

Nordic Mission Possible

An Assessment of Covid-19's
Impact on the Nordic Audiovisual
Industry and the Effectiveness of
Government and Industry Measures

Centre for Creative Industries



Nordisk
Film & TV Fond

By Terje Gaustad, Peter Booth, Endre Offerdal, Linnéa E. Svensson and Anne-Britt Gran

BI Centre for Creative Industries 2021

BI:CCI-report no. 1/2021 Nordic Mission Possible: An Assessment of Covid-19's Impact on the Nordic Audiovisual Industry and the Effectiveness of Government and Industry Measures

By Terje Gaustad, Peter Booth, Endre Offerdal, Linnea E. Svensson and Anne-Britt Gran

Copyright © 2021 by BI Centre for Creative Industries

All Rights Reserved

Published by BI Centre for Creative Industries

BI Norwegian Business School
Nydalsveien 37
0484 Oslo
Norway

Tel: 0047 46410678

Email: terje.gaustad@bi.no

Research centre homepage: <http://www.bi/cci>

Twitter: @BI_CCI

Design: Betty Røssaak

Photos used in this report are from Unsplash.com, and they can be used for free.

Preface

Commissioned by Nordisk Film & TV Fond, BI Centre for Creative Industries (BI:CCI) have mapped and analyzed effects of the Covid-19 pandemic on Nordic film and drama series productions.

Project leader has been Asst. Prof. Terje Gaustad, with Assoc. Prof. Peter Booth, Endre Offerdal and Linnea Svensson as team members. Prof. Anne-Britt Gran has provided quality assurance.

We would like to thank Nordisk Film & TV Fond for an interesting project, good discussions and valuable assistance in establishing industry contacts. We would also like to thank the film institutes, centers and producers associations in each of the Nordic countries for their assistance in providing data, feedback and comments, and for organizing contact with producers. We are very thankful to the producers that took time to participate in our case studies, sharing their experiences and thoughts, and for all those who answered our surveys, providing vital data for this study. Finally, we would like to thank Jose Cañas-Bajo, and his research team for the "Elements of Success in the Finnish Film and Television Industry" (EoS) project at Aalto University, who acted as a valuable discussion partner for our work.

Oslo, 12. March 2021

Asst. Prof. Terje Gaustad

Project leader

BI:CCI

Key Findings

With support from Nordisk Film & TV Fond, we have studied the economic consequences of the Covid-19 pandemic, and the restrictive and mitigating government and industry measures it has triggered for the audiovisual industry in Denmark, Finland, Iceland, Norway and Sweden. This type of research is often done by looking at the companies within the sector, which is the organizational level where most data is readily available (e.g., Gaustad et al, 2020), but this report considers impact directly on each feature film, documentary, and drama series project. By collecting data on projects, which are the fundamental organizing units for audiovisual production, results embody impact not only on production companies, but on all participants involved in a production (cast, crew, suppliers, financiers, etc.). Hence, this approach provides a fuller picture of the whole production sector.

Our key findings are:

- Drama series projects experience the strongest negative disparity between restrictive and mitigating measures with considerably more productions reporting high impact of restrictive measures than high impact of mitigating measures.
- The experience of negative disparities tends to increase with project size.
- Finland and Sweden have the strongest negative disparities, while Iceland has a positive disparity.
- The Nordic audiovisual production sector shows strong resilience with only 2 percent of projects cancelled due to Covid-19.

On the impact of restrictive measures:

- Drama series projects most frequently report high impact of restrictive measures.
- Documentaries has the smallest proportion of projects experiencing high impact of restrictive measures.
- The proportion of projects experiencing high impact of restrictive measures increases with project size (production budget).
- Among the Nordic countries, Sweden has the highest proportion of projects experiencing high impact from restrictive measures.
- The number of shooting days increased by 7 percent.
- The production periods were extended by 21 percent.
- Project revenues are estimated to decline by 17 percent.
- Production costs increased by 10 percent.
- In 83 percent of the projects, the additional costs were financed partly by the production companies themselves.
- 45 percent of the projects received Covid-19-related funding to cover additional costs.
- 71 percent of the productions were made without insurance against Covid-19-related occurrences.

- 38 percent of the productions experienced some or great impact on the project's production value from Covid-19-related production changes.
- 37 percent of the projects experienced more artistic compromises because of Covid-19-related changes.
- Few theatrical documentary and feature film projects have considered shifting from theatrical to home video release.

On the impact of mitigating measures:

- Great mitigating impact is more often experienced from sector-specific fiscal mitigating measures than from other mitigating measures.
- 3 out of 4 projects used and experienced some or great impact from other sector-specific mitigating measures such as production guidelines.
- Many projects did not use fiscal measures that were not aimed specifically for the sector, and when used they had most often just some or little impact.
- A considerably higher share of feature film projects experienced high impact from mitigating measures, compared to documentary and drama series projects.
- High impact of mitigating measures was experienced most frequently by Icelandic productions and the least by Finnish productions.

On the climate footprint:

- The pandemic has reduced the climate footprint of audiovisual production in areas like air travel, but the industry lacks efficient tools to estimate and manage emissions.

Table of Contents

Preface	i
Key Findings	ii
1. Introduction: Film and Drama Production with Covid-19	1
1.1. Project Objectives	2
1.2. Methods	2
2. The Audiovisual Industry and Covid-19 in the Nordic Countries	7
2.1. The Nordic Audiovisual Industries.....	7
2.2. Covid-19 in the Nordic Countries.....	10
3. Restrictive and Mitigating Measures Across the Nordic Countries	12
3.1. Types of Measures.....	12
3.2. Overview of Measures Across the Nordic Countries.....	13
4. Restrictive Measures: Reacting and Adapting to a World with Covid-19	16
4.1. Production Challenges and Overall Implications	16
4.2. Adapting project plans and schedule.....	22
4.3. Adapting project economy.....	26
4.4. Adapting content	29
4.5. Distribution and release	31
5. Mitigating Measures: Impact of First Aid and Incentives for Productions Dealing with Covid-19	35
5.1. Overall use and impact.....	36
5.2. Impact by country and project categories.....	37
6. Covid-19 and the Climate Footprint	39
6.1. Measuring the climate footprint of film and series production	40
6.2. Key areas and activities for the level of climate emissions on film and series projects	41
6.3. A preliminary investigation of the impact of Covid-19 on the climate footprint of Nordic film and series projects.....	44
6.4. Case studies	47
6.5. Suggestions and closing remarks	50
7. Assessing and Looking Ahead	52
7.1. Balancing restrictions and assistance	52
7.2. Producers' outlook.....	53
7.3. Nordic audiovisual production resilience	55
8. Appendix – Further findings	56
8.1. Background: The audiovisual industry in the Nordic countries	56
8.1.1. Cinema admissions and releases.....	56
8.1.2. Denmark	57
8.1.3. Finland.....	57
8.1.4. Iceland.....	58
8.1.5. Norway	58
8.1.6. Sweden.....	59
8.1.7. Key figures.....	59
8.2. Restrictive and mitigating measures - country by country.....	59
8.2.1. Measures in Denmark.....	59
8.2.2. Measures in Finland.....	62

8.2.3.	Measures in Iceland	66
8.2.4.	Measures in Norway	69
8.2.5.	Measures in Sweden.....	72
8.2.6.	Pan-European measures covering the Nordic countries	76
8.3.	Impact of restrictions and recommendations	78
8.3.1.	Cross-country comparisons	78
8.3.2.	Country by country	80
8.3.3.	Impact on production content – country by country	83
8.4.	Other findings on restrictive measures.....	87
8.4.1.	Adapting to restrictions and recommendations.....	87
8.4.2.	Challenges when moving activities online.....	92
8.4.3.	International productions	93
8.5.	Mitigating Measures	99
8.5.1.	Use of Financial Mitigating Measures – country by country	99
8.5.2.	Impact of Other Mitigating Measures – country by country.....	104
9.	About the Researchers	106
10.	References.....	107

1. Introduction: Film and Drama Production with Covid-19

This report presents analyses of how the Covid-19 pandemic has affected the production of film and drama series in the five Nordic countries: Denmark, Finland, Iceland, Norway and Sweden, and of the effectiveness of government and industry measures introduced in response to the pandemic.

Producers of films and drama series are no strangers to production and market uncertainty, but the Covid-19 pandemic has added a whole new layer. It has affected productions in a number of ways, having to adapt to shifting restrictive government measures for travel, social distancing, hygiene, and more. The measures reflect the risks associated with the virus itself, which have the potential to directly affect the productions, such as when a key team member is infected, is forced to isolate and causes disruption or even a temporal but immediate closedown of the production. In addition to these added production risks, theatrical films are affected at the other end of the value chain where closures or restrictions of cinemas add significant market risk to the films' primary distribution channel. Other market channels are also affected, but not to the same degree as the theatrical market which is based on the physical gathering of audiences in a public arena. In between production and exhibition, the audiovisual industry value chain has been interrupted by the cancellation of markets, conventions, and other physical industry gatherings that function as important meeting places for networking and transactions. While many of these activities and events have moved online, the digital versions may be poor substitutes as arenas for building the trust and relations often required to close deals and develop new partnerships.

The production sector of the film and television industry is predominantly organized around projects, constituted by each feature film, documentary or series season produced. Projects are thus the fundamental organizing unit for audiovisual production. Project organizations are set up and managed by film and TV production companies, but brings together artistic, creative, and humdrum freelance personnel and suppliers. Financing is typically drawn from a number of private and public sources. With so many of the resources drawn from outside the boundaries of production companies, these companies only partly and indirectly reflect the state of film and series production. In this report we therefore use projects as our unit of analysis instead of companies. The choice entails certain methodological challenges, as projects by nature are temporary, less formal and more elusive than companies with less data systematically collected and readily available. Still, developing a better understanding of how the pandemic affects the industry in its core organizing unit is important when assessing the effects of measures, trying to identify best practices, and learning-opportunities for moving forward.

1.1. Project Objectives

The overall objective of this project has been to provide insight into the economic consequences of the Covid-19 pandemic, and the restrictive and mitigating government and industry measures it has triggered, for the audiovisual industry in the Nordic countries. These economic consequences include but go beyond the purely financial. So, while we are interested in how production costs, financing and revenues are affected by the pandemic and the measures taken, we also apply a broader value creation perspective allowing us to take into consideration value created for industry participants, audiences and other stakeholders that may or may not be reflected in the financial figures.

Furthermore, we have made preliminary inquiries into how the industry's climate footprint has been affected by its reactions to the pandemic. As argued by *The Economist*,¹ the pandemic is a fast-moving crisis within the slow-moving climate crisis that it in some ways resembles. Like the pandemic, climate change is global in the disruption it causes and will be far more costly to deal with in the future if it is neglected now. The question is therefore how we can identify new ways of organizing audiovisual production in the wake of the pandemic that may contribute to more sustainable production going forward.

Our study is limited to film and drama productions, or more specifically: theatrical feature films, theatrical documentaries, and drama series; both live action and animated within each format. Hence, we have not included short films, documentary series, commercials, or entertainment programming such as reality shows.



1.2. Methods

To study the economic consequences of the pandemic we have applied mixed methods including surveys, case studies and document studies.

¹ *The Economist* (2020) The plague year. *The Economist*, December 19 2020 – January 1 2021. 437 (9225):15.

Case Studies

Case studies of film and series productions have allowed us to gain a better understanding of how exactly the pandemic, and government restrictive and mitigating measures, affected the industry on a project level. This insight allowed us to develop surveys capturing as much relevant data as possible, and it helped us interpreting survey results.

We have worked with film institutes and producer associations in each of the Nordic countries to identify production cases with a sought after variety in terms of nationality, genre, format, size (budget and production period), commercial and artistic orientation, national or international scope, and project stage at the time when the pandemic struck. From the resulting list of projects, we contacted lead producers to request in-depth interviews, which we used as the main source of data collection. Naturally, as most projects were in progress under challenging circumstances, some did not have the opportunity to participate. Interviews were carried out via video conference and recorded. Interview data were supplemented with publicly available information about the projects (listings, media coverage, etc.), and in some cases with confidential documentation (budgets, plans, etc.) supplied by the producers. While the final selection of ten cases was partly a result of producer availability, it still represents great variety in types of projects.

All production cases and producers are anonymized in this report. With a relatively small population of projects, which becomes even smaller when sorted by country and genre, it would be relatively easy for readers with knowledge of the industry to identify projects if cases were presented as complete case studies. Therefore, to maintain anonymity each case is not presented separately. Instead, information from the cases is presented together with the survey results where it contributes to illustrate, explain and complement our quantitative findings. The only exceptions are two cases presented in chapter 6 where it was agreed with the producers to use case presentations to better illustrate climate footprint consequences.

Surveys

The producer survey was developed in line with the aims to the project, namely that it should map the following elements:

- i. Projects (number, types, scope, stage, etc.)
- ii. Effects of restrictive measures associated with Covid-19 (interruptions, cancellations, use of resources, content, etc.)
- iii. Other covid-19 related barriers to project activity (beyond restrictive measures)
- iv. Use and effects of mitigation measures (general and industry specific)
- v. Overall consequences (including potential long-term effects)
- vi. Selected climate effects

In developing and testing the survey, BI Centre for Creative Industries sought feedback from Nordisk Film & TV Fond, Danish Producers Association, Audiovisual Producers Finland, Icelandic Film Centre, Virke, and Swedish Film & TV Producers Association. The five separate surveys that resulted differed only in relation to question concerning country specific restrictions and recommendations, and questions relating to country specific measures. To assist analysis and testing, and to prevent delays due the translation, all surveys were in English and delivered using Qualtrics survey software.

In co-ordination with producers associations in each of the Nordic countries, the online survey was launched on 20.11.20 with invitations to complete the anonymous survey being sent to members of the producers associations. In order to boost the response rate, 3-4 email reminders were sent. Additionally, NFTF send out survey invitations directly to producers. The survey was closed on 10.12.20 and data exported to SPSS for processing.

To determine the representativeness of the sample data, the overall number of film, documentary and series produced in the Nordic countries during 2020 was estimated by data provided by the film institutes and/or producer associations in each of the countries. The following table provides an estimate of the total number of relevant projects in 2020, and the corresponding coverage of our sample.

Table 1.1 Estimate or actual film, documentary and series productions in 2020 and sample coverage

	Feature films	Documentary	Drama series	Total	Sample	Sample coverage
Denmark	21 ^a	23 ^a	20 ^b	64	20	31 %
Finland	21	15	8	44	33	75 %
Iceland	9 ^a	11 ^a	4 ^a	23	16	69 %
Norway	28 ^a	30 ^b	26 ^b	83	35	42 %
Sweden	28 ^a	22 ^a	40 ^a	91	51	56 %
Total	107	101	97	305	155	51 %

^a Estimate based on average annual production between 2017 and 2019

^b Estimate based on the average proportion of this production type as a portion of all productions in Finland, Iceland and Sweden (where data for current or historical data is available across all production types).

