

SA.62830 - STATE AID TO YLE

Public service broadcasting and the impact of Yle Areena on commercial operators

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Non-Confidential

Contents

Section 1	Introduction and summary	1
Section 2	State aid and the remit for public service broadcasting	3
	Public service broadcasting and Yle's public service remit	3
	Economic literature provides some support for public service broadcasting	4
	Proportionality of state funding	4
	Benefits from public service broadcasting need to be weighed against the impact on competition	5
Section 3	Yle Areena and the fulfilment of Yle's public service remit	7
	Claims by the Finnish State and Copenhagen Economics	7
	Fulfilment of Yle's public service remit	8
	Yle's public service remit	8
	Yle's linear TV service	10
	Yle Areena	12
	Yle Areena recommendations promote commercial content	15
	Content recommended on Yle Areena	15
	Content that is 'Yle Areena' exclusive is commercially focused	17
	Content availability	18
	Conclusion on Yle Areena and the public service remit	19
Section 4	Impact of Yle Areena on commercial providers	20
	Claims by the Finnish State and Copenhagen Economics	20
	Appropriate analytical framework for impact estimation	21
	The counterfactual	21
	Impact estimated in the CE Report	23
	Quantification of impact estimated in the CE Report	25
	SVOD	25
	AVOD	26
	Linear TV	27
	Total financial impact	27
	Financial performance of commercial operators	27
	Summary	28
Section 5	The need for a proper process and safeguards	29
	The lack of an assessment process for Yle	29
	The process for the BBC	30
	The iPlayer decision is an example of thorough scrutiny	32
	Conclusion	33
Annex A	Methodology of Impact Analysis	34

Overview of the analysis	34
Impact of Yle Areena on SVOD services	34
Impact of Yle Areena on AVOD services	37
Impact of Yle Areena on commercial linear TV	40

Section 1

Introduction and summary

- 1.1 Sanoma Media Finland Oy (**Sanoma**) submitted a Complaint (**Sanoma Complaint**) to the European Commission (**Commission**) on 23 April 2021. The Finnish State responded to the Sanoma Complaint on 21 June 2021 (**First Reply**) and followed up with a second reply (**Second Reply**) on 30 September 2021, including a report by Copenhagen Economics (**CE**).
- 1.2 This report forms a part of the second submission by Sanoma in response to the Second Reply. Compass Lexecon has been asked by Sanoma to review and respond to some of the claims made by the Finnish State in its replies, and by Copenhagen Economics in its report (**CE Report**), specifically in relation to the impact of Yle Areena. The Sanoma complaint also included online-learning, which is not addressed in this report. However, we note that our conclusions in relation to the need for a proper process to assess material changes to public services are also relevant for that area.
- 1.3 In this report, we discuss the role of public service broadcasting (**PSB**), its effect on commercial operators, as well as the extent to which Yleisradio Oy (**Yle**) fulfils its role as a public service broadcaster through Yle Areena.
- 1.4 Public Service Broadcasters are given state funding to deliver Services of General Economic Interest. As with other types of State aid, such public funding has the potential to distort competition. This impact can be justified when the public funding is used to fulfil a clearly defined public service remit and deliver services of high social value. However, when the remit is poorly defined, state funding can be used to deliver services which are already well-served by commercial operators, leading to negative impacts on competition, which are disproportionate to the public benefit.
- 1.5 The Finnish State claims that “[Yle Areena’s] offering and related consumptions differs essentially from that of the commercial operators”.¹ In contrast, we show that most content which is consumed and promoted on Yle Areena is commercial by nature – a situation that contrasts with Yle’s linear offering. Although public broadcasters need to adapt to technological change, they must do so while still fulfilling their public service remit. The move from linear viewing to video-on-demand (**VOD**) cannot be used by public broadcasters to chase ratings rather than fulfil their remit. This risks a negative impact on commercial

¹ First Reply of the Finnish State, 21 June 2021, paragraph 24.

broadcasters in Finland, and ultimately consumers, as it may be disproportionate to the benefits of these activities.

1.6 Copenhagen Economics dispute that Yle Areena has had a negative impact on commercial broadcasters, citing the results of a survey it conducted.² In this report, we use the results of that survey to show that as a result of Yle Areena, Sanoma's VOD revenues are [--]% lower than they would have been in the absence of Yle Areena. While we note that the purpose of the Sanoma complaint is not to stop Yle from providing the Yle Areena service all together, these results are significant. Contrary to the suggestions of Copenhagen Economics, [-----]. Therefore, the impact estimated by Copenhagen Economics would make a significant difference to Sanoma's profitability and long-term viability.

1.7 Finally, we argue that there needs to be an effective process to ensure that public funds are used for the public-service mission, and that the impact on commercial broadcasters is not disproportionate to the public benefit. We provide an explanation of the process used by Ofcom for scrutinising material changes to BBC services as an example of the type of process that should be followed. In contrast to Yle Areena, this process has led to limits on the amount of drama boxsets that can be on the BBC's VOD service, and means that any material changes to an existing public service are scrutinised to ensure they fulfil the public service remit, and do not have a disproportionate impact on competition.

1.8 The rest of this report is structured as follows:

- In **Section 2** we discuss State aid and the remit for public service broadcasting. We explain that proportionality is a key element in State aid.
- In **Section 3** we discuss how Yle fulfils its public remit and evaluate to what extent Yle Areena is focused on providing commercial content.
- In **Section 4** we present an analysis of the quantified impact of Yle Areena on Domestic Commercial Operators in Finland. We discuss the financial performance of the Domestic Commercial Operators and show that the impact of Yle Areena would make a difference.
- In **Section 5** we establish the need for proper process and safeguards for a well-functioning VOD market to the benefit of consumers.

² In this report, the commercial VOD services by Sanoma (Ruutu), Telia (Cmore and MTV), and Elisa (Viaplay) are called **Domestic Commercial Operators**, consistent with the CE Report and Sanoma complaint.

Section 2

State aid and the remit for public service broadcasting

2.1 In this section, we discuss the role of public broadcasting, Yle's public service remit, and the proportionality of State aid.

Public service broadcasting and Yle's public service remit

2.2 Public broadcasting is given state funding to deliver Services of General Economic Interest (**SGEI**). Public broadcasting has a role in building a well-informed society, political debate and in strengthening and reinforcing a country's culture. As the Amsterdam Protocol states, "*the system of public broadcasting in the Member States is directly related to the democratic, social and cultural needs of each society and to the need to preserve media pluralism.*"³

2.3 The rationale for such broadcasting has evolved over time. Public broadcasters were first established in an analogue world where restricted supply of spectrum, costs of establishing a country wide broadcasting network, and difficulties in excluding recipients made the case for the state provision of broadcast television. Today, technological developments mean that it is possible to restrict services to subscribers, and the growth of pay-TV and VOD means that audiences have access to an unprecedented quantity of quality content, so rationales based on inability to exclude or scarcity no longer apply.

2.4 Instead, public service broadcasting is maintained to ensure that content of social value is made, with an implicit assumption that it would otherwise be underprovided by the commercial sector. This is recognised in the European Commission's communication on the application of State aid rules to public service broadcasting (**Broadcasting Communication**), which states:

³ Treaty of Amsterdam amending the Treaty on European Union, the Treaties establishing the European Communities and certain related acts - Protocol annexed to the Treaty of the European Community - Protocol on the application of the principles of subsidiarity and proportionality OJ C 340, 10.11.1997, p. 105.

“Member States considered that public service broadcasting ought to be maintained, as a way to ensure the coverage of a number of areas and the satisfaction of needs and public policy objectives that would otherwise not necessarily be fulfilled to the optimal extent.”⁴

Economic literature provides some support for public service broadcasting

- 2.5 The economic literature supports the notion that some forms of broadcast content generate ‘positive externalities’, (i.e. benefits to wider society) through their role in shaping society and citizens’ behaviour. Examples of these externalities include the benefits of news content in creating a well-informed population and public discourse, educational children’s programming (in the US, studies have found that *Sesame Street*, was associated with increased educational attainment⁵) and promotion of health outcomes (e.g. a Tanzanian radio soap opera was associated with improved HIV-responsible behaviour⁶).
- 2.6 Such outcomes provide a rationale for state funding granted to public broadcasters that are explicitly entrusted with a remit to produce content of social value. Commercial broadcasters, such as Sanoma, also produce content of high social value (e.g. ‘Arman Pohjantäiden alla’ and ‘HS lasten uutiset’ (children’s news)).⁷ However, the use of state funding means that public broadcasters are free from commercial pressures, and so can focus on adding social value, allowing them to produce content that may not be commercially viable.

Proportionality of state funding

- 2.7 As publicly funded broadcasters compete for viewers with commercial broadcasters, they inevitably impact on competition. As stated in the Amsterdam Protocol, such state funding is allowed subject to conditions:⁸

“such funding is granted to broadcasting organisations for the fulfilment of the public service remit as conferred, defined and organised by each Member State, and insofar as such funding

⁴ Communication from the Commission on the application of State aid rules to public service broadcasting (Text with EEA relevance) OJ C 257, 27.10.2009, p. 1–14.

⁵ Kearney, M. and Levine, P. (2019) “Early Childhood Education by Television: Lessons from Sesame Street.” *American Economic Journal: Applied Economics*, Vol. 11(1): 318-350.

⁶ Vaughan, P., Rogers, E., Singhal, A. and Swalehe, R. (2000) “Entertainment-education and HIV/AIDS Prevention: A Field Experiment in Tanzania.” *Journal of Health Communications*, Vol. 5(1): 81-100.

⁷ ‘Arman Pohjantäiden alla’ (<https://www.ruutu.fi/ohjelmat/arman-pohjantahden-alla>) is a popular documentary TV show that presents subjects such as addiction, homelessness, discrimination, and the lives of ordinary people in Finland. The show won the 2016 ‘Golden Venla’ prize for the best factual show of the year (<https://www.kultainenvenla.fi/arkisto/voittajat-2016/>). ‘HS lasten uutiset’ (<https://www.ruutu.fi/ohjelmat/hs-lasten-uutiset>) is a weekly children’s news programme by Helsingin Sanomat (part of Sanoma Group).

⁸ Council of the European Union, Representatives of the Governments of the Member States, (1999), “Resolution of the Council and of the Representatives of the Governments of the Member States, meeting within the Council of 25 January 1999 concerning public service broadcasting, EYVL C 30, 5.2.1999”

*does not affect trading conditions and competition in the Community to an extent which would be contrary to the common interest, while the realisation of the remit of that public service shall be taken into account.*⁹

- 2.8 That is, state funding is granted to public broadcasters for the fulfilment of a defined remit. The public broadcaster's compliance with that remit has to be appropriately supervised and monitored. The Broadcasting Communication further clarifies that public service broadcasters shall not engage in activities which would result in disproportionate distortions of competition that are not necessary for fulfilling the public service mission.¹⁰

Benefits from public service broadcasting need to be weighed against the impact on competition

- 2.9 The CE Report claims that the threshold for finding that State aid for public broadcasting is illegal is very high.¹¹ They cite the decision of the European General Court in *T-533/10 DTS Distribuidora de Televisión Digital V. Commission* and claim that the aid must affect “*competition significantly and to extent which is manifestly disproportionate to the objectives pursued by the Member State*” and secondly that such aid should render “*it impossible or excessively difficult for a private operator to conduct business in the [Spanish] broadcasting market*”.¹²
- 2.10 We agree that, for State aid to be illegal, it must have an impact on competition that is disproportionate to the objectives pursued by the Member State, but we dispute the proposition that disproportionality can only occur where commercial rivals would find it impossible to operate viably. The nature of the relationship between the content viewed on Yle Arena and Yle's public service remit has to be taken into account in the proportionality assessment. If an activity is essential to the public service remit, a greater impact on competition may be considered to be proportionate; however, if that activity has only a weak linkage to the public service remit, even a much smaller impact may be disproportionate.
- 2.11 Thus, the key consideration is whether the public service broadcaster in question adheres to its remit. For example, the European General Court states that:

⁹ Treaty of Amsterdam amending the Treaty on European Union, the Treaties establishing the European Communities and certain related acts - Protocol annexed to the Treaty of the European Community - Protocol on the application of the principles of subsidiarity and proportionality OJ C 340, 10.11.1997, p. 105.

