’s allegation concerning Yle’s “uncontrolled expansion” appears unfounded.

---

7 See, for example, Oexova (2017). Ex post assessment of the impact of state aid on competition, p. 6.
8 It is not plausible to establish a direct relationship between the amount of aid given and the distortive effects of the aid.
9 Sanoma Complaint, e.g., para 109.
10 During the global pandemic all home-based use of entertainment has increased. We consider that this is in all likelihood temporary and the pre-pandemic consumption more reliably reflects the change in usage patterns over time.
While this data analysis is descriptive in nature and does not allow us to establish precise counterfactual market outcomes that would prevail in the absence of Yle Areena’s contested functionalities, it casts serious doubts on Sanoma’s allegations, which appear to exaggerate any commercial challenges private providers are facing, and the role of Yle Areena.

**Sanoma substantially overstates the effects of Yle Areena on the take-up of SVOD services in Finland**

Central to Sanoma’s allegations is a quantification of the estimated effects of Yle Areena. Sanoma attempts to quantify an alleged effect of Yle Areena’s allegedly VOD-like service on commercial VOD providers’, and specifically Sanoma’s, revenues from Subscription- and Advertisement-based Video-On-Demand. Specifically, Sanoma alleges that, in the absence of Yle Areena, households already subscribing to a commercial SVOD service would have subscribed to additional commercial SVOD services (the so called ’stacking effect’). Sanoma further alleges that the presence of Yle Areena significantly reduces the use of AVOD services.

Sanoma does not disclose sources of evidence behind its assumptions. In particular, Sanoma’s estimate of the ‘stacking effect’ (SVOD users subscribing to further services in the absence of Yle Areena) is not underpinned by transparent evidence and appears to be based on rudimentary assumptions. These assumptions appear bold when put in the context of SVOD take-up observed in other countries.

To inform our assessment of the reliability of Sanoma’s assumptions, we designed a customer survey, which was conducted by IROResearch Oy (IRO), a market research company. Similar types of surveys are frequently conducted in the context of competition assessments more generally, and our survey design built on an approach employed by Ofcom, the UK communications regulator, in a closely related competition impact assessment.  

Our analysis based on survey evidence shows that the effects estimated by Sanoma rest on erroneous assumptions. The survey-based analysis suggests that Sanoma substantially overstates any revenue effect Yle’s allegedly VOD-like services could have on commercial operators. In particular, Sanoma’s estimate of the ’stacking effect’ is as the effect we estimated based on survey evidence. Put simply, substantially fewer customers would subscribe to additional SVOD services in the absence of Yle Areena (or its contested functionalities) than Sanoma alleges. We also find that Sanoma’s allegations regarding AVOD appear unfounded and are not supported by the evidence we obtained from the survey (although Sanoma has not disclosed some of the key elements of its analysis).

**Sanoma’s allegations regarding content markets are unfounded**

To fulfill its public service objectives and stay relevant for diverse audiences, Yle invests in audiovisual content. This includes the production of original content (in-house and commissioning) and the acquisition of rights to broadcast audiovisual content both over linear TV and over Yle Areena (just around 5% of Yle’s content is shown exclusively on Yle Areena).
According to Sanoma, Yle distorts the content acquisition market. The economic underpinning (the theory of harm) of Sanoma’s allegations is unclear in the complaint, but appears to be two-fold: First, Sanoma alleges that, as Yle is not dependent on subscription fees or advertisement revenue, it can invest without commercial considerations on returns and acquire domestic and foreign content at prices commercial providers cannot match. Second, Sanoma alleges that Yle drives up the “input prices” by generating demand and funding domestic content. This, according to Sanoma, crowds out commercial providers.

The available evidence does not support Sanoma’s allegations.

First, Yle’s ability to outbid other providers is constrained by its finite budget and statutory duty to ensure variety in programming. Yle’s total drama expenditure has not increased in real terms over the last 10 years. This contrasts with Sanoma’s allegations and suggests that Yle has not expanded its share of the available content over a period when the size of the overall content market has grown significantly. Further to this, Yle faces a statutory duty to ensure variety in its programming. It is not Yle’s objective to focus its purchasing budget on a narrow area of content and its statutory duties constrain its ability to do so. This again contrasts with commercial providers that may make a strategic choice based on the expected returns of certain content rights.

Second, Sanoma overstates Yle’s role in competition for content rights. Competition for foreign and domestic content has intensified mainly because of the large, global SVOD providers such as Netflix and HBO. The limited overlap is also manifested through the composition of Yle’s programming content, which varies considerably from that of commercial providers, and through consumers generally not viewing domestic VOD providers as the closest substitutes to Yle. Even though some of these titles have subsequently proven popular, the gap between production and Yle’s acquisition date indicates that these rights were not fiercely competed for by commercial providers at the time of production.

Third, there is no evidence to suggest that Yle crowds out commercial providers by inflating “input prices” of domestic content production. The supply of Finnish drama content has increased substantially since the emergence of SVOD services, with many of the largest productions being funded and broadcast exclusively by commercial VOD providers. While an increased demand can be expected to contribute to higher prices, it does not follow that any “input price” increases would be caused by Yle, nor does it follow that Yle’s content acquisitions would make it excessively difficult for commercial providers to operate in the market. Commercial SVOD providers’ recent growth coincides with their substantial acquisitions of domestic drama rights (and productions), and there are no indications of domestic content being increasingly concentrated in the hands of Yle. We also note that Sanoma ignores the likely positive effects Yle has on the domestic content industry.

---

Sanoma Complaint, paragraph 179.

Drama expenditure includes predominantly both domestic and foreign content rights, and Yle’s investments in original content. It also includes certain other costs attributed to “drama”, e.g. distribution costs.

For presentational clarity, and in line with Sanoma’s complaint, we label MTV, Ruutu and Elisa/Viaplay as “domestic”.

---
Yle’s provision of learning materials focuses on journalistic content and overlaps only narrowly with commercial providers

Sanoma alleges that Yle’s provision of comparable learning products and services reduces customers’ willingness to pay for the content, “negatively impacting commercial publishers’ ability and opportunities to innovate and create new learning services and business models.” According to Sanoma, learning material spend in Finland ranges from €120 to €500 per year in primary, secondary and upper secondary education and “Yle captures a material part of the annual spend of Finnish students that would otherwise be captured by commercial operators.”

Given that Sanoma’s complaint lacks a significant empirical foundation, we focus on providing the following economic arguments that are relevant to assessing the plausibility of Sanoma’s claims:

First, the nature of the Yle services mentioned in Sanoma’s complaint makes it unlikely that they compete directly with commercial services. Yle’s learning materials are largely journalistic content, with the exception of older materials from now defunct services, and isolated examples of more recent material produced by subject experts. Yle’s services do not readily integrate within a learning platform. There is (a) no evidence that the choice, or at any rate the primary choice, facing teachers is one between Yle’s learning materials and commercial proprietary learning materials and (b) no evidence that teachers or schools choose Yle’s materials to the exclusion of commercial materials.

Second, there is no evidence to suggest that Yle has been expanding its offering of learning services relative to commercial or other providers. Yle’s offering is, and will remain, distinctive. To avoid competing with commercial providers, Yle has decided not to continue producing content structured according to the national curriculum and aimed at schools. For example, the growth of Yle’s spending on the Abitreenit service mentioned in Sanoma’s complaint has been relatively modest in comparison with the total revenue growth of a number of commercial players offering preparatory courses for the matriculation examination. This does not indicate the squeezing out of commercial players.

Third, the nature of Yle’s online learning materials makes it implausible that they could commoditise online learning services, or even online learning materials. The absence of a clear tie to curricular content in its materials, the lack of significant and consistent pedagogical expert input into their production, and the absence of integration into a learning platform, all suggest that commercial players can offer products with significant advantages from a consumer perspective, thus adding significant value to students and teachers.

In addition, similarly to VOD services, any complete analysis of the effect of Yle in learning services should take into account the possibility that its activities introduce some consumers to online learning materials for the first time. This may increase the size of the market and, in the event that Yle’s content helps them overcome an initial hurdle associated with the use of unfamiliar learning environments, may even boost consumers’ willingness to pay for commercial learning materials.

---

*a* €120 per year per pupil in primary education, €140 in secondary education and €300-500 in upper secondary education (Jukio).

*b* Sanoma Complaint, Para 141.

*c* Yle’s learning materials are not updated frequently and often based on programming content broadcast earlier.
Report structure
The remainder of this report is structured as follows:

- Chapter 1 sets out an overview of Sanoma’s complaint and the allegations central to this report.
- Chapter 2 outlines the basis for an economic assessment of state aid in the context of public service broadcasters.
- Chapter 3 reviews Sanoma’s estimates of the size of the allegedly unlawful aid.
- Chapter 4 examines whether evidence of market developments supports Sanoma’s allegations of Yle squeezing out commercial providers.
- Chapter 5, based on a survey commissioned for this report, assesses the reliability of Sanoma’s quantitative estimates on the extent to which Yle “captures” VOD customers.
- Chapter 6 assesses Sanoma’s allegations in relation to Yle’s effects to content acquisition markets.
- Chapter 7 sets out conceptual economic arguments that are relevant to assessing the plausibility of Sanoma’s allegations on learning materials.
CHAPTER 1

OVERVIEW OF THE COMPLAINT: SANOMA ALLEGES THAT YLE’S SERVICES DISTORT VIDEO-ON-DEMAND AND LEARNING SERVICES

SANOMA’S COMPLAINT IDENTIFIES FOUR MECHANISMS THROUGH WHICH YLE ALLEGEDLY DISTORTS THE MARKET

1.1 On 23rd April 2021, Sanoma Media Finland Oy (hereafter referred to as Sanoma) submitted a complaint to the European Commission concerning potentially unlawful state aid received by Yleisradio Oy (Yle), the Finnish public service broadcaster. Sanoma’s complaint concerns two areas of service: 1) Yle Areena, the Video-on-Demand service of Yle (“Yle Areena”); and 2) online learning services. Below we describe the core elements of Sanoma’s complaint that are within the scope of our assessment.

1.2 In its complaint, Sanoma alleges the state funding of Yle’s provision of these services confers a selective economic advantage to Yle and distorts competition. Consequently, Sanoma considers that the funding attributable to these services constitutes aid incompatible with the internal market. According to Sanoma, Yle provides these services for free and enters existing competitive markets and as a consequence distorts competition on these markets. Sanoma further argues that Yle’s activities on the Finnish market have an appreciable effect on Sanoma’s (and other commercial media companies’) ability to operate profitably in the affected markets.

1.3 Any possible adverse effects potentially stemming from any public service broadcasting would be manifested through competitors’ declined willingness to innovate and invest; suppliers ceasing to provide existing services; or potential new providers entering the market. Sanoma’s complaint suggests four main mechanisms through which competitive distortion could arise:

   i. **Crowding out commercial SVOD** - Yle’s free provision of Yle Areena allegedly decreases the number of paid VOD subscriptions (SVOD);

   ii. **Diverting viewers** – Yle’s free provision of VOD allegedly results in the reduction of viewers of advertisement-based VOD services (AVOD);

   iii. **Distorted rights acquisition** - Yle’s in-house production and acquisition of content rights allegedly distorts the functioning of the audiovisual content rights market; and

   iv. **Commoditising learning services** - Yle’s free provision of online learning materials allegedly commoditises the market for digital learning materials

1.4 Sanoma’s complaint concerns selected features of Yle Areena and does not contest the existence of Yle Areena, nor Yle’s freedom to discharge its public service remit through any means, including online. More specifically:

---

*Yle Areena offers both a “Video-on-Demand”-style video library and catch-up service where content already broadcast can be watched. Yle Areena also provides audio-on-demand services which contain (most of) Yle’s radio programs and Areena-only podcasts.*

*Online learning services of Yle include Yle Oppinnet, Abitireddit and Tripset amongst others.*

*Namely, the existing competitive markets as described by Sanoma are markets for 1) audiovisual content (both linear and non-linear), 2) digital learning materials, and 3) acquisition of broadcasting rights.*
“Sanoma does not contest Yle’s ability to offer the services forming part of its public service remit through any – including online – means. In this regard, Sanoma does not contest the offering of TV catch-up services by Yle – i.e., the availability online of content already broadcasted on Yle’s TV channels for a clearly limited duration (such as 7 days after the broadcast).”  

1.5 Therefore, any competitive distortions attributable to the Yle Areena platform would, according to Sanoma, derive from non-catch-up VOD services. Sanoma states that for Yle Areena’s content to be considered “additional service related to Yle’s TV programming”, the content should be made available for a limited amount of time after the initial broadcast on television (so-called catch-up service) and that providing catalogue of content available for longer period of time constitutes a VOD-service which is not related to Yle’s TV programming nor to its public service obligation. Therefore, an assessment of competitive effects needs to disentangle the effects of the contested features of Yle Areena.

1.6 Sanoma describes the subscription-based VOD (SVOD) market in Finland highly competitive, with a number of commercial providers in the market, which stimulates price competition in the Finnish market. At the same time, Sanoma argues that part of the price competition is driven by wide variety of content being available without a subscription fee. Sanoma further states that there are low barriers to entry in the Finnish market and that both international as well as domestic entrants can enter the market. Sanoma, however, stresses the importance of the domestic content, which, according to Sanoma, is mostly offered by the domestic SVOD providers and Yle. Sanoma goes on arguing that this exacerbates the distortive effect Yle has on domestic commercial broadcasters.

1.7 As recognised by Sanoma, media consumption has shifted from linear free-to-air (FTA) broadcasting into more diverse consumption patterns where non-linear video-on-demand services are preferred by in particular the younger audiences. In response, Yle has adapted its services and in recent years has begun to offer more of its content in non-linear fashion to increase its reach to younger audiences, whose viewing of linear TV is in decline. This in Sanoma’s view both violates the public service obligations of Yle as such and “disproportionately distorts competition in the relevant markets to the detriment of commercial operators, innovation, competition and ultimately consumers.”

1.8 These main elements of Sanoma’s complaint set the basis for our assessment of competitive effects, presented in the remainder of the report.

---

52 Sanoma Complaint, para 5.
53 Sanoma Complaint, para 121.
54 Sanoma Complaint, para 91.
55 Sanoma Complaint, para 92 and 93.
56 Sanoma Complaint, para 168.
57 Sanoma Complaint, para 10.
CHAPTER 2
FRAMEWORK FOR ASSESSING COMPETITIVE EFFECTS OF STATE AID IN THE CONTEXT OF PUBLIC SERVICE BROADCASTING

2.1 Public service broadcasting is identified by the Commission as a public service. Therefore, designated providers delivering these services are eligible for public funding according to the EC Treaty and the Amsterdam Protocol. Under the Amsterdam Protocol, Member States are responsible for defining the public broadcasting service and entrusting a provider with the service. Therefore, Member States are free to provide funding for public service broadcasting insofar as the funding is aligned with the services defined by the Member State and does not affect trade and competition in the EU against common interest, i.e. proportionality is assessed.

2.2 There is a high threshold for finding that State aid for public service broadcasting is illegal. In particular, the European General Court has confirmed that in context of public broadcasting, the aid must affect "competition significantly and to extent which is manifestly disproportionate to the objectives pursued by the Member State" and that such aid should render "it impossible or excessively difficult for a private operator to conduct business in the [Spanish] broadcasting market."

BUILDING BLOCKS OF AN ECONOMIC ASSESSMENT OF COMPETITION EFFECTS

2.3 We assessed the implications of Yle's contested services drawing on established methods used to assess competitive implications of state aid generally, and applicable specifically to the VOD and learning services.

2.4 An economic assessment of how State aid may affect competition needs to recognise sector-specific characteristics and the relevant theories of harm. In the context of public service broadcasting, any adverse effects could, in principle, manifest through a national PSB crowding out commercial undertakings. There is limited economic research into the 'crowding out' effects PSBs may have on commercial media markets. The available research broadly suggests that the effects of PSBs have had on commercial providers are either positive (e.g. through stimulating demand) or negligible in magnitude relative to the public value created. While they demonstrate that the adverse market impacts of PSBs' services are ambiguous – evidently not adverse a priori – these results cannot however be generalised beyond their specific context.

2.5 We note that the UK regulator Ofcom, when assessing the impacts of the BBC iPlayer, premised its impact assessment on the notion that any additional features to the existing service will have some effects on the market:

---

50 In addition, the rules for State aid applied to public service broadcasting also relies on the Services of General Economic Interest Framework and the EC Treaty.
51 European Commission's Broadcasting Communication, Section 6 536.
52 Judgement of the General Court, Case T533/l0, 11 July 2014, paras. 155 and 160, our emphasis.
2.6 The relevant question is whether any potential adverse effects can be qualified as so manifestly disproportionate that they make it impossible or exceedingly difficult for commercial operators to conduct their business on the market. Our assessment focuses on Sanoma’s specific allegations of adverse effects on competition. In our assessment we sought to capture the following elements we consider relevant for state aid assessments generally and in this context.

2.7 **Magnitude of the aid:** Generally, an element of determining if aid has an effect on competition is to determine the magnitude of the aid relative to the size of the market. As shown by empirical ex post studies, when the aid amounts to a large relative amount of the total market size, there is a larger likelihood that the aid will have distortive competitive effects. Sanoma has attempted to quantify the magnitude of the aid (the cost attributable to allegedly unlawful services); however, its estimates do not stand up to scrutiny.

2.8 **Relevant markets and competition in these markets:** As established in the literature and (limited) case precedents, any competitive effects of (in this case) Yle Arena depend crucially on the extent to which audiences view the national PSB (its content or services) as a substitute, or as a complement to commercial providers. Put simply, broadcasters and VOD providers compete for people’s time, and any time spent on viewing a PSB’s content is away from other (media and non-media related) activities, some of which may have a commercial dimension. The closer a competitor Yle Arena is to commercial providers, the more likely it is that material changes to Arena can affect the functioning of the market. While it may not be necessary to conclude on the specific boundaries of the relevant markets, it is nevertheless important to understand the extent to which the services provided by Yle could be substitutable with commercial providers. This applies to all areas central to Sanoma’s complaint: the VOD services, content acquisitions and learning services. Sanoma has not presented any significant analysis to inform market definitions for any of the services its complaint pertains to.

2.9 **Theories of harm:** Central to any competition assessment is to set out the mechanisms through which competitors and consumers could be harmed as a result of the aid. Sanoma does not articulate theories of harm and (as we explain below) some of its allegations are ambiguous. Sanoma’s concerns generally relate to Yle allegedly “crowding out” private providers. Based on our best understanding of Sanoma’s concerns, in our assessments we investigated the circumstances under which distortions could arise and, conversely, whether the market outcomes we observe in reality are consistent with outcomes predicted by Sanoma.