The survey, which has a project rather than production company focus, permitted each respondent to complete data on up to three projects. In preparing the data for analysis, each project was later recoded as a separate project record. After removal of projects with missing data, the overall sample size was 155 projects. The response rate is thus estimated to 51 percent, which provides robust numbers. However, for certain types of categories (e.g. animations or cancelled projects) the population is too small for generalizations, as the specificity of each project strongly influence the category results. It should also be noted that we applied no weighting to our sample, so comparisons between countries can be skewed by the background variables of the projects reported on.



Table 1.2 Characteristics of sample

Country	Denmark	Finland	Iceland	Norway	Sweden	
	20	33	16	35	51	
Type of production	Feature film	Animated feature film	Documentary	Drama series	Animated series	Other
	63	4	32	51	2	3
Production budget	Production budget not stated	Production budget under 1m EUR	Production budget 1-4m EUR	Production budget > 4m EUR		
	43	40	38	34		
Production phase as of March 12, 2020	Not yet greenlighted	Greenlighted only, pre-production not commenced	Pre-production	Principal Photography	Post-Production	Pre-release / pre-delivery
	29	21	37	31	28	9
Status of project November 2020	In production, no interruption yet	Back in production, after interruption	Production completed without interruption	Production completed with interruption	On hold	Cancelled
	27	36	37	39	13	3

Table 1.3 Characteristics of sample by production type and production stage as of 12.03.20

	Denmark	Finland	Iceland	Norway	Sweden
Feature film	10	13	8	16	16
Animated feature film	1	1	0	2	0
Documentary	3	9	4	5	11
Drama series	5	8	4	10	24
Animated series	0	2	0	0	0
Other	1	0	0	2	0
Not yet greenlighted or greenlighted only as of 12.03.20	9	7	7	11	16
Pre-production or principal photography as of 12.03.20	4	18	6	15	25
Post-production or pre-release as of 12.03.20	7	8	3	9	10

Analysis of survey data was conducted in SPSS and Excel, with an emphasis on descriptive statistics that permit a response to the above mentioned aims of the survey. In segmenting the data set for analysis, we have opted to primarily use the first four parameters listed on Table 1.2 above, namely:

- i. **Country to sole or major producer:** captures differences in local conditions, and is particularly relevant to analysis the impact of country specific restrictions/recommendations and measures.
- ii. **Type of production:** captures project type and the nature of the project (length, distribution, key elements at risk, funding, etc.)

- iii. **Production budget:** converted to million euros and grouped into 3 categories with an approximately equal number of projects, this enables a scale measure for compatibility of projects.
- iv. **Stage of production as of 12.03.20:** captures the level of production at risk when the first wave of Covid-19 restrictions took hold on 12.3.20. While the survey captures 6 categories of production stage, this has been grouped into 3 categories for the analysis. Projects that were at pre-production or principle photography stage as of 12.03.20 are considered to be most at risk of Covid-19 restrictions. Projects that were at post-production or pre-release/pre-delivery stage on 12.03.20 are considered to face mainly market risk and lower production risk, and so form the second category. The third category captures projects that were not yet at a pre-production stage or later as of 12.03.20.

Document Studies

Our document studies primarily include published information about restrictive and mitigating measures, publicly available studies and reports on the effect of the Covid-19 pandemic, the film industries, and on government restrictive and mitigating measures.

Data on restrictive and mitigating measures have been collected in the period from ultimo August until medio November 2020, and there has been significant fluctuation in both the measures themselves and the published information at various points in time since the first were introduced in March 2020. We have endeavored to map a great variety of measures from industries,



governments, and individual players throughout this period. Most measures have been dynamic, developing over time due to changed circumstances. Measures and restrictions are closely intertwined, a guideline might be mentioned in the same sentence as a restriction, due to their interwoven nature. Our cut-off date for tracking measures in medio November coincided with the surveys so that collected data reflected the mapped measures. Some of the information we collected have since been removed or altered, so current digital sources such as government webpages may not reflect the exact data collected.

Due to the amount and shifting nature of measures, this report should not be read as a complete and detailed fact sheet of all measures. Our aim has been to provide an overview of the environment within which the audiovisual industry has had to cope in each of the Nordic countries.

2. The Audiovisual Industry and Covid-19 in the Nordic Countries

In this section we describe the status quo of the Nordic film industries before they were struck by the Covid-19 pandemic, as well as how the pandemic developed in each country. This provides a starting point for our analyses from which observed reactions and changes should be interpreted and understood.

2.1. The Nordic Audiovisual Industries



From an international perspective, the film and TV industries in the Nordic countries share many key features beyond their cultural similarities. According to Kääpä and Hjort (2020) they are predicated on significant levels of public funding and strict but egalitarian labor regulations. The roles of private capital, competition with imported products, the challenges of digital platforms, as well as an inherently limited scope of the domestic media markets, translate into a complex media environment where production labor and the constitution of professional roles are constantly precarious, despite the fact that these countries are often promoted as exhibiting some of the more stable and sustainable societal infrastructures globally.

Yet, from a closer perspective there are some important differences. First, while all limited in scope, home markets differ significantly with the Swedish population about 28 times the size of the Icelandic. For cultural industries, like film and TV, with extreme scale economics and cultural barriers between home and foreign markets, these differences matter a great deal when it comes to each market's ability to support commercial production and supply of content (Waterman, 2005).

Table 2.1 Population per country 2019 (in millions)

Iceland	Norway	Finland	Denmark	Sweden
0.36	5.37	5.52	5.81	10.32

These differences are reflected in the number of cinema admissions. To reduce the impact of single titles on average admission calculations, it is useful to look at the average admissions over a five-year period (2015-2019). Doing this, we see that Sweden has the largest number of admissions with an average with 16.7 million admissions. Denmark and Norway follow with averages of 12.8 and 12.0 million respectively. In Finland the number is a bit lower with an average of 8.5 million, while Iceland, with a fraction of the population of the others, has 1.3 million.

However, when we look at the average domestic market share over the same period, Denmark, comes out on top with an average domestic market share of 26 percent, resulting in an average of 3.3 million ticket sales for Danish features and documentaries. This is achieved from releasing on average 34 titles each year. Finland follows with a 25 percent domestic share from 2.2 million ticket sales divided between 39 releases. Norway had an average domestic share of 21 percent from 2.6 million tickets sold for 27 titles. Sweden's domestic share has fluctuated significantly, between 13 and 20 percent, over the period despite releasing the highest number of titles, on average 49 per year. Average domestic share is 17 percent, which means that its domestic ticket sales at 2.8 million is below Denmark's. Despite significantly smaller population and total admissions, an average of 16 domestic titles are released in Iceland creating on average 99 000 ticket sales. This gives a domestic market share of 8 percent, but also here it varied significantly from year to year (between 5 and 13 percent).

The most avid cinemagoers are the Icelandic, with an average of 3.83 admissions per capita over the period, but due to the low domestic market share Icelandic films still only have 0.27 admissions per capita. The highest per capita admissions for domestic films are found in Denmark with 0.56 followed by Norway with 0.48.

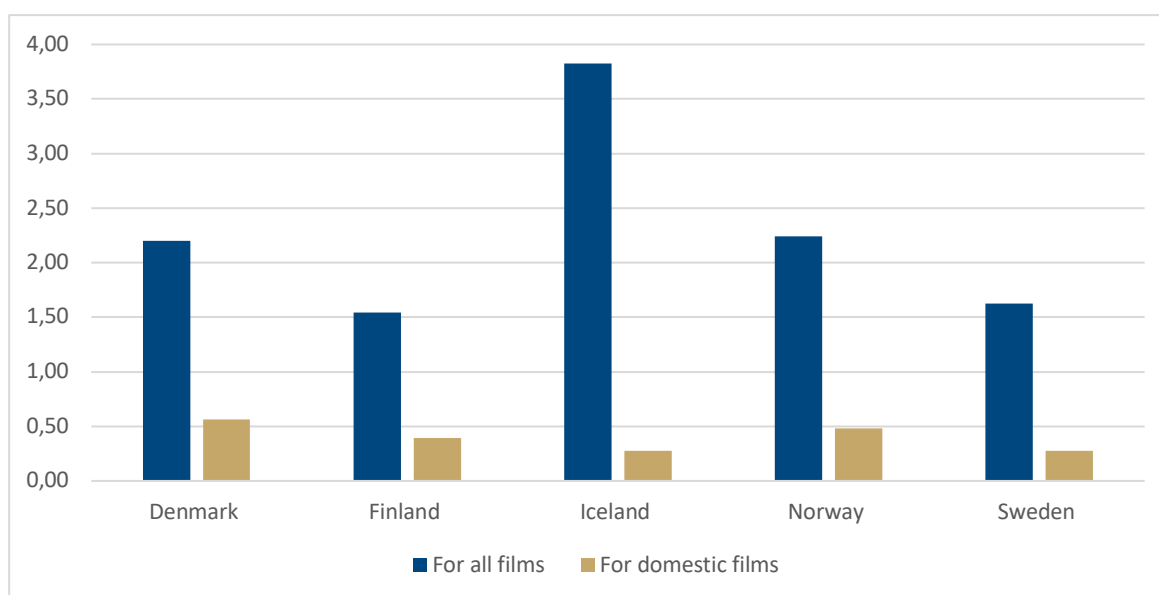


Figure 2.1 Annual cinema admissions per capita (average 2015-2019). (Source: Film fund Facts & Figures reports from each country²) See also Table 8.5.

As Nordic content production and supply is not purely commercial but based on a mix of private and public funding, market size and admission data need to be complemented with public funding data for a more complete picture. Public funding for Nordic audiovisual productions is provided by film funds at transnational, national and regional levels. These organizations exist to support filmmakers in the realization of their creative vision, to aid the circulation of national cultural resources, and to provide audiences with the opportunity to enjoy a diverse array of audiovisual content. Their objectives often cross multiple policy domains, including the arts, economy, education, public planning, and tourism. While generally referred to as film funds, few of the funds concentrate exclusively on film alone but covers drama series and gaming (Noonan, 2020).

Across the Nordic countries, theatrical film projects receive significantly higher shares of public funding than drama series projects. For theatrical projects, public funding accounts for between 31 and 62 percent of the production financing.³ Less financing data is available for drama series, but data and estimates from Norway and Finland suggest a public share between 10 and 15 percent of the financing.

² Facts & Figures reports:

Denmark: <https://www.dfi.dk/en/english/numbers>

Finland: <https://www.ses.fi/en/yearly-statistics/>

Iceland: <http://www.icelandicfilmcentre.is/facts-and-figures/key-figures/>

Norway: <https://www.nfi.no/statistikk/statistikk-analyse-og-rapporter>

Sweden: <https://www.filminstitutet.se/en/learn-more-about-film/statistics/facts-and-figures/>

³ Shares of public funding may vary some depending on where and how one draws the border defining public funding. For instance, some schemes may include support for marketing and release, regional funding may include elements of private funding, and automatic matching funds schemes complementing market revenues may or may not be included.

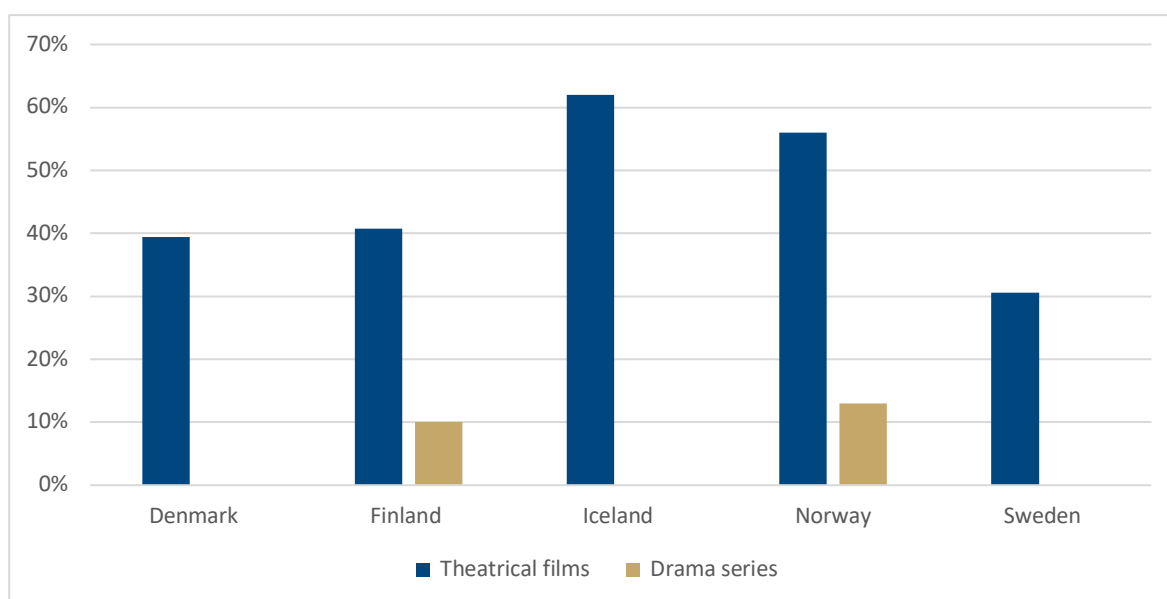


Figure 2.2 Average public funding as share of production financing (2015-2019). Drama series data not available for Denmark, Iceland and Sweden. (Sources: Film fund Facts & Figures reports from each country⁴ plus estimates provided by film funds). See also Table 8.6.

Detailed data on cinema admissions, releases, and public funding, as well as brief summaries per country, are found in the appendix. Similar data for home video consumption and releases are not included as these markets are significantly less transparent.

2.2. Covid-19 in the Nordic Countries

The first coronavirus wave hit the Nordic countries in March 2020 and from late September 2020 the Nordics experienced a second wave. By October and November daily confirmed cases surpassed previous peaks. The contamination numbers contrast with the popular image of the Nordic countries as seemingly similar countries. Sweden has experienced significantly higher numbers of cases and deaths than the other Nordic countries.

Looking at the number of confirmed Covid-19 cases we see that in the first wave Iceland had the most cases per capita until mid-June 2020. Since then Sweden has experienced the most cases, measured both in absolute numbers and per capita, except from a relatively brief period in October 2020 when Iceland again had most cases per capita. Finland and Norway have experienced relatively low numbers throughout the period. Denmark followed a path similar to Finland and Norway in the first wave but was hit harder in the second wave and has surpassed Iceland in terms of cases per capita.