¹⁰ Communication from the Commission on the application of State aid rules to public service broadcasting (Text with EEA relevance) OJ C 257, 27.10.2009, paragraph 92.

¹¹ Copenhagen Economics report, paragraph 2.2.

¹² See case *T533/10 DTS Distribuidora de Televisión Digital, SA v European Commission* [2014] ECLI:EU:T:2014:629, paragraphs 155 and 160.

“Article 106(2) TFEU does not prevent RTVE from competing with private operators or from acquiring premium content, provided that it does so in the performance of its public service broadcasting mandate.”

- 2.12 The Broadcasting Communication delivers a similar message with regard to the issue of proportionality, setting out that the European Commission’s role is *“to consider whether or not any distortion of competition arising from the public service compensation can be justified in terms of the need to provide the public service and to provide for its funding.”*¹³
- 2.13 In any specific case this assessment of proportionality must relate to the specific service being considered, and not just whether there is a case for any public broadcaster to exist. We therefore first consider how the Yle Areena service is delivering on its public service remit, before then assessing its impact on competition.

¹³ Communication from the Commission on the application of State aid rules to public service broadcasting (Text with EEA relevance) OJ C 257, 27.10.2009, paragraph 40.

Section 3

Yle Areena and the fulfilment of Yle's public service remit

- 3.1 In this section we show that there is a discrepancy between what is viewed on Yle Areena and Yle's public service remit. As Yle's public service remit is reflected by what is viewed on Yle's linear channels, the latter provide a benchmark against which the degree of Yle Areena's adherence to the public service remit can be assessed.
- 3.2 Yle's linear TV channels broadcast mainly non-commercial content, which closely relates to Yle's public service remit. By contrast, most of the content viewed on Yle Areena is in commercially attractive genres. Yle, like all public broadcasters, needs to make the transition from linear to on-demand broadcasting, but this does not absolve Yle from fulfilling a clearly defined remit while doing so.

Claims by the Finnish State and Copenhagen Economics

- 3.3 The Finnish State explains in its First and Second Reply that the objective pursued with Yle Areena is to serve all types of viewers – not only those that prefer to watch linear TV, but also those that prefer to watch online on-demand services. The Finnish State further explains that there is a natural transition from linear TV to online on-demand services, as the demand of the viewers change.
- 3.4 The Finnish State claims that the content on Yle Areena is similar to the content broadcast on Yle's linear channels, differing only in the platform and the technical means that allow for a delayed and continued consumption.¹⁴ According to the Finnish state, this content is not commercial and differs significantly from that offered by commercial rivals. It is claimed that, therefore, Yle Areena's service is within Yle's public service remit, and that the impact on commercial operators must be negligible.
- 3.5 Copenhagen Economics claim that the transition from linear to on-demand broadcasting has not resulted in an uncontrolled *expansion* of Yle's services, nor an increase in expenditure. They use Yle's accounts to show that Yle spent € 96.2 million in 2019 on online services,

¹⁴ Second Response of the Finnish State, paragraphs 16 and 42.

including € 15 million on exclusive content for Yle Areena, and that expenditure on drama has not increased with the advent of Areena.^{15 16}

- 3.6 Contrary to these claims, our analysis finds that the content consumed on Yle Areena differs markedly from Yle's linear channels – which adhere closely to Yle's public service remit – and instead is similar to the content offered by commercial VOD providers. Although Yle has to serve all audiences, it needs to do so with content that meets a clearly defined public service remit.

Fulfilment of Yle's public service remit

Yle's public service remit

- 3.7 Yle's public service remit is defined at a high level in the Yle Act.¹⁷ This remit encapsulates three aspects that are important for public service broadcasting, and that distinguish Yle from purely commercial broadcasters:
- a. First, its primary aim is to deliver *social value*. The content types highlighted in the list – such as, supporting democracy and providing opportunities for participation, as well as the

¹⁵ Copenhagen Economics report, paragraphs 3.8-3.9.

¹⁶ In 2020, Yle's spending on online services was € 111.9 million – an increase of 16%. Finnish Transport and Communications Agency (Traficom), (2021), "Liikenne- ja viestintävirasto Traficom in lausunto Ylesradio Oy:n kertomuksesta vuoden 2020 aikana tarjotusta palvelusta", Dnro: TRAFICOM/14120/11.03.01/2021, Table 1, p.7

¹⁷ The Act states that, "*The company's task is to make versatile and comprehensive public service television and radio software with its related ancillary and additional services available to everyone on equal terms. ...In particular, public service program activities must:*

1) support democracy and opportunities for everyone to participate by providing diverse information, opinions and discussions, as well as opportunities for interaction;

2) produce, create, develop and preserve domestic culture, art and stimulating entertainment;

3) take into account the aspects of education and equality in the program, provide opportunities for learning and self-development, emphasize programs for children and young people, and offer devotional programs;

4) 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;

5) support the preservation of the Finnish cultural heritage, tolerance, equality, equality and cultural diversity, and to take care of the provision of programs also for minority and special groups;

6) promote the interaction of cultures and to maintain the Program Offering directed abroad;

7) forward official information to be regulated in more detail by decree and prepare for the performance of television and radio activities in exceptional circumstances."

focus on education, Finnish culture, and social cohesion – are based on meeting the democratic, social, and cultural needs of Finland.

- b. Second, public broadcasters have particular responsibilities in the promotion of current affairs, and educational and minority interest programming such as religious programming. These program categories risk being *underprovided* by purely commercial operators.
- c. Third, they can provide programming which is *domestically focused*, reflecting Finnish culture. Global providers, like Netflix, have an incentive to produce content which sells in as many markets as possible.¹⁸ Public broadcasters, like Yle, freed from commercial pressure, provide content that reflects the culture of their society.

3.8 Public broadcasters are not limited to specific ‘market failure’ categories such as news, as entertainment programmes can also deliver content of public value. For example, ‘Skam’, by the Norwegian public broadcaster, NRK, is considered to help teenage girls negotiate social media¹⁹, while in the US, ‘Sesame Street’, is credited with improving children’s educational attainment²⁰. In Finland similar examples would be ‘Sekasin’ on Yle Areena and the commercial SVOD service Viaplay.²¹

3.9 The difference between such entertainment programmes and those offered by a purely commercial broadcaster is that public broadcasting aims to deliver public value, rather than to maximise audiences. As Dr David Fernández Quijada, of the European Broadcasting Union said:

“Public service broadcasting is about the value that broadcasting can contribute to society. It’s not about attracting the largest audiences but it’s about what public value you deliver, how you raise awareness about issues, change people’s values, and prompt them to act.”²²

¹⁸ We note that global players are also investing in local content as well. For example, *Karppi* and *Sorjonen*, two popular Finnish drama series are both available on Netflix in addition to being streamed on Yle Areena (see <https://www.justwatch.com/fi/sarja/karppi> and <https://www.justwatch.com/fi/sarja/sorjonen>, both available on 29 November 2021). However, this is a small proportion of their overall offering.

¹⁹ Krüger, S. and Rustad, G. (2017) “Coping with Shame in a Media-saturated Society: Norwegian Web-series Skam as Transitional Object.” *Television & New Media*, Vol. 20(1): 72-95.

²⁰ Kearney, M. and Levine, P. (2019) “Early Childhood Education by Television: Lessons from Sesame Street.” *American Economic Journal: Applied Economics*, Vol. 11(1): 318-350.

²¹ Sekasin is a domestic drama show with the recurring theme of mental illness, which may help in decreasing the stigma associated with such illnesses. The show is available on Yle Areena without charges (<https://areena.yle.fi/1-3430975>) and for subscribers through the commercial VOD service Viaplay (<https://viaplay.fi/sarjat/sekasin>).

²² Ernst & Young (2020) International perspectives on public service broadcasting, EY report for Ofcom, page 24.

Yle's linear TV service

- 3.10 Yle aims to fulfil its public service broadcasting remit through its linear TV channels Yle TV1, Yle TV2, and Yle Teema/Fem. Together, these channels form Yle's TV offering, which responds to the need for public service broadcasting. Each channel has a slightly different profile:
- a. Yle TV1 is the flagship channel which broadcasts news and current affairs, and some high-profile drama shows. Yle TV1 is given the most prominent slot on the Electronic Programme Guide and accounts for 30% of all television viewing in Finland.²³
 - b. Yle TV2 accounts for 10% of Finnish viewing and broadcasts a wide range of content from documentaries to factual and lifestyle shows, as well as drama and entertainment. It used to broadcast daily news bulletins until these were discontinued in 2019.²⁴ Previously, in 2012, Yle had rebranded Yle TV2 to "*reflect the appearance and attitude of a youthful and modern TV channel*"²⁵ – a change that was controversial among some viewers²⁶.
 - c. Yle Teema/Fem, which is showing a mix of both news and documentaries, as well as lifestyle shows and entertainment, in many cases in Swedish. Yle Teema/Fem is broadcasted on the fifth channel slot after the commercial channels MTV3 and Nelonen and receives 4% of linear viewing.²⁷
- 3.11 In order to review how Yle meets its public service remit, we have assessed the different genres of content available and classified them into two groups:
- a. **Commercial genres (General Entertainment):** entertainment, sports, and foreign and domestic children's programmes and drama; and

²³ See <https://www.digita.fi/antennitv/vapaat-kanavat-ja-vastaanotto/hyodyllista-tietoa-tvsta/kanavajarjestys/#/> and <https://www.finnpanel.fi/tulokset/tv/vuosi/sharev/viimeisin/>, available on 18 November 2021.

²⁴ See Yle (2018) online article <https://yle.fi/aihe/artikkeli/2018/11/26/yle-tv1-vahvistaa- uutistarjontaansa>, available on 18 November 2021.

²⁵ See Helsingin Sanomat (2014) online article <https://www.hs.fi/kulttuuri/art-2000002704449.html>, available on 18 November 2021.

²⁶ According to the article in the newspaper Helsingin Sanomat cited above, Yle TV2 viewing decreased from around 20% in 2010 before the rebranding, to 13.2% in the year of rebranding, and further down to 11.9% in 2014. In 2020, the Yle TV2 viewing had not regained, remaining low at around 10%. A page on the Yle website, which announced the rebranding of Yle TV2 in 2012, also displays critical comments from viewers regarding the decision to concentrate on entertainment programmes (<http://vintti.yle.fi/yle.fi/tv2/juttuarkisto/ajankohtaista/nain-kakkonen-uudistuu.html>).

²⁷ See <https://www.digita.fi/antennitv/vapaat-kanavat-ja-vastaanotto/hyodyllista-tietoa-tvsta/kanavajarjestys/#/> and <https://www.finnpanel.fi/tulokset/tv/vuosi/sharev/viimeisin/>, available on 18 November 2021.

b. Non-commercial genres: cultural, current affairs, educational and science programs, factual/lifestyle, and news.