---

10 Ofcom (2019) para 2.4.
2.10 Effects relative to a counterfactual without Yle's contested services: Sanoma has not explicitly sought to establish counterfactual market outcomes in the absence of Yle Areena's contested beyond catch-up services. That said, some of Sanoma's allegations refer to a situation in the absence Yle Areena and, in places, the specific functionalities or features contested by Sanoma. There are inherent complexities in determining how consumers and providers would behave in the counterfactual – e.g. there are no clear “events” of service upgrades; rather, the upgrades have been gradual. As such it is not straightforward to quantitatively assess the nature and magnitude of any effects attributable to certain services. Notwithstanding these challenges, any assessment of competitive effects should nevertheless seek to assess the counterfactual based on the best possible evidence. In this respect, Sanoma's assumptions underlying its estimated market effects appear arbitrary. We sought to help understand the counterfactual by analysing existing market evidence, and by collecting new evidence obtained through a survey specifically designed to assess the validity of the assumptions that are central to Sanoma's allegations.

2.11 Below we first review Sanoma's estimates of the magnitude of the allegedly unlawful aid followed by the subsequent assessment of Sanoma's allegations in relation to VOD, content acquisitions and learning services, respectively.
CHAPTER 3
SANOMA OVERESTIMATES THE MAGNITUDE OF THE ALLEGED AID

Table 1
Summary of assessment presented in Chapter 3

<table>
<thead>
<tr>
<th>SANOMA ALLEGATION</th>
<th>COPENHAGEN ECONOMICS ASSESSMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanoma estimates the cost of Yle’s VOD services beyond the definition of catch-up services amounts to a total of $\text{million}. This according to Sanoma represents the magnitude to the allegedly unlawful aid.</td>
<td>Sanoma’s cost estimates lack transparency and cannot be replicated. Based on information from Yle’s accounts and principles approved by the regulator (Telecom), Sanoma significantly overestimates the costs attributable to the contested services under conservative assumptions on cost allocations.</td>
</tr>
</tbody>
</table>

3.1 As reported in an economic study published by the European Commission, the relative magnitude of the aid could be informative as regards the magnitude of the distortions to competition. If the magnitude of the aid granted is small relative to the size of the affected market, any aid measure is unlikely to have an appreciable effect on competition. Put another way, each of the above theories of harm are more likely to be credible if the aid is large relative to the size of the relevant markets.

3.2 Sanoma estimates the cost of Yle’s VOD services beyond the definition of catch-up services. Sanoma bases its calculation on content acquisition cost of $\text{million} annually, out of which $\text{million} or $\text{million} are attributed to Yle Arena ‘beyond catch-up’. Sanoma has estimated this cost by categorising each item in Yle’s online catalogue apart from news, documentaries and current affairs, which Sanoma considers “TV-related categories and would thus not form part of a VOD catalogue” and has estimated a “suitable hourly rate” for each item.

3.3 We return to the allegations of whether the contested features of Yle Arena can give rise to competitive distortions in Chapters 4–6. Below, we review and comment on the estimates of the size of the allegedly unlawful aid as put forward by Sanoma. We find that: (i) the basis of Sanoma’s estimates is unclear and impossible to replicate; (ii) Sanoma’s estimated range of expenditure attributable to Yle’s contested VOD services is implausible and based on questionable cost allocation; and, for completeness, (iii) the composition and magnitude of Yle’s content expenditure has remained broadly constant suggesting that Yle’s overall investments have not increased.

SANOMA’S COST ESTIMATES ARE UNCLEAR

3.4 We reviewed the cost estimates presented in Sanoma’s complaint. We recognise that Sanoma does not have access to Yle’s detailed cost accounting and for this reason Sanoma needs to base its estimates on publicly available information and assumptions. Nevertheless, Sanoma’s estimates lack transparency and cannot be replicated. As such, they do not provide reliable basis to inform the magnitude of the allegedly unlawful aid. More specifically:

---

\(^{32}\) See, for example, Oxera (2015). Ex post assessment of the impact of state aid on competition, p. v.

\(^{33}\) It is not plausible to establish a direct relationship between the amount of aid given and the disruptive effects of the aid, however. In a small or newly formed market, a relatively small amount of aid can lead to significant distortions of competition, while a seemingly large aid provided may result in negligible competitive distortion compared to the benefits gained.

\(^{36}\) Sanoma Complaint, para. 199.
1. Sanoma does not comment on what is considered a “suitable hourly rate” for each type of content which renders its calculation non-transparent. It is unclear to us whether an “hourly rate” is an appropriate basis to estimate costs (this depends on Yle’s remuneration model).

2. Sanoma does not comment on how it estimates which share of VOD services’ costs are related to “catch-up services” and, conversely, which share of costs it considers to be funded with unlawful state aid.

3. Categorisation of content, and consequently the average cost, by Sanoma is rudimentary as it is presented in Sanoma’s complaint. Since a considerable share of Yle’s content is very different from any content provided by commercial media, a comparison of the related costs can be misleading. If the cost of acquiring commercially less attractive content is less than the cost of acquiring commercially attractive content, then such benchmarking will lead to considerable overestimation of VOD’s costs.\textsuperscript{37}

3.5 These factors limit our opportunities to engage with Sanoma’s calculations. As such, Sanoma’s estimates cannot be relied upon in a state aid investigation.

**SANOMA’S RANGE OF ESTIMATED EXPENDITURE APPEARS IMPLAUSIBLE**

3.6 To evaluate the magnitude of possible competitive distortions of Yle’s activities in the VOD market, we reviewed Sanoma’s calculation of the alleged aid drawing on data provided by Yle. First, we evaluated the range provided by Sanoma relative to Yle’s annual budget and estimates of Yle’s expenditure on other activities. Second, we calculate the total cost of content provided on Yle Areena.

3.7 As correctly recognised by Sanoma, even if there would be competitive distortions attributable to the Yle Areena service, these would derive from non-catch-up VOD services. Thus, when attributing costs of any specific content to Yle Areena VOD, only the incremental costs of providing content for more than 7 days are relevant for an assessment of the implications of the aid. Sanoma has estimated that between $\textsuperscript{38}$ million out of Yle’s content acquisition cost can be attributed to Yle Areena’s activities ‘beyond catch-up’ in 2019.

3.8 According to the Act on the Finnish Broadcasting Company (YLE Act) Section 7 b, Yle shall “differentiate its television and radio broadcasting from other public service operations”. To comply with Section 7 b and other provisions set on Yle’s accounting and supervision, Yle annually reports to the Finnish Transport and Communications Regulatory Authority (Traficom) on its expenditure split between television and radio broadcasting, and other activities. In 2019, Yle’s total turnover was €478 million, of which €96.2 million were allocated to provision of public service on internet and mobile devices on Yle’s separated accounts, which are annually submitted to Traficom. Traficom then issues an evaluation of Yle’s financial conduct to the Government. See Table 2 below.

\textsuperscript{37} For instance, if Sanoma’s estimate on cost of foreign series is based on commercially attractive (i.e. likely more expensive) content, this is likely to provide an overestimated “suitable hourly rate” for foreign series of Yle. It is our understanding, that Yle’s foreign content consists largely of European content from different linguistic areas and of material from other public broadcasters which might be commercially less desirable content for the other VOD providers.
Table 2
Yle’s separated accounts

<table>
<thead>
<tr>
<th>ACCOUNT TYPE</th>
<th>TURNOVER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Service on Television and</td>
<td>€866.6 million</td>
</tr>
<tr>
<td>Radio</td>
<td></td>
</tr>
<tr>
<td>Public Service on Internet and</td>
<td>€96.2 million</td>
</tr>
<tr>
<td>Mobile Devices</td>
<td></td>
</tr>
<tr>
<td>Commercial activities</td>
<td>€1.8 million</td>
</tr>
<tr>
<td>Elimination of Internal Items</td>
<td>[- €6.7 million]</td>
</tr>
<tr>
<td>Total</td>
<td>€478 million</td>
</tr>
</tbody>
</table>


3.9 Out of the turnover of €96.2 million, Sanoma alleges that Yle spends between [redacted] million, or [redacted] for Yle Areena expenditure attributable to the “outside catch-up services”. Sanoma thus claims that Yle spends only between [redacted] million on online services other than Yle Areena VOD.

3.10 Yle provided us with data on expenditure related to all content on Yle Areena, including catch-up which Sanoma considers acceptable. Yle has identified two types of costs for which it uses a different allocation method. First, most of Yle’s audiovisual content is available to audiences both on linear television and on Yle Areena for catch-up and beyond. For this content, the costs are split between linear television and Yle Areena based on the actual viewership numbers. This methodology is based on Yle’s accounting standards for the separated accounts, which Yle reports annually to Traficom, the regulator of transport and communications. We note that this method overestimates the costs attributable to Yle Areena’s “beyond catch-up” services, since both minutes watched as “catch-up” and “beyond catch up” are considered VOD minutes under the methodology. Second, a limited amount of content acquired by Yle is Yle Areena exclusive, in which case all costs related to that content are considered part of Yle Areena costs.

3.11 In 2020 Yle spent in total around [redacted] million on content made available both via linear TV and Yle Areena, of which approximately 12 million is allocated to Yle Areena based on the applicable accounting rules. An additional 15 million is used for content published solely on Yle Areena. For further breakdown of costs, please see Table 3.

---

25 Sanoma Complaint, para. 159; Table 4.
26 We note that it is not plausible to establish a reliable counterfactual price of Yle’s content rights in a scenario where viewing was restricted to, say, seven days after the initial broadcast. These contracts include a range of (price and non-price) elements, each of which can be negotiated between the rights holder and the broadcaster.
27 According to Yle, this includes both own production and content acquisitions.
### Table 3

**Estimated breakdown of Yle's audiovisual content costs in 2020**

<table>
<thead>
<tr>
<th></th>
<th>Production Costs</th>
<th>Content Rights</th>
<th>Music Rights</th>
<th>Distribution</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yle TV1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yle TV2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yle Teemo/Fem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which allocated to Yle Arena</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Yle Arena</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Total cost of Arena</strong></td>
<td><strong>17</strong></td>
<td><strong>5</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

**Note:** Due to rounding, figures on total cost of Arena do not add up. Yle's accounting is based on a multimedia and content-driven way and allocation between different media formats and publishing channels is computational based on original platform of distribution and media consumption. In Yle's internal accounting, all content is allocated to one of the linear channels or Yle Arena depending on where the content is broadcast the first time. Production cost is only allocated when content is broadcast for the first time. Content and music rights are allocated to both for first time broadcasting and subsequent reruns. Following the accounting practices of Yle in its annual reporting to the telecom part of the linear broadcast cost is allocated to Yle Arena by using the multiplier of .

**Source:** Yle's estimate on Yle's accounting data.

#### 3.12

As shown in Table 3, Sanoma's estimate of the magnitude of the aid (€... million) is around our estimate based on Yle's actual accounting data and allocation principles approved by the regulator. We consider the above estimation in Table 3 cautious, as the number of minutes spent on Yle Arena VOD includes any catch-up viewing within seven days of the television broadcast, as well as minutes from news, current affairs and documentaries which Sanoma considers acceptable within Yle's public service remit. Moreover, production costs of Yle's own production should not be dependent of whether content is available on Yle Arena for a longer period of time, thus biasing the cost allocation upwards.

### DEVELOPMENT OF YLE’S EXPENDITURE ON DRAMA AND CULTURE AND ENTERTAINMENT

#### 3.13

For completeness, we examined Yle's expenditures on content and services over time. If Yle's content and services costs increased with the development of its Arena service, this would indicate that Yle has invested in content shown over Arena more than it has done over linear TV. It is not plausible to determine an accurate counterfactual for Yle's content acquisition costs but for Yle's strategy of making content available for a period longer than seven days.

#### 3.14

In its annual reporting, Yle has split its expenditure into five categories: Content and services, Technology and Infrastructure, Joint operations and administration, Depreciation, and Sales. In 2020, 78% of Yle's expenditure was spent on Content and services.

---

* Production costs contain Yle's own production. The total production cost of €... million does not, according to Yle, fully account for news and current affairs. However, Yle's news and current affairs are not included in Sanoma's complaint, see footnote x on p. 45.

* This reflects the year when costs occur.

* According to Yle, the average daily consumption of its video content (TV + Arena) in 2020 was... minutes per person, of which... minutes were spent on Yle Arena VOD (i.e. non-live content)... which is the share of Yle Arena VOD minutes out of total minutes spent on Yle’s video content.
Further, Yle splits its spending on Content and services into 6 genres: News and Current Affairs, Sport, Factual, Culture and Entertainment, Drama, and Children and Youth. In 2020, Yle spent most money on News and Current affairs and Culture and entertainment, which in total accounted for 56% of Yle’s total spending on Content and Services. We note that content and services spending includes all Yle’s activities, including radio and other services such as online text content and Finnish Radio Symphony Orchestra – i.e. not all expenditure is related to Yle’s audiovisual broadcasting. Overall, Yle’s expenditure on Content and services has remained stable. In 2020, Yle spent 23% of its total expenditure on Content and service on Drama, Yle’s real spending on drama – a content category which in practice only contains audiovisual content and central to Sanoma’s complaint - has decreased throughout the 2010s, from €57.5 million in 2012 to €50.6 million in 2020. Figure 1 below shows the development of Yle’s expenditure, both in real and nominal terms between 2012 and 2020.

**Figure 1**

*Yle’s total expenditure on Content and Services, € million in 2020 euros*

![Expenditure Graph](image)

**Note:** Annual nominal expenditure is deflated using the producer price index for services in “creative arts and entertainment services”. Annual nominal spending on drama is deflated using the producer price index for services in “creative arts and entertainment services”. Reporting before 2012 uses different categorisation of content.


Based on Yle’s total expenditure on ‘Content and Services’ and, in particular, on Drama, it does not seem credible to argue that Yle invests substantially more than previously to the detriment of Finnish commercial media. Yle’s (in nominal terms) moderately increasing budget merely reflects the price development in the Finnish media sector.

46 In some years, News and Current affairs is split between National and Regional.
CHAPTER 4

EVIDENCE ON MARKET DEVELOPMENTS IS NOT INDICATIVE OF SIGNIFICANT DISTORTIONS

Table 4
Summary of assessment presented in Chapter 4

<table>
<thead>
<tr>
<th>SANOMA ALLEGATION</th>
<th>COPENHAGEN ECONOMICS ASSESSMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yle's investments in and upgrades to Areena result in an &quot;uncontrolled expansion&quot; distorting competition &quot;threatening the existence of private Finnish media&quot;.</td>
<td>The available evidence on market outcomes does not support Sanoma's allegations. The increased use of Yle Areena likely reflects the changing media consumption and the diminishing viewing of Yle's linear services (before the Covid 19 outbreak). The Finnish SVOD market is growing and performs well in international comparisons in terms of take-up, market entry and concentration. We found no indications of unsustainable profitability amongst the main domestic providers of VOD services.</td>
</tr>
</tbody>
</table>

4.1 Sanoma distinguishes two different distortions through which Yle Areena in its view affects the market for VOD services. First, Sanoma alleges that Yle Areena crowds out commercial VOD providers. By providing free-of-charge alternative Yle Areena decreases the number of paid VOD subscriptions thus decreasing the subscriber income of commercial SVOD providers. In particular, Sanoma alleges that Yle Areena crowds the domestic SVOD services which also face significant competitive pressure also from the large multinational SVOD providers, such as Netflix, HBO and Disney. Second, Sanoma alleges that free provision of Yle Areena decreases viewership of advertisement-based VOD services by diverting customers. Essentially, Sanoma argues that Yle Areena captures viewers who, in the absence of Yle Areena, would have used commercial (A)VOD services.

4.2 According to Sanoma, these distortions result from two different effects that Yle has on the market. On one hand, Yle leverages its large share FTA viewing and strong brand recognition “to promote and benefit its VOD offering", attracting users to Yle Areena. On the other, Yle Areena captures users which would have otherwise been served by commercial operators, reducing their subscription and advertising revenues. More specifically, Sanoma alleges that:

“In addition, Yle’s uncontrolled expansion – and to be more precise, its involvement in commercial activities (e.g., the provision of VOD and online learning services) relying on funding by State resources – threatens the existence of private Finnish media and online learning service providers. Yle, backed up by State resources, offers its services at zero price, attracting users to the detriment of commercial operators who are struggling to survive and continue their operations in the digital age.”

4.3 In Chapter 5, using quantitative evidence from a consumer survey, we assess Sanoma’s specific claims of Yle Areena capturing viewers who would, in the absence of Yle Areena (and its non-catch up features) use commercial services instead. In this Chapter, we examine whether the market evidence is indicative of Yle Areena’s “uncontrolled expansion“ “threatening the existence of private Finnish media”. Specifically, we assess:

---

Sanoma Complaint, para. 8.
whether the user data provided by Yle is indicative of Yle’s “uncontrolled expansion”, or of an ongoing transition from linear to VOD reflective of the changing consumer preferences. The closer a substitute Yle Areena is to Yle’s own linear TV (as opposed to commercial SVOD providers), the less likely it is that any increased use of Yle Areena would, in and of itself, crowd out commercial providers.

whether the market developments in the Finnish commercial VOD markets are indicative of substantial market distortions. Evidence of entry barriers, limited willingness to pay for, and take up of, SVOD services, low profitability and high concentration would be indicative of market distortions akin to those described by Sanoma.

4.4 We found no evidence indicative of market distortions of the magnitude described by Sanoma in its complaint. Nor is it apparent that any competitive challenges faced by the domestic providers can reliably be attributed to Yle Areena as opposed to international providers. We explain our findings below.

THE ONGOING INCREASE IN THE USE OF YLE AREENA REFLECTS THE SHIFT IN THE CONSUMPTION OF AUDIOVISUAL CONTENT

4.5 As recognised by Sanoma,6 media consumption has shifted from linear free-to-air (FTA) broadcasting into more diverse consumption patterns where non-linear video-on-demand services are preferred by the younger audiences. In response, Yle has adapted its services and in recent years has updated and upgraded its Areena service to serve audiences of all ages.7 This, in Sanoma’s view, both violates the public service obligations of Yle as such and “disproportionately distorts competition in the relevant markets to the detriment of commercial operators, innovation, competition and ultimately consumers.”8

4.6 Sanoma’s complaint is reasonable in that an analysis of competitive effects should recognise ongoing changes in the use of media content. However, any alleged effect on competition for VOD consumers is not necessarily incremental to any effect Yle previously had on competition in discharging its public service remit in linear broadcasting, because the latter effect would have correspondingly diminished following the shift of consumption patterns. Yle’s historically large viewership and the increasing use of Yle Areena do not mean that Yle is disproportionately distorting competition and making it excessively difficult for commercial providers to conduct business in Finland.

4.7 Sanoma has not defined the relevant market based on a thorough analysis of the substitutability between linear and non-linear broadcasting. Sanoma does however present its strong preference for the relevant market to include both linear and non-linear services.9 We do not find it necessary to define the specific boundaries of the market to assess Sanoma’s allegations. However, as we explain below, there is clear evidence that audiences are gradually substituting linear TV with non-linear viewing.

---

6 Sanoma Complaint, para. 168.
7 According to the Act on Finnish Broadcasting Company and the strategy adopted by the Administrative Council elected by the Finnish Parliament, Yle is to provide its services to all audiences under equal conditions using public communication networks.
8 Sanoma Complaint, para. 10.
9 Sanoma Complaint, para. 82.
Non-linear media consumption is increasing rapidly

The existing research into media consumption strongly indicates that the way in which audiences consume video content is indeed undergoing a significant transition whereby especially younger audiences replace linear TV with catch-up services, “binge-watching” of content, and seek to access audiovisual content on multiple devices. For example, a survey studying the development of consumer preferences related to digitalisation and digital development found that an increasing number of viewers consider flexibility important, see Figure 2 below.