⁴ Facts & Figures reports:

Denmark: <https://www.dfi.dk/en/english/numbers>

Finland: <https://www.ses.fi/en/yearly-statistics/>

Iceland: <http://www.icelandicfilmcentre.is/facts-and-figures/key-figures/>

Norway: <https://www.nfi.no/statistikk/statistikk-analyse-og-rapporter>

Sweden: <https://www.filminstitutet.se/en/learn-more-about-film/statistics/facts-and-figures/>

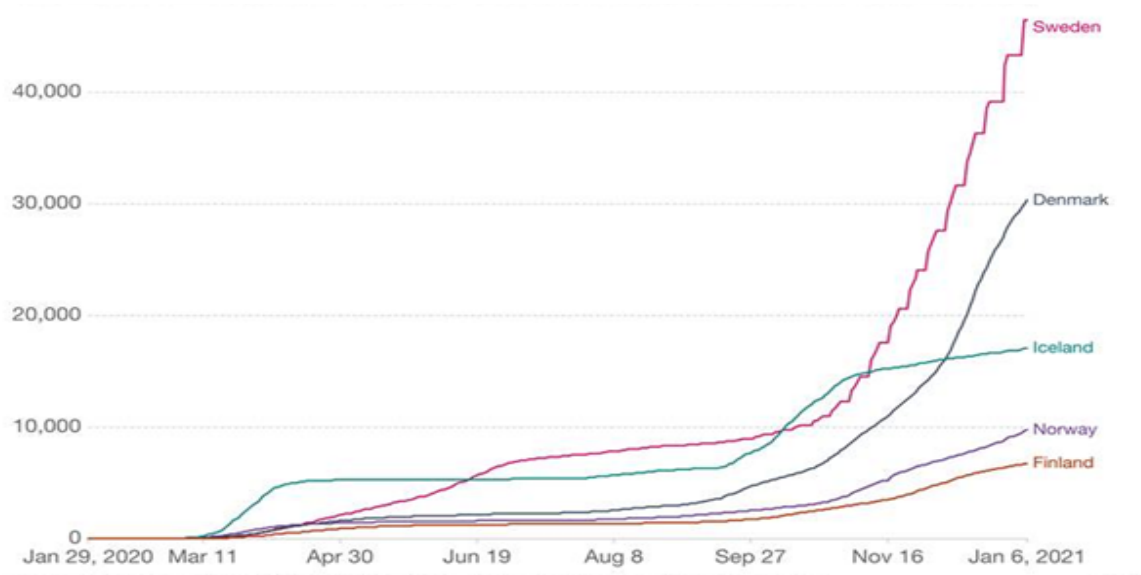


Figure 2.3 Cumulative confirmed Covid-19 cases per million people (Source: Johns Hopkins University CSSE Covid-19 Data, as of January 7, 2021)

Looking at the number of confirmed Covid-19 deaths, Sweden stands out even more clearly. Already in the first wave the number of Covid-19 related deaths in Sweden was many times higher than in the other Nordic countries, and this trend has continued throughout the second wave. Denmark has followed with the second highest Covid-19 related mortality-rate, while Finland, Iceland and Norway form a third category with relatively low mortality rates.

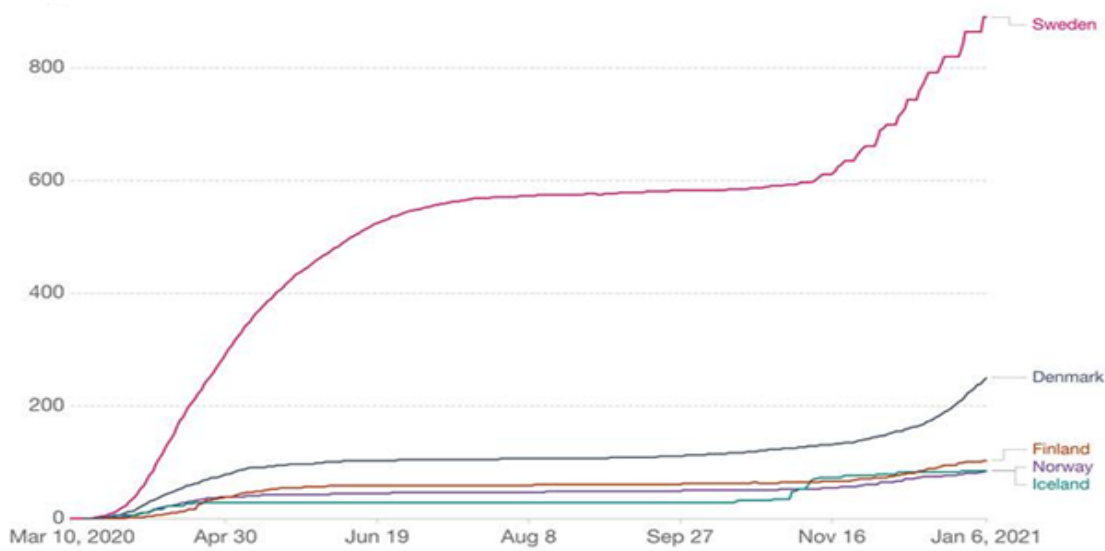


Figure 2.4 Cumulative confirmed Covid-19 deaths per million people (Source: Johns Hopkins University CSSE Covid-19 Data, as of January 7, 2021).

3. Restrictive and Mitigating Measures Across the Nordic Countries

Across the Nordic countries the Covid-19 pandemic triggered restrictive government measures to contain the contamination that have severely affected the audiovisual sector. Measures, in the forms of rules and recommendations, have been enacted by national governments as well as by various governmental and industry bodies. Measures have not been static but shifted frequently as the pandemic has progressed in waves, adding dynamic guidance and relief for audiovisual productions, but also another element of uncertainty. In this chapter seek to provide some clarity to the multitude of measures introduced by categorizing them according to their relevance for audiovisual productions before providing an overview of restrictive and mitigating measures taken in the Nordic countries. A detailed account of restrictive and mitigating measures for each of the Nordic countries is offered in the Appendix.

3.1. Types of Measures

We concentrate on measures that most directly affect film and series projects, as well as the companies and individuals creating them. We thus exclude measures primarily affecting the sector indirectly, such as monetary policy intended to stimulate the overall economy, health system measures increasing funding for hospitals, and school closures. Moreover, we primarily look at those imposed nationally by governments and their organizations, such as the film institutes, but also include those taken by industry stakeholder organizations, such as the producers' associations.

Following some basic principles of the categorizations made elsewhere,⁵ we distinguish between restrictive measures taken to contain the pandemic, on the one hand, and financial and other measures taken to mitigate negative effects of these restrictions, on the other.

Restrictive measures are divided into four subcategories:

1. Cancellation of public events
2. Travel restrictions and bans
3. Quarantine, confinement, distance, and hygiene
4. Other restrictive measures

Mitigating measures are divided into those aimed broadly at all industries and society at large that are relevant for audiovisual production, in addition to those aimed specifically at the audiovisual sector.

⁵ See OECD's Country Policy Tracker (<https://www.oecd.org/coronavirus/country-policy-tracker>) and Cabrera Blázquez et al. (2020).

For **general fiscal measures** we use five subcategories:

1. Tax and VAT
2. Loans and loan guarantees
3. Public subsidies
4. Income support
5. Other general fiscal measures

Fiscal measures aimed specifically for cultural and audiovisual industries are divided into the following subcategories:

1. Additional production subsidies (project-based)
2. Additional distribution subsidies (project-based)
3. Additional subsidies for companies and individuals
4. Deferred and advanced payments
5. Other financial measures for cultural and audiovisual industries

Other mitigating measures for cultural and audiovisual industries are divided into three subcategories:

1. Modified and relaxed restrictions
2. Industry operational guidelines and advice
3. Other non-financial mitigating measures

3.2. Overview of Measures Across the Nordic Countries

When the first wave of the pandemic hit in March 2020, the risks associated with Covid-19 were largely unknown and uncertain. It triggered a first set of emergency measures with the primary aim of limiting contamination and negative impact for industries that would be severely affected by the restrictive measures - among them the audiovisual industry. Gradually, and particularly from the tail of the first wave and onwards, measures started to shift from emergency to stimuli objectives. For restrictive measures, there was an introduction of exceptions from general restrictions under certain conditions, such as eased quarantine rules for foreign cast and crew provided a certain testing regime and other precautions were met. Fiscal mitigating measures shifted from compensating lost income to also encourage activity.

Particularly for its restrictive measures, Sweden stands out among the Nordic countries. While other countries imposed strict rules, Sweden relied much more on recommendations. As other Nordic countries went into lockdown under the first wave, Sweden urged its inhabitants to avoid social contacts,⁶ and did not force cinemas to shut down.⁷ Generally, the other Nordic countries have been somewhat harmonized in restrictions they introduced, with common themes regarding quarantine, isolation and distancing.

Throughout the summer, respective tax authorities broadened the range of measures for both individuals and companies.

⁶ <https://www.oecd.org/coronavirus/country-policy-tracker/> For Sweden

⁷ <https://www.theguardian.com/film/2020/may/01/cinemas-in-sweden-remain-open-coronavirus-pandemic>

Common for the countries is that governments quickly sought relief by postponement of tax, or extending tax obligations to be paid to ease liquidity pressure. As governments observed the virus spreading, they also organized, at slightly different pace, measures to deal with the negative consequences for the self-employed, freelancers, those remitted, and businesses. Many of the first emergency packages were aimed at specific sectors (e.g. cultural and airline industries), and these early schemes often had a relatively short time frame. The Nordic countries also focused on the strains inflicted on small and medium-sized enterprises (SMEs), and their liquidity, which should have been important for the audiovisual industry as many companies within the sector falls into this category. Targeted measures were put in place for SMEs, as many companies in this category that operates on a more hand-to-mouth basis (e.g. the tax measures described above).

As governments shuffled budgets and introduced restrictive measures, transnational and national industry bodies introduced their own measures that sought to adapt activity to the changing circumstances. Industry leaders communicated publicly the specific assistance their respective industries would need from government to ensure its continued survival.⁸ As the severity of the pandemic ensued with time, so did many of the measures from the bodies itself. Redistribution of overall balances early payments of funding, and non-repayment of incurred costs are common themes to industry specific measures throughout the Nordics.

Another theme in the Nordics has been that of re-direction. There have been initiatives upon re-directing existing businesses and strategies or creating brand new ones for SMEs and larger companies. Examples are Finland and Norway that have utilized this through bodies such as Business Finland and Innovation Norway. Government bodies have not been alone in this, as export and credit associations together with banks have secured loans for SMEs that have been in liquidity crisis, as well as taken responsibility for allocating government-backed funds utilizing their own rating systems.

The measures themselves have had varying time frames, as some have been aimed at the period when the pandemic hit only to see their time frame shortened as optimism of when re-openings could happen together with public pressure altered their effectiveness and popularity. This typically caused a second wave of measures to be introduced in the autumn, or towards the end of 2020 that reflected updated criteria and suggestions for where impact was needed. In many of the countries, a number of tax measures were backdated to pre-corona periods to further ease liquidity and solidity for businesses.

When it comes to the audiovisual institutions, there are two main patterns followed by most of the film funds. The first pattern involves funds focusing on easing the negative consequences of the pandemic through their existing measures, utilizing more flexible and pragmatic approaches. For instance, deadlines have been extended for applications and reporting, and producers have not been required to repay support received for cancelled events like premiers or festival participations. The other pattern is new and rebranded measures adapted to a pandemic situation. For instance, additional funds have been granted allowing producers to increase development work, or alternatively reapply for support covering increased production costs or the need to relaunch after interrupted releases. For both patterns, film funds have acted swiftly seeking to mitigate the pandemic's negative consequences.

⁸ <https://www.dfi.dk/branche-og-stoette/aktuelt/filmbranchen-er-udfordret> and <https://www.nfi.no/covid19/nye-tiltak-fra-nfi>

Generally, there are many similarities between the approaches taken by the Nordic countries, but difference in who and how regarding implementation. Different institutions have been allocated different responsibilities, and there have been differences in the intensity of restrictive measures and the resources spent on mitigating measures.



4. Restrictive Measures: Reacting and Adapting to a World with Covid-19

Across the Nordic countries audiovisual productions have endeavored to adapt to major disruptions caused by the pandemic: the immediate freeze of productions that were shooting when the first wave hit, travel restrictions for cast and crew, the closure or digital relocation of markets and festivals, cinema closures, and so forth. Governments and industry bodies have sought to assist by employing a range of mitigating measures. However, prescribing the right medicines without a diagnosis is tricky, so understanding how productions are affected, and to what degree, and how audiovisual productions have been able to adapt to these new and fluctuating circumstances, is a prerequisite to assess the effectiveness of the mitigating measures.

In this chapter we present findings on the impact of Covid-19-related restrictions and recommendations on film, documentary, and series projects across the Nordic countries. First, we look at production challenges, types of implications and the general level of impact experienced by different type of productions. Then we describe how Nordic producers have adapted their productions to the pandemic and restrictive measures in terms of project plans and schedules, project economy, and content. Finally, we look at the implications related to distribution and release.

For some categories the number of responses were too low for meaningfully generalizing any implications based on the results. Therefore, we do not comment on animation and 'other' categories but include the results in our tables for a fuller picture.

We provide aggregated results about the different types of measures. In our surveys, however, respondents were asked about impact on their projects of the specific restrictions and recommendations introduced in their respective countries. We have aggregated the results by categorizing the specific measures in each country into broader categories. Detailed country-by-country results for specific measures, and other details on the findings presented in this chapter, are included in the appendix.

4.1. Production Challenges and Overall Implications

Our case studies reveal numerous production challenges arising from the pandemic and the restrictive measures it triggers, and that each type of challenge often has multiple implications. For instance, the need to replace a key member of the production team due to illness, quarantine, or

travel restrictions may imply paying higher fees, rescheduling of shooting days (which may also cause extra costs), as well as changes to the content produced.



Among the serious production challenges emerging from our case studies were:

- **Pushing shooting periods and rescheduling shooting days:** Most projects have been forced to move their planned periods of principal photography and/or shooting days due to various restrictions. Some also had to split principal photography into periods with long gaps in between.
- **Not being able to plan due to difficulties in fixing new start dates and schedules:** The projects had problems setting firm start dates and were often working with multiple alternative plans due to uncertainties as to how long restrictions would stay in force, when key resources would become available, and so forth. It was particularly challenging for co-productions having to adjust to changing circumstances in multiple countries.
- **Access to production insurance:** Projects had to continue in or enter production without production insurance covering risks associated with the pandemic.
- **Uncertain availability of cast and crew:** Illness and quarantine requirements created uncertainty about the availability of cast and crew members. As most work on a freelance basis, the risk of key team-members being held up due to delays or rescheduling in other projects added another layer to this uncertainty.
- **Including buffers when blocking essential elements:** Due to uncertain schedules buffers had to be added when blocking time for cast, crew, and equipment. While this mitigates some risks associated to availability, it drives costs upwards. Buffers were also added for quarantine requirements.
- **Need for backup and standby personnel:** As team members could be held up due to quarantine (e.g., being traced as a contact to someone outside the production who tested positive) or illness at any time, some producers chose to line up backup and standby personnel for some or all crew members to avoid a freeze or delay should one or more be prevented from working.
- **Risk of personnel suppressing symptoms of illness:** Some producers expressed concern about team members not disclosing symptoms of illness in order to stay on the project and not forego income, increasing the risk of group contamination.
- **Obtaining unambiguous production guidelines and protocols:** Particularly in the early stages of the pandemic, but also when restrictive measures are adjusted, producers expressed a need for clear guidelines for how productions can safely be carried out.
- **Script changes to increase producibility:** Scenes requiring large crowds, foreign locations, intimacy, and so forth may have required rewriting for projects to be producible, and sometimes elements like (foreign) characters and specific seasons have also been altered. Challenges have arisen in making these changes without compromising the content.