- 3.12 The genres that belong to the General Entertainment group are identified based on what domestic commercial operators offer, as this is content which has been shown to be commercially attractive. As we show later in this section, almost all content viewed on the MTV and Ruutu services, belong in the General Entertainment category.²⁸
- 3.13 In linear television, there is a clear relationship between what is broadcast, particularly at prime time, and what is viewed. This means that by controlling which programmes are scheduled at which times, Yle can directly help ensure that content with high social value is viewed. Using our classifications, we find that, in a typical week, 61% of the prime-time broadcasted programming on the Yle linear channels is within non-commercial genres (i.e. not General Entertainment).²⁹ This is consistent with Yle seeking to meet its public service remit.
- 3.14 As more commercial programmes often have higher viewing figures, we have used Finnpanel data to assess which content Finnish viewers are watching across Yle's linear channels to get an indication of the consumption mix which Yle considers fulfils its remit. The table below shows the viewing of Yle's linear channels by genre in 2020.

²⁸ The delineation is not always clear-cut. For example, the genre 'factual and lifestyle programmes' encompasses a wide range of programmes, some of which are more commercially orientated and some less so. As it is not feasible to categorise all individual programmes, we have taken a conservative approach and labelled all factual and lifestyle programmes as non-commercial.

²⁹ Compass Lexecon analysis based on Yle linear TV weekly programming for the week commencing on 20 September 2021. Analysis is done for programming scheduled during prime-time evening time slots 18:00-00:00. The General Entertainment category includes the genres: entertainment, sports, and foreign and domestic children's programmes and drama.

Table 1: Viewing of Yle linear channels 2020

Genre	Viewing (thousand minutes)	Share of total viewing
Children programmes	4,392	3%
Domestic fiction	5,657	4%
Domestic movies	5,582	4%
Entertainment/light music/reality	6,911	5%
Foreign fiction	22,880	17%
Foreign movies	3,985	3%
Sports	13,333	10%
General entertainment	62,739	47%
-none-	1,603	1%
Cultural	1,193	1%
Current Affairs	21,619	16%
Educational and science programmes	0	0%
Factual/lifestyle	26,331	20%
News	20,605	15%
Other program types	8	0%
Popular Culture	0	0%
Other	71,360	53%
Total	134,100	100%

Notes: The linear Yle channels include Yle TV1, Yle TV2, Teema, and Fem.

Source: Compass Lexecon analysis of Finnpanel data.

- 3.15 Table 1 above shows that even though commercial genres account for a higher share of viewing than they do as a share of the schedule, the majority of content viewed on Yle’s linear channels is still in non-commercial genres (53% of viewing) such as, factual/lifestyle, news, and current affairs. A high share (31%) is to news and current affairs programmes. These correspond to Yle’s requirement to “support democracy ... by providing diverse information, opinions and discussions”.

Yle Areena

- 3.16 We have undertaken a similar analysis for the Yle Areena service. For VOD services, there is no content schedule as viewers select which content they view from the VOD library. However, this does not mean that the VOD operator has no influence on the content viewed as they can influence the content that is recommended and promoted to the viewer.
- 3.17 In contrast to Yle’s linear service we find that most of the content consumed on Yle Areena is within the General Entertainment genres.
- 3.18 Finnpanel data in the table below shows that the content viewed on Yle Areena is predominantly commercial in nature, with 80% of all viewing in the General Entertainment

genres. Just 4% of all viewing on Areena in 2020 was to news and current affairs, despite the importance of such content in Yle's remit. Although Yle's remit has emphasised the importance of reflecting domestic culture, 42% of all viewing was to foreign entertainment content (37% foreign fiction and 5% foreign movies).

Table 2: Viewing of Yle Areena, Ruutu AVOD and MTV AVOD 2020

Genre	Yle Areena	MTV	Ruutu
Children programmes	11 %	3 %	1 %
Domestic fiction	20 %	26 %	10 %
Domestic movies	2 %	0 %	0 %
Entertainment/light music/reality	4 %	30 %	72 %
Foreign fiction	37 %	23 %	10 %
Foreign movies	5 %	2 %	1 %
Sports	1 %	0 %	1 %
General Entertainment	80 %	85 %	95 %
-none-	1 %	1 %	0 %
Cultural	0 %	0 %	0 %
Current Affairs	2 %	1 %	0 %
Educational and science programmes	0 %	0 %	0 %
Factual/lifestyle	15 %	10 %	5 %
News	2 %	3 %	0 %
Other program types	0 %	0 %	0 %
Popular Culture	0 %	0 %	0 %
Other	20 %	15 %	5 %
Total	100 %	100 %	100 %

Notes: Total viewing in thousand minutes: Yle Areena 10,034; Ruutu AVOD 1,130; and MTV AVOD 2,164.
Source: Compass Lexecon analysis of Finnpanel data.

3.19 We have used the same classification to group together the content on the Ruutu and MTV AVOD services. For Ruutu the General Entertainment genres account for 95% of viewing in 2020, and for MTV the General Entertainment genres account for 85% of viewing in 2020. We can see that, contrary to the claims by the Finnish state, Yle Areena's service split is notably different from that observed for Yle's linear channels, whilst resembling closely that of domestic commercial VOD operators in Finland.

3.20 To supplement this analysis, we have collected data on the content published and viewed on Yle Areena on 27 September (**Yle Areena data**).³⁰ The data include all available titles on Yle Areena at the time, including information on views, and descriptive information such as content

³⁰ These data represent a snapshot of the content on Yle Areena as of the collection date.

genre and type.³¹ The table below shows available titles and viewing on Yle Areena by genre in September 2021. These data show that, although the content library of Yle Areena may include the content from the linear channels, the content that is viewed is mainly in commercial genres.

Table 3: Yle Areena - Titles and viewing by genre

Genre	Number of titles	Share of titles	Share of total views	Share of average views per day
Children domestic	10,072	20%	21%	7%
Children foreign	3,316	7%	10%	38%
Drama domestic	2,918	6%	29%	12%
Drama foreign	1,564	3%	9%	20%
Entertainment	4,203	8%	6%	2%
Sports	3,003	6%	3%	6%
General Entertainment	25,076	50%	77%	84%
Culture	2,506	5%	1%	0%
Current affairs	2,416	5%	2%	2%
Informative	12,383	25%	16%	9%
Learning and science	449	1%	0%	0%
Music	1,214	2%	0%	0%
News	5,160	10%	3%	4%
N/A	532	1%	0%	0%
Other	24,660	50%	23%	16%
Total	49,736	100%	100%	100%

Notes: Data collected from the Yle Areena website in September 2021.

Source: Compass Lexecon analysis of collected Yle Areena data.

3.21 Table 3 above shows that 77% of content in terms of viewing are within genres that can be considered commercial. To take into account that some of the non-commercial content is likely to be available indefinitely (and thus may accumulate many views over time by virtue of having been available for a long time), we also consider views as an average of days available on the service. If considering share of average views per day, only 16% are within genres that are more likely to be non-commercial. This confirms the findings based on the Finnpanel data that most of the content that is viewed on Yle Areena is commercial in nature, contrary to what is claimed in the responses by the Finnish State and the CE Report.

³¹ This dataset differs from Finnpanel as it is not annual data, but data on the total number of views to date of the shows on the Yle Areena website. This may explain the higher proportion of children's programme in views as children's titles may be present for longer and accumulate total views over a longer period.

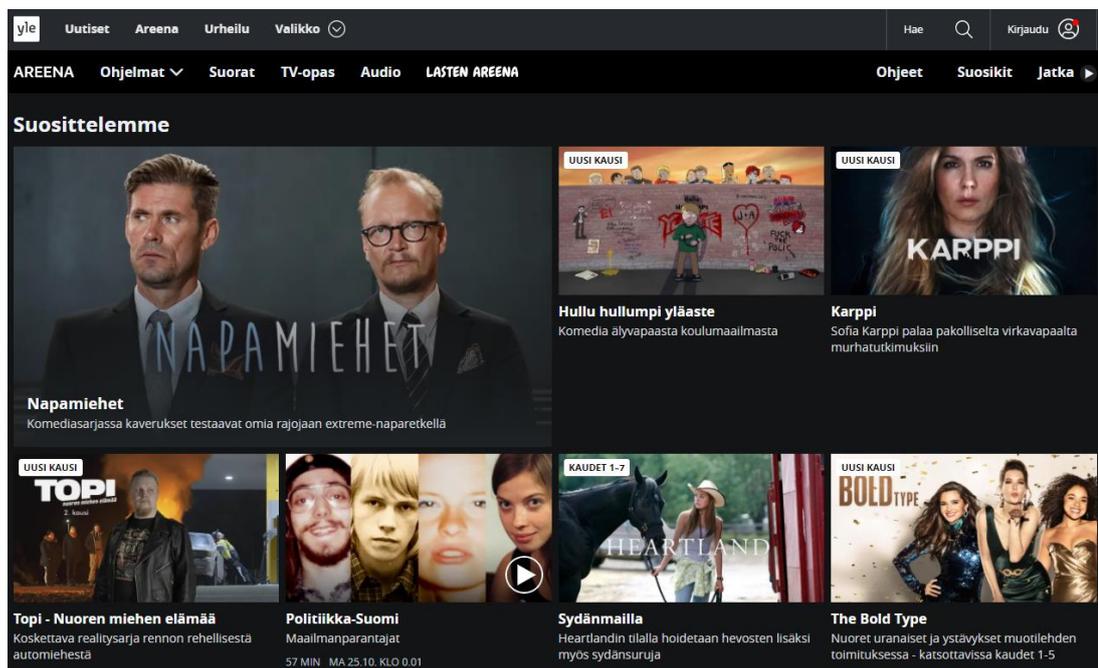
Yle Areena recommendations promote commercial content

- 3.22 In contrast to linear TV, Yle has somewhat less control of what content is viewed on the Yle Areena on-demand platform, as viewers can choose from whatever content is made available. This could suggest that Yle Areena is powerless to influence which content is consumed. However, this does not mean that Yle is unable to steer viewers towards the type of content that fulfils its public service remit.
- 3.23 It could do so in three ways: (i) content recommendations; (ii) choice of exclusive content and (iii) content availability. We examine each of these in turn.

Content recommended on Yle Areena

- 3.24 In linear TV, broadcasters use prominence and scheduling to steer viewers towards content with high public value. For example, news and current affairs are shown on prime hours on Yle TV1, which has the most prominent position on the Electronic Programme Guide. For VOD services, a similar role is played by content recommendations, which viewers see when they switch on the Yle Areena service. Like the linear schedule, Yle has control over these recommendations and can use them to promote and steer viewers towards content that is of higher public value.
- 3.25 We have reviewed the recommendations on Yle Areena to see what content is promoted to viewers. As recommendations are personalised, we have used the recommendations for a 'new viewer' for whom Yle Areena has no previous viewing history.
- 3.26 The screen shot below from the Yle Areena website shows the top recommendations for a new viewer on 8 November 2021.

Figure 1: Recommended shows on Yle Areena



Notes: Screen shot captured on 8 November 2021.