Figure 2
Change in consumer preferences: percentage of viewers considering it important to watch TV-content flexibly
Share of respondents agreeing with the statement

Sources: Copenhagen Economics based on: DNA. Digitaliset elämäänotot tutkimus. reports for the years 2017–2021.

4.9
Several studies confirm that the ability to watch content flexibly is particularly important for younger age cohorts but increasingly so across audiences of all ages. For example, in 2021, at least 71% of all age cohorts but 65–74-year-olds considered it important to watch content independent of time broadcast. Further, especially the younger audiences have changed the way audiovisual content is generally consumed. Instead of a “by-episode” watching behaviour, audiences wish to watch full seasons, or even series, in a shorter period of time. The increase in binge-watching coincides with the emergence of global and domestic SVOD providers such as Netflix.

---

50 E.g., DNA (2017–2021), Digitaliset elämäänotot tutkimus.
51 DNA (2021), Digitaliset elämäänotot tutkimus, 2021.
The transition from linear to Areena has not resulted in an "uncontrolled expansion" of Yle's services

4.10 Sanoma alleges that number of minutes spent using Yle Areena has increased in the recent years claiming that Yle Areena has captured viewership, which in absence of Yle Areena, would have watched either advertisement- or subscription-based VOD services. According to Sanoma, Yle's allegedly increasing investment in Yle Areena's beyond catch-up functionalities results in Yle's "uncontrolled expansion" to the detriment of commercial providers and ultimately consumers. Sanoma recognises that the overall audiovisual market is going through substantial transformation from traditionally linear consumption of audiovisual content (i.e. broadcast television) into nonlinear consumption.

4.11 This recognition that a public service broadcaster needs to adapt is analogous with the premise of Ofcom's economic impact assessment of the BBC iPlayer:

"Over time, we consider the BBC's proposed evolution of BBC iPlayer could generate significant public value, through increased choice and availability of PSB content. To some extent, this reflects the fact that viewers' expectations have already changed and that the BBC needs to keep pace so that it remains relevant for audiences now, and in the future."  

4.12 Indeed, in response to an ongoing change in its operating environment driven by the changing consumer preferences, Yle, similarly to commercial providers, has invested in the Areena online service. We also observe a growth in the use of Areena. The growth in the use of Areena does not in itself mean that Yle’s investments in Areena crowd out commercial providers. Insofar as the contested functionalities of Yle Areena do not result in a market expansion relative to Yle’s position in discharging its public service remit in linear broadcasting and catch-up VOD, any disproportionate crowding out of commercial providers appears unlikely.

4.13 We have not had access to comprehensive usage data of commercial VOD providers (SVOD and AVOD). We are thus unable to compare Yle’s overall viewing relative to all viewing of audiovisual content and to conduct econometric analysis on the relationship between Yle Areena’s contested features and the use of commercial services. To assess indicatively whether the gradual growth of Yle Areena has coincided with an overall expansion in Yle’s viewership, we analysed data on the use of Yle Areena relative to the use of Yle’s linear broadcasting.

---

53 Sanoma Complaint, para. 8.
55 Total TV data from Finpanel is only available from 2019 onwards and only covers MTV and Ruutu, thus not providing sufficiently good picture of the overall VOD market. Furthermore, we do not have granular usage data (minutes viewed) for commercial SVOD providers over time.
56 While we have not conducted a comprehensive market definition, we note that the provision of audiovisual content is not limited to linear, AVOD and SVOD providers but includes content shared over social media platforms (e.g. Facebook, TikTok).
The aggregate use of traditional linear TV, especially in younger age groups, is declining and the use of Areena is increasing. Over the years preceding the outbreak of Covid-19 (which resulted in an overall increased consumption of audiovisual content), the increased use of Yle Areena was reflective of the reduction in the viewing of Yle’s linear channels. The usage, measured as the average time viewed (ATV) of Yle’s linear channels, has decreased by 6.95 minutes/day over 2016-2019 (before the Covid-19 outbreak). The yearly ATV of Yle Areena increased by 2.05 minutes/day during the same period. Figure 3 depicts the evolution of Yle’s average time viewed, including both linear and Areena.  

Figure 3
Evolution of Average Time Viewed
Average Time Viewed (ATV) per person per day

[Graph showing the evolution of average time viewed from 2016 to 2021 for Yle Areena, Yle Linear Channels, and Yle Total Viewing (time)].

Note: The Average Time Viewed is a measurement of how many minutes an average Finn (above the age of 3) has watched the channel per day and is calculated as a product of average time spend on channel and daily cover. As explained below 2020 and 2021 are likely reflective of general but temporary increase in the consumption of audiovisual content due to Covid-19 pandemic and more time spent at home. The time period covered is 2016 (week 35 onwards) – 2021 (until week 25).

Source: Copenhagen Economics analysis based on based on weekly TV audience measurement for Linear channels (Finnpanel Cyt TV Audience Measurement 2016-2021) and Yle analytics data for Yle Areena.

Sanoma’s complaint also shows how the use of free-to-air (FTA; linear) has developed over time.  
Sanoma’s analysis, based on Finnpanel data, shows the share of Yle relative to (according to Sanoma) all FTA viewing. The relevance of this is unclear to us in that it does not relate to the VOD services that are central to Sanoma’s complaint. Drawing conclusions from shares of FTA viewing, excluding VOD, is also inconsistent with Sanoma’s own view on market definition: “Sanoma, however, strongly believes that the Commission should move away from such a fragmentation of the audiovisual services market and define a single market comprising all audiovisual services, including both linear and non-linear services [...]”. Elsewhere in its complaint, Sanoma does, however, show that Areena, while undisputedly still popular, has become a less preferred choice amongst audiences over the recent years, although the changes are small.

57 These developments are particularly apparent amongst the younger audiences.
58 Sanoma complaint, Figure 4.
59 Sanoma Complaint, para. 82.
60 Sanoma Complaint, Figure 6. See also Appendix A for a comparison of countries showing a similar trend (with other comparator countries either at a broadly similar level or catching up).
Finally, we note that the outbreak of the Covid-19 during spring 2020 has reversed some of this development and since then, overall consumption of audiovisual content has increased, both linear and non-linear. However, this increase in consumption of Yle’s services is reflective of a change in consumer behaviour during the pandemic (more time spent at home) and unlikely to persist, since we expect people to spend less time at home after the pandemic and associated restrictions. As such, the decreasing (increasing) use of linear TV (Yle Areena) observed before the pandemic more reliably shows how audiences have recently used Yle’s services. Yle’s share of the overall viewing of linear television has remained broadly stable until the summer 2021 – i.e. during the COVID-19 pandemic, indicating that the viewing of linear television has increased similarly on other TV channels.\footnote{Copenhagen Economics analysis based on Finpanel Oy, TV Audience Measurement, 2016-2021 (week 25). Sanoma’s complaint (Figure 4) suggests that Yle’s share of viewing in 2020 was similar to 2019.}

**THE FINNISH VOD MARKET DOES NOT SHOW INDICATIONS OF SUBSTANTIAL DISTORTIONS**

Sanoma alleges that Yle Areena crowds out private investment: “Yle, backed up by State resources, offers its services at zero price, attracting users to the detriment of commercial operators who are struggling to survive and continue their operations in the digital age”\footnote{Sanoma Complaint, paragraph 8.} We sought to assess whether evidence of the current state of the Finnish SVOD market is consistent with substantial market distortions, as described by Sanoma.\footnote{\textsuperscript{11} References to “VOD markets” should not be interpreted as relevant markets within the meaning of competition law.}

Competition in the media market, including VOD, manifests through competition for people’s finite time. In principle, every minute used in viewing linear or on-demand content shown by a public service broadcaster is away from the viewers time spent on other activities, some of which may include consuming products or services provided by private businesses. The crowding out effect of PSB’s is not however clear-cut, as established in the (somewhat limited) economic literature. The mere provision of VOD with (catch-up, possibility to binge-watching) functionalities comparable to commercial providers does not in itself mean that a PSB would make it excessively difficult for commercial providers to enter and remain in the market. The available research broadly suggests that PSBs’ have, internationally, had either a negligible or a positive effect on commercial providers’ revenues, as summarised in Box 1 below.
Box 1 International research on PSB’s crowding out effect

A comparative study by Sehl, Fletcher and Picard (2020)\(^{66}\) analysed cross-national evidence on whether public service media crowds out private commercial media by shrinking commercial audiences, either reducing the advertisement income of free-to-air television or willingness to pay for PayTV.\(^{65}\) Econometric evidence presented by Sehl, Fletcher and Picard suggests that higher per capita investment in public service broadcasting benefits commercial media.\(^{66}\) Sehl, Fletcher and Picard find a statistically significant positive correlation between both per capita advertisement revenue for FTA channels and PayTV subscription revenue and spending on public service broadcasting in 2015.\(^{67}\) Moreover, audience share of the public service broadcaster is positively correlated with PayTV revenues. The study finds that in Finland, private media has one of the highest per capita revenues both from advertisement and from subscription fees. According to the study, this could be driven by “race to the top”, by which the private media has to actively compete for audiences with the public service broadcaster, but also benefits from audiences the public service broadcaster has fostered.\(^{68}\)

Separately, a competitive assessment of BBC’s iPlayer service by Ofcom\(^{69}\) in 2019 found that extending iPlayer catchup period from 30 days to 12 months would have a limited effect of decreasing on the use of commercial VOD. Thus, if there are any distortive effects from a public service broadcasters’ VOD services, these should be limited and according to Ofcom likely to be offset by significant public value provided by the PSB’s VOD service.


4.19 The data available to us does not allow for an econometric assessment of the effect Yle Areena has on the performance of commercial providers. We reviewed evidence available to us from the public domain and from Yle on: (a) the growth of the Finnish VOD market, (b) the performance of the SVOD operators in Finland relative to their international peers. We found that the Finnish SVOD market shows strong growth and does not seem to lack behind in international comparisons, as follows.

---


\(^{65}\) Ibid. p. 391.

\(^{66}\) Ibid. p. 395.

\(^{67}\) Ibid. Table 3, p. 400.

\(^{68}\) Ibid. p. 405.


For more detailed description of the Ofcom study, please see Appendix A.
4.20 First, the reach of commercial VOD has increased overall during the period when the use of Yle's Areena service has grown. Figure 4 sets out the development of 'monthly reach' (share of population who have used the service at least once within the last month) of some of the main domestic VOD providers. Some new "domestic" providers have grown significantly - e.g. Viaplay and CMore (we do not have consistent data for global providers such as Netflix, HBO and a more recent, rapidly grown entrant Disney).²⁶

![Graph showing evolution of reach 2016 - 2021, selected commercial VOD providers](image)

**Figure 4**

**Evolution of reach 2016 - 2021, selected commercial VOD providers**

Monthly reach (percentage of target population)

Note: Monthly reach is defined as the percentage of the people who have reported using the service at least monthly.


4.21 This descriptive evidence on the growth of (domestic) VOD providers does not allow us to establish a precise counterfactual of what would have happened in the absence of Yle Areena or its contested features.²⁷ It however strongly indicates that the presence of Yle Areena has not resulted in systematic deterioration of domestic VOD services, or in insurmountable barriers to entry. This finding is further supported by a Kantar TNS study, which shows that both the use of paid audiovisual content and service, and consumers' willingness to pay for content have increased between 2015 and 2020.²⁸

²⁶ According to a survey designed by Copenhagen Economics and conducted by IBOResearch Oy, in less than a year after its launch, Disney+ has become the 5th most popular SVOD service in Finland with 23% of Yle Areena users subscribing to it (the survey is described in greater detail below in Chapter 5).

²⁷ An econometric analysis would seek to disentangle the specific effects attributable to, say, selected features of Yle Areena, taking into account other factors that impact on the take-up of commercial services. Given the plurality of supply and demand-side drivers, and the associated data requirements, we did not find it feasible to conduct a reliable econometric analysis based on the data available to us to date.

²⁸ Specifically, the study finds that the use of paid audiovisual content has increased from 37% to 57% and willingness to pay for content from 16% to 24%. Kantar TNS Oy (2020), Mind Assesne 2020, pp. 66-67.
Further, as also reported below in Chapter 5, neither AVOD nor new SVOD services appear as the most commonly chosen alternatives to Yle Areena in the light of our survey evidence. We found that a greater proportion of Areena users would, in the absence of Areena, shift back to watching linear television or spend more time watching their pre-existing SVOD subscriptions. This is consistent with economic research suggesting that a popular public service broadcasting has a limited or (according to some estimates) even positive effect on the consumption of and spending on commercial media (see Box 1 above).  

**Second,** the Finnish commercial VOD operators’ financial performance and customer take-up are not consistent with Sanoma’s allegation that these providers “struggle to survive”, as alleged by Sanoma. If Yle’s provision of Yle Areena substantially distorted the market, we would expect to observe worsened financial performance and limited customer take-up for Finnish commercial VOD operators. While we are unable to access commercial providers’ management accounts to analyse the profitability of their VOD services, the providers’ own reporting to investors and the public does not support Sanoma’s allegations. Notably:

(i) The earnings before interest and tax (EBIT) of Sanoma Media Finland business unit has been stable for the past years and increased from 8.5% in 2016 to 11.8% in 2020. Even though Sanoma Media Finland’s total net sales have decreased from 2016, its subscription sales grew by 17% between 2019 and 2020, partly driven by the increasing number of subscriptions for the SVOD service Ruutu+. Furthermore, Sanoma reports that during 2020, Sanoma Media Finland “outperformed the market […] gaining market share especially in TV, online and radio advertising.”

(ii) Telia Company AB (Telia), which acquired MTV and C More in 2019, states that market position of its TV and Media business was “further strengthened by increasing share of commercial viewing in both Sweden and Finland” during the first half of 2021. Moreover, the number of C More subscriptions increased by 50% during 2020 and Telia plans to make C More Finland’s top VOD service in collaboration with MTV.

(iii) Elisa Oyj (Elisa) reports that during the first half of 2021, its revenues grew by 4% on the previous year, one of the main reasons being the Elisa Viitdeo - Viaplay cooperation with Nordic Entertainment Group. In 2020, Viaplay was the second largest SVOD service in Finland with a market share of 16% of total SVOD subscribers. Moreover, as also clear from the data on ‘reach’ (see Figure 4), Viaplay is growing fast. Indeed, its subscriber base is expected to double in the Nordics by the end of 2025.

We did not find evidence to suggest that any of the currently active Nordic providers would “struggle to survive” in the digital age, nor has Sanoma put forward reliable evidence on the specific effect of Yle Areena, as opposed to global providers of audiovisual content and other entertainment.

---

75 Sanoma, Annual Report 2020, p. 11 and 15.
76 Sanoma, Annual Report 2020, p. 15.
77 Telia Company, Qs Interim Report January–June 2021, p. 3.
80 European Audiovisual Observatory (2021), Trends in the VOD market in EU28, p. 19.
81 Nordic Entertainment Group, 2020 Annual & Sustainability Report, pp. 14-16. Numbers for Viaplay are only reported as a total for all Nordic countries.
Third, international comparisons suggest that the take up of SVOD services in Finland is at a high level compared to other countries. Development of the SVOD markets in Europe can be studied through a variety of different indicators, e.g., household stacking, number of available SVOD services, number of SVOD subscriptions per capita and minutes spent watching VOD. The European Audiovisual Observatory considers Finland to be one of the six “mature SVOD markets” in Europe in 2020, with fourth highest SVOD service penetration in the EU. Consistent with that, suggests that Finland ranks high compared to other European countries in terms of SVOD penetration, see Figure 5.\textsuperscript{56}

\textbf{Figure 5}

4.26 We note that some surveys indicate that Finland is catching up other Nordic countries. For instance, a recent survey from Finnpool reported a stacking of 2.2.\textsuperscript{57} Overall, this evidence is not indicative of Finnish consumers’ reluctance to take up commercial SVOD services, nor does it support a notion that commercial providers would find it excessively difficult to maintain or launch operations in Finland.

\textsuperscript{56} The SVOD markets across Europe are still rapidly changing and as a consequence, the amount of coherent data in the market is limited and most data available is collected through surveys – resulting in slightly different results depending on sampling, method of surveying and the exact time of the survey in question.

\textsuperscript{57} Finnpool (2021), TV-taloudet Suomessa tukkimus toate-keskikseen vaihteessa 2021.
4.27 As an additional indicator of the functioning of the Finnish market relative to peers, we examined market concentration in the SVOD market. The Finnish SVOD market is not concentrated in international comparisons. As remarked by the European Audiovisual Observatory (EAO), in developed SVOD markets the combined market share of the three largest providers ('CR3' index) is smaller. This, in turn, tends to coincide with a stronger presence of domestic providers and/or with entry of new providers. In Finland, the CR3 ratio was, according to Ampere (a research company) data reported by the EAO, 58%. For comparison, the average CR3 in EU28 was 85% according to the same study.\(^4\)

Further, Finland has a high number of SVOD services available for consumers. With the EU average at 16 SVOD providers, Finland had 22 providers in 2020, as reported by the EAO.\(^5\) Finally, we note that most SVOD providers have localised their services into Finnish language, which indicates that the Finnish SVOD market is commercially attractive.

4.29 We conclude that evidence of the ongoing status and development of the commercial VOD market do not support Sanoma’s allegations. Sanoma’s allegation concerning Yle “[..] making it very difficult for private competitors to catch up with this unfair head start” lacks foundation.\(^6\) While it is not plausible to estimate the precise counterfactual, we can conclude that there is no prima facie evidence that Yle Areena’s ‘beyond catch up’ functionalities would significantly depress consumer willingness to pay to an extent that commercial providers would find it excessively difficult to operate in the Finnish market.

4.30 We proceed to assess the assumptions underlying Sanoma’s quantitative estimates of the alleged market effects.

\(^4\) European Audiovisual Observatory (2021), Trends in the VOD Market in EU28, January, p.19.

\(^5\) See Appendix A for a concentration comparison of ‘six mature SVOD markets’ as identified by European Audiovisual Observatory.

\(^6\) European Audiovisual Observatory (2020), Trends in the VOD Market in EU28, January, p.15.