Most implications of these and other production challenges fall into these three categories: schedule, economy, and content. Implications within each of these categories are highly interdependent. Not only are they often caused by the same production challenge, as in the team-member replacement example above, but there are also trade-offs between the categories and consequently producers are required to prioritize across common project management areas - time, cost and performance (Larson and Gray, 2021). In the team-member replacement example above, the producer may have to prioritize between content consequences (e.g., the fit and quality

of the replacement member) on the one hand, and economy and schedule consequences (e.g., requirements for costly rescheduling) on the other.

Our surveys reveal that the overall impact of restrictive measures on productions is perceived quite differently depending on its type (feature, documentary or drama series), its size (production budget), the project’s production phase when the first wave restrictions hit, and on the country in which production takes place. Based on scores for each of seven categories of restrictions/recommendations, each project is either characterized as experiencing ‘low impact’, ‘high impact’ or neither.

High impact of restrictive measures is reported most frequently by producers of drama series (see below). 53 percent of the drama series projects reported high impact, while 24 percent reported low impact. Feature films follow, with 41 percent of the projects reporting high impact and 25 percent reporting low impact. The lowest share of projects reporting high impact were found among documentaries, where 28 percent reported high impact and 25 percent low impact. That drama series most frequently report high impact is not surprising considering their relatively long production periods (producing one full season at a time).

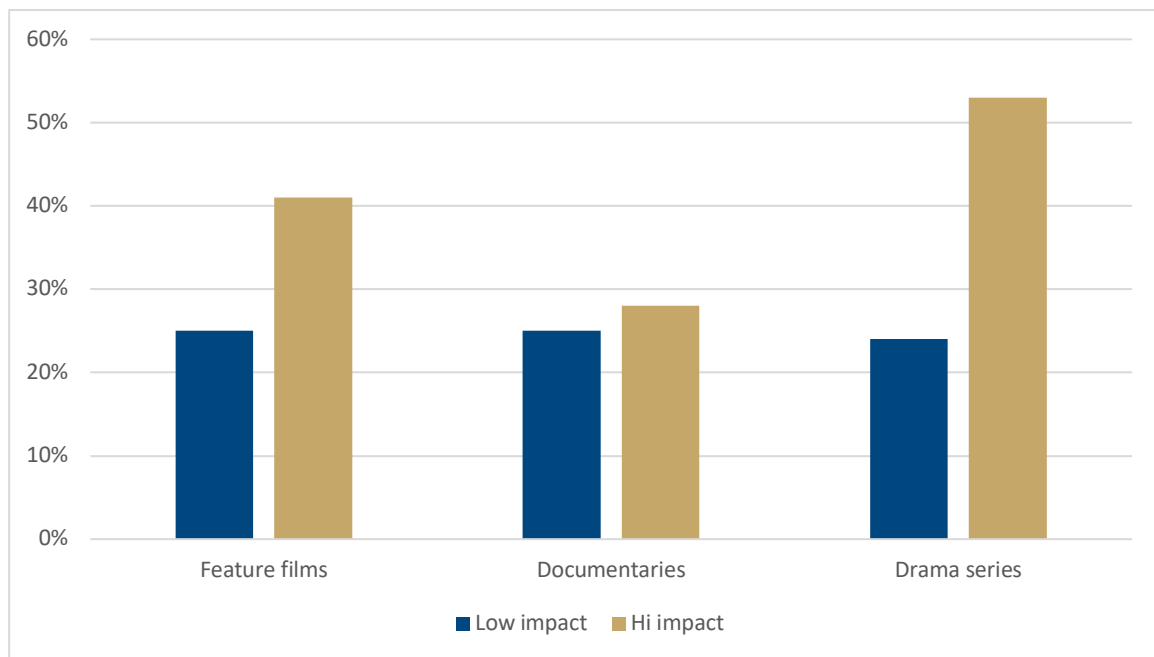


Figure 4.1 Projects reporting high or low impact of restrictive measures by production type. See also Table 8.8.

The size of the project, measured in production costs or budget, also matters (see Figure 4.2 below). Productions costing more than 4 million euros report high impact in 50 percent of the cases. The high impact cases decline to 37 percent for those budgeted between 1 and 4 million euros, and further to 28 percent for those budgeted below one million euros. As larger productions normally involve both longer production periods and bigger teams, this finding is not surprising.

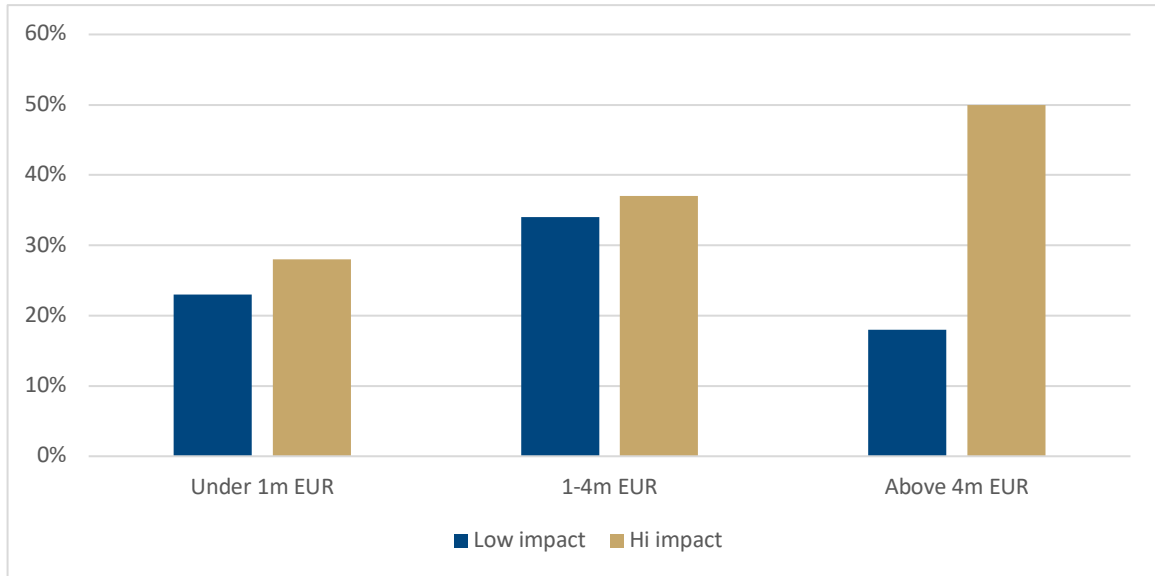


Figure 4.2 Projects reporting high or low impact of restrictive measures by project size (production budget) See also Table 8.8.

As our surveys were made in the early stages of the second wave, our findings clearly reflect the timing of the projects in relation to the first wave (see below). It is during pre-production and principal photography that projects are in their most intensive stages, with relatively large teams of cast and crew working together in physically concentrated locations, during in pre-production and principal photography. During the earlier development stages and later post-production stages, teams are smaller and often dispersed across multiple workplaces. Of the projects that were in pre-production or production when the first lockdowns incurred around 12 March 2020, 57 percent report high impact. Of the projects that had not yet entered this most intensive stage, but that went into production later in the year (i.e., those that were not yet greenlighted or greenlighted only as of 12 March 2020) high impact was reported by 50 percent. Not surprisingly, projects that had completed principal photography and were in post-production or awaiting release were less severely affected. Only 8 percent of these reported high impact and 46 percent reported low impact.

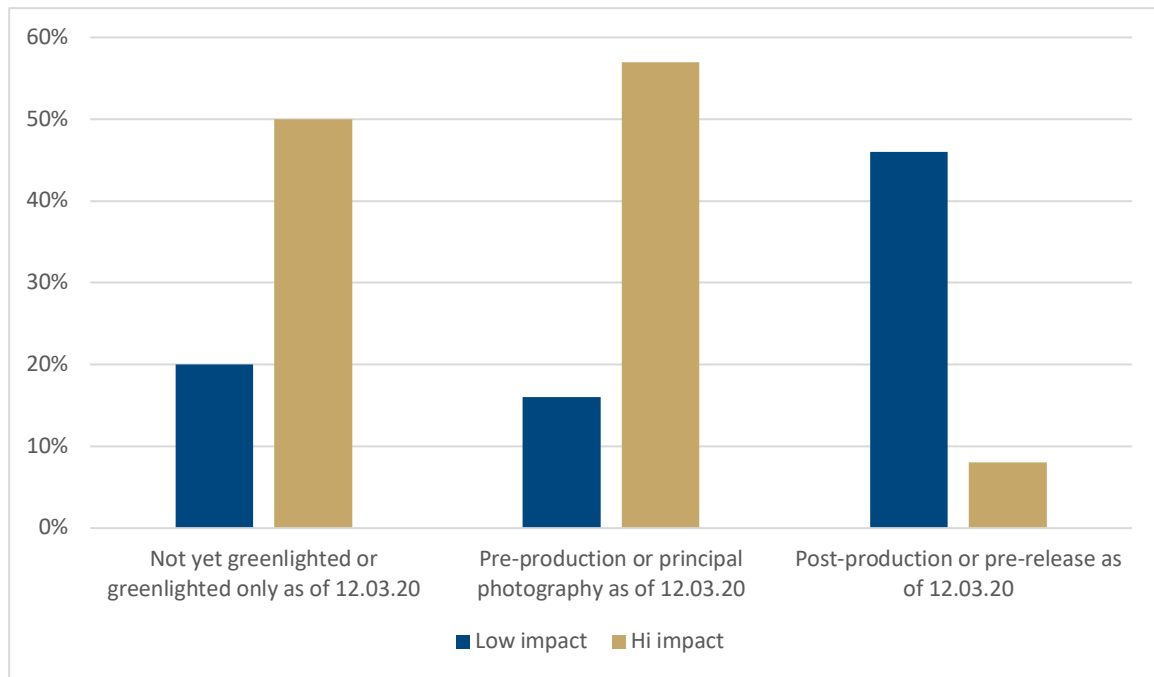


Figure 4.3 Projects reporting high or low impact of restrictive measures by production phase. See also Table 8.8.

We also find significant differences between the Nordic countries (see Figure 4.4 below) high or low impact of restrictive measures by country below). Among the Danish projects, 40 percent reported low impact and only 25 percent high impact. This is in stark contrast to Swedish productions, of which 53 percent reported high impact and only 20 percent low impact. Productions in the other Nordic countries reported impact in between these values. Given the relatively lenient nature of Swedish restrictive measures, it may seem surprising that Swedish projects most frequently reported high impact. However, in Sweden drama series made up a significantly larger share of the total production. The result may also reflect that implications in many cases are transnational. Strict travel restrictions in other countries limits access to foreign locations, cast and crew, and Sweden has more international co-productions than the other Nordic countries (see Table 8.26 in the appendix). Moreover, restrictive measures taken at a corporate level may have transborder effects, like when Odeon Cinemas Group, Europe's largest cinema operator and with the biggest market share in Sweden, decided to close its cinemas in Sweden due to lack of popular new titles rather than Swedish restrictions. The high share of Danish projects reporting low impact may partly be explained by their timing: only 20 percent of the Danish projects were in pre-production or principal photography when the first wave hit, compared to 49 percent of the Swedish projects.

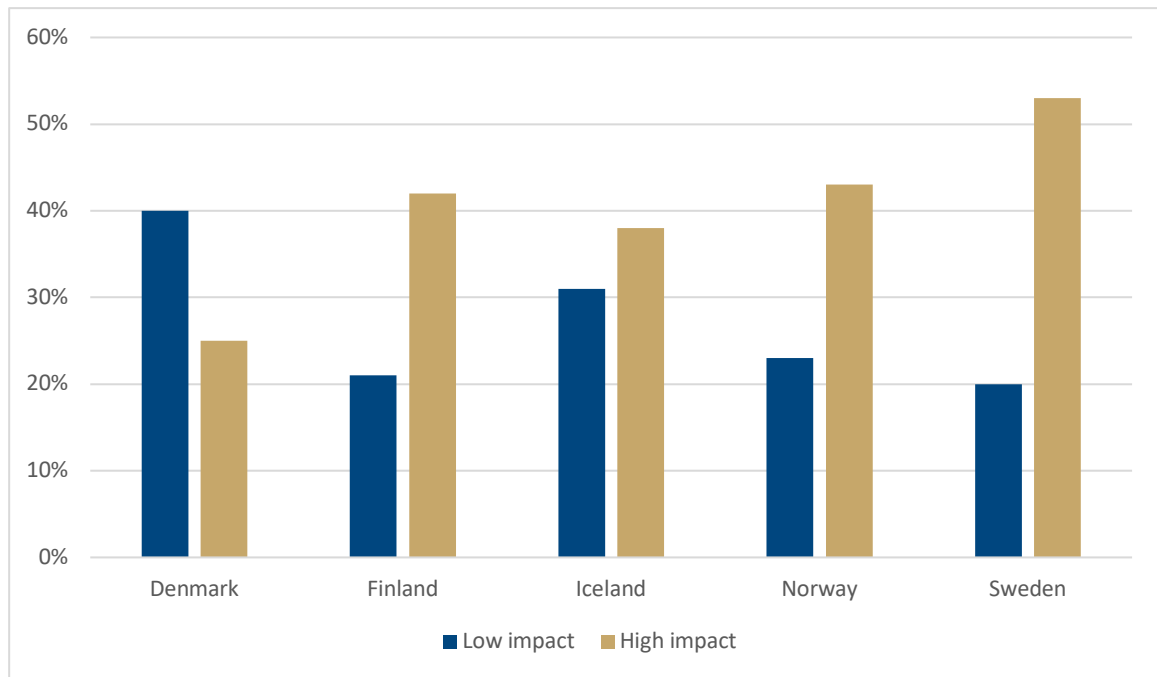


Figure 4.4 Projects reporting high or low impact of restrictive measures by country. See also Table 8.8.

The measures that have had the greatest impact concern travel and transfer, quarantine, and general distance restrictions/recommendations. Swedish and Norwegian producers most frequently reported great impact for transfer and travel restrictions/recommendations. Icelandic producers most frequently reported great impact from both transfer and travel general occupational health and safety measures and guidelines. For Icelandic projects great impact is reported most frequently for general occupational health and safety measures and guidelines and for general distance restrictions and recommendations. When Danish projects report great impact, it is most frequently for general occupational health and safety measures and guidelines, and this is also the type of restriction most frequently reported have great impact on Finnish projects. Detailed findings of impact of country specific restrictions and recommendations are included in the appendix.