Source: Yle Areena website

3.27 Of the seven shows highlighted, six are commercial in nature:³²

- Napamiehet: Domestic comedy series.
- Hullu hullumpi yläaste: Animated domestic children's entertainment series.
- Karppi: Domestic drama series.
- Topi - Nuoren miehen elämää: Domestic reality series.
- Sydänmailla (Heartland): Canadian drama series.³³
- The Bold Type: US comedy-drama series.³⁴

3.28 It is notable that, in contrast to Yle's remit, with the exception of the 'Politiikka-Suomi' show, the top Areena recommendations do not include any news or current affairs content. Instead,

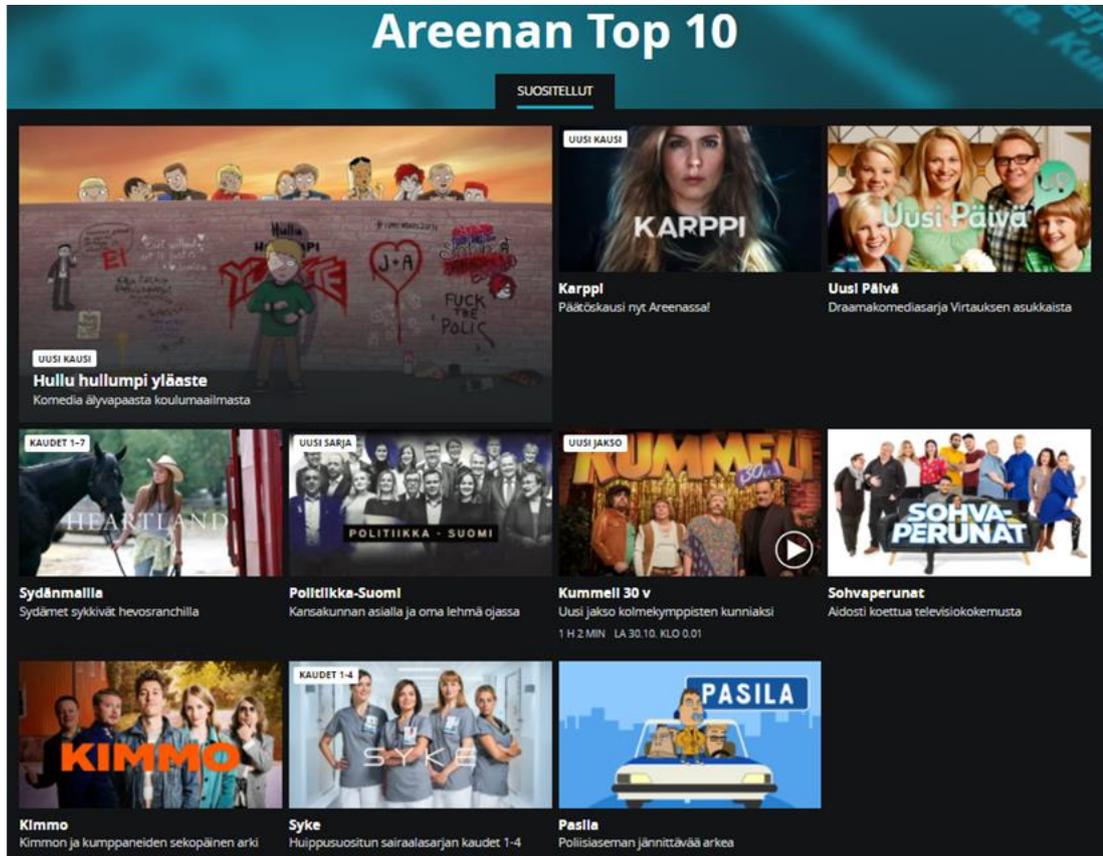
³² The exception is *Politiikka-Suomi*, a domestic political documentary series.

³³ Broadcast in Canada on Netflix and other commercial services. See <https://www.justwatch.com/ca/tv-show/heartland>, available on 18 November 2021.

³⁴ Broadcast internationally on Hulu, Amazon Prime and Netflix. For UK see <https://www.justwatch.com/uk/tv-series/the-bold-type>; and for US see <https://www.justwatch.com/us/tv-show/the-bold-type>, both available on 18 November 2021.

the recommended shows appear to simply be the content that is most popular on Areena. This is shown in Figure 2 below which shows the Areena top 10 for the same date.

Figure 2: Yle Areena Top-10 shows



Notes: Screen shot captured on 8 November 2021.

Source: Yle Areena website

3.30 As the top 10 shows relate closely to the content recommended on Areena, it appears as though Yle is concentrating on serving viewers with what attracts the most viewing, rather than what has the highest public value.

Content that is 'Yle Areena' exclusive is commercially focused

3.31 Another way in which Yle can influence the type of content which users consumer on Yle Areena is through the content which it purchases specifically for Yle Areena. The CE Report has stated that Yle has spent € 15 million on content that is exclusive to Yle Areena. As we do not have access to information identifying such content, a direct assessment of such it aims at fulfilling the public service remit or is more commercially focused is out of scope. However, based on Yle's website, we have identified the titles that did not have a linear broadcast, and

assumed these to be 'Areena exclusives'. Examples of the most popular titles within the commercial genres that are exclusively available on Yle Areena include:³⁵

- a. Barbapapa (Barbapapa en famille): French animated children's programme produced by the commercial TV channel TF1 and broadcasted on the commercial channels TF1 in France and Nickelodeon Junior in other countries.³⁶ The show has around 7.5 million views on Yle Areena as of September 2021.³⁷
- b. Kolmekymppiset (Being 29): a Danish drama comedy, which in Sweden is offered by the commercial broadcaster TV4.³⁸ The show has around 3.4 million views as of September 2021.
- c. Eagles: a Swedish drama series for youths. Broadcasted in Sweden by the public service broadcaster SVT.³⁹ The show has around 2.9 million views as of September 2021.

3.32 This is consistent with other evidence showing that Yle Areena may be seeking content which attracts the maximum viewers, rather than content which delivers the maximum social value.

Content availability

3.33 Yle Areena could steer viewing towards content that is of higher public value and closer to Yle's public service remit is by limiting the amount of content on Yle Areena. This can be done in a number of ways, including limits on the length of time content is available or on the amount of certain types of content that is available.

Time limits

3.34 As set out in the accompanying legal submission, limits on the length of time that content is on PSB VOD services exist in a number of European countries, including Austria, Germany, Belgium, and the UK. By contrast, no time limits exist on Yle Areena. Analysis based on data collected from the Yle Areena website in September 2021 shows that just below a third of the

³⁵ Yle Areena exclusivity is based on an assumption of the data collected from the Yle Areena website: If a programme has never had a linear TV broadcast, it is assumed to be exclusively available on Yle Areena.

³⁶ See <https://www.tf1.fr/tf1/barbapapa>, available on 19 November 2021; and <https://www.nickjr.tv/>, available on 26 November 2021.

³⁷ Views refer to the view count on the Yle Areena webpage. It is not entirely clear what constitutes as a view on Yle Areena. It could be either content starts or times viewed until some point of the programme.

³⁸ See <https://www.tv4play.se/program/29>, available on 19 November 2021.

³⁹ See <https://www.svtplay.se/eagles>, available on 19 November 2021.

commercially classified content on the service is available indefinitely when measured in terms of total views.⁴⁰

Content limits

- 3.35 Limits could also be placed on the amount of content, or on the amount of certain types of content - that is on Yle Areena. As we set out in the next section, the BBC has limits on the amount of drama box-sets on its VOD service, before another assessment is required.

Conclusion on Yle Areena and the public service remit

- 3.36 In their desire to compete with services such as Netflix, it is tempting for public broadcasters to procure and promote commercial content that will attract mass audiences. However, the purpose of a public broadcaster is not to attract mass audiences for its own sake, but to serve them with content that fulfil a public service remit.
- 3.37 In this section, we have shown that there is a marked contrast between the content viewed on Yle Areena and that viewed on the linear channels. In contrast to Yle linear, the content promoted and viewed on Yle Areena is much more commercial in nature, leading to consumption patterns closer to domestic commercial SVODs than to its public service linear channels. This suggests that it is delivering relatively little public value, compared to what would otherwise be provided by commercial services, and has implications for the proportionality of its impact on commercial services.

⁴⁰ Compass Lexecon analysis of collected Yle Areena data. Data collected from the Yle Areena website in September 2021. Same genre classification applies as in Tables 1-3.

Section 4

Impact of Yle Areena on commercial providers

4.1 In this section we evaluate claims by the Finnish State and Copenhagen Economics, and assess the impact of Yle Areena on the commercial operators in Finland. This section is structured as follows:

- First, we summarize the claims made by the Finnish State in its responses, and by Copenhagen Economics in the CE Report.
- Second, we set out the appropriate analysis framework and show that the figures presented in the CE Report are likely to be an underestimate.
- Third, we quantify the monetary impact of the figures presented in the CE Report and show that, even under the survey in the CE Report, Yle Areena has a significant impact on the domestic commercial operators.
- Finally, we show that, contrary to the claims in the CE Report, the domestic commercial operators' television operations are not in good financial health.

Claims by the Finnish State and Copenhagen Economics

4.2 In its First and Second Replies, the Finnish State has made a number of claims relating to the impact of Yle Areena on commercial operators. In the First Reply, the Finnish State claims: *“any potential impact of Yle Areena on competition is limited since its offering and related consumption differs essentially from that of the commercial operators”*.⁴¹

4.3 The CE Report builds on the Finnish State's claims by referring to a survey, which it claims to show that Sanoma overestimates the impact of Yle Areena on the domestic commercial operators. The survey presented in the CE Report asks a sample of viewers, which have used Yle Areena within the past year, a series of questions about their viewing habits and what they would do if Yle Areena did not exist; namely, what other services they would use. The CE Report presents a selection of responses, some of which are aggregated and filtered in various

⁴¹ First Reply of the Finnish State, para. 24, p. 9.

ways, requiring careful interpretation to understanding the implications on the total population of Finland.

- 4.4 The CE Report claims that “[i]f 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”.⁴² The CE Report claims that Sanoma’s allegation that commercial VOD service providers struggle to survive is not consistent with (i) the financial performance of Sanoma Media Finland; (ii) the increased subscriptions of C More; (iii) the 4% increased revenues of Elisa Oyj during the first half of 2021; and (iv) the Viaplay market share in Finland and future outlook in the Nordics.
- 4.5 Furthermore, in the First Reply of the Finnish State and the CE Report, it is claimed that empirical evidence does not support the theory of ‘crowding-out’, i.e. that public sector broadcasting reduces the demand for services provided by commercial operators.⁴³
- 4.6 In the rest of this section, we assess and respond to these claims.

Appropriate analytical framework for impact estimation

- 4.7 The appropriate way to identify any impact requires identifying and estimating the outcomes in a scenario where the cause of the impact did not take place. This scenario is called the counterfactual scenario. By comparing the counterfactual scenario to the factual scenario (where the cause of the impact did take place), the impact is identified as the difference between the counterfactual and the factual scenarios.⁴⁴

The counterfactual

- 4.8 In this case, the identification of the impact of Yle Areena requires estimating what would have happened in a scenario where Yle’s services would have been more closely fulfilling Yle’s public service remit.
- 4.9 The claims by the Finnish State in its responses, as well as the survey in the CE Report, fail to consider how commercial operators’ services would differ if Yle Areena was less commercially focused. Therefore, these claims and the survey in the CE Report – which are based on observing the state of commercial operators in Finland as they are – fail to correctly identify the impact of Yle’s services on the commercial operators.

⁴² CE Report, para. 4.23.

⁴³ First Reply of the Finnish State, para. 101, p. 31; CE Report, para. 4.18.

⁴⁴ This framework is the standard method in economic literature. It is used in a broad range of different applications, such as impact assessments of competition infringements. This is also the foundation for the European Commission’s Guidelines for quantifying harm in competition infringements, European Commission, (2013), Commission Staff Working Document, Practical Guide, Quantifying Harm in Actions for Damages Based on Breaches of Article 101 or 102 of the Treaty on the Functioning of the European Union.

4.10 In the counterfactual, domestic commercial operators may offer more content such as domestic drama than they do now, and so may be more attractive to viewers. It is difficult to measure a true counterfactual of what rival domestic VOD services would look like if Areena was less commercial, as they may have had to diversify their offering in areas where Yle Areena is active as it offers similar content without subscription fees or advertising. Therefore, the commercial operators may have had to concentrate on offering for example entertainment instead of domestic drama, even if both types of content are commercially attractive and would have been offered by commercial operators in the absence of Yle overstepping its public service remit.