\(^7\) Sanoma Complaint, para. 68.
CHAPTER 5
SANOMA SUBSTANTIALLY OVERSTATES YLE AREENA’S EFFECTS ON THE USE OF COMMERCIAL VOD SERVICES

Table 6
Summary of the assessment presented in Chapter 6

<table>
<thead>
<tr>
<th>SANOMA ALLEGATION</th>
<th>COPENHAGEN ECONOMICS ASSESSMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanoma alleges that in the absence of Yle Arena households already subscribing to a commercial SVOD service would have subscribed to additional commercial SVOD services to the extent that [stacking effect]. Sanoma further alleges that the presence of Yle Arena substantially reduces the use of AVOD services although Sanoma does not disclose the assumptions underlying its calculation or the magnitude of the effects.</td>
<td>Our survey-based analysis suggests that Sanoma substantially overstates any revenue impact of what Sanoma calls Yle’s “SVOD-like service” could have on commercial providers. Sanoma’s estimate of the “stacking effect” is more than [double estimate we derive based on survey evidence. Sanoma’s allegations regarding customer diversions to AVOD and specifically Sanoma’s own Ruutu service appear unfounded and not consistent with the evidence we obtain.</td>
</tr>
</tbody>
</table>

5.1 In its complaint, Sanoma attempts to quantify an alleged effect of what it terms Yle Arena’s SVOD-like service on commercial VOD providers’ and specifically Sanoma’s revenues from subscription- and advertisement-based video-on-demand (SVOD and AVOD, respectively) services. In the following, we will: first, present our understanding of Sanoma’s attempted quantification, as presented in its complaint for SVOD and AVOD; and second, explain our approach to assessing the reliability of Sanoma’s allegations, both quantitative and qualitative. Our approach is based on a consumer survey designed and conducted for the purposes of this report.

5.2 We conclude that in attempting to quantify revenue effects, Sanoma relies on erroneous assumptions. As a result, Sanoma substantially overstates any effect what it calls Yle’s SVOD-like service could have on the market for SVOD services. While Sanoma does not disclose the alleged effect of what it calls Yle’s SVOD-like service on AVOD revenues, the approach it takes is likely substantially to overstate any such effect.

---

66 Sanoma describes Yle Arena as “SVOD-like service in terms of content and characteristics (e.g., indefinite availability of content, structured stand-alone catalogue etc.).” Source: Sanoma Complaint, para. 133. Sanoma further specifies that it does not contest the offering of TV catch-up services by Yle – i.e., the availability online of content already broadcasted on Yle’s TV channels for a clearly limited duration (such as 7 days after the broadcast). And that it does not contest what “the commercial players cannot provide and is directly related to democratic, social and cultural needs of the Finnish society”. Sanoma Complaint, para. 3. We do not consider the pure audio content of Yle Arena, unless otherwise indicated. By Yle Arena, we mean the audiovisual content available on Yle Arena.
Sanoma presents an implausible counterfactual scenario for the SVOD market size

5.3. In describing Yle Areena's alleged negative effect on commercial SVOD providers, Sanoma states that "SVOD-like Areena offering affects the size of the market (as it captures users that would otherwise be served by commercial VOD operators)" and that the negative effect manifests itself "through its effect on the level of "stacking" (i.e. the number of subscriptions to VOD services each household buys)". By focusing on the size of the market, Sanoma addresses Yle's effect on revenues, not on the profits of the SVOD providers.

5.4. Sanoma quantifies the effects of Yle Areena on subscription-based video-on-demand services (SVOD) by making an assumption about the average number of SVOD subscriptions per household in the absence of Yle Areena. It is not clear to us from the complaint whether this counterfactual is meant to describe a scenario in which Yle Areena did not exist at all, or a scenario with a more limited Yle Areena. Sanoma describes the counterfactual as "Household Stacking w/o [without] Areena" but relies on the resulting estimates to support a complaint about specific features of Yle Areena ('beyond catch up'). This apparent inconsistency suggests that even if the quantitative arguments Sanoma presented were sound, they would not be directly relevant to the specific complaint it was making and likely overstate any revenue effect by construction.

5.5. Table 6 summarises Sanoma's SVOD calculation. In its complaint, Sanoma does not provide any sources for the assumptions underlying its SVOD calculation, but "[a]ccording to Sanoma's best estimate, in the period 2020-2025, as illustrated in Table 5 below [CE simplification below in Table 6], the level of stacking in the Finnish VOD segment is expected than it would have been in absence of YLE's VOD offering. [--) In other words, without Yle, the number of subscriptions users would buy from commercial operators would be than in the current situation". Sanoma does not cite any survey or other empirical evidence but appears to assume that an arbitrary number of Yle Areena users would have subscribed to commercial SVOD service in the absence of Yle Areena (or what Sanoma calls Yle Areena's SVOD-like properties).

---

99 Sanoma Complaint, para. 152
95 Sanoma Complaint, para. 153
87 Sanoma Complaint, Table 5
95 Sanoma Complaint, para. 154
5.6 We note that Sanoma’s assumed 'stacking effect' is arbitrary and seems implausible in light of available international evidence, see Box 2.

**Box 2 Sanoma’s counterfactual scenario in an international context**

If the magnitude of the effect of Yle Areena on household stacking, as alleged by Sanoma, were true, then household stacking in Finland would have to have been [redacted] in the absence of Yle Areena. Based on an Ofcom-commissioned report published in 2019, an international comparison shows that the USA had the highest observed household stacking of SVOD services at 1.7, followed by the United Kingdom, at 1.5. Sanoma’s assumption means that in absence of Yle Areena, the Finnish household stacking rate in 2019 would not only have been the highest in Europe but in the world, exceeding the household stacking observed in the United States.


5.7 Sanoma attempts to monetise the effect of the allegedly lost subscriptions by applying an estimate of the average price of a SVOD subscriptions. It concludes that in 2020, the Finnish SVOD market would have been [redacted] in absence of Yle Areena. Again, it is unclear why Sanoma shows this estimate; Sanoma’s complaint concerns the selected “beyond catch-up” features of Yle Areena, not Yle Areena altogether.
5.8 In addition, Sanoma contends that Yle Areena’s Finnish content affects the domestic SVOD services’ (i.e. Ruutu+, Elisa Viihde Viaplay and CMore) ability to compete against the large global competitors like Netflix, Amazon Prime and Disney+ for Finnish customers. According to Sanoma’s complaint, availability of Finnish content on Yle Areena reduces the competitive advantage of domestic commercial VOD services vis-à-vis their global competitors.

Sanoma’s estimate of Yle Areena’s alleged revenue effect on AVOD is redacted in the complaint

5.9 In the non-confidential version of Annex 5 of the complaint available to us, Sanoma presents a redacted estimate of the monetary effect of Yle’s VOD offering on its AVOD business. This redacted estimate and any assumptions underlying it are redacted. Sanoma “estimates that about [redacted]% of Yle Areena’s users do not use Sanoma’s AVOD because Yle’s offering”. According to Sanoma, “The impact of Yle’s VOD offering on Sanoma’s AVOD business in 2020 is estimated to be in the range of [redacted] million per year”. Our understanding is that Sanoma makes an assumption about the number of Yle Areena users who do not use Ruutu because they use Yle Areena, and then monetises the impact under the assumption that premium AVOD generates revenue per 1,000 impressions in excess of [redacted].

5.10 Sanoma makes a separate remark, citing a Kantar study as the source: “[redacted] of Sanoma’s AVOD users also use Yle Areena on a weekly basis”. Furthermore, Sanoma states that: “If in the absence of Yle’s VOD offering, Sanoma would likely be able to capture more viewing from these users, which it could then monetize through advertising”.

5.11 Apart from referring to a Kantar study as a source for the [redacted] between Sanoma’s AVOD and Yle Areena, Sanoma does not provide any sources for its assumptions concerning Yle Areena’s effects on the size of the AVOD market.

A SURVEY OF CURRENT YLE AREENA USERS CAN HELP ASSESS THE CREDIBILITY OF SANOMA’S ALLEGATIONS

5.12 Sanoma’s quantification of the effect of Yle Areena on its business rests on three assumptions:

1. SVOD subscribing households would [redacted] SVOD services if Yle Areena did not exist;
2. An undisclosed percentage of Yle Areena users are currently not using Ruutu AVOD due to Yle’s offering; and
3. Sanoma would likely capture more viewing from the [redacted], who also use Yle Areena.

---

[93] As explained above, we consider CMore, Elisa Viihde Viaplay, and Ruutu+ domestic SVOD services.
[94] Sanoma Complaint, para 163.
[95] Sanoma Complaint, para 161.
[96] Sanoma Complaint, para 163.
[98] Sanoma Complaint, para. 164.
These assumptions describe the counterfactual scenario where Yle Areena either did not exist or was limited in content and functionality to a 7-day catch-up service. While Sanoma does not explicitly state that Yle Areena should be limited to 7 days, the examples used in its complaint to describe catch-up services suggests such a limitation.  

5.13 Sanoma’s three assumptions can be evaluated directly by asking users of Yle Areena how they would change their behaviour in a scenario where Yle Areena did not exist or was limited in functionality to a 7-day catch-up service. Surveys and diversion analysis based on survey results are commonly used in competitive assessments by competition authorities and regulators, in particular when the assessment concerns markets for consumer goods or services, such as the SVOD and AVOD services considered in Sanoma’s complaint. Likewise, market impact assessments carried out by telecommunications and broadcasting regulators are frequently informed by surveys.

5.14 As a closely related precedent on the use of survey evidence, we note the 2019 assessment by Ofcom (The UK broadcasting and telecommunications regulator) concerning the market impact of specific features of BBC’s video-on-demand service iPlayer. In its assessment, Ofcom specifically considered the effects of extending iPlayer’s content availability on other broadcasters’ VOD services and SVOD services, used two consumer surveys. Ofcom used the results of these surveys to answer two questions: (1) what would iPlayer users have done in absence of specific content on iPlayer, and (2) would users increase their use of BBC iPlayer if content was available for 12 months instead of 30 days? Ofcom concluded that specific iPlayer content or the availability of such content beyond 30 days did not give rise to adverse effects that would outweigh the public value of the service (see Appendix A for an overview of Ofcom’s approach).

---

99 E.g., Sanoma Complaint, para. 126: “It is not disputed that Yle may offer catch-up TV – in other words, make available online content already broadcasted on TV for users to watch on-demand for a clearly-set and limited time after the broadcast (such as 7 days). After all, this content is an additional service related to Yle’s TV programming. Such a 7-day catch-up service [-].”

100 For instance, the British Office of Fair Trading relied on survey evidence produced by parties in the acquisition of Amazon’s online DVD rental subscription business by LOVEFILM as part of its market assessment. Office of Fair Trading (2008), “Anticipated acquisition by LOVEFILM International Limited of the online DVD rental subscription business of Amazon, Inc.,” No. ME/3534/08.

101 The Ofcom evaluation of proposed changes to BBC iPlayer is available at: https://www.ofcom.org.uk/consultations-and-statements/category-3/proposed-changes-bbc-iplayer
Yle commissioned a survey to assess the credibility of Sanoma's allegations

Similarly to the surveys used as evidence by Ofcom, the survey designed by Copenhagen Economics and IRO, and commissioned by Yle, asks respondents two types of questions. The first type relates to forced diversions in a scenario where Yle Arena is absent altogether, and the second to behaviour in a scenario where Yle Arena is restricted to a 7-day catch-up service—a functionality that Sanoma appears to consider acceptable in its complaint. Ofcom argues that the first type, concerning forced diversions is more direct and easier for the user to relate to than the second. The second type question relates to a hypothetical situation which the respondent has never faced. We note that surveys asking forced diversion questions are used for closeness-of-competition assessment by the UK Competition and Markets Authority (CMA), as noted in its guidance for good practices on survey design. In the present context, the ambiguity of Sanoma’s allegation relating to the effect of Yle Arena on the size of the SVOD market also makes it necessary to consider a counterfactual without Yle Arena.

The survey commissioned by Yle was conducted by IRO Research Oy between July 27th and August 5th, 2021, as an online survey and asked a representative sample of respondents about their use of Yle Arena. Following the initial screening questions on whether the respondent used Yle Arena at least annually, 1,119 respondents took part in the survey. IRO ensured the representativeness of the sample, and the sample size is consistent (or larger) with surveys conducted in competition investigations in Finland. Responses are weighted such that the results are representative of the target population, people living in Finland (excl. Åland) over the age of 15. Box 3 sets out a more detailed description of the sampling method.

---

665 Forced diversion refers to scenario in which the good or service was not available at all for the customer, and is asked using formulation such as "If [respondent's choice] was not available, what would you have done?" or "Imagine that [respondent's choice] was chosen for refurbishment for 6 months..."


668 The sample was chosen such that more than 1,000 Yle Arena users could be captured with a high probability.

669 The sample size used is consistent with the practice used by the Finnish Competition and Consumer Authority, which frequently carries out surveys both for merger investigations and other analyses. For instance, in market investigation of loyalty programmes of Finnish Groceries chains, the FCCA used a sample size of 1009 and in the investigation for Acquisition of Pähalyjärvi by Mehläinen the FCCA had a post-screening sample size of 1064 which was used to study the private healthcare market in Finland (both surveys were used to estimate how consumers would diver between providers in response to an absence of the provider they chose).

670 The weighting is done by IRO Research (see Box 3).
5.17 The survey contained questions to help evaluate Sanoma’s assumptions about users’ SVOD and AVOD substitution patterns in the absence of Yle Areena. Respondents were asked: \emph{If Yle Areena was not available, which of the following would you most likely do?}\footnote{In Finnish: Jos Yle Areena ei olisi saatavilla, mitä seuraavista tekisiid käikistä todennäköisimmin?} Those respondents who indicated that they would have substituted Yle Areena with other audiovisual content were further asked: \emph{How would you substitute your consumption of Yle Areena video content?}\footnote{In Finnish: Miten korvataisit Yle Areenan videoaiheiden kulutuksen?} Respondents were provided with number of alternatives, including watching more linear TV, making use of their existing SVOD subscription, consuming advertisement-funded VOD (AVOD) or subscribing to either one or more additional SVOD services. The respondents were permitted to select multiple alternatives.

5.18 Further, in line with Ofcom’s approach in its investigation into BBC iPlayer’s features, Yle Areena users were asked how they would behave if Yle Areena was restricted to a 7-day catch-up service: \emph{If only content broadcast on TV was available on Yle Areena either live or at most for 7 days after being broadcast on TV, what would you do?}\footnote{In Finnish: Jos Yle Areenasta olisi saatavilla vain TV:ssä lähetettyä ohjelmia joko suoraan tai korkeintaan 7 päivän niiden TV-esityksen jälkeen, mitä tekisiid?} While Sanoma’s stacking effect assumption appears to refer to the forced diversion scenario, asking about this specific hypothetical change to Yle’s service is relevant to any potential effect of those features of Yle Areena to which Sanoma is objecting on the revenues of SVOD and AVOD providers.

5.19 The respondents were asked what kind of content they watch and what drives their current choices. Following the forced diversion questions, the respondents were also asked why they did not divert to a specific choice, e.g. why a respondent would not watch more AVOD content in the absence of Yle Areena, or if Yle Areena was limited to a 7-day catch-up service. Answers to these questions provide further insights into drivers of consumer choice behaviour.
5.20 We note that the purpose of the survey analysis presented here is to help assess the specific allegations presented by Sanoma in its complaint. The survey focuses on specific aspects of consumers’ likely behaviour and is not aimed at estimating all market outcomes in a counterfactual scenario without Yle Areena or the contested ‘beyond catch up’ services. For example, the survey analysis does not help inform the extent to which Yle Areena stimulates demand and incentivises innovation.

SANOMA’S ATTEMPT TO QUANTIFY AREENA’S MARKET EFFECTS IS BASED ON UNRELIABLE ASSUMPTIONS

5.21 Sanoma describes two particular reasons for why, in its view, the allegedly SVOD-like properties of Yle Areena are detrimental to competition in the market for SVOD services. First, Sanoma argues that Yle Areena decreases the number of subscriptions of SVOD services in Finland. Second, Sanoma argues that Yle Areena is particularly detrimental for the domestic SVOD providers who face significant competitive constraints from large global SVOD services, and whose competitive advantage is diminished by Yle’s free provision of Finnish language VOD content. The results of the survey suggest that both of Sanoma’s arguments rest on erroneous assumptions.

Sanoma exaggerates Yle Areena’s effect on the average number of household subscriptions to commercial SVOD services

5.22 Sanoma argues that the availability of Yle Areena affects the average number of SVOD subscriptions among SVOD-subscribing households, or household stacking. It is clear that Sanoma has identified the household stacking effect of Yle Areena. This amounts to assuming that, in the absence of Yle Areena, households already subscribing to a commercial SVOD service or services would have compared with the situation where Areena was available.

5.23 This stacking effect can be interpreted as the aggregate diversion from Yle Areena to other services in a scenario where Yle Areena is not available. From an economic perspective, the plausibility of a stacking effect assumption hinges on whether Yle Areena and SVOD services are considered close substitutes or not. The more similar the alternatives are from the customer’s perspective, the closer the alternatives are as substitutes. Alternatives may be close substitutes for different reasons, however. A reliable assessment of the closeness of substitution ultimately requires an empirical analysis.

---

412 Activity respondents were not told about Sanoma’s State aid complaint.

413 As noted in Chapter 9, our focus is on Sanoma’s allegations concerning the alleged adverse market effects, not on the possible positive effects Yle Areena can have on market outcomes.

414 It is not clear from Sanoma’s complaint whether the counterfactual stacking levels describe a situation where Yle Areena does not exist at all, or whether merely what Sanoma terms the SVOD-like service of Yle Areena is absent. Para. 153 of the Sanoma’s complaint may reasonably be interpreted as suggesting that it is what Sanoma calls the SVOD-like service in terms of content and characteristics that is absent in the counterfactual, and not Yle Areena as a 7-day catch-up service, for example.

415 To be clear, Sanoma’s calculation rules out a scenario where those households that currently do not subscribe to any SVOD service would subscribe to SVOD services in absence of Yle Areena. It only allows a scenario where households currently subscribing to a SVOD service or services would subscribe to another SVOD or services. This is shown in Sanoma’s “best-for” calculation, where the number of SVOD-subscribing households does not change between scenarios, while the average number of subscriptions per subscribing household increases.

416 Typically, diversion ratios are measured between individual goods or services, for example from Yle Areena to Netflix. Diversion to similar but differently branded goods may also be aggregated when the goal is to identify whether a specific type of good is considered a close substitute or not.

417 For one buyer, two services can be close substitutes because they include content from a genre that user particularly cares about. Another buyer who cares less about that specific genre may not view the two services as close substitutes.
A stacking effect corresponds, for example to an aggregate diversion pattern where it would also arise if, in the absence of Yle Arena, the plausibility of a stacking effect can therefore be assessed using surveys with diversion questions of the type described above.

**Box 4 Quantifying the stacking effect**

While the concept of stacking effect is closely related to the diversion ratio and the two are interlinked, the diversion ratio cannot be directly interpreted as the stacking effect. Some households may subscribe to more than one SVOD service in absence of their Yle Arena. The stacking effect can be calculated as follows:

\[
Stacking = \sum \left( \frac{NewSubs_i}{HH_{SVOD}} \right)
\]

where NewSubs \(i\) is the number of new subscriptions a SVOD-subscribing household would subscribe to based on their response and \(HH_{SVOD}\) is the percentage of SVOD-subscribing households who have indicated they would subscribe to \(i\) more services.

For example, if 50% of households would subscribe to one additional SVOD service, 10% would subscribe to two additional SVOD services and 2% of households would subscribe to three additional SVOD services, stacking effect would be calculated as:

\[
Stacking = 1 \cdot 50\% + 2 \cdot 10\% + 3 \cdot 2\% = 0.5 + 0.2 + 0.06 = 0.76
\]

The results of Yle’s survey reveal that, out of those respondents who had at least one SVOD service in use, only 6.8% would have subscribed to one additional SVOD service, and 1.5% would have subscribed to more than one additional SVOD service, see Figure 6 below. 92% would not have subscribed to an additional SVOD service had Yle Arena not been available. This observed diversion pattern corresponds to a stacking effect of around 0.095. Thus, Sanoma’s estimate of Yle Arena’s stacking effect is more than as the estimate we calculate based on the survey evidence.