We now turn to how individual projects adapted to the combined impact of Covid-19, in terms of schedule, economy and content.

4.2. Adapting project plans and schedule

In this section we look at how productions adapted project plans and schedule to the challenges caused by Covid-19 and restrictive measures. A significant number of projects report that they have adjusted production plans by moving domestic locations and dropping international locations, reducing travel and increasing shipping, working with reduced crews, changing sub-contractors and co-producers, and by moving meetings and work online. Furthermore, project schedules have been adapted in terms of the number of shooting days and by rescheduled shooting days for later. Further details on all the findings presented here can be found in the appendix.

Moving domestic filming locations to safer areas: This is a response adopted most frequently for drama series projects. 22 percent of drama series and 13 percent of feature films and documentaries responded in this way. It was also most frequently used by projects that had not yet entered pre-production when the first wave hit. Of these projects, 22 percent moved domestic filming locations to safer areas, compared to 18 percent of the projects that were in pre-production or principal photography on March 12, 2020. Of the Norwegian projects, 26 percent responded in this way, compared to 20 percent of the Swedish and 18 percent of the Finnish projects. None of the Danish or Icelandic projects responded in this way. We do not find any clear tendencies between the size of the projects and this type of response.

Dropping international filming locations: Also, when it comes to this response, it is most frequently adapted by drama series projects. 24 percent of drama series, 22 percent of documentaries and 14 percent of feature films dropped international filming locations. These are more significant numbers when one bears in mind that many did not plan for any international filming locations. On average, drama series filmed in 1.3 countries. The response choice to drop international filming locations was most frequent among the projects that were in pre-production or production when the first wave hit. 29 percent of these projects dropped international locations, compared to only 12 percent of those that had not yet entered pre-production at that time. The response was most frequent among Swedish productions, with 31 percent, followed by 20 percent of Norwegian projects, 15 percent of Finnish projects, 6 percent of Icelandic projects, and only 5 percent of Danish projects. But, again, we should bear in mind that relatively few Danish projects responding to our survey were in pre-production or principal photography when the first wave hit. Again, we do not find any clear tendencies between the size of the projects and this type of response.

Reduced travel: This is one of the most frequently reported responses to the pandemic and the restrictive measures. Among documentaries, 69 percent of the projects reduced travel for essential team members (producers, director, heads of departments, and lead cast) and 47 percent reduced travel for non-essential team members. For feature films the percentages were 54 and 51, and for drama series 51 and 47. Among the projects that were in pre-production or principal photography when the first wave hit 59 percent reduced travel for essential team members and 62 percent for non-essential. For those not yet in pre-production these percentages were 56 and 46. It is noteworthy that also 57 percent of the projects in post-production or awaiting release reduced travel for essential team members. Swedish producers cut travel most frequently for essential team members, with 69 percent of the projects, followed by the Icelandic with 63 percent. The percentages for Norway, Finland and Denmark were 54, 48 and 45. Also for non-essential team members, we find the most frequent travel reductions among the Swedish productions, with 55 percent of the projects. Norway follows with 51 percent, and then Finland with 45 percent, Denmark with 40 percent, and Iceland with 38 percent. We do not find any clear tendencies between the size of the projects and reduced travel for essential team members, but for the non-essential travel reductions are more frequently adapted by projects with higher budgets. For those with budgets below one million euro, 38 percent report reduced travel, compared to 45 percent for those with budgets between one and four million euros, and 53 percent for those with budgets above 4 million.

Increased shipping: Our case studies revealed that reduced travel is sometimes offset by an increase in shipping of materials and equipment. In one project, for instance, costumes were sent back and forth to cast members during pre-production when travel restrictions prevented them from meeting the costume designer. Increased shipping is reported for 18 percent of the drama series, 21 percent of the feature films, and 38 percent of the documentaries. It is most frequently reported for the projects that were in pre-production or principal photography when the first wave hit, with 28 percent, compared to 22 percent for those that were not yet in pre-production at that time. Among the Icelandic projects, it is reported for 38 percent, followed by 35 percent of the Swedish, 18 percent of the Finnish, 14 percent of the Norwegian, and only 5 percent of the Danish. We do not find any clear tendencies between the size of the projects and this type of response.

Working with reduced crews: We have seen that the experienced impact of the pandemic and restrictive measures increases with the size of a project, so seeking to reduce crew size seems like a predictable response. 41 percent of the documentaries reported working with reduced production crews, compared to 35 percent of the feature films, and 25 percent of the drama series. This strategy was most frequently adopted by the projects that were not yet in pre-production when the first wave hit, thus still in position to adjust their crewing plans. These reported reducing crews in 40 percent of the projects, compared to 35 percent of those that were already in pre-production or principal photography. It was most frequently reported among the Danish projects, with 45 percent, followed by 43 percent of the Norwegian, 38 percent of the Icelandic, 36 percent of the Finnish, and 22 percent of the Swedish projects. We do not find any clear tendencies between the size of the projects and this type of response.

Changing sub-contractors: Our case studies showed that some productions replaced sub-contractors, such as post-production houses and other service providers, either directly due to restrictions or to reduce costs. Survey results reveal that this type of response was adopted less frequently than most of the other responses. It was most frequently adopted by documentaries (28 percent), by low-budget projects with production budgets below 1 million euros (30 percent), and by projects that had progressed to pre-production or further when the first wave hit (24 percent). Among Finnish projects 27 percent changed sub-contractors, followed by 22 percent of the Swedish, 20 percent of the Danish, 19 percent of the Icelandic, and 17 percent of the Norwegian projects.

Changing co-producers: When setting up and structuring a project, co-producers can be essential elements to achieve a closing of the process. Hence, replacing co-producers after a project is greenlighted will in most cases be a drastic measure. Still, 7 percent of the projects that were in pre-production or principal photography when the first wave hit reported changing co-producers. Among the Swedish projects 10 percent adopted this response, and so did 6 percent of the Norwegian projects. It was not adopted by Danish, Finnish or Icelandic projects. It was only reported by drama series, by 8 percent, and feature films, by 5 percent.

Moving meetings and work online: Not surprisingly, this was the most frequently adopted response. It covers a wide range of activities, from team and production meetings, to online collaboration between directors and editors. It was adopted for 88 percent of the Swedish projects, and between 70 and 75 percent of the projects in the other Nordic countries. It was frequently adopted among all types of production, across all budget ranges, and for productions in

all phases of the project cycle. However, our case studies reveal that some producers are concerned about online inefficiencies in the forms of new format challenges for artistic discussions and decisions, and limited ability to build relationships and trust, and that online work often requires additional resources and facilities.

Adjusting the number of shooting days: Some productions had to add shooting days to compensate for certain production activities taking more time due to restrictive measures and other required changes. About one third of documentaries, feature films, and drama series reported to have adjusted the number of shooting days, with a trend that this response being used more frequently by projects with higher production budgets. Also, it was most frequently reported by projects in pre-production and principal photography when the first wave hit. 43 percent of these had adjusted the number of shooting days, compared to 28 percent of those that had not yet entered pre-production at that time. About one third of the Finnish, Norwegian and Swedish projects, and about one quarter of Icelandic projects, adjusted shooting days, but this occurred in only 10 percent of the Danish projects (likely due to a relatively low number of productions in pre-production and principal photography when the first wave hit). On average the projects increased the number of shooting days by 7 percent. For most categories, increases were in the 2 – 10 percentage range (see below), with documentaries in the lower end of the range and feature film and drama series in the higher end.

Rescheduling shooting days for later: Most of the projects that had not completed principal photography before the first wave hit had to reschedule shooting days for later. 66 percent of the projects in pre-production or principal photography reported this response, while 50 percent of the projects that had not yet reached pre-production adopted this response. Drama series, which normally have the longest shooting periods, reported this response most frequently. 63 percent rescheduled, compared to 47 percent of documentaries and 40 percent of feature films. This response was also made most frequently by the highest budgeted projects. 62 percent of projects with production costs above 4 million euros rescheduled, compared to 32 of the projects with budgets between 1 and 4 million, and 40 percent of those budgeted below 1 million. It was most frequently observed in Icelandic projects, with 63 percent, followed by 55 percent of the Swedish, 45 percent of the Finnish, 43 percent of the Norwegian, and 35 percent of the Danish projects. Rescheduling caused increases in the overall shooting period, and on average the production period was extended by 21 percent. For most categories the extension was in the 11 – 38 percent range (see below), with documentaries in the higher end of the range, and feature films and dramas towards the lower range.

Table 4.1 Covid-19 impact on shooting days and production period, with the difference between actual or final estimate and original plan (by country, production type, production budget and production phases as of 12.3.20, N=155)

	Shooting days	Production period	N
All projects	+7%	+21%	155
Denmark	n/a ^a	n/a ^a	20
Finland	+7 %	+17 %	33
Iceland	+10 %	+18 %	16
Norway	+7 %	+30 %	35
Sweden	+6 %	+15 %	51
Feature film	+8 %	+16 %	63
Animated feature film	n/a ^a	n/a ^a	4
Documentary	+2 %	+38 %	32
Drama series	+9 %	+19 %	51
Animated series	n/a ^a	n/a ^a	2
Other	n/a ^a	n/a ^a	3
Production budget not stated	n/a ^a	n/a ^a	43
Production budget under 1m EUR	+5 %	+25 %	40
Production budget 1-4m EUR	+10 %	+19 %	38
Production budget > 4m EUR	+8 %	+19 %	34
Not yet greenlighted or greenlighted only as of 12.03.20	+10 %	+11 %	50
Pre-production or principal photography as of 12.03.20	+8 %	+21 %	68
Post-production or pre-release as of 12.03.20	-5 %	+45 %	37

^a Missing data due to non-forced nature of survey question

4.3. Adapting project economy

In this section we look at how productions adapted the project economy to the challenges caused by Covid-19 and restrictive measures. We present the results of the overall impact of Covid-19 on production costs and revenues, how projects have covered the additional costs incurred, and the extent to which projects have been able to draw on insurance to cover Covid-19 related cost increases.

First, it should be noted that some costs are non-financial and hard to trace. Our case studies indicate an increase in the use of unpaid overtime as a method to deal with workloads related to increased uncertainty. As revealed in producer interviews, the stress level among production teams was also considerably higher than under normal circumstances.

Turning to financial costs, survey results show that, on average, 10 percent were added to the production budgets (see Table 4.2 below). Costs increased between 6 and 19 percent for all categories, with the greatest variability related to differences in production phase and country. Predictably, projects that had completed principal photography and were in post-production or

awaiting release when the first wave hit had less overages than the others. Norwegian productions experienced the sharpest cost increases, while Danish and Icelandic had the lowest.

Combined with increased production costs, producers also expect reduced revenues as a consequence of Covid-19. On average, they estimate revenues to be down by 17 percent. The most severe revenue reductions were predictably estimated for the types of productions normally relying on cinemas as their primary distribution channel. In sum, increased production costs and lower revenues have a considerable negative effect on the financial stability of the projects. There is considerable variance between the Nordic countries in producers' estimates of both cost and revenue impact of Covid-19, and thus also for net effects.

Table 4.2 Covid-19 impact on total revenue estimates and production costs relative to original locked budget (N=77; N=91), and the net effect of these on project economy.

	Estimated change in revenues (N=77)	Estimated or actual change in production costs (N=91)	Indicator of net effect on production economy ^a
Total	-17 %	+10 %	-26
Denmark	-6 %	+8 %	-14
Finland	-10 %	+10 %	-20
Iceland	-9 %	+8 %	-16
Norway	-24 %	+14 %	-38
Sweden	-24 %	+9 %	-33
Feature film	-20 %	+9 %	-29
Animated feature film	-18 %	+10 %	-28
Documentary	-23 %	+12 %	-35
Drama series	-7 %	+9 %	-16
Animated series	-10 %	+6 %	-16
Other	n/a	+19 %	n/a
Production budget not stated	n/a	0 %	n/a
Production budget under 1m EUR	-18 %	+10 %	-28
Production budget 1-4m EUR	-19 %	+9 %	-28
Production budget > 4m EUR	-13 %	+10 %	-23
Not yet greenlighted or greenlighted only as of 12.03.20	-8 %	+12 %	-20
Pre-production or principal photography as of 12.03.20	-17 %	+11 %	-28
Post-production or pre-release as of 12.03.20	-20 %	+6 %	-26

^aThe indicator reflects the combined effects of reduced revenues and increased costs. It illustrates the variance in project economy effects between categories but can not be used directly to calculate the magnitude of the effects as each component is based on different units (revenues and costs).

For projects that reported increased production costs and provided details on how the increase was funded, the most common (83 percent) financing contribution came from the production companies themselves. Their existing funding partners, those that were contracted when a project

was greenlighted, provided additional financing towards budget increases in 36 percent of the projects, and most frequently for drama series. Covid-19 related support and funding contributed with additional funding in 45 percent of the projects, most frequently in Sweden, followed by Iceland, Norway, Finland, and Denmark. Among projects in pre-production and principal photography when the first wave hit, 60 percent received funding from these sources, which also partly explains the low share among Danish projects where relatively few were in this project stage. 7 percent of all projects found financing for additional costs from other new funding partners, mostly among high budget and Danish projects.

Table 4.3 Added production costs and financing: Production budgets as per March 12, 2020 and increases calculated from actual or estimated production costs as per Nov/Dec 2020, and the source contributing to financing the increased production costs (percentages reflect the proportion of projects that have accessed each source of finance) (by country, production type, production budget and production phase as of 12.3.20, N=112)

	Production costs		Financing source covering cost increases				
	Average production budget	Increase	Production company	Existing funding partners	Covid-19 related support and funding	Other new funding partners	N
All projects	3,2	+10%	83%	36%	45%	7%	112
Denmark	4.5	+8 %	75 %	33 %	17 %	25 %	12
Finland	2.0	+10 %	100 %	29 %	33 %	4 %	24
Iceland	2.4	+8 %	100 %	20 %	50 %	0 %	10
Norway	3.8	+14 %	88 %	44 %	40 %	8 %	25
Sweden	4.0	+9 %	68 %	39 %	61 %	5 %	41
Feature film	3.3	+9 %	84 %	29 %	56 %	9 %	45
Animated feature film	3.6	+10 %	100 %	50 %	100 %	0 %	2
Documentary	0.7	+12 %	86 %	18 %	32 %	9 %	22
Drama series	4.8	+9 %	77 %	51 %	41 %	3 %	39
Animated series	8.0	+6 %	100 %	0 %	0 %	100 %	1
Other	1.2	+19 %	100 %	67 %	0 %	0 %	3
Production budget not stated	n/a	n/a	67 %	42 %	45 %	9 %	33
Production budget under 1m EUR	0.6	+10 %	96 %	25 %	21 %	0 %	28
Production budget 1-4m EUR	2.5	+9 %	91 %	35 %	52 %	0 %	23
Production budget > 4m EUR	7.1	+10 %	82 %	39 %	61 %	18 %	28
Before pre-production	3.3	+12 %	66 %	39 %	29 %	5 %	38
Pre-production or principal photography as of 12.03.20	3.8	+11 %	91 %	37 %	60 %	9 %	57
Post-production or pre-release as of 12.03.20	2.3	+6 %	94 %	24 %	29 %	6 %	17

Both the original financing and the additional financing raised to cover cost-increases were exposed to even higher than usual levels of risk as few projects had obtained insurance against Covid-19 related occurrences (see Table 4.4 below). We find generally a low level of coverage

across all projects. However, standouts are Danish productions that have a relatively high rate of coverage by existing insurance, and Finnish productions that have a relatively high share of limited coverage by existing insurance.