4.11 This potential impact of a publicly funded VOD service on the services operated by commercial rivals is described by Ofcom economists:

“The BBC’s iPlayer proposals might have the effect of reducing the revenue that rival services can generate and diminish the number of viewers attracted or retained by rivals’ investments. As a result, commercial firms may respond to the proposals by reducing investment – for example, they could produce fewer programmes in expensive genres such as drama. This could have a negative impact on consumers if it reduces overall choice. Another possibility is that commercial rivals reposition themselves to differentiate themselves from BBC iPlayer. This could affect different viewers in different ways, with some having more programmes that suit their tastes and others having less.”⁴⁵

4.12 As we explain in the text box below, the economics literature has found that when public broadcasters operate in areas provided by the commercial sector, crowding out can occur, where commercial broadcasters reduce their services in response.

⁴⁵ Ofcom (2020) “Public funding and commercial investment: BBC iPlayer case study”, see <https://www.ofcom.org.uk/about-ofcom/latest/features-and-news/public-funding-commercial-investment-iplayer-case-study>, accessed on 18 November 2021.

Economic literature on the crowding-out effect of public service broadcasters

The Replies by the Finnish State and the CE Report claims that the crowding out argument – i.e., that "public service broadcasters are reducing demand for services provided by the private sector" – is not supported by research. The report backs this statement up by citing a single study, namely Sehl et al (2020).¹ This was a cross sectional study, looking at the relationship between expenditure on public service broadcasting, and the revenues of commercial broadcasters. The study found that countries with high per capita investment in public service broadcasting also tended to have higher advertising and pay TV subscription revenue.

However, as Dr Helen Weeds, noted in a literature review for Ofcom:

*“positive correlations between performance indicators for public and private operators found in cross-sectional analysis of international data—sometimes cited as evidence of PSB’s positive impact on commercial provision via ‘competition for quality’—reveal nothing about causality as both may be driven by common background factors (e.g. higher incomes and greater willingness to pay for television both publicly and privately).”*²

Other research, looking at the effects of specific commercially orientated PSB services in specific markets have found evidence of crowding out. For example, Berry and Waldfogel (1999) found that in the US, government subsidies to jazz and classical music stations displaced commercial programming in large markets. In the UK, a report by media consultants Oliver and Ohlbaum and Oxera, found that not only would commercial broadcasters have higher revenues, but that there would be a positive net market impact if the BBC’s output was more differentiated from commercial rivals at the same levels of public funding.³ These studies are more relevant to the present case as they look specifically at instances where the publicly funded broadcaster is providing services similar to those of commercial rivals.

1. Sehl, Fletcher and Picard (2020), Crowding out: Is there evidence that public service media harm markets? A cross national comparative analysis of commercial television and online news providers, *European Journal of Communication*, Vol. 35(4) 389-409.

2. Weeds, Helen, (2019), *Rethinking public service broadcasting for the digital age*, a report for Ofcom, 2019

3. Berry, Steven T., and Joel Waldfogel (1999). "Public Radio in the U.S.: Does it Correct Market Failure or Cannibalize Commercial Stations." *Journal of Public Economics*, Vol. 71, No. 2, pp. 189-211.

4. [Ohlbaum and Oxera, A report for the UK Department of Media Culture and Sport](#), 2016
2016

Impact estimated in the CE Report

- 4.13 Nonetheless, the survey in the CE Report does provide a basis on which to assess the impact of Yle Areena on domestic commercial operators. The CE Report asks those who have used Yle Areena in the past year, what services they would switch to in the event that Yle Areena was no longer available.
- 4.14 It is noted in the CE Report that while the survey has asked respondents how they would react in the counterfactual of Yle Areena not existing, the true counterfactual would be smaller in

scale. Instead of Yle Areena not existing, the true counterfactual would be that Yle would be limited to offer content that is consistent with its public service remit. The CE Report explains that this counterfactual is difficult for respondents to understand. The survey in the CE Report might therefore overstate the impact, as the true counterfactual is not that Yle Areena would cease to exist at all.⁴⁶ However, as most of the content that is watched on Yle Areena is in commercial genres, and commercial operators may offer more attractive content, the difference between the counterfactual used in the CE Report and the true counterfactual may not be that large.

- 4.15 The CE Report claims that the survey results show that the impact of Yle Areena on Sanoma's SVOD services is overestimated, and that "*Sanoma's allegation that Yle Areena's advertisement-free provision of SVOD-like content decreases Ruutu's AVOD viewership is unfounded*".
- 4.16 Although the CE Report presents the results of the consumer survey, it does not actually include a quantification of the impact on Sanoma, and other domestic commercial operators. The CE Report presents the results from the survey in terms of the diversion of those who have viewed Yle Areena in the last year. However, this is not informative of the impact on commercial operators: Yle Areena has a higher customer base than the domestic commercial operators, so that a small share of Yle Areena viewers may correspond to a significant share of the domestic commercial operators' viewers. In addition, the survey asks viewers that have used Yle Areena within the past year, rather than regular users that may be more likely to seek a replacement, so the diversion percentage can seem superficially low.
- 4.17 Moreover, the diversion that is presented in the CE Report is split between different services so that each individual impact can appear small. This gives a misleading picture of the total impact of Yle Areena on the commercial operators. The Domestic Commercial Operators are mainly active with three different types of services:
- a. Subscription video-on-demand (**SVOD**);
 - b. Advertising video-on-demand (**AVOD**); and
 - c. Linear free-to-air television (**FTA**).
- 4.18 By offering commercial content free of charge, Yle Areena impacts all three services through a reduction in viewers and subscribers. Sanoma and Telia Company, offer all three services through their linear TV channels and their Ruutu, MTV and C More services, and are thus

⁴⁶ The survey in the CE Report has also asked how respondents would react in the scenario where "*Yle Areena was limited to a 7-day catchup service*". The CE Report explains that the responses to these questions suggest a smaller impact, although the CE Report does not present full results for these survey questions. As it is noted in the CE Report, designing the survey so that the respondents would react to the true counterfactual may not be feasible, and therefore the forced diversion question could be more appropriate.

affected by Yle Areena on all three fronts. It is therefore necessary to consider all three services together, when assessing the impact of Yle Areena.

Quantification of impact estimated in the CE Report

- 4.19 The quantification of the impact of Yle Areena on the domestic commercial operators in Finland is based on the diversion figures presented in the CE Report, assumptions on viewer profitability based on input from Sanoma, and public sources with viewing and market shares of VOD service providers.
- 4.20 The methodology is explained in detail in Annex A of this report. A summary of the methodology is described below. As described above, the commercial operators provide three services SVOD, AVOD, and linear TV (FTA). As the quantification methodology differs slightly between the services, we summarise each of them below.

SVOD

- 4.21 The revenue from SVOD services come from subscriptions that viewers pay monthly. We assume that a subscription for a service is made at household level. The impact is equal to the incremental households that would otherwise subscribe to one of the commercially operated SVOD services. The impact for the SVOD services is calculated by multiplying the following factors:
- a. The number of households in Finland;
 - b. Share of households who used Yle Areena within past 12 months;
 - c. The estimated diversion calculated from the figures presented in the CE Report;
 - d. The estimated probability of a diverting household to select each commercial VOD services – based on the market shares of each commercial operator; and
 - e. The monthly SVOD subscription fee of each service.
- 4.22 Applying this approach, we find an impact of € 8.2 million in annual revenues for Sanoma, MTV, and Elisa Viihde Viaplay. The foregone revenue for Sanoma's SVOD service Ruutu+ is estimated to be € 2.9 million in annual revenues or [-]% of total SVOD revenues.⁴⁷ For the other two other main domestic commercial operators who offer SVOD services, MTV and Elisa Viihde Viaplay, the forgone revenues are estimated to be € 1.3 million and € 4.0 million

⁴⁷ The share of total revenue is calculated by dividing the additional annual revenue with Sanoma's SVOD revenues in 2020.

respectively. In terms of share of total revenues, we estimate this to be approximately 4% for MTV and 9% for Elisa Viihde Viaplay.⁴⁸

AVOD

4.23 The revenue of AVOD services is generated from advertisements that each viewer sees. The impact is equivalent to the additional minutes of viewed advertising if viewers would divert viewing from Yle Areena to the commercial operators' AVOD services. The impact for the AVOD services is calculated by multiplying the following factors:

- a. The population of Finland above the age 15;
- b. Share of population who used Yle Areena within past 12 months;
- c. The estimated diversion calculated from the figures presented in the CE Report;
- d. Average time spent watching Yle Areena (minutes per day);
- e. Expected viewing (minutes per day) diverted to each AVOD services – calculated from public sources on viewing habits and the results on specific AVOD service providers from the survey in the CE Report;
- f. Average time spent watching advertisements out of time watched AVOD;
- g. Average price per minute of advertisements.

4.24 For Sanoma and MTV alone, this yields an estimated annual impact of € 4.3 million in forgone revenues due to the impact of Yle Areena. The foregone revenue for Sanoma's AVOD service Ruutu is estimated to be € 2.0 million in annual revenues or [--]% of total AVOD revenues.⁴⁹ For the other major domestic AVOD provider MTV, we estimate the forgone revenue to be € 2.4 million which amounts to 25% of total AVOD revenues.⁵⁰ These figures are in contrast to claim in the CE Report that the survey showed that the impact of Yle Areena on AVOD was "unfounded".

⁴⁸ For MTV the share of total revenue is calculated by dividing the additional annual revenue with Sanoma's estimate of MTV's SVOD revenues based on financial statements. For Elisa Viihde Viaplay the annual revenues have been estimated by multiplying the number of subscribers (data from the European Audiovisual Observatory) with the monthly subscription fee.

⁴⁹ The share of total revenue is calculated by dividing the additional annual revenue with Sanoma's AVOD revenues in 2020.

⁵⁰ For MTV the share of total revenue is calculated by dividing the additional annual revenue with Sanoma's estimate of MTV's AVOD revenues based on financial statements.

Linear TV

- 4.25 As noted in the CE Report, the impact of Yle Areena extends to commercial operators' FTA services on linear TV. As may be expected, the impact of Yle Areena on linear TV is less than its impact on VOD services. We calculate that Yle Areena has an annual impact of € 0.2m on domestic commercial linear broadcasters.

Total financial impact

- 4.26 In total, we calculate that Yle Areena has an annual impact of € 12.7 million on Sanoma, MTV and Elisa Viihde Viaplay. The impact of SVOD and AVOD alone represents [--]% of Sanoma's and 9% for each of MTV and Viaplay's VOD revenues. As we note above, this does not take into account that the domestic commercial operators could be able to offer more attractive content in the true counterfactual scenario. As we show below, this is also significant in terms of the profitability of these services.

Financial performance of commercial operators

- 4.27 It is claimed in the CE Report that the financial performance of Finnish commercial VOD operators is not consistent with Sanoma's allegation that these providers are struggling.⁵¹ The CE Report notes that each operator has grown the number of SVOD subscribers and said that Sanoma Media Finland had increased its EBIT in 2020.
- 4.28 As the VOD market has been in a rapid growth phase in recent years, it is hardly surprising that all VOD operators have increased their subscriber bases. However, this on its own is not descriptive of the financial health of the business. In fact, CE failed to note that the domestic commercial VOD and linear TV operator MTV has been loss-making in each of the past three years, recording an EBIT of -16.4% (€ -28.2 million) in 2020.⁵²
- 4.29 For Sanoma, the CE Report shows the profits of Sanoma Media Finland (which is a subsidiary of Sanoma Group). This consists, in addition to the relevant total-TV (FTA and VOD) segments, of other non-relevant business segments such as newspaper, radio, events, and magazines.⁵³
- 4.30 While the financial performance of Sanoma Media Finland has been profitable and stable over the past years, the financial performance of the total-TV business segment on a standalone basis has been [-----]. The EBIT margin of Sanoma's FTA and VOD business (total-TV) has been [-----] for the past two years.⁵⁴
- 4.31 The table below shows the financial performance of both Sanoma Media Finland (including the Total-TV business) as well as the Total-TV business alone. The table also shows the

⁵¹ CE Report, paragraph 4.23.