---

67 Precisely, households in which there is an Yle Arena user.
68 There are households that would subscribe to more than one SVOD service in absence of Yle, hence there is no direct 1-to-1 link between the diversion ratio and stacking effect.
69 Even if the respondent had indicated that they would subscribe to one more SVOD service only, they were able to select multiple services when asked which service they would subscribe to. Due to the more speculative nature of the follow-up question, we continue to assume that the respondent would only subscribe to one more SVOD service and interpret the selection of multiple services as the uncertainty about the choice of service. For example, if the respondent chose two different services having first answered that they would subscribe to only one, we interpret that they would choose each service with equal, or 50%, probability.
70 The stacking effect is calculated as \(1 \times 0.0682082 + 2 \times 0.0125077\), where 2.1904 is the average number of SVOD subscriptions among households subscribing to more than one additional SVOD service. This is mathematically equivalent to the calculation in Box 4.
Figure 6
What would have done if Yle Areena was not available? I would watch...
Percentage of households who already subscribe to SVOD

![Bar chart showing percentages of households who would watch different types of services if Yle Areena was not available.](image)

Note: N = 609. The subsample includes those respondents who have used Yle Areena within the past year and already subscribe to at least one SVOD service. Respondents were allowed to select multiple alternatives apart from “No other AV content”. Column “Total other than SVOD” sums up all unique respondents to “Yle Linear TV, Commercial Linear TV, AVOD, and Edited SVOD”. Following a standard practice respondents who did not know what to do are disregarded.

Source: Copenhagen Economics analysis based on IRO survey data.

5.26 Instead of subscribing to another SVOD service as claimed by Sanoma, most respondents say that they would replace at least some of their viewing by watching more linear TV or make more use of their existing SVOD subscription.

5.27 Of those respondents who did not already subscribe to a SVOD service, 3.9% would subscribe to one or more SVOD service if Yle Areena was not available. While these respondents would increase the overall number of SVOD subscriptions in Finland, this increase is not part of the stacking effect through which the alleged SVOD market size-reducing effect of Yle Areena operates in Sanoma’s calculation.
In order to evaluate the effect of Sanoma’s proposal of restricting Yle Areena to a 7-day catch-up service, Yle also asked the survey respondents what they would do if content on Yle Areena was available only (a) as a live stream concurrently with the TV broadcast and (b) seven days after the initial TV broadcast. Only 2.5% of the respondents would have subscribed to an additional SVOD service in such a scenario, with around 66% of respondents currently using Yle Areena and at least one SVOD service saying they would either watch the same amount of Yle Areena content as before or decrease their use of Yle Areena, but not replace the decreased viewing time with consumption of other audiovisual content.

Based on the survey results, most users with at least one SVOD subscription would increase use of their existing SVOD service(s) or watch more of linear TV rather than subscribe to an additional SVOD service. The household stacking effect estimated by Sanoma is overestimated. Only 8% of respondents already subscribing to at least one SVOD service would subscribe to another SVOD service, which corresponds to stacking effect of 0.095. Thus, the effect of Yle Areena’s VOD service on the size of the SVOD market is severely exaggerated by Sanoma in its complaint. Further, while the ‘forced diversion’ analysis is necessary as it enables a like-for-like comparison with Sanoma’s assumptions, it substantially overestimates any effects of the contested services — i.e. Yle’s ‘beyond catch up services’ — could have on SVOD subscriptions.

Ruutu+ and other domestic SVOD services do not appear as close substitutes to Yle Areena

Further to reducing the number of SVOD subscriptions, Sanoma asserts that Yle Areena’s VOD service is particularly distorting on the Finnish market since it provides content in Finnish. According to Sanoma, the domestic SVOD providers face significant competitive pressure from the global SVOD services such as Netflix, Amazon Prime Video and Disney+, and that Yle’s provision of Finnish content for free diminishes the competitive advantage of the domestic SVOD services (namely CMore, Elisa Viihde Viaplay and Ruutu+).

In other words, Sanoma alleges that Ruutu+, CMore and Elisa Viihde Viaplay are closer substitutes to Yle Areena than e.g. Netflix or Amazon Prime, and that in the absence of Yle Areena the users of Yle Areena would subscribe to one of these services focusing on Finnish content. The credibility of Sanoma’s assertion hinges on Yle Areena and the domestic services being close substitutes to one another and can be evaluated empirically. If those users who in the absence of Yle Areena would subscribe to a SVOD service were to mostly subscribe to another global SVOD service, any effect Yle Areena may have on the market is less likely to render it impossible or excessively difficult for a private operator to conduct business. Beyond the attained substitution patterns from the survey, we have asked the respondents about the language in which they primarily watch Yle Areena in.

For Sanoma’s claim on Yle Areena being particularly distorting on the Finnish market due to providing Finnish language content and being a particularly close substitute to domestic SVOD, the following hypothesis must be true:

*In absence of Yle Areena, domestic SVOD services would be preferred by the respondents over their global counterparts*

---

128 The 7-day restricted diversion question was only posed to those respondents who had indicated that they would substitute Yle Areena with other audiovisual content. Those respondents who had stated they would not have watched any audiovisual content to replace Yle Areena can be assumed either to watch the same amount of Yle Areena as before, or to decrease their use of Yle Areena but not to replace their decreased viewing with consumption of other audiovisual content. The 2.5% is therefore a conservative upper range for additional SVOD subscribers.
5.33. As reported, the observed 'stacking effect', or the effect of Yle Areena on the average number of household subscriptions to SVOD services (among the households that do subscribe to such services) is 0.09. When asked which SVOD service the respondent would have diverted to in the absence of Yle Areena, only 25.4% of the respondents would have chosen a domestic SVOD service, see Figure 7. The three most popular alternatives selected by the respondents were HBO Nordic, Disney+, and Netflix, all global services.

5.34 Out of those respondents who currently subscribed only to global services, 27.6% would have selected a domestic SVOD service in absence of Yle Areena. Moreover, out of those users of who mostly watched content on Yle Areena in Finnish, 26% would have subscribed to a domestic SVOD service in absence of Yle Areena. Recognising that the sample size in this sub-group is small (N=46) and results should therefore be interpreted with caution, the limited substitution towards domestic SVOD casts further doubts on the notion that the existence of Yle Areena could make it excessively difficult or impossible for Sanoma to conduct its SVOD business in Finland.

**Figure 7**

**To which SVOD service would the respondent subscribe in the absence of Yle Areena?**

Percent of the minority of respondents who would subscribe to at least one more SVOD service.

![Diagram showing subscription preferences](image)

- Not subscribing any other SVOD
- Global
- Domestic

**Note:** N = 609. The subsample includes those respondents who have used Yle Areena within the past year and already subscribe to at least one SVOD service. Respondents who stated they would subscribe to at least one SVOD service were asked which service(s) they would subscribe to.

**Source:** Copenhagen Economics: calculations based on IRO survey data.

5.35 Based on the survey results, users of Yle Areena do not consider the services of domestic SVOD providers to be closer substitutes to Yle Areena VOD than the global SVOD services. Only 25.4% of respondents indicated that they would have chosen to subscribe to one of the three domestic SVOD services in absence of Yle Areena.

---

Note that the number of respondents who subscribed only to global SVOD services is 55, meaning that the percentage is only indicative.

Note that the number of users viewing mostly Finnish content and who would subscribe to a SVOD service in absence of Yle Areena is 21.
5.36 In light of the limited diversions uncovered in the survey from Yle Areena to domestic SVOD providers, it is unlikely that Yle Areena exerts a stronger competitive constraint on domestic SVOD providers than global players. Moreover, it is unlikely that Yle’s provision of Finnish language content diminishes the competitiveness of the domestic SVOD providers vis-à-vis Netflix and other global players.

**OTHER ADVERTISEMENT-FREE ALTERNATIVES WOULD CAPTURE MOST OF EXISTING YLE AREENA VIEWING**

5.37 On AVOD services, Sanoma alleges that Yle Areena reduces the number of users of AVOD services, making them less appealing to advertisers and thereby reducing the advertising revenues of AVOD service providers. In effect, Sanoma makes two allegations:

1. [redacted]% of Yle Areena users are currently not using Ruutu AVOD due to Yle’s offering; and
2. Sanoma would likely capture more viewing from [redacted] of its Ruutu AVOD users, who also use Yle Areena

Based on the first allegation about AVOD, Sanoma provides an estimate of lost advertisement revenue. However, as both the estimated lost revenue and the calculation through which Sanoma arrives at the estimated lost revenue are redacted, we are limited to a high-level commentary on the credibility of the two allegations made by Sanoma.

**Most users of Yle Areena multi-home and use several AVOD services alongside Yle Areena**

5.38 Sanoma alleges that for some users, Yle Areena provides a substitute to the content provided by AVOD services. According to Sanoma, Yle Areena’s advertisement-free content is appealing to these users, as they might for instance find advertisements as part of their audiovisual content consumption undesirable. Sanoma argues that in absence of Yle Areena, these users would choose to use AVOD services instead, which would make these services more desirable to advertisers consequently increasing their respective turnovers.

5.39 Sanoma fails to recognise that the reason why some of Yle Areena’s users do not watch Ruutu can be independent of Yle Areena’s advertisement-free content offering. For instance, the needs of some multihoming Yle Areena users may be sufficiently satisfied by combination of Yle Areena and other AVOD. Even if Yle Areena were restricted to a 7-day catch-up service, the users currently consuming Yle Areena content might replace it with services other than Sanoma’s, if they were to replace it at all. Furthermore, Sanoma does overlook the possibility that, in the absence of Yle Areena, other advertisement-free content is likely to be more appealing to Yle Areena users if advertisements constitute a key deterrent to using AVOD services.

5.40 Sanoma further fails to recognise the fact that its own SVOD service Ruutu+ could cannibalise part of its own AVOD business. Given the largely overlapping content\(^\text{11}\), we consider it improbable that the same user would use both Sanoma’s AVOD and SVOD services. Sanoma in essence claims that Yle Areena users would divert to both of its services but does not comment on the fact that Yle Areena users probably would not divert to both services and the two segments of the VOD market cannibalise one another.

\(^{11}\) In footnote 149 of the Sanoma Complaint, Sanoma states that “The entire content offering acquired by Sanoma is available in both AVOD (Ruutu) and SVOD (Ruutu+) (excluding sports content which is SVOD-only and). Further we note that a substantial part of the film content is available only on Ruutu+ subscribers.”
In order to evaluate the plausibility of the assumptions that appear to underlie Sanoma’s AVOD-related allegations, it is necessary to determine how many users already multi-home between Yle Areena and Ruutu (or other AVOD), and how many users would divert to Ruutu in the absence of Yle Areena.

Firstly, we see from the survey commissioned by Yle that the vast majority of Yle Areena users already watch at least some AVOD content. Only 11.4% of Yle Areena users do not consume any AVOD services; see Figure 8. The most popular AVOD service used by 75% of the respondents is Youtube. Secondly, the domestic AVOD services jointly reach 68% of Yle Areena users - with MTV and Ruutu alone reaching 51% and 50% respectively.

**Figure 8:**
*Which AVOD services have you used in the past year?*
Percentage of Yle Areena users

Note: N = 1043. The subsample includes those respondents who have used Yle Areena within the past year. Respondents were allowed to pick multiple alternatives. “No AVOD” refers to respondents not using any AVOD service. Finnish AVOD aggregates unique respondents who have used at least Ruutu, MTV or one of the online news platforms. Other services with smaller percentages are excluded from the figure for clarity.

Source: Copenhagen Economics calculations based on IRO survey data.

Given that most Yle Areena users already use at least some AVOD service and the respective shares of Ruutu and MTV users exceed 50%, Sanoma’s allegation of users not watching AVOD due to free provision of content on Yle Areena appears implausible. We cannot comment on the plausibility of the specific effect being alleged as this has been redacted.

**In the absence of Yle Areena, other advertisement-free services would capture most of the users who currently do not use Ruutu**

Sanoma’s allegation on Yle Areena being distorting is specific to its Ruutu service. Thus, in the forthcoming we focus exclusively on those Yle Areena users who do not watch Ruutu but may use other AVOD services.
5.45 Of the 50% of Yle Areena users who did not already watch Ruutu, only 9.5% would watch any AVOD service if Yle Areena was not available. 57.7% would not replace Yle Areena with any audiovisual content, and a further 32.8% would replace Yle Areena with services other than AVOD. Most commonly, Yle Areena would be replaced with Yle’s own linear TV broadcasts or with increased use of the respondent’s existing SVOD subscription, see Figure 9.

Figure 9
What would you have done if Yle Areena was not available? I would watch...
Percentage of respondents who did not already watch Ruutu

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No other AV content</td>
<td>57.7%</td>
</tr>
<tr>
<td>Yle Linear TV</td>
<td>20.9%</td>
</tr>
<tr>
<td>Existing SVOD</td>
<td>9.8%</td>
</tr>
<tr>
<td>Order one more SVOD</td>
<td>17.5%</td>
</tr>
<tr>
<td>Order more than one SVOD</td>
<td>4.5%</td>
</tr>
<tr>
<td>Total other than AVOD</td>
<td>32.8%</td>
</tr>
<tr>
<td>AVOD</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

Note: N = 518. The subsample includes those respondents who have used Yle Areena within the past year and who do not watch Ruutu AVOD. Respondents were allowed to answer multiple alternatives. Column “Total other than AVOD” sums up all unique respondents to “Yle Linear TV, Commercial Linear TV, Existing SVOD and would subscribe to another SVOD”. Following a standard practice, respondents who did not know what to do are disregarded.

Source: Copenhagen Economics calculations based on IRO survey data.

5.46 Of the 9.5% who would increase their consumption of AVOD services, only 20.5% would watch Ruutu in place of Yle Areena. Put another way, only 1.9% of those currently not watching Ruutu would do so in the absence of Yle Areena. These estimated percentages are based on the forced diversion question (no Areena) and fewer respondents said they would increase their use of AVOD (and Ruutu) in the absence of just the contested ‘beyond catch up’ functionalities.

5.47 For those Areena users who did not already use Ruutu, the main reasons behind not consuming more AVOD services in absence of Yle Areena were the presence of advertisements and the lack of appealing content, with 49.3% citing lack of appealing content and 47.8% citing advertisements as reasons; see Figure 10. The majority of Yle Areena users who not already watching Ruutu would instead watch more Yle’s linear TV or make more use of their existing SVOD subscriptions. Both of these alternatives provide advertisement-free content to end-users.

9.5% of those not currently watching Ruutu would increase their use of AVOD service in absence of Yle. Of those 9.5%, only 20.5% would watch Ruutu. Thus, out of all Yle Areena users not already watching Ruutu 9.5% × 20.5% = 1.9% would start watching Ruutu in absence of Yle Areena.
Figure 10
Reasons behind not watching more AVOD in absence of Yle Areena
Percentage of respondents who did not already watch Ruutu and would not increase use of AVOD in the absence of Yle Areena

Note: N = 233. The subsample includes those respondents who have used Yle Areena within the past year and who do not watch Ruutu AVOD and would not increase use of AVOD in the absence of Yle Areena. Respondents were allowed to name more than one reason why they would not have watched AVOD.
Source: Copenhagen Economics calculations based on IRO survey data.

5.48 To evaluate the effect of Sanoma's proposal of restricting Yle Areena to a 7-day catch-up service, we also asked the respondents what they would do if content on Yle Areena was available only live and 7 days after being broadcast on TV. Only 5.2% of those respondents who did not watch Ruutu would have increased their use of AVOD. 75.8% of the respondents would either watch the same amount of Yle Areena than before or decrease their use of Yle Areena but not replace the decreased use with other audiovisual content.

5.49 Even in the absence of Yle Areena, only 1.9% of Yle Areena's current users who are not already using Ruutu would start using Ruutu. Most respondents would either not replace their consumption of Yle Areena with any video content or replace it with other advertisement-free audiovisual content. Thus, Sanoma's allegation that Yle Areena's advertisement-free provision of SVOD-like content decreases Ruutu's AVOD viewership appears unfounded.

In the absence of Yle Areena, most multi-homers would not increase their consumption of any AVOD service

5.50 Sanoma alleges that, in the absence of Yle Areena, those currently multihoming between Yle Areena and Ruutu, would spend more time watching AVOD content on Ruutu. This, according to Sanoma's reasoning, would increase the reach of its AVOD services, increasing its appeal to advertisers, and increasing Sanoma's advertisement revenue.
5.51 The argument again hinges on Ruutu being a substitute to Yle Areena. Since consumers’ attention is a scarce resource, any time spent on watching Yle Areena is time not spent in some other activity. In Sanoma’s view, some of this time would go into Ruutu ahead of other activities. Specifically, according to Sanoma, of Ruutu users also use Yle Areena, and in the absence of Yle’s VOD offering, Ruutu “would likely be able to capture more viewing time from these users.”

5.52 In order for Sanoma’s assumption regarding Ruutu capturing more viewers in the absence of Areena to be plausible, it should be the case those who currently use both Yle Areena and Ruutu would substitute their Yle Areena consumption with Ruutu.

5.53 As previously stated, 50% Yle Areena users in the survey also used Ruutu. These 50% of Yle Areena users should correspond to . As such, the preferences of these 50% should reflect the preferences of those Ruutu users. Figure 11 illustrates the overlapping viewership between Yle Areena and Ruutu.

5.54 Thus, by looking into this overlapping usership between the two services, we can test how many of the multi-homers of these services would watch more Ruutu in absence of Yle Areena. We observe that only 20.8% of those using both Yle Areena and Ruutu would replace any part of their consumption of Yle Areena with an AVOD service, see Figure 12. A mere 4.9% of the survey respondents would have only diverted their use of Yle Areena to AVOD, with the remaining splitting their available time between other alternatives.

---

Para 164, Sanoma Complaint.

Sanoma’s claim focuses in particular on those users multihoming between Yle Areena and Ruutu, but the claim can be generalized to cover any AVOD service.
Figure 12
What would you have done if Yle Areena was not available? I would watch...
Percentage of respondents who multihome between Yle Areena and Ruutu

Note: N=524. The subsample includes those respondents who have used Yle Areena within the past year and who watch Ruutu AVOD. Respondents were allowed to select more than one alternative.
Source: Copenhagen Economics calculations based on IRO survey data.

5.55 Of those 20.8% who would have increased their time watching AVOD, 73.8% would have increased time spent on Ruutu, see Figure 13. In other words, 15.4% of those users who currently use both Yle Areena and Sanoma’s AVOD service Ruutu would spend more time viewing Ruutu in the absence of Yle Areena.
Figure 13
Which AVOD service would you use to replace Yle Areena
% of respondents who would increase their use of AVOD services and multihomed between Yle Areena and Ruutu

Note: N = 106. The subsample includes those respondents who have used Yle Areena within the past year and who watch Ruutu AVOD and would increase their use of AVOD in absence of Yle Areena. Services with less than 10% excluded for clarity. Respondents were allowed to select more than one alternative.
Source: Copenhagen Economics calculations based on IRO survey data.