Table 4.4 Production insurance against Covid-19 (by country, production type, production budget and production phase as of 12.3.20, N=155)

	Yes, full coverage by existing (original) production insurance package	Yes, full coverage by additional insurance acquired at an extra cost	Yes, limited coverage by existing (original) production insurance package	Yes, limited coverage by additional insurance acquired at an extra cost	No	N
Total	6 %	5 %	12 %	7 %	71 %	155
Denmark	25 %	0 %	0 %	5 %	70 %	20
Finland	0 %	6 %	24 %	12 %	58 %	33
Iceland	0 %	0 %	6 %	0 %	94 %	16
Norway	0 %	9 %	9 %	6 %	77 %	35
Sweden	8 %	4 %	12 %	8 %	69 %	51
Feature film	3 %	5 %	14 %	6 %	71 %	63
Animated feature film	0 %	0 %	0 %	25 %	75 %	4
Documentary	9 %	6 %	3 %	0 %	81 %	32
Drama series	8 %	4 %	14 %	10 %	65 %	51
Animated series	0 %	0 %	50 %	50 %	0 %	2
Other	0 %	0 %	0 %	0 %	100 %	3
Production budget not stated	12 %	5 %	7 %	7 %	70 %	43
Production budget under 1m EUR	3 %	0 %	15 %	5 %	78 %	40
Production budget 1-4m EUR	3 %	5 %	13 %	5 %	74 %	38
Production budget > 4m EUR	6 %	9 %	12 %	12 %	62 %	34
Not yet greenlighted or greenlighted only as of 12.03.20	6 %	6 %	8 %	10 %	70 %	50
Pre-production or principal photography as of 12.03.20	7 %	4 %	18 %	9 %	62 %	68
Post-production or pre-release as of 12.03.20	3 %	3 %	5 %	0 %	89 %	37

4.4. Adapting content

In this section we look at how productions adapted content to increase producibility in face of the challenges caused by Covid-19 and restrictive measures. A significant number of projects report that they have adapted content by recasting and re-crewing, changing from indoors to outdoors settings and locations, making necessary changes to script and content, and some also report having substituted in-camera shoots with digital animations (CGI/VFX). Producers also report that Covid-19 related production changes impacted their project's production value and caused more artistic compromises.

Recasting and/or re-crewing: Replacing team-members became necessary for many productions as both cast and crew members were prevented from participating or completing their jobs due to illness or restrictive measures related to travel, quarantine or similar. Replacing cast members has obvious effects on content and may trigger other changes such as rewriting scripts. Re-crewing may also have significant effects if the team-members have positions with important artistic and creative input, as with directors of photography, production designers or similar. Of the projects that were in pre-production or principal photography when the first wave hit, 60 percent reported that they had to recast and/or re-crew. Of those that had not yet reached pre-production at that time, 36 percent had to adopt this response. Project size was an important factor, as 53 percent of those with budgets above 4 million euros reported recasting and/or re-crewing, compared to about 25 percent of those with budgets below 4 million. This is also partly reflected in that the response was adopted by 51 percent of the drama series, 41 percent of feature films, but only 25 percent of the documentary projects. In Sweden it was adopted by 53 percent of the projects, in Norway by 46 percent, in Denmark and Finland by 30 percent, and in Iceland by only 19 percent.

Changing from indoors to outdoors settings and locations: Producers also changed settings (where the story plays out) and locations (where the scenes are shot) from indoors to outdoors in response to the restrictive measures. This response was adopted by 28 percent of the projects that had not yet reached pre-production when the first wave hit, and thus had most time to plan content changes, and by 26 percent of the projects that were in pre-production or principal photography at that time. It was adopted by 33 percent of the drama series, compared to 14 percent of the feature films and 13 percent of the documentaries. 27 percent of Finnish and Swedish projects adopted this response, followed by 20 percent of the Norwegian and 10 percent of the Danish projects. None of the Icelandic projects made changes from indoor to outdoor.

Making necessary changes to script and/or content: While the above two responses may imply script changes, we also asked specifically if the productions had made necessary changes to script and/or content, such as dropping crowded or intimate scenes. 47 percent of the projects that were in pre-production or principal photography when the first wave hit reported such changes were made, and so did 42 percent of those that had not yet entered pre-production at that time. Again, larger productions most frequently reported this type of change. 41 percent of projects budgeted above 4 million euros adopted this response, compared to about 30 percent of the projects with budgets below 4 million. And again, it was drama series that most frequently employed this type of change, with 55 percent of the projects making necessary changes to script and/or content, compared to 29 percent of feature films, and 25 percent of documentaries. 43 percent of Norwegian and Swedish projects made script and/or content changes, followed by 36 percent of Finnish, 20 percent of Danish, and 19 percent of Icelandic projects.

Substituting in-camera shoots with CGI/VFX: Using computer generated images (CGI) or visual effects (VFX) as a substitute for shooting scenes in camera on the set was a less frequently adopted response to producing during a pandemic with restrictive measures. 16 percent of the projects that were in pre-production or principal photography when the first wave hit had adopted this response, compared to only 6 percent of those that had not yet entered pre-production, indicating that those in the latter category may have had time to respond in other ways. This response is also associated with larger projects. It was adopted by 18 percent of the projects budgeted at 4

million euros or higher, while only by 3 to 5 percent of those with budgets below 4 million. It was used by 13 percent of the feature films, 12 percent of the drama series, and predictably only 3 percent of the documentaries. 14 percent of Swedish projects adopted this measure, 11 percent of the Norwegian, 9 percent of the Finnish, 5 percent of the Danish, and none of the Icelandic.

We also examine the extent that Covid-19 is perceived to have impacted each project's 'production value', and to what extent artistic compromises have been required (see Table 4.5 below). While most respond no or little impact, it is notable that more than half of the documentaries report some or great impact on production value, and that around 40 percent of the projects report some or great impact in a number of the categories. We also note that higher-budget projects experience less impact in terms of artistic compromise, which may indicate that these have been able to respond in other ways to avoid this.

Table 4.5 Covid-19 impact on 'production value' and artistic compromises (by country, production type, production budget and production phase as of 12.3.20, N=144)

	To what extent have any Covid-19 related production changes impacted the project's 'production value'?				To what extent have any Covid-19 related changes impacted the project in ways causing more artistic compromises?				N
	No impact	Little impact	Some impact	Great impact	No impact	Little impact	Some impact	Great impact	
Total	28 %	33 %	36 %	2 %	28 %	35 %	31 %	6 %	144
Denmark	59 %	12 %	24 %	6 %	47 %	29 %	18 %	6 %	17
Finland	25 %	34 %	38 %	3 %	41 %	28 %	31 %	0 %	32
Iceland	31 %	38 %	31 %	0 %	13 %	50 %	25 %	13 %	16
Norway	29 %	29 %	38 %	3 %	26 %	38 %	29 %	6 %	34
Sweden	18 %	42 %	40 %	0 %	20 %	36 %	38 %	7 %	45
Feature film	42 %	28 %	30 %	0 %	38 %	30 %	28 %	3 %	60
Animated feature film	75 %	0 %	25 %	0 %	50 %	50 %	0 %	0 %	4
Documentary	16 %	29 %	48 %	6 %	26 %	26 %	39 %	10 %	31
Drama series	16 %	47 %	36 %	2 %	16 %	47 %	31 %	7 %	45
Animated series	50 %	50 %	0 %	0 %	50 %	50 %	0 %	0 %	2
Other	0 %	0 %	100 %	0 %	0 %	50 %	50 %	0 %	2
Production budget not stated	21 %	32 %	42 %	5 %	16 %	29 %	42 %	13 %	38
Production budget under 1m EUR	26 %	37 %	37 %	0 %	29 %	34 %	32 %	5 %	38
Production budget 1-4m EUR	38 %	27 %	32 %	3 %	38 %	32 %	30 %	0 %	37
Production budget > 4m EUR	29 %	39 %	32 %	0 %	32 %	48 %	16 %	3 %	31
Not yet greenlighted or greenlighted only as of 12.03.20	26 %	36 %	33 %	5 %	26 %	33 %	31 %	10 %	42
Pre-production or principal photography as of 12.03.20	20 %	37 %	43 %	0 %	17 %	43 %	34 %	6 %	65
Post-production or pre-release as of 12.03.20	46 %	24 %	27 %	3 %	51 %	24 %	24 %	0	37

4.5. Distribution and release

In this section we examine the impact of Covid-19 on distribution and release. Our case studies revealed that the added uncertainty related to cinema closures, the presence or absence of

competition from popular Hollywood movies, and the cancellation or digital migration of festivals created many challenges, especially for planning and executing longer campaigns.

First, we examine feature film and documentary projects that typically employ theatrical release and present, as of November/ December 2020, their plans or intentions for release.

The survey results indicate relatively clear differences in release strategy across the Nordic countries, with Sweden being a clear standout (see Table 4.6 below). Across the other Nordic countries cinematic release dates were kept as originally scheduled for about 40 to 50 percent of the projects, while Sweden significantly lower with 22%. Almost half of the Swedish projects had delayed the release to an unspecified date, and this share was significantly higher than in the other Nordic countries.

Compared to feature films, documentaries seemed to face greater release uncertainty with a higher share pushed to an unspecified date. Production budget also appears to impact release strategy, with a higher share of high budget projects having delayed release to a new set date, possibly reflecting a greater need for cinema capacity than restrictive measures could allow.



As expected, a lower share of projects that were in postproduction or awaiting release when the first wave hit have kept their release dates as many of these were likely within the first period with strict restrictions. Of this category, the most common response is that cinematic release has been delayed to an unspecified date.

Relatively few projects had given up on a theatrical release. Among those dropping cinemas in favour of other another distribution channel there were relatively high shares of Icelandic and documentary projects. The reluctance seen here to drop theatrical distribution is consistent with distributor strategies and results from those that have tried without coming close to recouping the losses from the lack of ordinary cinematic exhibition (Øfsti, 2020).

Table 4.6 Covid-19 and delay or cancellation of cinematic release of feature films and documentaries (by country, production type, production budget and production phase as of 12.3.20, N=99)

	Theatrical release date will be as originally scheduled	Theatrical release date will be delayed to new set date	Theatrical release date will be delayed to a new date which is not yet set	Theatrical release will be dropped in favour of another distribution channel	Theatrical release was not originally planned	N
Denmark	50 %	21 %	21 %	0 %	7 %	14
Finland	43 %	22 %	17 %	13 %	4 %	23
Iceland	42 %	17 %	8 %	25 %	8 %	12
Norway	39 %	26 %	17 %	0 %	17 %	23
Sweden	22 %	26 %	48 %	4 %	0 %	27
Feature film	49 %	17 %	24 %	3 %	6 %	63
Animated feature film	50 %	25 %	0 %	25 %	0 %	4
Documentary	13 %	34 %	31 %	13 %	9 %	32
Drama series	n/a	n/a	n/a	n/a	n/a	0
Animated series	n/a	n/a	n/a	n/a	n/a	0
Other	n/a	n/a	n/a	n/a	n/a	0
Production budget not stated	38 %	21 %	33 %	4 %	4 %	24
Production budget under 1m EUR	34 %	31 %	22 %	9 %	3 %	32
Production budget 1-4m EUR	43 %	7 %	30 %	7 %	13 %	30
Production budget > 4m EUR	31 %	46 %	8 %	8 %	8 %	13
Before pre-production as of 12.03.20	40 %	33 %	13 %	3 %	10 %	30
Pre-production or principal photography as of 12.03.20	43 %	16 %	27 %	11 %	3 %	37
Post-production or pre-release as of 12.03.20	28 %	22 %	34 %	6 %	9 %	32

Finally, in Table 4.7 below we present how producers perceive that reduced access to physical film markets and festivals will impact finding distributors for the project. Here we observe a significant degree of variability across all key background variables, but documentary projects stand out in reporting high shares of great and some impact. Drama series report highest share of no impact. Impact also seems to decrease with increasing production budget.



Table 4.7 Impact of reduced access to film markets and festivals on finding distributors (by country, production type, production budget and production phase as of 12.3.20, N=155)

	none	don't know	little impact	some impact	great impact	N
Denmark	40 %	20 %	10 %	20 %	10 %	20
Finland	27 %	3 %	9 %	42 %	18 %	33
Iceland	44 %	6 %	13 %	25 %	13 %	16
Norway	50 %	9 %	9 %	15 %	18 %	34
Sweden	49 %	4 %	10 %	14 %	22 %	49
Feature film	46 %	8 %	10 %	27 %	10 %	63
Animated feature film	50 %	25 %	25 %	0 %	0 %	4
Documentary	9 %	3 %	6 %	31 %	50 %	32
Drama series	60 %	8 %	13 %	10 %	8 %	48
Animated series	0 %	0 %	0 %	50 %	50 %	2
Other	67 %	0 %	0 %	33 %	0 %	3
Production budget not stated	46 %	15 %	7 %	15 %	17 %	41
Production budget under 1m EUR	23 %	5 %	8 %	33 %	33 %	40
Production budget 1-4m EUR	45 %	8 %	11 %	26 %	11 %	38
Production budget > 4m EUR	61 %	0 %	15 %	15 %	9 %	33
Not yet greenlighted or greenlighted only as of 12.03.20	36 %	15 %	11 %	19 %	19 %	47
Pre-production or principal photography as of 12.03.20	51 %	4 %	13 %	21 %	10 %	68
Post-production or pre-release as of 12.03.20	35 %	3 %	3 %	30 %	30 %	37

5. Mitigating Measures: Impact of First Aid and Incentives for Productions Dealing with Covid-19

A number of measures have been introduced by governments and industry bodies to ease the negative impact of the pandemic and the restrictions it has triggered. In chapter 3 we categorized these mitigating measures into general, and sector-specific fiscal measures, and other sector specific measures for the cultural and audiovisual industries. In this chapter we present findings on the effectiveness of these mitigating measures in terms of: 1) how they have been utilized by feature film, documentary, and drama series projects across all Nordic countries, and 2) how their impact is experienced by producers.