⁵² See <https://www.asiakastiето.fi/yritykset/fi/mtv-oy/10939441/taloustiedot>, available on 1 December 2021.

⁵³ See for overview of segments in Sanoma Media Finland <https://media.sanoma.fi/en/media-audiences>.

⁵⁴ Sanoma internal income statement.

financial performance of the other commercial VOD and linear TV operator MTV (there are no domestic figures publicly available for Viaplay in Finland).

Table 4: Profitability of Sanoma Media Finland and commercial VOD and FTA service providers in Finland 2018-2020

EBIT-%	2018	2019	2020
Sanoma Media Finland (including VOD and FTA)	12,0 %	12,0 %	11,8 %
Sanoma VOD and FTA	[-----]	[-----]	[-----]
MTV VOD and FTA	-12%	-9.4%	-16.4%

Notes: Total-TV contains net sales from Linear TV (FTA), Display, AVOD, nPVR, SVOD and Linear-Pay. The financials of MTV Oy are assumed to include the VOD and linear TV operations.

Source: Compass Lexecon analysis of Sanoma financial data, Asiakastieto/ MTV Oy's published financial accounts.

4.32 This analysis confirms that the domestic commercial operators offering VOD and FTA services have a weak financial performance.

4.33 Since VOD service providers costs are largely fixed, the impact of the forgone revenues due to Yle Areena translates directly into lower profits. For Sanoma, the VOD and linear TV business segment has [-----] over the past three years. Therefore, the impact of Yle Areena makes a notable difference to the long-run viability of the domestic commercial operators. Assuming that the additional revenue from the impact of Yle Areena would directly translate to profits for the commercial operators, the revenue at stake from the impact of Yle Areena could turn Sanoma's VOD and FTA operations [-----].

Summary

4.34 In this section, we have shown that even under the survey in the CE Report, Yle Areena has a negative impact on the domestic commercial operators Sanoma, MTV, and Viaplay of around €13 million per year, which is equivalent to 9-16% of the domestic commercial operators' VOD revenues.⁵⁵ In terms of profitability, the forgone revenues are significant, and in the case of Sanoma [-----].

4.35 As discussed in Section 2, state aid must be proportionate. This means that the impact on commercial operators can be justified if the service causing the impact is generating significant public value. In Section 3 we have showed that Yle Areena is offering a service that is mostly commercial. It should therefore be reviewed more closely and clarified whether Yle Areena, in its current form justifies the impact on competition, innovation, and ultimately consumers.

⁵⁵ Impact is VOD only in the case of Viaplay.

Section 5

The need for a proper process and safeguards

- 5.1 State aid is likely to distort competition but can be justified for services of a general economic interest. This does not justify a free rein for public service broadcasters. When carrying out public service activities, particularly new activities, there needs to be processes and safeguards to ensure that the activities fit within the defined remit of the PSB and that the impact on competition is not disproportionate. These assessments need to be carried out by independent bodies, to avoid obvious conflicts of interests.
- 5.2 In this section we draw attention to the lack of a process for Yle for assessing the proportionality of Yle's activities. We explain the process for the BBC, a comparable, largely tax-funded broadcaster with a similar remit. In contrast to Yle, any material change to BBC services is subject to independent scrutiny, including a public consultation to ensure that the impact on commercial services is not disproportionate to the public benefit. This process means that the BBC's iPlayer service, the equivalent of Yle Areena, has restrictions on the total amount of certain types of content (such as drama boxsets) to prevent a disproportionate impact on competition.

The lack of an assessment process for Yle

- 5.3 As set out in the Broadcasting Communication, the European Commission assesses "*whether there are sufficient guarantees to avoid disproportionate effects of public funding, overcompensation and cross-subsidisation, and to ensure that public service broadcasters respect market conditions in their commercial activities.*"⁵⁶
- 5.4 Such guarantees require proper processes to assess whether significant changes by a public service broadcaster fulfil its remit and that the impact on competition is not disproportionate. As set out in Sanoma's Complaint, there does not appear to be any process to ensure that Yle complies with its remit, and that the impact on competition is not disproportionate.⁵⁷

⁵⁶ Communication from the Commission on the application of State aid rules to public service broadcasting (Text with EEA relevance) OJ C 257, 27.10.2009, paragraph 40.

⁵⁷ Legal assessment of State aid incompatible with the internal market, paragraphs 33-40.

The process for the BBC

- 5.5 An example of appropriate procedures is provided by the system for supervision for the BBC, which like Yle, is not funded by advertising. Like Yle, the BBC is a large public service broadcaster with a wide remit, operating a range of broadcast channels, radio and online services. However, in contrast to Yle, the BBC is subject to a thorough process to ensure that any significant changes to its services adhere to its remit, and do not have a disproportionate impact on competition.
- 5.6 Under the BBC Agreement, any material change to a BBC service must satisfy three conditions which allow the BBC to pursue its public service remit (**the Mission and Public Purposes**), while ensuring that the impact on competition is not disproportionate:
- a. the proposed change to the UK public services contributes to the fulfilment of the Mission and the promotion of one or more of the Public Purposes;
 - b. it has taken reasonable steps to ensure that the proposed change has no adverse impact on fair and effective competition, which is not necessary for the effective fulfilment of the Mission and the promotion of the Public Purposes; and
 - c. the public value of the proposed change justifies any adverse impact on fair and effective competition.⁵⁸
- 5.7 Ofcom, the independent communications regulator, has responsibility for overseeing the process. As described in Sanoma's response, Ofcom was given this responsibility from the BBC Trust, which was considered to have a conflict of interest in deciding on the BBC's strategy and assessing fulfilment of the BBC's remit.⁵⁹ As set out in the Second Reply, a similar situation appears to exist for the Yle Administrative Council.
- 5.8 The procedure for assessing changes to BBC public services is described in the diagram below. The first step in the assessment is for the BBC to consider whether the change is material. A material change is defined as either a new public service, or a change that may have a significant impact on competition. This means that the materiality assessment also involves an assessment of the impact of the change on competition. Since 2017, there have been 18 materiality assessments for changes to BBC public services.
- 5.9 If a change is considered to be material, then a BBC Competition Assessment is required. This is a process which lasts up to 6 months, including a public consultation, giving all affected companies an opportunity to make representations. BBC competition assessments examine whether any proposed changes to BBC public service activities and proposed new UK Public Services, which may have a significant impact on competition, are justified in light of the

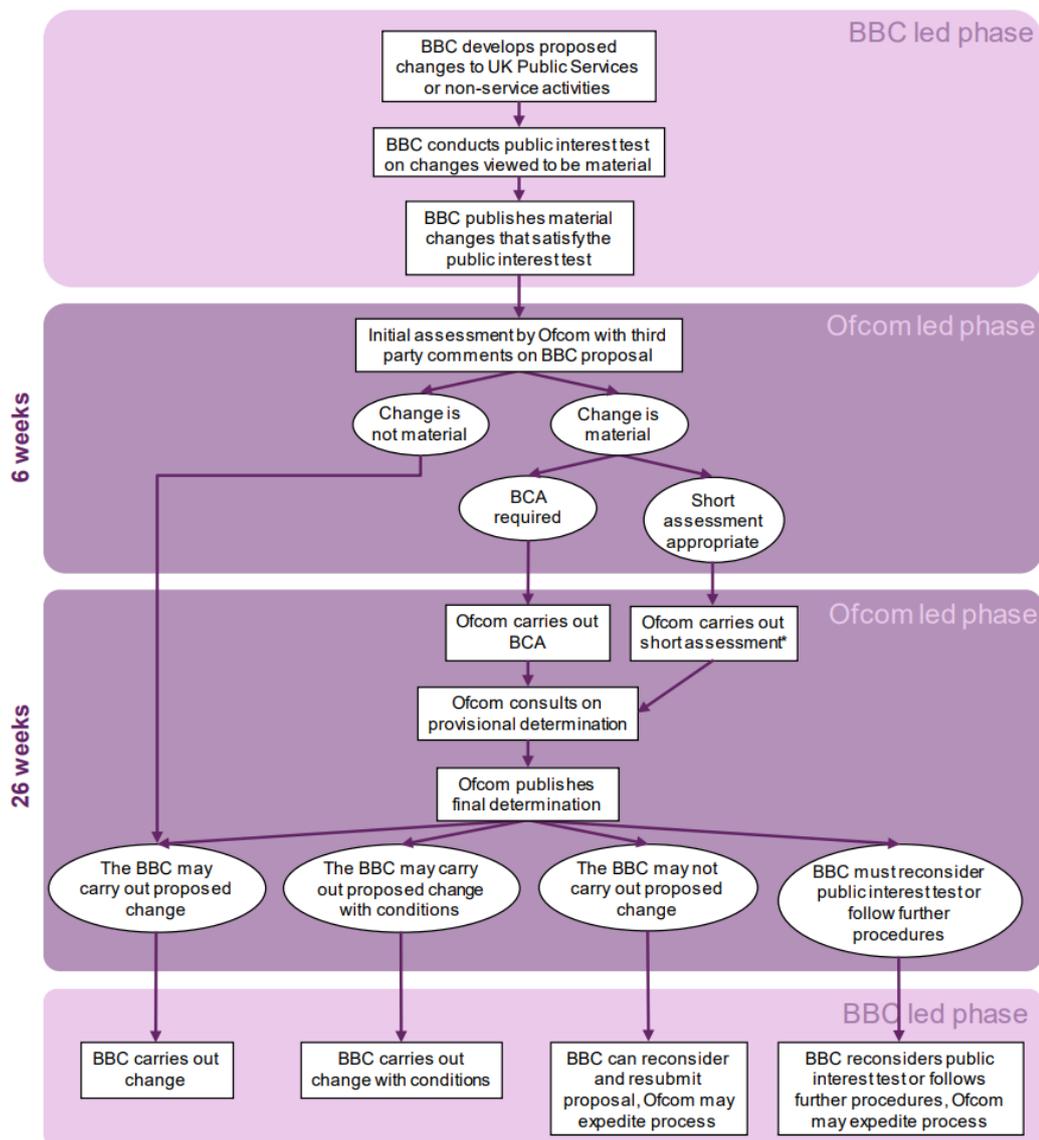
⁵⁸ BBC Framework Agreement, section 8. See https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/584329/57965_Cm_9366_Print_1_.pdf, accessed on 18 November 2021.

⁵⁹ Response of Sanoma Media Finland, 22 October 2021, paragraph 79.

potential public value and impacts on fair and effective competition. Ofcom has the power to approve, reject or modify the BBC's proposal. Since 2017, there have been 3 BCAs of changes to BBC public services.⁶⁰

Figure 3: Illustration of process for assessing changes to BBC's public service activities

Indicative stages in the assessment procedure



Source: Ofcom (2021) "Assessing the impact of proposed changes to the BBC's public service activities, Ofcom's procedures and guidance.", p. 11.

⁶⁰ BBC Annual Reports.