5.56 If instead the content of Yle Areena was available only for 7 days after being broadcast on TV, only 8.5% of the respondents multihoming between Yle Areena and Ruutu would increase their use of AVOD. 71.5% of respondents would either watch the same amount of Yle Areena than before or decrease their use of Yle Areena but not replace the decreased use with other audiovisual content.

5.57 Sanoma’s statement that it “would likely be able to capture more viewing time from these users [those multi-homing between Ruutu and Yle Areena]” appears exaggerated. Based on our analysis of the survey results, Sanoma would be able to gain more viewing time from only 15.4% (in the absence of Areena) or 8.5% (in the absence of ‘beyond catch-up’ features) of these users. The users would not only substitute their use of audiovisual content to Ruutu, but also other audiovisual content.

5.58 In conclusion, Sanoma’s allegations related to Yle Areena resulting in fewer SVOD subscriptions, or reduced use of AVOD services are based on speculative assumptions considering the quantitative evidence obtained through the survey. This suggests that it is unlikely that specific properties of Yle Areena, or Yle Areena as a whole, make commercial providers’ VOD business excessively difficult or impossible to conduct.
CHAPTER 6

THERE IS NO EVIDENCE TO SUGGEST THAT YLE WOULD DISTORT CONTENT MARKETS

Table 7
Summary of the assessment presented in Chapter 6

<table>
<thead>
<tr>
<th>SANOMA ALLEGATION</th>
<th>COPENHAGEN ECONOMICS ASSESSMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanoma alleges: “YLE competes with domestic and international audiovisual content providers (including VOD providers) for the licensing / acquisition of rights to audiovisual content. YLE’s stable, guaranteed and considerable public funding allows it to invest significantly in the acquisition of rights to domestic and foreign audiovisual content, competing with domestic commercial operators, which have more limited resources to allocate for the acquisition of such content”.</td>
<td>Sanoma has not presented reliable evidence in support of its allegations. YLE’s incentive and ability to match market prices for content and to outbid commercial rivals is constrained by its finite budget and statutory remit to ensure diversity in YLE’s content holdings. The available information does not suggest that YLE would frequently compete with commercial providers for foreign drama content and outbid commercial providers by paying exceptionally high prices.</td>
</tr>
</tbody>
</table>

SANOMA’S ALLEGED THAT YLE CROWDS OUT COMMERCIAL PROVIDERS FROM THE CONTENT MARKET

6.1 Sanoma alleges that YLE’s activities distort the market(s) for production of original content and acquisition of rights to audiovisual content. At the core of Sanoma’s allegation is a notion that since YLE is not dependent on subscription fees or advertisement revenue it has the opportunity to invest upfront without commercial considerations on returns.

6.2 In its complaint, Sanoma distinguishes two mechanisms through which it alleges that YLE distorts competition in the content market:

6.3 First, according to Sanoma, YLE competes for (domestic and foreign) content rights with commercial VOD providers. Sanoma alleges that YLE’s content acquisition intensifies competition for broadcasting rights on the Finnish (and possibly Nordic) markets, and that this increases the overall price level in the market. Due to the allegedly inflated price level, the commercial VOD providers are able to acquire fewer rights, making their services less appealing for consumers. Sanoma alleges that, for example:

“YLE competes with domestic and international audiovisual content providers (including VOD providers) for the licensing / acquisition of rights to audiovisual content. YLE’s stable, guaranteed and considerable public funding allows it to invest significantly in the acquisition of rights to domestic and foreign audiovisual content, competing with domestic commercial operators, which have more limited resources to allocate for the acquisition of such content”

---

u6 Sanoma defines all VOD content acquisition as one market.
u9 Sanoma Complaint, para 173.
v7 Our understanding on the basis of YLE’s description is that Finnish content is rarely traded as ready-made content, but rather developed together with the broadcaster (or VOD provider) from concept.
v8 Sanoma Complaint, para 98.
6.4 Second, Yle’s domestic content acquisition and production increases costs borne by commercial operators. Sanoma further alleges that as a consequence of its “heavy investments” in original content Yle drives up input prices in the industry, thus increasing the production costs: “Moreover, Yle’s presence affects input prices and thus increases production costs, increasing in turn the costs borne by commercial operators.” Sanoma considers that this weakens the domestic VOD providers’ ability to invest in Finnish content and to differentiate themselves from global VOD providers such as Netflix or Disney.

6.5 As a consequence, Sanoma alleges, Yle reduces the VOD providers’ ability to invest and innovate. In particular, Sanoma considers that its ability to invest in content is reduced by Yle’s activities in content acquisition and production. According to Sanoma, “the quality and diversity of content offered by VOD providers is fundamental for acquiring and maintaining their user base”. It concludes that the effect of Yle on the VOD market will intensify over time as the commercial operators’ ability to use FTA content reduces.\(^\text{44}\)

**THERE IS NO EVIDENCE OF SUBSTANTIAL DISTORTIONS IN THE CONTENT MARKET**

6.6 Sanoma refers to Yle’s state funding and budget and appears to suggest that Yle competes for, and outbids, commercial providers due to its financial resources. Sanoma does not set out a clear theory of harm of how such distortion could arise, nor does Sanoma provide significant empirical evidence to support its allegations. An assessment of any effects Yle may have on content acquisition necessitates significantly more evidence than what has been put forward by Sanoma.

6.7 Given that Sanoma’s allegations lack a significant empirical foundation, we assessed the effect Yle may have on the content market drawing on conceptual economic arguments relevant to content rights acquisitions. From an economic perspective, distortions to content rights acquisitions akin to those described by Sanoma can be plausible if:

- Yle’s financial resources and regulatory constraints enable outbidding commercial operators;
- Yle acquires similar types of content as commercial providers and competes for the same rights;
- Yle pays high prices for the content it acquires.

6.8 Based on the evidence available to us from Yle and public sources, we assessed the extent to which these circumstances characterise the content acquisition markets in which Yle and commercial providers operate. We found that Sanoma appears to exaggerate Yle’s ability to outbid rivals and...\(^\text{45}\) We elaborate our findings as follows.

**Yle’s finite budget and statutory duty to ensure diversity and public service values limits Yle’s incentive and ability to compete for commercially valuable content**

6.9 Contrary to Sanoma’s allegations (i) Yle faces budget constraints impeding its ability to match market prices of content rights, and (ii) regulatory requirements to ensure diversity and public service values in its content holdings.

\(^{42}\) Sanoma Complaint, para 175.
\(^{43}\) Sanoma Complaint, para 148.
\(^{44}\) Sanoma Complaint, para 174.
6.10 **Yle operates under a strict statutory budget constraint.** Commercial providers base their strategic choices over content acquisitions on expected returns. The expected returns are contingent on (i) the numbers of new VOD subscribers, FTA/AVOD viewers and advertisement revenues, and (ii) the numbers of existing subscribers generating cash flows limiting the need for additional finance. Yle cannot increase its budget (or individual bids) to reflect the market value of content rights.

6.11 Yle’s ability to outbid other providers for commercially attractive content is still constrained financially by its annual budget approved annually by the Ministry of Transport and Communications. As Yle’s budget (net revenue after VAT) has increased by around 4.7 percent between 2016 and 2020 (CGAR 1.2%). Further, with the emergence of global and national SVOD players, competition for content rights has intensified. As competition for content rights increases, the bargaining power of rights holders increases, too, enabling them to extract higher prices for content rights. Had Yle, as Sanoma alleges, disproportionately increased investments in content to outbid rivals, we would expect to see an increasing spend in commercially attractive content. Instead, we observe that Yle’s expenditure for drama, a category including potentially commercially attractive content, has, in fact, slightly declined in real terms between 2012 and 2020, see Figure 14 (this includes, amongst other costs, produced and acquired domestic, and foreign content). This is not consistent with the allegation that Yle is able to increasingly outbid rivals when competing for content due to its state-funded budget.

**Figure 14**

**Yle’s expenditure on drama in nominal and real terms**

€ million in 2020 euros

<table>
<thead>
<tr>
<th>Year</th>
<th>Real value</th>
<th>Nominal value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>60</td>
<td>55</td>
</tr>
<tr>
<td>2013</td>
<td>65</td>
<td>60</td>
</tr>
<tr>
<td>2014</td>
<td>70</td>
<td>65</td>
</tr>
<tr>
<td>2015</td>
<td>75</td>
<td>70</td>
</tr>
<tr>
<td>2016</td>
<td>80</td>
<td>75</td>
</tr>
<tr>
<td>2017</td>
<td>85</td>
<td>80</td>
</tr>
<tr>
<td>2018</td>
<td>90</td>
<td>85</td>
</tr>
<tr>
<td>2019</td>
<td>95</td>
<td>90</td>
</tr>
<tr>
<td>2020</td>
<td>100</td>
<td>95</td>
</tr>
</tbody>
</table>

**Note:** Annual nominal spending on drama is deflated using the producer price index for services in "creative arts and entertainment services". Reporting before 2012 uses different categorisation of content. The figure displays Yle’s expenditure on both foreign and domestic drama.


---

[https://valtioneuvosto.fi/valoarkset/paattue?decisionId=0000000008b0b6f40](https://valtioneuvosto.fi/valoarkset/paattue?decisionId=0000000008b0b6f40)
6.12 Yle's content differs considerably from that of commercial players. Yle is subject to many regulatory obligations to ensure variety and public service values in its programming. These regulatory obligations constrain Yle from investing disproportionally in certain programming content.²⁶ Yle does not have the same flexibility as commercial providers because it is subject to guidance and a code of conduct on what type of content it should provide, see Box 5. Yle’s strategy for acquiring content is focused on variety, serving all audiences including special and minority audiences.²⁷ Further, Yle has also identified values and general objectives which are followed in the selection process for acquiring content to ensure content variety within genres.²⁸

**Box 6 Statutory obligations and general principles for Yle’s content offering**

Act on Yleisradio Oy defines that Yle is responsible for the provision of versatile and comprehensive television and radio programming with the related additional and extra services for all citizens under equal conditions. In particular, Yle’s content offering shall e.g.:

- support democracy and everyone’s opportunity to participate by providing diverse information, opinions, and discussions, as well as opportunities for interaction;
- produce, create, develop, and preserve Finnish culture, art and stimulating entertainment;
- consider the aspects of education and equality in the programmes, provide opportunities for learning and self-development, emphasize programmes for children and young people, and offer devotional programmes;
- treat the Finnish- and Swedish-speaking population on an equal footing in program activities, provide services in the Sámi, Romani, and sign languages and, where applicable, also in the languages of other language groups in the country;
- support the preservation of the Finnish cultural heritage, tolerance, equal treatment, equality and cultural diversity, and to take care of the provision of programmes also for minority and special groups;
- promote cultural interaction and maintain production intended for international distribution.

**General principles** for Yle’s production of programmes and content include e.g.:

- Yle presents opinions, values, and social phenomena in as diverse a way as possible in its programmes and content.
- The public must be given the opportunity to distinguish both the facts and their background from opinions and fictional content.
- The dignity of everyone must be respected. Pluralism is one of our core values.


²⁷ Copenhagen Economics interview with Yle.

²⁸ Copenhagen Economics interview with Yle.
6.13 The fulfillment by Yle of these defined objectives is supervised by the Administrative Council and the Finnish Transport and Communications Regulatory Authority supervises e.g. that Yle is in compliance with the legislation. In particular, the Administrative Council is in charge of deciding on Yle’s strategy, economic and operational guidelines, restrictions and expansion objectives and reporting to Parliament on the fulfillment of the public service remit.\(^\text{129}\)

6.14 Further, Yle has developed a detailed overview of the type of content that it seeks from production companies for future content including the content genre and the target viewer age group.\(^\text{130}\) This, coupled with the aforementioned statutory obligations, means that Yle does not aim, and has a limited ability, to compete with commercial providers. Put another way, Yle’s ability spend its finite content budget on narrow areas of commercially appealing content is limited.

6.15 Sanoma has not shown whether its own programming content is similar to that of Yle to an extent consumers’ (or advertisers’) willingness to pay for Sanoma’s services would be materially lower. Data from Finnpool suggests that there are substantial differences between Yle Arena and commercial providers in terms of the composition of the content provided. Compared to other operators, Yle’s viewers watch programs from a wider range of content categories such as children’s programs, domestic and foreign fiction, and factual/cultural/lifestyle programs, see Figure 15.\(^\text{131}\)

Figure 16  
Comparison of BVOD services’ content consumption
Relative percentage split in reported cumulative average time viewed per genre

![Comparison of BVOD services’ content consumption](image)

Note: Data includes people older than 3 years. Ryto and Ruytu+ are excluded from BVOD services. Educational and science programs, other program types and popular culture are consumed only marginally and are left out of the figure.

Source: Copenhagen Economics based on: TotoTV Measurement Finnpool 2020 data.

---

\(^{129}\) https://yle.fi/aika/-/about-yle/yle-administrative-council

\(^{130}\) Yle (2001), Tarjontametsä 2002 –, available from: https://docs.google.com/presentation/d/e/2PACX- arI5rApVz7gjQmTQ1AOj6S6VfTGHV9H3bXPlP7CQr9DQzYoBuhM9e71h

\(^{131}\) The categorization used by Finnpool is at a very high level. Yle provides content in variety of different languages from other public broadcasters and independent producers which is not visible on this.
6.16 As shown in the Figure, while entertainment, light music and reality is the most popular genre in Ruutu and AVOD services (as high as 80% in Ruutu), they only constitute 4% of the content consumed from Yle Areena. Furthermore, foreign fiction, which is the most popular genre consumed in Yle Areena, is considerably less popular, especially in Ruutu. Yle Areena also stands out with 11% of its content consumption coming from children’s programmes, whereas the share of children’s programmes is AVOD services, respectively.

6.17 The survey commissioned by Yle (discussed in detail in Chapter 5) corroborates the finding that viewers choose Areena for more diverse content compared to what is consumed via commercial providers, see Figure 15. Survey respondents also identified that the content they view on Yle Areena is different from what the content that they view on other SVOD and AVOD platforms, particularly with respect to content genre and language, see Figure 16 and Figure 17.

**Figure 16**

Yle Areena viewers’ content consumption differs from SVOD and AVOD content

Percentage of survey respondents

---

Note: Question: Which of the following best describe Yle Areena/SVOD/AVOD content viewed?

Source: Copenhagen Economics based IRO survey.
The fact that viewers choose Yle for different reasons than commercial providers does not in itself rule out overlaps between them. Nonetheless, these differences in what viewers expect from Yle, and what Yle offers, are reflective of Yle using its finite content budget to attract more diverse audiences, and meeting different needs, than commercial providers. As such, this evidence does not support Sanoma’s allegations, which suggest that Yle seeks to be a close substitute to commercial providers.

Finally, we remark that Yle provides additional services to specific minority groups such as the hearing impaired. These are audiences not fully, or at all, served by the commercial players. Even if its public service mandate only allowed Yle to provide services that, demonstrably, no commercial operator provided, the existence of these minority groups would justify the provision of Yle Areena’s VOD services from a public value perspective.

**Yle with commercial providers for the same content rights and price competition**

As a matter of economics, Yle could drive up prices if it competes aggressively for the same content rights as commercial providers. Conversely, if Yle mostly acquires content that differs from the content acquired by commercial providers and/or content that is not appealing for commercial providers at the time of the acquisition, it is unlikely that those commercial providers will feel any price effects (or be outbid by Yle). Thus, any competitive harm resulting from Yle’s content acquisitions would be more likely if Yle sought to acquire content that is most attractive to commercial broadcasters.

---

6.20 For the purposes of our assessment of Sanoma’s complaint, we do not find it necessary to define precisely the market of “premium content” — i.e. the type of content that is valuable, attracts viewers and subscribers in large numbers, and is therefore central to competition investigations in this field. See, for example: BEREC (2018), BEREC report on the impact of premium content on ECS markets and the effect of devices on the open use of the Internet, BoR (18) 25.
6.21 Competition for foreign (non-Finnish) content rights is global and Yle is a small player in comparison with e.g. Netflix, HBO and Disney which aim to acquire global, or at least regional, rights. In contrast, Finnish content is acquired predominantly by domestic providers although some Finnish language content is produced for the global markets and have been successfully distributed outside of Finland. Sanoma’s allegations relate to both foreign and domestic content acquisitions.

6.22 We requested and reviewed data on Yle’s content acquisitions over 2020 – 2021 (June). We sought to assess: (i) the extent to which Yle has competed for the same content rights as commercial providers and its success in competing for rights, (ii) the extent to which Yle pays high prices for the content it acquires, and (iii) to what extent the rights acquired by Yle have been in the market without interest from commercial providers.

6.23 As we explain below, due to Yle’s public service duties guiding its content acquisitions.

6.24 In its complaint, Sanoma shows a graph depicting the number of foreign titles in 2019 – 2020 (again, Sanoma does not disclose where it has sourced these numbers from). Sanoma alleges that “Yle has been increasing the foreign content available in its VOD catalogue in the last two years. Between July and December 2020, the number of foreign titles available on Areena increased by 25%, corresponding to Yle’s strategy to make Areena an SVOD-like service.”

6.25 We remark that Sanoma’s interpretation of its own data is questionable. The figure shown by Sanoma covers a relatively short period of time depicting noticeable fluctuations between months (e.g. in mid-2020 the number of foreign rights was lower than in the beginning of the time horizon shown by Sanoma).

6.26 Moreover, Sanoma mentions specific examples shown on Yle Areena and questions whether they “can be considered to meet the “democratic, social and cultural needs” of society – i.e., the purpose of public service media.”~4 Sanoma’s views on the nature of certain specific titles are inevitably subjective and of limited relevance in an assessment of competitive distortions. We note however that Sanoma does not suggest that it would have sought to purchase the rights of any of these titles.

---

~4 Sanoma Complaint, para. 69.
Tie's statutory obligations and internal guidelines aimed at ensuring diversity and public interest (as reported above).
6.31 Yle told us that in many instances Yle acquires drama content (e.g., series) that have been in the market for a long time without interest from commercial players. By way of an example, Yle acquired the rights to broadcast all three seasons of the series Harlots – Paheen pesä in April 2021. Even though this series proved popular after they were released in Yle Areenna, it seems that commercial providers did not find the content attractive before or at the time of Yle’s acquisition, as the first season of the series was produced in 2017, three years before Yle acquired the rights. The same applies to the French series Le Bureau, which Yle acquired for Yle Areenna in the end of 2019 – four years after its original release in 2015.

6.32 To go beyond anecdotal evidence, we reviewed evidence of the discrepancy between the year of production and the year of purchase for foreign drama content acquired by Yle in 2020 and 2021.

6.33 First, we observe that, as expected, the content that was acquired less than one year after production or before production could be seen as more commercially attractive. Many of these productions are on the list of most viewed foreign fiction list from Finnpanel.