The effects of mitigating measures on audiovisual production are both direct and indirect (see Figure 5.1 below). Fiscal mitigating measures have direct effects on project economy, alleviating the negative economic impacts presented in section 4.3 above. Improving the project economy will normally result in indirect positive effects on the other impact areas, providing more flexibility for plans and schedule and reducing negative impact on content. Other sector specific measures, such as modified and relaxed restrictions for cinemas, industry operational guidelines and advice, will have direct effects on plans and schedule, easing the negative impacts presented in section 4.2 above. This will normally result in positive indirect effects on project economy and content. Positive impact on content, mitigating the negative impacts presented in section 4.4 above, will thus normally be indirect through project economy or plans and schedule.

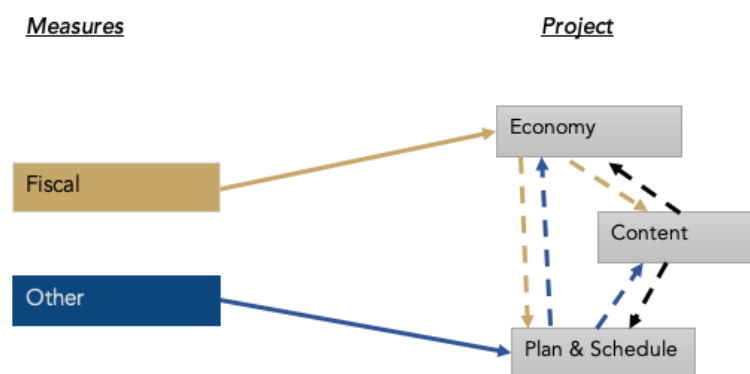


Figure 5.1 Direct and indirect effects of mitigating measures

In this chapter we provide aggregated results concerning the different types of measures, similar to what was done in the previous chapter. In our surveys, however, respondents were asked about

impact on their projects of the specific measures introduced in their respective countries. To present an aggregated picture of the results, we have categorized the specific measures in each country into broader categories. Detailed country-by-country results for specific measures are included in the appendix.

As in the previous chapters we do not comment on results in categories with very few respondents, but include the results in our tables.

5.1. Overall use and impact

We first present a cross-country overview of the effectiveness of the three major categories of Covid-19 mitigation measures: general fiscal measures; fiscal measures aimed specifically at the cultural and audiovisual industries, and other industry specific mitigating measures (see Figure 5.2 below).

A large proportion of projects have not benefited from non-industry specific fiscal measures. About half of the projects have not used these measures, while about one third have used one or more of these measures with some or great impact. In our case studies producers explained that they found most of these measures ill-fitted for project-based enterprises like audiovisual productions as they tend to be aimed primarily at continuous operations. Another obstacle for many producers in smaller production companies is limited resources for the administrative work required and limited experience with support systems that are not sector specific.

An even greater proportion of projects have not benefited from fiscal measures aimed specifically at the cultural and audiovisual industries. Only 40 percent of the projects had used one of these. However, we see a relatively high share of projects that have not yet used these measures but intend to do so.

Furthermore, this type of measure has the highest proportion of projects reporting that it has been used with great impact, and few producers report use with only some or no impact. These results indicate that the measures are relatively effective but in limited supply. In the case studies producers also expressed greatest interest in and need for sector specific support mechanisms covering additional Covid-19-related project costs.



However, we find that it is the non-fiscal industry specific measures that have had mitigating impact on the greatest number of projects. 75 percent of the projects report having used these with some or great impact. These measures are often non-rival of nature, meaning that one project’s use of it does not reduce its availability for other projects, so unlike most sector specific fiscal measures these are available to all who wishes to use them. It is noteworthy that almost as many projects report great impact from these measures as is reported for the industry-specific fiscal measures. In our case studies, producers expressed significant effect on their projects from measures such as partial reopening of cinemas and unambiguous production guidelines.

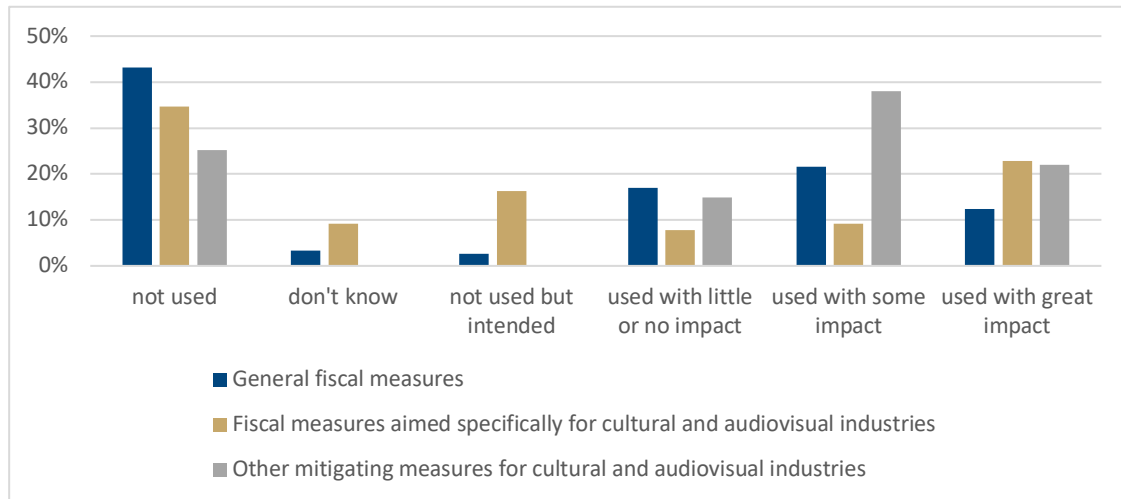


Figure 5.2 Comparison of impact of mitigating measures across the Nordic countries (N=155). To enable cross-country comparison, each of the country specific measures have been categorized according to the three broad categories of mitigating measures outlined in section 3.1. For each project, the measure of impact for each of the three broad categories is determined by the relevant country-specific measure with the greatest impact. For example, if the highest impact of the different country specific measures categorized to General fiscal measures for a Swedish project is “used with some impact”, then the project’s value for General fiscal measures will be recorded as “used with some impact”.

5.2. Impact by country and project categories

With an aim to show the characteristics of projects that experienced a high and low impact of mitigating measures, we also present projects that both have and have not experiences great impact from the at least one of the mitigating measures (see Table 5.1 below).

Most projects reported low impact, meaning that they had not experienced great impact from any mitigating measure. Among the relatively few projects reporting high impact, i.e., having experienced great impact for at least one measure, there are noteworthy differences across the core background variables.

First, we find that the proportion reporting high impact is significantly higher for feature films than for documentaries and drama series. This may indicate that the availability of effective fiscal measures has been better for features than other types of productions, and that there has been a better fit between project demands and measures.

Second, the proportion of projects that were in pre-production or principal photography when the first wave hit reporting a high impact of mitigating measures is considerably greater compared to other projects. This may indicate that the availability and fit of measures have been better for these projects than for the others.

Finally, it seems to be a trend that the share of projects reporting high impact increases with production budgets, but the increase is relatively flat (from 28 to 35 percent).

Among the Nordic countries, Iceland stands out with 50 percent of the projects reporting high impact, which is a considerably higher proportion than in the other countries. At the lower end of the scale we find Finland and Denmark with 15 and 20 percent respectively, while Sweden and Norway are in the middle with 33 and 34 percent. Project features among the respondents may explain some of the differences. Iceland, for instance, have a relatively high share of feature films, while few of the Danish projects were in pre-production or principal photography. But on the other hand, Finland scores low on impact even with the highest share of respondent in pre-production or principal photography, a category that overall scores high. Variances between the countries therefore can not be explained solely based on project characteristics, but likely reflects the effectiveness of their mitigating measures.

Table 5.1 Characteristics of projects experiencing high and low impact of mitigating measures (N=155)

	Low impact: no mitigating measures have high impact	High impact: at least 1 mitigating measure has high impact	N
Denmark	80 %	20 %	20
Finland	85 %	15 %	33
Iceland	50 %	50 %	16
Norway	66 %	34 %	35
Sweden	67 %	33 %	51
Feature film	54 %	46 %	63
Animated feature film	75 %	25 %	4
Documentary	81 %	19 %	32
Drama series	84 %	16 %	51
Animated series	50 %	50 %	2
Other - please specify	67 %	33 %	3
Production budget not stated	74 %	26 %	43
Production budget under 1m EUR	73 %	28 %	40
Production budget 1-4m EUR	68 %	32 %	38
Production budget > 4m EUR	65 %	35 %	34
Before pre-production as of 12.03.20	74 %	26 %	50
Pre-production or principal photography as of 12.03.20	62 %	38 %	68
Post-production or pre-release as of 12.03.20	81 %	19 %	37

6. Covid-19 and the Climate Footprint

What are the climate implications arising from the Covid-19 pandemic? How might experiences of producing film, drama series, documentaries under Covid-19 offer an insight into how the audiovisual sector could reduce its CO₂ emissions? In this chapter we present and evaluate experiences of projects that were forced to alter production methods as a case study of how a more climate friendly audiovisual sector could be achieved.

As introduced in section 1.1, the Covid-19 crisis occurs within the slower moving, but more significant crisis of CO₂-linked climate change. Our study's primary aim is to report on the impact of Covid-19 on film, drama series, and documentary projects, and to evaluate the effectiveness of government and industry mitigating measures. Nevertheless, because Covid-19 offers a type of structural jolt that changes production methods, and because a study of this nature gives access a wide range of project data, we are provided with a unique opportunity to consider the emissions impact of projects and the impact of altered production methods.

The larger backdrop for studying the climate impact amidst Covid-19 is that all Nordic countries are signatories to the 2015 Paris Climate Agreement's action plan for limiting global warming to below 2 degrees Celsius. Reducing CO₂ emissions is then a critical concern for both EU and EEA countries, and efforts to reduce emissions are enshrined in EU Green Deal which among other things plans to cut greenhouse gas emissions by 55 per cent by 2030 leading to zero net emissions by 2050. As a significant contributor to greenhouse gas emissions⁹, the publicly subsidized element of the audiovisual sector is likely to experience increased pressure to demonstrate activity that limits CO₂ emissions going forward. It is in this context that projects such as the EU funded Green Screen initiative is currently working on how sustainable measures for producing films, TV and audiovisual content can be adopted across Europe.

With these aims and background factors in mind, we begin this section with an overview of an established method for measuring the climate footprint of film and series production. Second, we use this method to identify key activities for the level of climate emissions on film and series projects. Third, we discuss how these activities have been affected by Covid-19 and present some data measuring the change to these indicators. Finally, we present the results of a limited number of case studies where individual producers provide greater insight on both the extent to which the relevant activities changed and the degree to which climate emissions enter everyday production decisions.

⁹ https://www.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1536587660.pdf

6.1. Measuring the climate footprint of film and series production

Greenhouse gas (GHG) emissions include CO₂ as well as methane, nitrous oxide, fluorinated gases, and water vapour. While the climate footprint of an activity measures the range of GHG emissions, in practice emissions models typically focus on the CO₂ element. A generic model for determining the emission equivalent of an activity is level of the activity multiplied by the emission factor associated with that activity.

$$\text{Emission (CO}_{2\text{eq}}) = \text{Activity data} \times \text{Emission factor}$$

For example, natural gas emits 0.244 kg CO_{2eq} / kWh, so gas fuelled catering for a production crew that uses 20,000 kWh can be estimated to produce 4880 kg equivalents of CO₂.

To enable this and more sophisticated carbon emission calculations, the Greenhouse Gas Protocol (GHG Protocol) has become the most widely used international accounting tool for government and business to understand, quantify and manage greenhouse gas emissions. GHG Protocol's Corporate Accounting and Reporting Standard provides the accounting platform for virtually every corporate GHG reporting program in the world.¹⁰ The GHG protocol system categorises sources of GHGs into three main areas of emissions levels or 'scopes' categorised according to where the emissions take place.

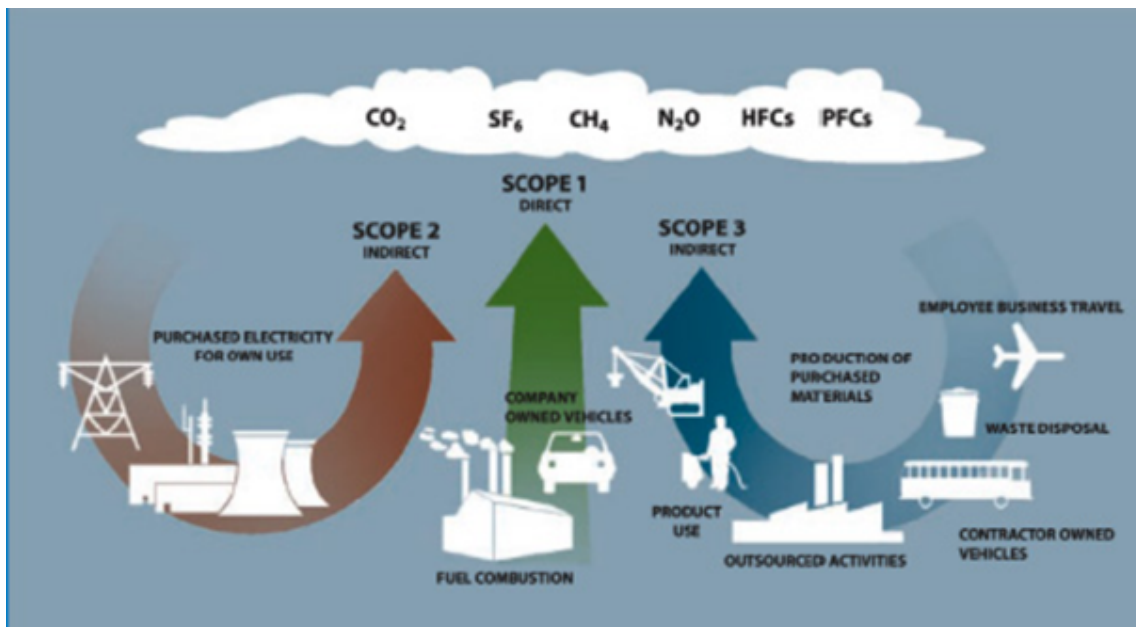


Figure 6.1: The three scopes of greenhouse emissions. Source: Greenhouse Gas Protocol

Scope 1 captures all own, direct GHG emissions, such as emissions from owned or rented cars. **Scope 2** captures indirect GHG emissions from consumption of purchased energy, such as electricity from the main power grid, district heating or cooling. **Scope 3** captures other indirect

¹⁰ <https://ghgprotocol.org/corporate-standard>

sources like production and consumption of goods and services as well as fuels, transport-related activities not owned by the reporting entity, waste disposal, and so on.

Applying the GHG Protocol emissions accounting system to film, drama series, and documentary projects, as one would in another industry, we firstly determine the activities within each of the three scopes and then calculate a CO₂ emission equivalent for each activity. A CO₂ emission equivalent can then be approximated for each of the three scopes and summed to determine the CO₂ equivalent of the project. At its most basic, lowering the carbon footprint of an audiovisual project is achieved where activities are reduced or there is a change in the technology behind how the activity occurs (i.e., change in the emission factor).