The iPlayer decision is an example of thorough scrutiny

- 5.10 The iPlayer decision provides an example of effective, proportionate, and independent scrutiny. In 2018, the BBC announced a change in its iPlayer strategy to allow it to compete with other video-on-demand services. The BBC wished to increase the availability of content on its iPlayer VOD service from 30 days to 12 months, and to have some content available for longer as boxsets. The BBC claimed that this was not a material change. Ofcom disagreed as it considered that increasing the content on iPlayer would increase the BBC's share of on-demand viewing and could harm competition by reducing competitors' incentives to invest in and develop their services.⁶¹
- 5.11 Ofcom's BCA found that the expansion of iPlayer would have an adverse impact on fair and effective competition. Ofcom found that viewing on rival UK broadcaster's free VOD services would fall by 0.6-2.0% as a result of the changes.⁶² This impact is far below the impact of Yle Areena on domestic commercial operators implied by the survey in the CE Report. Ofcom stated: "*These revenue reductions could reduce BVODs' incentives to invest in their services, which could in turn have a detrimental impact on their audiences.*" Given the impact we have estimated of Yle Areena on domestic commercial operators, a similar conclusion seems warranted.⁶³
- 5.12 Although Ofcom ultimately considered that the public value justified approving the BBC's proposals, it included a number of conditions and guidance to limit the impact on commercial rivals. These conditions were:
- a. Limits on the amount of content on iPlayer: In order to ensure that the impact on commercial broadcasters was not disproportionate, Ofcom set maximum limits on the number of boxsets that the BBC was allowed to carry on iPlayer. For example, only up to 50% (~25 titles each year) of current drama and comedy series are allowed to be available as boxsets on iPlayer.⁶⁴ The BBC is required to undertake a new materiality assessment if it wishes to increase the amount of content on iPlayer beyond these limits. By contrast, there are no limits on the content on Yle Areena, so it can continually expand its offering without any process to review the impact on rival broadcasters. Our analysis finds that in September 2021, there were a total of 81 drama and comedy boxsets available on Yle Areena.⁶⁵

⁶¹ Ofcom (2018) "Review of the BBC's Materiality Assessment of Proposed Changes to iPlayer", paragraphs 1.11-1.14.

⁶² Ofcom (2019) "BBC iPlayer Competition Assessment, Final Determination", paragraph 3.28.

⁶³ Ofcom (2019) "BBC iPlayer Competition Assessment, Final Determination", paragraph 3.85.

⁶⁴ Ofcom (2019) "BBC iPlayer Competition Assessment, Final Determination", page 55 and paragraphs 4.23-4.24.

⁶⁵ Compass Lexecon analysis of Yle Areena data collected in September 2021. We defined a boxset as a drama that has more than a single season available in the Yle Areena library.

- b. Requirements to show how iPlayer is used to deliver the BBC's remit: Ofcom also imposed conditions to ensure that iPlayer would deliver on the BBC's remit. These consist of two different conditions. First, the BBC is required to keep a record of the content on iPlayer and have it available on request. Second, Ofcom imposed a requirement for the BBC to propose performance measures and to set out in the BBC's Annual Plan each year how iPlayer would contribute to the BBC's remit, taking into account the impact on competition. This would allow Ofcom to determine whether any further changes are material and to intervene if necessary.

Conclusion

- 5.13 There are currently no restrictions or processes in place to ensure that Yle Areena delivers on a public service remit and does not have a disproportionate impact on competition. This contrasts with other publicly funded broadcasters such as the BBC. In this section we explained the process of scrutiny to ensure that changes to BBC public services both deliver on the BBC's remit, and do not have a disproportionate impact on competition. This means that changes to the BBC's VOD service, iPlayer, were subject to independent scrutiny. This resulted in limits to the amount of certain types of content that the BBC could place on iPlayer, and reporting requirements for the BBC to show how iPlayer delivers on the BBC remits.
- 5.14 Given the evidence of the commercial nature of the content promoted and consumed on Yle Areena, we consider that similar processes and requirements are needed to avoid disproportionate impacts on competition.

Annex A

Methodology of Impact Analysis

- A.1 This annex provides an overview of the methodology and sources used in the analysis of Yle Areena's impact on domestic commercial operators as discussed in section 4 of this report.

Overview of the analysis

- A.2 The Second Reply of the Finnish State included an economic assessment from Copenhagen Economics in the form of a separate report. The report, and Chapter 5 in particular, includes an assessment on the impact of Yle Areena on the use of commercial VOD services. The economic assessment in the CE Report relies on results from a survey (**Survey Results**). The survey is discussed in more detail in section 4 of this report.
- A.3 Using the Survey Results presented in the CE Report and other data sources, we have quantified the impact of Yle Areena in terms of revenues. Although, it is explained in the CE Report that the Survey Results are representative for the total population of Finland, some of the Survey Results are concerning a sub-group of viewers, such as those currently subscribing to a specific VOD service. As the impact of Yle Areena is concerning the total population in Finland, we generalise results to the wider population where necessary.⁶⁶
- A.4 To account for differences in AVOD, SVOD, and linear TV, the impact is quantified for each of the service separately, and then summed up to a total. The methodology and sources for each service are explained in detail in the sub-sections below.

Impact of Yle Areena on SVOD services

- A.5 The impact in terms of revenues forgone from SVOD services is calculated by estimating the value of the number of additional SVOD subscriptions of each service provider in the absence of Yle Areena. We assume that SVOD subscriptions are made on a household level.

⁶⁶ The CE Report states: "*Responses are weighted such that the results are representative of the target population, people living in Finland (excl. Åland) over the age of 15*". As the Survey Results are claimed to be representative for the whole population in Finland, we assume that the necessary generalisations are appropriate. CE Report para 5.16

- A.6 The Survey Results show that 82% of all respondents have used Yle Areena in the past twelve months.⁶⁷ This corresponds to approximately 2.25 million Finnish households (82% of all households).⁶⁸
- A.7 We estimate the diversion of households to commercial SVOD services in the following way:
- a. In Figure 6 of the CE Report, respondents who already subscribe to a SVOD service answered that 6.8% would subscribe to one more SVOD service, and 1.2% to more than one SVOD service in case Yle Areena was not available.⁶⁹ This corresponds to 4.7% in terms of the entire survey population.⁷⁰
 - b. In paragraph 5.27 of the CE Report, it is reported that 3.9% of the respondents who do not subscribe to a SVOD service would subscribe to one or more SVOD services.⁷¹ This corresponds to 1.6% in terms of the entire survey population. The Survey Results in the CE Report are insufficiently transparent and redacted for this sub-population, and hence we assume that the split between subscribing to one or more SVOD services is identical between those that did and did not already subscribe to a SVOD service.
 - c. By combining the above diversion results together, we estimate that 6.3% of the entire survey population would subscribe to at least one additional SVOD service.
- A.8 From the above, we estimate that 141,422 households would subscribe to at least one additional SVOD service. This figure is calculated by multiplication of the total number of households that have used Yle Areena in the past 12 months (see A.6) with the diversion estimate (see A.7c).⁷²

⁶⁷ Copenhagen Economics (2021) Economic assessment of Sanoma's State aid complaint concerning video-on-demand and learning services. P. 40, 47. The ratio of 82% is derived from the fact that the total survey sample is 1,276 respondents out of which 1,043 respondents indicated that they have used Yle Areena in the past twelve months.

⁶⁸ See https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lfst_hhnhtych&lang=en for number of Finnish households. Households are a relevant population for measuring impact on SVOD services as subscriptions are likely purchased on household level, not individual level.

⁶⁹ Copenhagen Economics (2021) Economic assessment of Sanoma's State aid complaint concerning video-on-demand and learning services. P. 43.

⁷⁰ Based on figure 6, we can estimate what the different alternatives represent in terms of number of respondents within the sub-population "households who already subscribe to SVOD", e.g. 6.8% corresponds to 41,4 respondents (N = 609). These figures can then be converted to the full sub-sample of all respondents that had watched Yle Areena in the past 12 months (N = 1,043).

⁷¹ Copenhagen Economics (2021) Economic assessment of Sanoma's State aid complaint concerning video-on-demand and learning services. P. 43.

⁷² Calculation: 2,246,946 x 6.3% = 141,422.

- A.9 To estimate the impact on each domestic commercial operator, we assume that the additional subscribers are distributed to each service by the operators' respective market shares, sourced from the European Audiovisual Observatory.⁷³ The market share estimates are used to calculate probabilities for a household to divert to each SVOD service.
- A.10 We estimate the probabilities of diverting to each SVOD service in the following way:
- a. For households that have stated that they would purchase only one SVOD service:
 - i. If they already subscribe to a SVOD service, we assume that they subscribe to only one additional SVOD service, i.e. two subscriptions in total;
 - ii. If they do not have an existing SVOD subscription, the total number of SVOD services they would subscribe to is one.
 - b. For households that have stated that they would purchase more than one SVOD service:
 - i. If they already subscribe to a SVOD service, we assume that they subscribe to only one existing SVOD service and would subscribe to two additional SVOD services, i.e. three subscriptions in total;
 - ii. If they do not have an existing SVOD subscription, the total number of SVOD services they would subscribe to is two.⁷⁴
- A.11 We estimate the number of additional subscribers that a specific SVOD service would gain in the absence of Yle Areena by multiplying the probabilities of unique combinations (see A.10) with the number of households that indicated that they would subscribe to at least one additional SVOD subscription (see A.8). For example, we estimate that Sanoma's SVOD service (Ruutu+) would gain 24,272 additional subscribers.⁷⁵
- A.12 We estimate monthly additional revenues by multiplying the additional monthly subscribers to each SVOD service (see A.11) with the average monthly subscription fee of each SVOD

⁷³ European Audiovisual Observatory (2020) (<http://yearbook.obs.coe.int/s/document/6373/od-serv-main-ott-svod-groups-in-europe-by-number-of-subscribers-december-2019>). In Figure 7 of the CE report, it is reported that 6% would subscribe to a foreign SVOD service while 2% would subscribe to a domestic SVOD service. This result is only provided for the sub-sample of those who had subscribed to a SVOD earlier, and hence, we have decided to estimate diversion to specific SVOD service for the whole population using existing market shares instead of this survey result.

⁷⁴ We assume the following market shares for domestic SVOD providers using European Audiovisual Observatory 2019 data: Ruutu+ 13%, C More 4% and Elisa Viihde Viaplay 14% and calculate the probability of each possible permutation.

⁷⁵ Calculation: $0.172 \times 141,422 = 24,272$ (for Ruutu+). Using the same approach, we estimate that MTV (C More) and Viaplay would gain 8,671 and 25,466 new subscribers.

service. For example, we estimate that the monthly revenues of Sanoma SVOD service (Ruutu+) would increase by € 242 thousand.⁷⁶

Impact of Yle Areena on AVOD services

- A.1 The impact in terms of revenues forgone from AVOD services is calculated by estimating the value of the incremental viewing of advertisements on each AVOD service in the absence of Yle Areena. In contrast to SVOD, diversion to AVOD generates revenues on an individual level, as each additional person viewing advertisements generates revenues for the service provider.
- A.13 As for the SVOD calculation above, the Survey Results indicate that 82% of all respondents have used Yle Areena in the past twelve months.⁷⁷ By assuming that the survey is representative of the whole population, we generalise the results for the total population in Finland and estimate that this concerns approximately 3.82 million Finnish individuals (82% of whole population aged over 15).⁷⁸
- A.14 We estimate the diversion of viewing from Yle Areena to domestic commercial operators' AVOD services in the following way:
- a. In figure 12 of the CE report respondents who already watch Ruutu AVOD answered that 20.8% would increase viewing time of AVOD services in case Yle Areena was not available.⁷⁹ This corresponds to 10.4% in terms of the full survey sample;⁸⁰

⁷⁶ Using a monthly subscription fee of 9.95 EUR (see <https://kauppa.ruutu.fi/hinnasto>). For MTV (C More) we estimate additional revenue using a monthly subscription fee of 12.95 (standard package price excluding sports) and for Viaplay 12.99 (standard package price excluding sports).

⁷⁷ Copenhagen Economics (2021) Economic assessment of Sanoma's State aid complaint concerning video-on-demand and learning services. P. 40, 47. The ratio of 82% is derived from the fact that the total survey sample is 1,276 respondents out of which 1,043 respondents indicated that they have used Yle Areena in the past twelve months.

⁷⁸ Total population over the age of 15 is 4,672,932 (Statistics Finland). Individuals is a relevant population for measuring impact on AVOD content as it is consumed on an individual and not household level.

⁷⁹ Copenhagen Economics (2021) Economic assessment of Sanoma's State aid complaint concerning video-on-demand and learning services. P. 51.