6.34 Second, we find that of Yle’s foreign drama content acquisitions consisted of content produced before Yle acquired its content rights. As a sensitivity check, limiting the sample of content right acquisitions to only first seasons of foreign drama series, we find that Yle’s portfolio was acquired before Yle’s acquisition (see Figure 18)."
We did not find evidence of Yle.

Contrary to Sanoma's allegations,

6.35

6.36
Finally, we remark that there are instances where Yle has deliberately ceased holding the rights for popular, commercially attractive content. For example, in 2018, Nelonen Media (part of Sanoma) took over the rights of *Syke*, and in 2019, Yle decided to discontinue *Vilikortti*, a similar variant of which was subsequently re-launched by MTV (albeit with a different name). *Uusi Päivät* was similarly discontinued to create space for new types of content. These example programs attracted large audiences. Yle's decisions to not hold on to these rights (but to effectively give them away to commercial broadcasters) exemplify how Yle seeks to create opportunities for new types of content and not engage in competition for the most popular content. These actions are in contrast with Sanoma's allegations of Yle crowding out commercial providers in the content market.

---

Yle has publicly stated that Yle, similarly to the other Nordic PSBs, have a principle that drama content should only be shown for three to four seasons. Yle has further explained that Yle is obliged to provide new content to audiences, making it financially unviable to introduce new series while continuing producing old ones. See https://www.italialinen.fi/tv/lehti/a/20151204225315636 and https://yle.fi/uiba/artikkeli/20170107/tv/lehti/ehon-se-noin-viel-kumpu-vakseen-saatai-la.toulturakekil-viilemien-kunia-pasventi.

---

64
If Yle held large volumes of expensive content, this could be consistent with a notion that Yle targets commercially attractive content and has outbid commercial providers.

**Figure 19**
While there is some ambiguity in Sanoma’s complaint, Sanoma appears to be particularly concerned over the content purchased for and available to audiences from Yle Areena. According to Yle’s estimates, just around 5% of its content is available exclusively on Areena.\footnote{Around 5% of Yle’s content is shown exclusively on Yle Areena by the main scheduling system. There are also additional on-demand-only publications as clips, live streams and some fast published genres, which are not included in this figure. Source: information provided by Yle. Also presented in: Ministry of Transport and Communications (2021).}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure20.png}
\caption{Figure 20}
\end{figure}

This does not support an allegation that Yle uses its financial resources to disproportionately acquire the most commercially attractive content rights making it excessively difficult for commercial providers compete for content.

**Yle’s impact on “input prices” is unclear and there is no evidence of a distorted content production in Finland**

Sanoma claims that Yle’s procurement of domestic content distorts the market for domestic production because Yle’s investments in this content drives up input prices in the industry. Specifically, Sanoma states:

“With regards to international content, domestic commercial VOD providers face strong competition from global actors, such as Netflix or Disney+. In reaction, domestic commercial VOD providers aim at differentiating their offering and compete in terms of the production and acquisition of domestic content. However, Yle is in a favourable position compared to commercial VOD providers to produce and acquire such content in that it has a high and guaranteed budget to spend. Yle indeed invests heavily in original and acquired content […] Moreover, Yle’s presence affects input prices and thus increases production costs, increasing in turn the costs borne by commercial operators.”\footnote{Sanoma Complaint, para 175.}
Although Yle does invest in domestic content production, we do not find evidence of changes in the market which would be consistent with the claim that Yle's investments distort competition in the market.

No evidence of Yle inflating the input market for domestic productions and creating barriers to entry and expansion

Sanoma's allegations regarding inflated "input prices" are not supported by any evidence of how specifically such inflation would manifest itself, data on the development of "input prices", or concrete examples.

Conceptually, the more there is competition on the downstream level – i.e. broadcasters and VOD providers alike – the greater the bargaining power upstream – i.e. amongst content creators. A recent study by Business Finland shows that Finnish content producers are facing a shortage of professionals across key competency areas, especially producers. A shortage of professionals across the relevant competency areas is driven in part by the increase in demand for domestic content. It is therefore plausible that "input prices" are increasing and we have not found evidence to suggest otherwise. According to data from Statistics Finland, the level of employment for television programming and broadcasting activities in Finland has remained relatively unchanged between 2008-2018, see Figure 21.

Figure 21
Employed labour force in mass media industries in Finland, 2008 - 2018
Number of employed people

Even if the demand for domestic content was outstripping supply, any effect Yle may have on the "input prices" needs to be disentangled from other market developments. In particular, the development of the SVOD market in Finland has increased the demand for Finnish content significantly. Sanoma is thus not unreasonable in noting that domestic (and Nordic) providers seek to differentiate themselves from global providers through the provision of Finnish original content.

Note: The available data is for employment not the supply of labour.
Source: Copenhagen Economics based on Statistics Finland Employment Statistics See also Cultural Statistics' Table Service Employed labour force in cultural industries

---

99 Business Finland (2021).
100 https://www.hs.fi/hallitusta/art-90000080ca83.html
6.46 While in the past Finnish content was primarily produced, acquired or commissioned by domestic providers, the growing popularity of Finnish drama content has led to both domestic and international SVOD providers, such as Netflix and HBO Nordic, acquiring and commissioning more original content in Finnish. Moreover, other commercial providers such as Elisa Vihde and C More have continued to be active in producing original Finnish content. For example, Viaplay and C More are the fastest growing SVOD providers in Finland (see Chapter 4). In line with this, according to Business Finland, there is evidence to show that the budgets of Finnish TV series has tripled in recent years. Figure 22 depicts the median percentage change in turnover for TV production companies in Finland.

![Figure 22](image)

The median percentage change in turnover for TV production companies in Finland.

Per cent

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>-5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>

Note: Copenhagen Economics has not verified the data using the selected companies' accounts.

6.47 The overall market size for domestic content has increased in size in terms of numbers of productions and overall turnover. Insofar as Yle's investments in domestic content (both original and acquired external) have not increased similarly, Yle's relative share of domestic content have diminished. As reported above, Yle's overall Content & Services, and within that drama, spend have not increased in real terms.

6.48 In all, we do not observe that (domestic or foreign) content and consequently viewers would be increasingly concentrated in the hands of Yle. On the contrary, the increased demand for domestic content is largely a result of the entry of domestic and global SVOD providers. Yle does and will continue to fund and broadcast domestic content, but its relative share is, if anything, diminishing. This is not consistent with a notion that Yle is crowding out commercial providers making it excessively difficult for them to enter to, and remain in, the market.

---

68

---

CHAPTER 7
SANOMA’S ALLEGATIONS CONCERNING
YLE’S EFFECTS ON COMMERCIAL LEARNING
SERVICES ARE UNFOUNDED

Table 10
Summary of the assessment presented in Chapter 7

<table>
<thead>
<tr>
<th>SANOMA ALLEGATION</th>
<th>COPENHAGEN ECONOMICS ASSESSMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanoma alleges: “Yle has been steadily growing its offering, with the ultimate objective of creating an offering that is similar to that of commercial operators. Yle has already done so in respect to the preparatory materials for the Matriculation Exam and its foreign language materials. At the same time, Yle has been building its offering with regards to digital materials for primary, secondary and vocational education, and it is expected that it will, in the near future, compete directly with commercial operators offering online learning materials for these levels of education.”</td>
<td></td>
</tr>
<tr>
<td>Sanoma’s complaint lacks a significant empirical foundation. We therefore focus on factors that are from a theoretical perspective likely to affect substitutability between each of Yle’s services and alleged commercial alternatives. We conclude that: (i) the nature of the Yle services mentioned in Sanoma’s complaint makes it unlikely that they compete directly with commercial services (ii) Sanoma has not presented evidence to suggest that Yle has been expanding its offering of learning services relative to commercial or other provider and (iii) the nature of Yle’s online learning materials makes it likely implausible that they could commoditize online learning services or even online learning materials.</td>
<td></td>
</tr>
</tbody>
</table>

SANOMA’S COMPLAINT CONCERNING LEARNING MATERIALS

7.1 In addition to Yle’s allegedly VOD-like offering, Sanoma’s complaint focuses on Yle’s activities in what Sanoma terms the “online learning services market”. Sanoma does not elaborate on the definition of this market but describes Yle’s activities in generic terms. Sanoma states that “Yle is active mainly through its Abitreenit (offering exam preparation digital materials) and Oppiminen (offering digital learning materials) websites / portals” Sanoma states further that: In the market for online learning services, Yle has been steadily growing its offering, with the ultimate objective of creating an offering that is similar to that of commercial operators. Yle has already done so in respect to the preparatory materials for the Matriculation Exam and its foreign language materials. At the same time, Yle has been building its offering with regards to digital materials for primary, secondary and vocational education, and it is expected that it will, in the near future, compete directly with commercial operators offering online learning materials for these levels of education.”

7.2 Sanoma’s complaint concerns Yle’s learning services as a whole but mentions specific outputs: Abitreenit and the Swedish language equivalent Abimix, Oppiminen and the Swedish language equivalent Vetamix (especially the Opettajalle- and Kielet- sections), Utistiuokka, Triplet, and Pikku Kakkosen Eskari. We describe each in turn.

---

46 For example, Sanoma does not comment on whether the relevant market should be defined to encompass both online and printed learning materials.
47 Sanoma complaint, para. 6.
48 Sanoma complaint, para. 10.
i. Abitreenit (along with its Swedish language equivalent Abimix) is, first of all, a collection of VOD content produced by Yle consisting of interviews with teachers, students, and matriculation examination board officials concerning each day's examinations. The VOD content covers the examinations that have taken place in the course of the day. As such, it constitutes journalistic content reporting on events of significant public interest. In addition, Abitreenit contains past examinations produced by the matriculation examination board, and the material of those examinations presented in a manner that allows a student to practice completing the examination. Abitreenit contains language learning materials previously produced by Yle and also available via Oppiminen (see below), a selection of journalistic VOD, audio, and text content under each of the subjects covered by the examinations. Finally, Abitreenit contains links to old materials produced by subject experts for Yle's now defunct koulu.tv and opettaja.tv services, and isolated examples of recent original material produced by subject experts or pedagogues. The latter are infrequently published under individual subjects and represent a negligible share of Yle's current spending on Abitreenit. Apart from the examinations from the national matriculation examination board and the VOD content covering the examinations of the day, all recent material produced for Abimix (the Swedish version of Abitreenit) is pre-existing journalistic content reposted on the Abimix site.

ii. Oppiminen (along with its Swedish language equivalent Vetamix) is a website that collects together journalistic content organised according to themes. The content is mainly in audio or audiovisual format but includes also some written journalistic content, including quizzes. Oppiminen functions as a landing page for other learning materials.

iii. The section called Kielet collects together language learning materials in Yle Oppiminen. It contains exercises and vocabularies, as well as learning materials in audio, audiovisual and text format. The content is based on Yle's broadcasted language courses and other materials that relate to these courses.

iv. Uutishuokka and Triplet are media education services. Uutishuokka (and its Swedish language equivalent Yle Nyhetsskolan) is an educational initiative launched by Yle's News and Current Affairs department where pupils are taught to produce news content. Triplet is a service targeted at teachers, packaging together Yle's news content (VOD) with exercises and answers. Each working day, three news video items are published on Triplet. The exercises are created by team of pedagogues at Hundred (the Triplet service provider). Moreover, the news content is not original to Triplet but has already been published on the Yle News section of Yle's website before being placed on Triplet.

---

66 The Finnish matriculation examination is a national examination covering the curriculum of the Finnish upper secondary school. Examinations take place in biannual periods in the spring and autumn, at the same time in all upper secondary schools. Examinations in a minimum of four subjects are required, and they may be taken in a single examination period or spread across examination periods. See https://www.ylioppilastutkinto.fi/en/matriculation-examination
67 Yle collaborates with the matriculation examination board, and has reached an agreement with Kopioisto, the central organization representing copy right owners in Finland, on the publication of the examination papers. The examinations often include visual, audio, and audiovisual content as well as text. https://docs.google.com/document/d/1-colz8CC-bhNSC%A4VYf5B2H1cEjWbhQp2zEpKClCenRZg/edit
68 An example is the material on sexuality published in 2002 under the subject psychology: https://yle.fi/sisar/artikkelit/2020/08/08/rohkeasti-seksualisuudesta-abitreenien-opiskelupaketti-seksista

70
v. *Pikku Kakkosen Eskari* is an app for preschoolers and provides what Yle describes as interactive digital play services. The app is not developed as part of Yle Learning materials, but developed by Yle Lapset, which is also responsible for running the television program Pikku Kakkonen.

7.3 In relation to all Yle’s offering listed above in what Sanoma terms the market for online learning services, Sanoma identifies a number of concerns. A comprehensive assessment of these concerns would require economic analysis of the market in which Yle is operating, as well as the nature of Yle’s operations. As Sanoma’s complaint lacks a significant empirical foundation, we instead focus here on conceptual economic arguments that are relevant to assessing the plausibility of Sanoma’s claims. We group the concerns into four aspects that characterise the complaint from an economic perspective and proceed to assess each aspect in turn.

**ECONOMIC ASSESSMENT OF THE MERITS OF SANOMA’S COMPLAINT**

7.4 As explained in Chapter 2, an analysis of the effect of a state-funded public service on commercial enterprises typically proceeds in steps. First, the affected markets are defined, and their competitiveness is investigated using concentration measures and market shares, for example. The magnitude of the aid used to fund the public service is compared with the size of the affected markets and closeness of competition between the public service and the commercial enterprises is assessed. A rigorous economic assessment would seek to establish a *counterfactual* (i.e. what would be the situation in the relevant learning materials market in the absence of the aid) and build on testable theories of harm.

7.5 Sanoma does not define markets or give a systematic overview of players in the market, or of competitive dynamics. Overall, it appears that any overlap between Yle and commercial learning providers is limited and Yle’s services are largely complementary to the commercially provided services. The growth observed in the revenues of commercial digital learning services does not support Sanoma’s allegations of Yle “commoditising” the market.

7.6 Below, we examine the degree to which Yle is likely to be competing with any commercial providers in each service. As such, our arguments are suggestive of the likely severity of any distortion that Yle’s activities may cause. Our focus is on the nature of the learning services provided by Yle, the relative magnitude of Yle’s spending on learning materials, and on conceptual arguments related to the willingness to pay for such a service by a consumer. This is likely to be informative of the closeness of competition between Yle and potential or actual commercial enterprises in providing learning materials or services. We note that it is part of Yle’s mandate to take educational and equality aspects into account in its offering. Nevertheless, we evaluate possible market effects of these learning services in order to assess the credibility of Sanoma’s allegations.

---

728 See [https://yle.fi/aihe/lapset/ekar](https://yle.fi/aihe/lapset/ekar)

729 For a framework to assess the impacts of state aid on competition, see, for example, *Otero (2007). Ex post assessment of the impact of state aid on competition.*

730 According to Publishing Industry Statistics, the net sales of primary school learning materials have increased by around 5%, in total, between 2017 and 2020 (the net sales of learning materials not intended for primary schools are not comparable before 2015). The net sales of digital learning materials for primary schools have increased by around 7% (2007-2020) and for secondary schools by around 44% (2009-2020). In total, the net sales of learning materials were 103.5 million euros in 2020. [http://tilastotin.int.kustantajat.fi/en/learning-materials/2020-21](http://tilastotin.int.kustantajat.fi/en/learning-materials/2020-21).

731 We use the terms ‘learning services’ and ‘learning materials’ interchangeably. Strictly speaking, Yle’s outputs covered here materials that can be used in learning, not services as such. They lack the interactive elements and pedagogic expert input that characterise commercial learning services.

Yle's activities are unlikely to either compete with existing commercial services or to prevent the entry of potentially successful commercial services

7.7 Except in the dissemination of materials suitable for use as preparation for the matriculation examination (Abitreenit) and of materials for foreign language learning in adult education, Sanoma does not appear to allege that Yle's services compete directly with commercial services. Instead, Sanoma contends that it is expected that they will in the near future. While Sanoma does not provide an economic justification for this expectation, it is relevant to assess whether those existing services highlighted in Sanoma's complaint could be sufficiently overlapping with commercial services to create competitive distortions.

7.8 A public service, such as Yle, can be considered to compete with commercial services on market if users consider the public service to be an alternative to those commercial services, or in other words if the public and commercial services are substitutable from a demand perspective. Commercial services in this context could mean existing services that users choose not to pay for because they use the public service, or potential commercial services that do not exist because the commercial providers' investment decisions are affected by the existence of the public service.

7.9 Below we consider each of Yle's services, mentioned in Sanoma's complaint, from a demand substitution perspective. We note that Sanoma has not provided any empirical evidence on substitutions to support its complaint. We therefore focus on factors that are, from a theoretical perspective, likely to affect substitutability between each of Yle's services and alleged commercial alternatives. A careful examination of the content of those of Yle's services named in Sanoma's complaint reveals that the degree of overlap is small, and the allegation that Yle competes directly with commercial services in the provision of learning materials is questionable.

Abitreenit

7.10 Sanoma alleges that through Abitreenit, "Yle directly competes against commercial providers of online learning services." As noted above, original content produced for Yle for Abitreenit (and for Abimix) is, first of all, live stream VOD content that is also available to watch after broadcasting for an indefinite period. This content consists of discussion, moderated by a journalist, between a student who completed the examination, a teacher with experience from teaching the content, and two matriculation examination board officials. In addition, Yle makes past examination papers with questions along with suggested solutions, both produced by the Matriculation Examination Board, available through the Abitreenit website at the board's discretion.

7.11 The past examinations allow students independently to practice completing an examination. The live stream VOD content covers the most recent past examination in each subject and consists of reporting on the specific content of that most recent examination, and the reaction to it by students and teachers. Importantly, this content is of interest to audiences wider than the group of students preparing for future examinations: the general public, as well as the students who have just completed the examination and are no longer preparing for examinations in the subject. While the audience is invited to send in questions through a chat function and some questions are picked up and answered live by the matriculation examination board members, the VOD content does not constitute a service that would prepare an individual student for a future examination.

---

77 Sanoma complaint, para. 79.
78 Sanoma complaint, para. 12.
79 We focus on the Finnish language services, but the same considerations apply to the Swedish language service. As the geographic market for Swedish language material covers Sweden as well as Finland as is therefore larger, competitive distortions are less likely in Swedish language learning materials.
80 Sanoma complaint, para. 62.
At best, in making available past examination papers with solutions keys, Abitreenit provides material a student could use for self-preparation for a future examination. The same material is, however, freely available to the student through his school, and the solutions keys online directly from the matriculation examination board website. It is therefore not clear (and not evidenced by Sanoma) that a preparing student, or the preparing student’s school, would be willing to pay for the past examination papers or solutions keys in the absence of Abitreenit. In any case, it is unlikely that a commercial operator would be authorised to sell access to such material for a profit. There is therefore no meaningful overlap between these aspects of Abitreenit and commercial services from a demand substitution perspective.

Finally, Abitreenit includes links to journalistic content including study skills guides written by journalists, older learning materials (for instance in languages), and isolated examples of more recent materials produced by subject experts. None of the above constitutes comprehensive learning material relevant to any particular upper secondary school courses or examination papers.