⁸⁰ Based on figure 12, we can estimate what the different alternatives represent in terms of number of respondents within the sub-population "respondents who multihomed between Yle Areena and Ruutu", e.g. 20.8% corresponds to 109,0 respondents (N = 524). These figures can then be converted to the full sub-sample of all respondents that had watched Yle Areena in the past 12 months (N = 1,043).

- b. In figure 9 of the CE Report respondents who did not already watch Ruutu AVOD answered that 9.5% would increase viewing time of AVOD services in case Yle Areena was not available.⁸¹ This corresponds to 4.7% in terms of the full survey sample;⁸²
- c. By combining the diversion results above, we estimate that 15.2% of the entire survey population would increase their viewing time of AVOD services in case Yle Areena was not available. For the total population in Finland, this corresponds to 579,363 individuals increasing their viewing time on AVOD services if Yle Areena was not available.⁸³

A.15 We estimate the share of viewing time diverted to a specific AVOD provider in the following way:

- a. Figures on increasing viewing time of a specific AVOD service is provided for respondents that already multihomed between Ruutu AVOD and Yle Areena in paragraph 5.55 and Figure 13 of the CE Report.⁸⁴ As respondents were able to select multiple AVOD alternatives, the shares in Figure 13 sum up to over 100%. Thus, we assume that the ratios between the alternative AVOD services represent the average split of viewing time between these services. Using this information, we estimate that Sanoma's Ruutu AVOD service would gain 36.4% of all the viewership being diverted to AVOD services for respondents that multihomed between Yle Areena and Ruutu AVOD.⁸⁵
- b. Figures on increasing viewing time of a specific AVOD service for respondents that did not multihome between Ruutu AVOD and Yle Areena is only provided for Sanoma's Ruutu AVOD service in paragraph 5.46 of the CE Report.⁸⁶ For the other AVOD services we assume the same ratios as in Figure 13 and estimate that Sanoma's Ruutu AVOD service

⁸¹ Copenhagen Economics (2021) Economic assessment of Sanoma's State aid complaint concerning video-on-demand and learning services. P. 48.

⁸² Based on figure 9, we can estimate what the different alternatives represent in terms of number of respondents within the sub-population "*percentage of respondents who did not already watch Ruutu*", e.g. 9.5% corresponds to 49,2 respondents (N = 518). These figures can then be converted to the full sub-sample of all respondents that had watched Yle Areena in the past 12 months (N = 1,043).

⁸³ Calculation: 3,819,646 x 15.2% = 579,363.

⁸⁴ Copenhagen Economics (2021) Economic assessment of Sanoma's State aid complaint concerning video-on-demand and learning services. p.51-52.

⁸⁵ Sanoma's share is estimated to be 36.4% (0.738/2.026=0.364). The ratio of MTV is 31.6%.

⁸⁶ Copenhagen Economics (2021) Economic assessment of Sanoma's State aid complaint concerning video-on-demand and learning services. P. 48.

would gain 13.7% of all the viewership being diverted to AVOD services for respondents that did not multihome between Yle Areena and Ruutu AVOD.⁸⁷

- A.16 On average individuals over the age of 15 watch 6 minutes of Yle Areena per day.⁸⁸ To estimate the time that would be diverted specifically to AVOD services, we calculate the expected value of time spent on AVOD.⁸⁹ This estimate is based on data on consumption habits for daily minutes spent watching different audio-visual content, out of which AVOD stands for 23.5%.⁹⁰ Using this approach, we estimate that respondents who indicated diverting to AVOD in the absence of Yle Areena would divert 3.38 minutes to AVOD services (2.62 minutes being diverted to other audio-visual services).
- A.17 We calculate the expected viewing time diverted to a specific AVOD service by multiplying the expected viewing time diverted to AVOD (see A.16) with the respective share of viewing time diverted to each commercial AVOD service provider (see A.15). We estimate that an individual would increase viewing time of Ruutu AVOD services on average by 0.99 minutes (2.39 minutes being diverted to other AVOD services).⁹¹
- A.18 We estimate the increase in total daily average viewing time of Ruutu AVOD services by multiplying the total number of respondents increasing their use of AVOD (see A.14c) with the expected daily viewing time diverted to a specific AVOD service (see A.17). This corresponds to a daily increase of 574,711 minutes of viewing on Ruutu AVOD.⁹²

⁸⁷ As respondents were able to select multiple alternatives, the shares sum up to over 100%. Thus, we assume that the ratios between the alternative AVOD services represent the average split of viewing time between these services. Sanoma's share is estimated to be 13.7% ($0.205/1.493=0.137$). The ratio of MTV is 42.9%.

⁸⁸ AdEdge (2021).

⁸⁹ The survey in the CE Report allows respondents to choose from multiple choices to which they would divert from using Yle Areena. The options include AVOD only, AVOD and one or more other services, as well as the option to not replace Yle Areena with AVOD. We estimate the total expected time diverted to all options including AVOD. If a respondent has stated that they would choose AVOD + one or more other choice, we estimate all permutations in which AVOD appears. We calculate the probability of respondents selecting each choice option based on Kantar data on Finnish consumption habits of audio-visual content. With the choice options and the estimated probabilities, we calculate the expected value of time diverted to AVOD.

Since the CE Report does not present results for respondents who "*did not already watch Ruutu*", we assume that the choice options are distributed in the same way as for the respondents that already multihomed between Yle Areena and Ruutu AVOD.

⁹⁰ Kantar (2021). AVOD category is defined in the same way as they were in the CE report, i.e. it includes AVOD services, YouTube and video services from domestic news outlets.

⁹¹ Calculation: $29.4\% \times 3.38 = 0.99$.

⁹² Calculation: $579,363 \times 0.99 = 574,711$. For MTV AVOD we estimate an increase of 686,857 minutes.

- A.19 The impact in terms of revenues is estimated by multiplying the increase in total daily average viewing time (see A.19), the average price for a minute of advertisement on AVOD, and the average time the viewer sees advertisements on AVOD. For Sanoma's Ruutu AVOD we estimate that daily revenues would increase by € 5.4 thousand, which is equal to a monthly impact of approximately € 164 thousand.⁹³

Impact of Yle Areena on commercial linear TV

- A.20 As for the AVOD service above, we assume that the survey respondents who have watched Yle Areena in the past twelve months represent approximately 3.82 million Finnish individuals (82% of whole population aged over 15).⁹⁴
- A.21 We estimate the impact of the diversion of viewing from Yle Areena to commercial linear TV time in the following way:
- a. In figure 6 of the CE Report, respondents who already subscribe to SVOD answered that 13.9% of those that would divert to "*other than SVOD*" would increase viewing time of commercial linear TV services in case Yle Areena was not available.⁹⁵ This corresponds to 4.8% in terms of the full survey sample;⁹⁶
 - b. In paragraph 5.27 of the CE Report, respondents who do not subscribe to a SVOD service answered that 96.1% would not subscribe to a SVOD service.⁹⁷ The Survey Results in the CE Report are not presented for all sub-populations and hence we have assumed that the split between diverting to watch more commercial linear TV is identical between those that did and did not already subscribe to a SVOD service. We estimate that 4.7% of

⁹³ The average price for a minute of advertisement and the average time a viewer sees advertisements on AVOD services are based on Sanoma's internal estimates. We estimate MTV's revenues based on the same set of assumptions.

⁹⁴ Total population over the age of 15 is 4,672,932 (Statistics Finland). Individuals is a relevant population for measuring impact on linear TV as it is consumed on an individual and not household level.

⁹⁵ Copenhagen Economics (2021) Economic assessment of Sanoma's State aid complaint concerning video-on-demand and learning services. P. 43.

⁹⁶ Based on figure 6, we can estimate what the different alternatives represent in number of respondents within the sub-population "*respondents who already subscribe to SVOD*" and "*Total other than SVOD*", e.g. 13.9% of 59.4% corresponds to 50,3 respondents (N = 609). These figures can then be converted to the full sub-sample of all respondents that had watched Yle Areena in the past 12 months (N = 1,043).

⁹⁷ Copenhagen Economics (2021) Economic assessment of Sanoma's State aid complaint concerning video-on-demand and learning services. P. 43.

respondents would divert to watch more commercial linear TV in terms of the entire survey population;⁹⁸

- c. By combining the diversion estimates above, we calculate that 9.6% of the entire survey population would divert to watch more commercial linear TV in the absence of Yle Areena.
- A.22 We calculate the number of users that would divert to watch commercial linear TV in the absence of Yle Areena by multiplying the total number of individuals that have used Yle Areena in the past year (see A.20) with the estimated diversion (see A.21c). This results in 368,200 individuals increasing their viewing time on commercial linear TV.⁹⁹
- A.23 On average individuals over the age of 15 watch 6 minutes of Yle Areena per day.¹⁰⁰ We assume that the respondents would divert this time watching other audio-visual content conditional on how they responded to the survey, e.g. if a respondent answered “Commercial Linear TV” then we assume that some share of 6 minutes would be diverted to watching this medium instead of Yle Areena.
- A.24 We assume that 24.4% of the time spent on Yle Areena would be diverted to commercial linear TV using data on consumption habits for daily minutes spent watching different audio-visual content.¹⁰¹ This corresponds to a daily increase of 1.46 minutes.
- A.25 We estimate the amount of additional viewing time that a specific commercial provider would gain if Yle Areena was not available by multiplying the market shares of commercial linear TV broadcasters with the average daily increase in viewing minutes (see A.24).¹⁰² As an example, we estimate that Sanoma’s commercial linear TV channels would gain 0.36 minutes in additional daily viewing time by individuals that indicated that they would divert to commercial

⁹⁸ Based on paragraph 5.27, we can estimate what the different alternatives represent in number of respondents within the sub-population: “respondents who did not subscribe to SVOD” and “*Total other than SVOD*”, e.g. 96.1% corresponds to 417,1 respondents (N = 434). From figure 6 we can use the ratio of which Commercial Linear TV would gain from the diversion of other than SVOD and apply it to this sub-sample. Calculation: “*Would not subscribe to SVOD*” x “*Commercial Linear TV*” / (“*not use any other AV service*” + “*Yle Linear TV*” + “*AVOD*”), which results in 11.9% or 49.4 respondents. These figures can then be converted to the full sub-sample of all respondents that had watched Yle Areena in the past 12 months (N = 1,043).

⁹⁹ Calculation: 3,819,646 x 9.6% = 368,200.

¹⁰⁰ AdEdge (2021).

¹⁰¹ Kantar (2021).

¹⁰² Data on Commercial Linear TV market shares from Finnpanel (see <https://www.finnpanel.fi/tulokset/tv/vuosi/sharev/2020/10plus.html>). MTV market share is 42% and Nelonen Media is 24% (when excluding Yle from the share of daily viewing).

linear TV in the absence of Yle Areena.¹⁰³ This corresponds to an increase in viewing of 130,846 minutes per day for Sanoma's linear TV channels.¹⁰⁴

- 5.15 To estimate the impact in terms of revenues, we assume that linear TV viewing and revenues from linear TV have a one-to-one relationship. This assumption is justified because on average each additional minute of viewed linear TV will lead to a corresponding increase in the viewed advertisements. We have estimated that the viewing of Sanoma's linear TV channel would increase by [---]%, therefore we assume the corresponding impact on revenues.¹⁰⁵

¹⁰³ Calculation: $24\% \times 1.46 = 0.36$ minutes

¹⁰⁴ Calculation: $0.36 \times 368,200 = 130,846$

¹⁰⁵ Existing viewership of Sanoma's linear TV channels is estimated by using data from Finnpanel of average daily minutes viewed (24 min) multiplied with total population size over the age of 10 (4.92 million). To estimate the increase in viewership we divide the additional viewership (see 1.26) with total viewership.