Oppiminen

According to Sanoma, through Oppiminen, Yle offers free materials that, while not structured according to the curriculum, students and teachers can use to complement materials used in class. Sanoma alleges that the language learning materials in Oppiminen partially replace material provided by commercial publishers in language teaching. However, the content being produced for Oppiminen is journalistic in nature and its production does not involve any pedagogy expert or learning material expert inputs. The focus of Oppiminen is the provision of media education and the teaching of digital media skills. The language learning material included in Oppiminen is more than 10 years old and has only been structurally updated to be accessible on Yle’s website. Yle does not maintain or develop learning platforms but utilizes the same web-based infrastructure as the rest of Yle’s online content.

We note that in its complaint, Sanoma sets out some of the properties of its learning platform. The properties described differ significantly from those of Oppiminen. A collection of articles or online quizzes, not structured according to a curriculum is highly unlikely to compete as learning material directly with a learning platform, with integrated feedback provision tools, pedagogically designed for teaching a given curriculum.

Uutisluokka and Triplet

These services are aimed at teachers. Uutisluokka is a media education initiative intimately connected with Yle’s public service mandate. Triplet collects Yle’s existing text-based and VOD journalistic material according to subject, to make it easier for teachers to find and to use in teaching. We understand that a teacher’s role in Finland as an autonomous and independent curator of learning material is widely recognised.

https://www.yleoppilastutkinto.fi/yleoppilastutkinto/hyvan-vastausen-piirteet
The profession is characterised by ambition that leads teachers to avoid ‘turnkey’ solutions and instead put lesson plans together from multiple sources. Journalistic content, whether from Yle or commercial media, provides one such source. In the absence of a website collecting material under subject headings, teachers could stop using Yle’s journalistic content in teaching, continue using it by searching for it themselves, or pay for a commercial service collecting Yle’s content under subject headings. While the latter is not plausible given the expectation on teachers independently to collate materials, at the very least some empirical evidence would be required to substantiate the claim that a commercial service would be viable as a collaborator of journalistic content, let alone Yle’s content, in the absence of Triplet. There is no evidence of overlap between commercial players with respect to the Uutisluokka and Triplet websites.

Pikku Kakkosen Eskari

Sanoma does not make a specific allegation about this application. It notes, referring to an Yle Board of Directors report that the app “includes a video game module aimed at improving the reading preparedness of preschool children”. We note that there are vast numbers of free learning apps available although we have not been able to estimate the full size of this market segment.

The nature of the Yle’s services mentioned in Sanoma’s complaint and described above makes it unlikely that they compete with commercial services. Yle’s services are not designed to integrate readily within a learning platform and in most cases require a teacher as a mediator and curator in order be made suitable for learning. Open-source learning materials are available from multiple sources. Yle’s journalistic content constitutes one such source. The opportunity for teachers to substitute between Yle’s journalistic materials and other open-source materials is likely to mitigate any effect of Yle’s materials on commercial players.

Sanoma has not presented evidence to support the idea that the choice, facing teachers is one between Yle’s learning materials and commercial proprietary learning materials. Nor does Sanoma put forward any evidence to suggest that teachers or schools choose Yle’s materials to the exclusion of commercial materials. The mere possibility that this could happen is not sufficient to evidence an actual market effect, let alone one that would make it excessively difficult or impossible for commercial providers to compete. The greatest overlap between Yle’s material and commercially provided material is likely to be in language learning, where Yle’s aging material is becoming less relevant over time and the overlap is therefore diminishing. There may additionally be some overlap in digital material aimed at children. However, in this area Yle’s offering is very limited and the number of free and commercial alternatives available to consumers is large.

Yle does not have an ultimate objective of creating an offering that is similar to that of commercial operators

Sanoma’s complaint identifies a trend in the development of Yle’s offering, making it more similar to the offering of commercial operators. While this trend is not specifically evidenced, and the complaint lacks any discussion of the dimensions along which the comparison being made, we comment briefly on the plausibility of the allegation in light of developments in the emphasis of Yle’s offering over the past decade.

---

\(^{2a}\) Copenhagen Economics understanding based on an interview with an education official.

\(^{2b}\) Sanoma complaint, para. 64 and footnote 8c.

\(^{4a}\) For example, in Apple’s App Store, there are over 75,000 education apps available (https://www.apple.com/au/education/ipad/apps-books-and-more/). Even in the Finnish context, commercial learning apps are prominent in App Store’s Top chart of free education apps (https://search.twitter.com/search?q=appstore%20rankings%20ipad%20free%20education%3Fdate=2021-08-31).

\(^{8b}\) See Sanoma complaint, para. 12.
In the past, since the mid-1920s, Yle has been a provider of learning materials structured according to the national curriculum. Its educational broadcasts koulutv and opetaja.tv services were moved online and re-oriented to serve life-long-learning objectives in 2013. At the same time, Yle made a decision not to continue producing content aimed at schools and structured according to the national curriculum, in order not to compete with commercial providers, and to focus on media education. The consequences of this decision were clearly reflected in the above discussion of the specific Yle services mentioned in Sanoma's complaint.

Apart from aging language learning material still available on the Oppiminen website, and overlap in digital material aimed at children, Yle's service is distinctive and not similar to commercial operators. Contrary to the allegation that there is an ultimate aim to compete directly with commercial providers, Yle’s aim in what Sanoma terms learning materials is to remain distinctive, detached from curriculum structures, and strongly focused on media education.

**Yle's activities are unlikely to suppress the overall willingness of consumers to pay for commercial services**

With the exception of its allegations in relation to Abitreenit, Sanoma appears to acknowledge that the content provided by Yle does not cover the full curriculum. While this calls the alleged closeness of competition between Yle's offering and those of commercial providers into question from an economic perspective, Sanoma puts forward more complicated reasoning to argue that the lack of connection to the curriculum does not remove its concerns.

Sanoma contends that "even though Yle's online learning offering for primary and secondary education would not yet directly compete with commercial operators as it does not cover the full curriculum, Yle's free offering commoditizes the market, already instilling a habit of using free learning materials". Sanoma further argues that this effect makes the fact that Yle's online learning material is not tied to the curriculum irrelevant to the question of whether it has an effect on the online learning services market in Finland.

Sanoma presents this alleged depression of consumers' willingness to pay as a wider phenomenon not specific to online learning materials. We note that Sanoma does not provide economic arguments to justify the assertion that such a phenomenon exists, let alone empirically test for or measure the alleged effect on the market for online learning materials or services. Furthermore, even if an effect on willingness to pay could somehow be demonstrated, Sanoma’s complaint focuses entirely on the profitability aspect of any such effect (if commoditisation is understood as a reduction in the value-added associated with the supply of online learning materials, resulting in lower profitability), ignoring the possible benefits to consumers associated with a potentially larger market for the allegedly more commoditised service.

---

46 Information provided by Yle.
47 Para. 80 of the complaint, our emphasis.
7.27 We first consider whether any economic foundations can be provided to the alleged commoditisation, and then discuss the possible market-growing effects of Yle's online learning services. We then examine the growth of Yle's spending on online learning materials in recent years, and in particular Yle's spending on the matriculation examination preparation service Abitreenitin, the only Finnish language Yle service with content indirectly driven by the national curriculum, by virtue of covering examinations that test students' knowledge of the national curriculum. We conclude that in recent years, Yle's spending on Abitreenitin has been declining relative to the total revenues of a number of matriculation examination prep course providers in Finland.66

Alleged commoditization

7.28 Economists use the term 'commoditisation' to refer to product or service homogenisation, or the removal of product or service differentiators. As product differentiation drives market power, or the ability to charge prices above the cost of production, commoditisation can be understood as the whereby profit margins are driven towards zero. Sanoma has not presented evidence for commoditisation of online materials as a result of Yle's activities. In fact, it has not tested whether Yle's provision of its services has any effect on market prices that would make it impossible or excessively difficult for a commercial provider to cover the costs of providing such a service.

7.29 The nature of Yle's online learning materials makes it likely implausible that they could commoditise online learning services, or even online learning materials. The degree of overlap between Yle and commercial players is small, as was discussed above. Yle's strong focus on media education, the absence of a clear tie to the curriculum in its materials, the lack of consistent and significant pedagogic expert input into their production, and the absence of integration into a learning platform suggest that commercial players can offer products with significant advantages from a consumer perspective, thus adding significant value to students and teachers. While these observations do not constitute a rigorous refutation of Sanoma's allegation regarding commoditisation, they suggest that the allegation would require strong evidential support and that substantiating it would appear to be a steep uphill struggle given the lack of a plausible theory to support the conclusion.

7.30 Furthermore, any complete analysis of the effect of Yle in this area should take into account the possibility that its activities introduce some consumers to online learning materials for the first time. Yle's role in upskilling students and teachers may increase the size of the market and even boost consumers' willingness to pay for commercial learning materials, if Yle's content help them overcome an initial hurdle associated with the use of unfamiliar learning environments. In such a scenario, Yle's spending growth would be outstripped by the growth of the market overall. Ignored in Sanoma's complaint, such an effect could manifest in market growth that outstrips any expansion in Yle's spending.

7.31 In Figure 23, we show the spending by Yle on Abitreenitin. This is a service that, according to Sanoma's complaint, competes directly with commercial providers. Yle's spending on the service has increased by around 21% in nominal terms over the four years to 2020, or by just under 5% in constant annualised terms.

---

66 We do not assert that Yle's Abitreenitin belongs to a market for online matriculation preparation services. It consists of journalistic VOD content and also provides an alternative channel for students to access examination materials also freely available elsewhere.
Over the same period, the total revenues of a number of commercial providers have increased by around 58%, or by over 12% in constant annualised terms as can be seen in Figure 24.
Figure 24
Annual revenues of selected providers of matriculation examination preparation services in Finland
€, million

<table>
<thead>
<tr>
<th>Year</th>
<th>Eximia</th>
<th>Vaimennuskeskus</th>
<th>MAFY-valmennus</th>
<th>Uplus</th>
<th>Suomen y-vaalmenus</th>
<th>Worddive</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>4</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>2018</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>2019</td>
<td>6</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>2020</td>
<td>7</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>18</td>
</tr>
</tbody>
</table>

Note: All of the companies included here provide services that prepare students for the matriculation examination. Worddive exclusively provides language learning services.
Source: www.oolokastieto.fi

7.33 Relative to the total revenues of a number of preparation course providers, Yle's spend on Abitreenit is very small and has decreased by about a quarter over the period of just four years. At the same time, a number of commercial providers of matriculation examination preparation services have increased their revenues. The increased revenues of commercial players that compete with, amongst others, Sanoma, are driven by paying customers. The existing customers of commercial players pay more for a given service, purchase more services, or new paying customers are attracted to the services of commercial providers. This development is not consistent with a notion that Yle crowds out commercial providers.

7.34 This comparison does not delineate a specific market in which Yle is alleged to compete. It nonetheless provides a background against which it appears unlikely that Yle's services in the area of matriculation examination prep materials and/or services would make it excessively difficult or impossible for commercial players to operate.

7.35 These observations alone do not allow us to measure what would have happened in the counterfactual where Yle had not provided the Abitreenit VOD content, presented examination material the matriculation examination board on its website, provided links to old learning materials and a selection of journalistic content under subject headings, or in isolated cases published new materials produced by subject experts. We can conclude however that there is no prima facie evidence for Yle's Abitreenit service having depressed consumer willingness to pay. Sanoma's allegation does not appear to be reflected in reality.
Sanoma has not evidenced its allegation that Yle adversely affects the investment and innovation incentives of commercial providers

7.36 Sanoma appears to argue that as a superior and innovative first mover, Yle makes it more difficult for commercial operators to win customers in new markets. According to Sanoma’s complaint, Yle’s ability to move first appears to be based on its steady and riskless revenue stream:

"Given its unrestrained, State-funded budget, Yle can get a head start over its private competitors and gradually enter into new business areas, launching additional services before commercial operators can do so. Yle can make significant investments ahead of market commercialization possibilities without the need to re-finance these new services. Therefore, contrary to commercial operators like Sanoma, Yle can build a market position before anyone else. Once the market takes off, Yle already has a well-established offering ahead of private competitors. This pattern is not specific to online learning services but is systemic."

7.37 While Yle is able to make decisions to spend its budget to produce content without considering the commercial return, this is because its spending is financed via the Yle tax. It follows, somewhat trivially, that if a commercial operator were to invest in the same activities as Yle, it would be at a disadvantage because, unlike Yle, it would have to re-finance those investments either externally or from retained profits.

7.38 It does not follow from this that investment-worthy projects are rendered unprofitable because of the operations of Yle in on-line learning services. In order to assess the plausibility of such an allegation, it is necessary to consider the existence of obstacles to investment faced by Sanoma and other commercial players. If investments from retained profits are not possible, such obstacles could arise for example from capital market imperfections that apply specifically to providers of learning materials. The commercial players could then not access financing and only a tax-funded service could enter new, innovative, and risky areas. Sanoma does not present evidence of any such obstacles, however.

7.39 From an economic perspective, with functioning capital markets there is no reason for why risky but net present value positive investments could not be funded externally. Sanoma has not provided detail on the kinds of projects that Yle’s very presence would render net present value-negative. Overall, Sanoma has not presented any evidence of Yle preventing commercial operators from innovating in the market for online learning services. As explained above, Yle’s overlap with commercial providers is small. Against this background, the allegation appears far-fetched.

7.40 Furthermore, we note that instead of driving out commercial players from new markets, some of Yle’s activities arguably shape the market and open up new possibilities by e.g. encouraging consumers to use more services online. Innovations can be market-creating as well as divert sales away from competitors entering later due to the switching costs faced by consumers. Sanoma has stipulated that Yle’s activities could make commercial players more unwilling to invest or to innovate. An at least equally plausible scenario is one where Yle’s activities help steer consumers towards markets where commercial providers can thrive. More evidence would be required to assess both of these theoretically possible effects in practice.

---

69 Para. 66 of the complaint, our emphasis.
70 The logic here is similar to that in our assessment of Sanoma’s allegations regarding content acquisitions, see Chapter 6.
REFERENCES


Ministry of Transport and Communications (2021). Reply of the Finnish competent authorities to the Commission’s request for information of 30 April 2021, SA.62830 – State aid to public service broadcaster YLE for VOD and online learning services.


Sanoma (2021a). Legal assessment of State aid incompatible with the internal market: Funding for online learning services and video-on-demand ("VOD") to the Finnish public service broadcaster Yleisradio Oy ("Yle").


Statistics Finland, Employment Statistics; See also Cultural Statistics’ Table Service, Employed labour force in cultural industries.


Traficom (2020). Liikenne- ja viestintävirasto Traficomin lausunto Tiesradion kerto- muksesta vuoden 2019 aikana tarjotusta palvelusta. Available at: https://drive.google.com/file/d/1qCRMGBBiomsjokWNPZXg6Ct-e2aWJ/view.


Yleisradio (2021a), Tarjontaspeksit 2022 -, 25.05.2021. Available at: https://docs.google.com/presentation/d/e/2PACX-1vRhdpG0V9s5QoloAL5hCwJ-TR6VaHoxKlPTO9DonZ04RbM99Ki-IUSISOVrocqW6oJDjChfOSAtgkV/pub?slide=id.gb63195d156_0-31


APPENDIX A
SUMMARY OF INTERNATIONAL EVIDENCE REFERRED TO IN THIS REPORT

BBC iPLAYER COMPETITION ASSESSMENT
The way media is consumed is changing rapidly and viewers’ expectations are evolving, also regarding the services offered by the Public Service Broadcaster BBC. To meet these changing expectations, the BBC proposed to change their VOD service BBC iPlayer from a service that allows viewers to catch-up on programmes for 30 days after broadcasting to one where programmes are available for 12 months as a standard, in some cases for even longer. Essentially, these changes would turn the BBC iPlayer from merely a service to catch-up on TV series to a “destination” for audiences.

In response to the proposed changes, Ofcom carried out a competition assessment in which they reviewed the public value from the proposed changes to BBC iPlayer, assessed the potential impacts on competition, and considered whether the public value outweighed the negative impacts on competition.

Ofcom concluded that the BBC could continue to progress its plans since the significant public value from the proposed changes outweighed the identified negative impacts on competition. However, they imposed certain conditions on the BBC to ensure that the public value from the changes will be realised. Ofcom’s conclusion was based on the following main findings:

1. Proposed changes could deliver significant public value. Ofcom concluded that the changes could deliver significant personal value through better meeting audience expectations. Moreover, the changes could deliver social value through increased viewing of content that delivers the BBC’s mission and public purposes and safeguarding the resilience of the BBC in the future.

2. Proposed changes could decrease incentives to invest for competing services. Ofcom concluded that it is likely that the proposed changes will to some extent adversely impact competition, particularly in relation to BVOD services as BBC iPlayer is likely to attract viewing away from these services. This could impact their incentives to invest. However, Ofcom found that it is unlikely that there will be substantial harm to viewers under the existing scope of the proposed changes. It is also unlikely that investment incentives of the main SVOD services and live TV will be significantly affected.

---

⁵⁵ 5 years for children’s programmes as a standard.
3. Proposed changes will have a limited impact in relation to other competition concerns. Ofcom concluded that reduction in the availability of appealing BBC commissioned content is unlikely to adversely impact competition for the main SVOD services. The potential adverse impact on competition in relation to UK-focused SVOD services is unlikely to be large. Moreover, Ofcom considered that the proposed changes are unlikely to adversely impact competition in the production sector or other creative industries.

SELECTED MARKET INDICATORS MENTIONED IN CHAPTER 4

Figure A.1 shows that Finland has the lowest market concentration among the "six mature SVOD markets" in Europe.

**Figure A.1**
Combined market share of the three most popular SVOD services
Percent

<table>
<thead>
<tr>
<th>Country</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>86</td>
</tr>
<tr>
<td>Germany</td>
<td>82</td>
</tr>
<tr>
<td>Netherlands</td>
<td>74</td>
</tr>
<tr>
<td>Denmark</td>
<td>65</td>
</tr>
<tr>
<td>Sweden</td>
<td>63</td>
</tr>
<tr>
<td>Finland</td>
<td>58</td>
</tr>
</tbody>
</table>


Figure A.2 shows that in contrast to the other Nordic countries and the UK, where the PSB's VOD service has increased in popularity between 2018 and 2020, the popularity of Yle Areena has slightly decreased during the same period.\textsuperscript{99}

Figure A.2
Popularity of Public Service Broadcaster's VOD service
Percent of respondents who use the service

<table>
<thead>
<tr>
<th>Country</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland (Yle Areena)</td>
<td>65</td>
<td>62</td>
<td>61</td>
</tr>
<tr>
<td>UK (B&amp;C iPlayer)</td>
<td>61</td>
<td>60</td>
<td>62</td>
</tr>
<tr>
<td>Norway (NRK TV)</td>
<td>57</td>
<td>49</td>
<td>68</td>
</tr>
<tr>
<td>Sweden (SVT Play)</td>
<td>55</td>
<td>53</td>
<td>58</td>
</tr>
<tr>
<td>Denmark (DR TV)</td>
<td>44</td>
<td>50</td>
<td>55</td>
</tr>
</tbody>
</table>

Note: The figures represent how large share of the ones who have used a streaming or downloading service to watch TV series or movies within the previous week that use the different services.