6.2. Key areas and activities for the level of climate emissions on film and series projects

In film production there are direct or indirect emissions at all stages of the production cycle (varying according to the size of each production). Reducing the climate footprint is most effectively achieved by identifying and reducing direct and indirect areas that produce the greatest emissions and then identifying key activities within those areas. Based on the GHG protocol accounting, 2020 studies by NRK¹¹ and Jordnær Creative¹² have shown that the most significant sources of carbon emissions in film, drama series and documentary production occur in the following areas:

Transport: Flights, vehicle travel, public transport, shipping of goods and equipment via air and land.

Energy: Consumption of electricity, e.g., use of generators when on temporary or outdoor locations, energy from non-sustainable sources like fossil fuels.

Other consumption: Purchasing of goods and services such as construction materials, props and other items, food, accommodation.

Waste: From production materials, set design and other consumption materials.

Based on the authors' sectoral knowledge and experience, and confirmed in the case study interviews (see below), table 6.1 below characterizes the key indicators for CO₂ emissions in film, drama series and documentary production by areas and scope.

¹¹ NRK. 2020. NRK Klima- og miljørapport 2018 og 2019. Unpublished report.

¹² Jordnær Creative. 2020. *Flush Bæredyktighedsrapport 2020*. <https://jordnaercreative.com/wp-content/uploads/2021/01/FLUSHrapport-22.12.2020-1FINAL-1.pdf>

Table 6.1: Key emission activities characterised by area and scope

Key emission areas for audiovisual production:				
	Transport	Energy	Other Consumption	Waste
Scope 1	Production cars/vehicles – owned or rented	Mobile power generators		
Scope 2		Land line/power grid energy mix, district heating and cooling		
Scope 3	Public transport, air travel and freight, other vehicle travel and freight		Materials, items, food/catering, accommodation	Waste treatment and transport

Closer inspection of the activities outlined in Table 6.1 above, combined with an understanding of the required inputs for the activities, can be used to identify specific activities that offer scope for lowering the expected carbon footprint of audiovisual projects.

Scope 1: Direct emissions

As previously outlined, Scope 1 are emissions that derive directly from sources that are owned or controlled by the production company. Based on emission factors assigned to the type of activities associated with Scope 1 emissions in other international studies (Jones, 2018), we identify significant sources of emission to include:

- Fuel used in mobile power generators
- Bottled gas for catering
- Fuel used in rented equipment and vehicles
- Fuel used in owned equipment and vehicles

Reducing the climate footprint of film and series projects could then, for instance, be achieved by the following changes to production:

- Satisfying a larger scope of production electricity and power needs from grid sources of electricity
- Reducing the number of shooting locations to reduce fuel needs for rented and owned vehicles

Scope 2: Energy – indirect emissions

As previously outlined, Scope 2 emissions are those from indirect sources: district heating or cooling, as well as electricity from the land line power grid used in the production. The most significant emissions in terms of film and drama series productions stem from both the usage level and generation source of the grid electricity supply. The climate footprint of grid electricity is therefore dependent on the local energy mix, whether it be coal and nuclear in Eastern Europe, or hydro, wind, coal and nuclear in the Nordics.

For productions in very hot or very cold locations, district heating and cooling is likely to be included in Scope 2. As power generators need to be fuelled, ignited and converted into energy on site, they are regarded as a Scope 1 direct emission. Based on emission factors assigned to the

type of activities associated with Scope 2 emissions in other international studies, we identify significant sources of emission to include:

- Grid electricity where coal fired generators are a significant contributor to the energy mix

Reducing the climate footprint of film and series projects could then, for instance, be achieved by the following changes to production:

- Buying green certificates or a green electricity from the energy provider

Scope 3: Waste management, transport and other consumption

Scope 3 accounts for indirect emissions associated with waste, transport, shipping, consumption and forms of mobility that accrue from the use of third-party provision of services. In a Nordic context, Scope 3 emissions may account for up to 80 percent of total emissions.¹³

Based on the emission factors assigned to the type of activities associated with Scope 3 emissions, we identify significant sources of emission to include:

- Transport of staff, employees, cast (all paid roles)
- Hotel and other accommodation
- Significant additional freight of equipment, goods and services required by the production
- Waste produced at the production site during and after filming, e.g., set design, waste from food and catering, paper, plastic cups and cutlery.
- Hired transportation, such as buses, boats, aircraft, taxis, limos
- Transport of goods and equipment for the production
- Removal and treatment of waste
- Emissions 'embodied' in all products and materials purchased for the production
- Catering for cast and crew

Reducing the climate footprint of film and series projects could then, for instance, be achieved by the following changes to production:

- Reducing amount and length of air travel
- Reducing the number of per person nights in hotels and other 'away' accommodation
- Minimizing the volume of hired transportation
- Reducing the number of different shoot locations to reduce equipment transport

¹³ Klimapartnere Rogaland. 2018. *Klima-regnskap 2018*. https://klimapartnere.no/wp-content/uploads/klimaregnskap2018_Rogaland_enklesider_07.01.pdf

6.3. A preliminary investigation of the impact of Covid-19 on the climate footprint of Nordic film and series projects

Based on existing studies¹⁴ that employ GHG footprinting using the ISO 14064-standard¹⁵ in temporary productions (e.g., sporting events, festivals, film sets), travel and energy are found to be areas with the most significant impact on the CO_{2eq}-footprint. As a preliminary mapping of the impact of Covid-19 on CO_{2eq} emissions in Nordic film, drama series and documentary projects, we therefore chose to focus on the proportional change in project-specific air travel. Change in travel activity was captured by three survey items. Firstly, as a proxy for the level of domestic and international travel during each project, we asked producers to state the number geographic shoot locations away from home. Secondly, we used two survey items to capture the total level of air travel under Covid-19 as a percentage of what producers estimate it would have been without Covid-19. These measures, coupled with some assumptions, have been used to estimate the level of domestic and international air travel during the pandemic, as well as what it would have been had the Covid-19 pandemic not occurred.

To illustrate how this information could be used to measure the climate footprint impact of Covid-19, we demonstrate a simplified method for estimating the CO_{2eq} emissions impact from air travel. To quantify the precise carbon footprint and how the pandemic has influenced it would have required significantly more details from all respondents, including number of journeys, destinations and the number of people travelling on each return flight. Given survey response rates are highly sensitive to survey length, a thorough analysis of the carbon emissions in relation to Covid-19 is beyond the current research scope.

Estimating the impact of Covid-19 on CO_{2eq} emissions from air travel employs the same principle that emissions are a product of the level of activity and the corresponding emissions factor:

$$\text{Emission (CO}_{2eq}\text{)} = \text{Activity data} \times \text{Emission factor}$$

In relation to air travel, the impact of Covid-19 emissions is determined by estimating pre- and post-Covid-19 CO_{2eq} emissions and calculating the change in emissions. Activity data refers to the estimated number of domestic and international return flights taken during a production, and is calculated on both a pre- and post-Covid-19 basis. The emissions factor corresponds to the CO_{2eq} emission of an average flight in either the Nordics or in Europe outside of the Nordics.

¹⁴ See <https://www.greenproducers.club/>; NRK (2020). *NRK Klima- og miljørapport 2018 og 2019*. Unpublished report; Jordnær Creative. 2020. *Flush Bæredygtighedsrapport 2020*. <https://jordnaercreative.com/wp-content/uploads/2021/01/FLUSHrapport- 22.12.2020-1FINAL-1.pdf>

¹⁵ <https://www.iso.org/standard/66453.html>

Table 6.2: Simplified method for estimating CO_{2eq} emissions for project-related air travel

<p>Locations requiring flights during Covid-19</p> <p>x</p> <p>30</p> <p>=</p>	<p>Estimation of the number of total number of locations requiring flights per production by country during the Covid-19 pandemic. We have estimated that 40 percent of away from home shooting locations required flights within the Nordics, and 30 percent of away from home shooting locations required flights in Europe outside the Nordics. The project survey captured the number of different away from home shooting locations per production, and this figure has been averaged by country in this calculation.</p>
<p>Pax rtn</p> <p>x</p> <p>Nordic factor</p> <p>=</p>	<p>Estimation of the number of cast, crew and management taking return flights to each geographic shoot location.</p> <p>Estimation of the average number of film production staff and crew (pax) that have travelled on a round trip (rtn = return) by air, per production.</p> <p>In calculating the carbon emission for each flight, we use the Ecoinvent¹⁶ (a closed, licenced database for emission factors) system. Each return flight is multiplied by this factor in order to determine the estimated emission. The factor we used for domestic and Nordic flights is 158, while the factor for European flights outside of the Nordics is 261</p>
<p>Emissions (CO_{2eq}) during Covid-19</p> <p>÷</p> <p>Domestic flights under Covid-19 proportional to Covid-19 free scenario</p> <p>=</p>	<p>CO₂ equivalent of the emissions produced air travel during a film, documentary or series production during the Covid-19 pandemic</p> <p>Approximate domestic air travel during Covid-19 as a proportion of expected domestic air travel in non-Covid-19 scenario, as captured in the survey.</p>
<p>Emissions (CO_{2eq}) pre Covid-19</p>	<p>CO₂ equivalent of the emissions produced air travel during a film, documentary or series production prior to the Covid-19 pandemic</p>

Table 6.3: Estimate of reduction in CO_{2eq} kg from domestic or Nordics air travel

Country	Domestic and Nordic locations requiring flights during Covid-19	Pax rtn	Nordic Factor	Emissions (CO _{2eq}) during Covid-19	Domestic flights under Covid-19 proportional to Covid-19 free scenario	Emissions (CO _{2eq}) pre Covid-19	Change in Nordic air travel emissions (CO _{2eq}) due to Covid-19
Denmark	1.1	30	158	5309	100 %	5309	0
Finland	1.9	30	158	9101	94 %	9682	581
Iceland	1.0	30	158	4930	80 %	6162	1232
Norway	2.0	30	158	9670	88 %	10988	1 319
Sweden	0.9	30	158	4171	86 %	4850	679
Average				6 636		7398	762

¹⁶ <https://www.ecoinvent.org>

As a preliminary study, we can estimate that the reduction in air travel during Covid-19 has on average across the Nordic countries lead to a 762 kg CO_{2eq} reduction in CO_{2eq} emissions per project. From the same data, country equivalent reductions in emissions could be estimated by multiplying the country-based emissions reduction by the total number of projects in that country in a given year.

To provide an indication of the CO_{2eq} emission reductions for longer flights to other non-Nordic European locations, we can apply the same calculation method with some minor modifications. The following illustrative calculation assumes that 30 percent of away from home shooting locations during the Covid-19 period were in European locations outside of the Nordics. We use the European air travel emissions factor relevant to the Nordic countries. In calculating pre-Covid-19 emissions, we use the approximate percentage change in international flights during Covid-19 that was also captured for each project in the survey.

Table 6.4: Estimate of reduction in CO_{2eq} kg from International (European) air travel

Country	International locations requiring flights during Covid-19	Pax rtn	Nordic Factor	Emissions (CO _{2eq} kg) during Covid-19	International flights under Covid-19 proportional to Covid-19 free scenario	Emissions (CO _{2eq}) pre Covid-19	Change in international air travel emissions (CO _{2eq}) due to Covid-19
Denmark	0.8	30	261	6577	80 %	8222	1644
Finland	1.4	30	261	11275	66 %	17084	5808
Iceland	0.8	30	261	6107	67 %	9116	3008
Norway	1.5	30	261	11980	83 %	14434	2454
Sweden	0.7	30	261	5168	68 %	7600	2432
Average				8222		11291	3069

This very simplified estimation of the reduction in CO_{2eq} emissions primarily serves to show the method by which an emissions equivalent is derived for different activities within the audiovisual sector. For the specific example of project related air travel, a more rigorous analysis of emissions would require specific details of the total number of number of flights and their destinations during the course of a project. With each flight representing a separate activity, it would then be possible to use the database ICAO.com to calculate the emission between any two destinations. Summing the CO_{2eq} emissions across all flight activities during a project, it would then be possible to make a more precise estimation of the climate footprint of air travel during a project, or alternatively, how changes to production practices could reduce a project's climate footprint.

However simplified, our estimate of the emissions impact of Covid-19 in relation to the major CO_{2eq} emitting activity of air travel points to two core findings. Firstly, and not surprisingly with national differences in quarantine requirements for international arrivals, there has been significant decline in international air travel for projects during the Covid-19 period across all countries. Because of the higher emissions associated with longer air travel, the greatest reduction in climate emissions, approximately 3000 kg CO_{2eq} per project, is associated with the fall in international (European) air travel. Secondly, all countries with the exception of Denmark recorded a fall in domestic flights, albeit less so compared to international flights. With a lower emission factor assigned to travel within the Nordics, the impact of Covid-19 on domestic air travel emissions is estimated to be only 20% of the emissions reduction associated flights to non-Nordic European

countries. Putting these results into perspective, reducing air travel, and longer international flights in particular, is an effective method of reducing the climatic footprint of audiovisual projects.

6.4. Case studies

Given practical restrictions of the number and type of questions that can be asked in an online survey, interviews with two film production companies and industry interest group were conducted to provide added insight into:

1. Major project activities that occur within the key emission areas (transport, energy, other consumption, waste)
2. Ways that these project activities have been affected by Covid-19 in 2020

The first film production company interviewed is based in Norway, with a primary focus on TV-series production. The second is a Swedish film production company that produces both long and short films. An interview was also conducted with the Norwegian initiative, Green Producers Club, which has developed a database for film producers to log their footprint and estimate carbon emissions from different productions. Table 6.5, below, summarizes findings in relation to the major project activities that occur within the key emission areas (transport, energy, other consumption, waste).



Table 6.5: Summary of major project activities categorized by key emission areas and emission scope, with impact of Covid-19 in brackets

	Transport	Energy	Other Consumption	Waste
Scope 1	Production cars – owned or rented (+)	Mobile power generators (+/-)	n/a	n/a
Scope 2	n/a	Land line/main grid energy mix, district heating and cooling (+/-)	n/a	n/a
Scope 3	Public transport (-), air travel (-)	n/a	Materials and items (+), food/catering (+)	Waste treatment and transport (+)
	air freight (+), other vehicle travel and freight (+)		accommodation (+/-)	

In relation to **transport**, the major **Scope 1** activity identified by producers is the use of production cars, both owned and rented. Due to Covid-19 measures such as social distancing requirements, prohibition from using public transport such as trains and buses, and a general desire to prevent staff illness, the production companies noted increased use of rental cars for transport of staff and equipment during 2020. While no major **Scope 2** activities were identified, the major **Scope 3** activities identified by producers are use of public transport, air travel and freight, other vehicle travel and freight. The case interviews revealed that production companies completely or partially prohibited employees from taking public transport to avoid possible infections and Covid-19 related outbreaks among production crew. Reduced use of public transport contributed to the already mentioned increase in use of private and rental cars. As previously explored in the emissions calculation example, survey results reveal a decrease in flights, both domestic and international, in all countries except Denmark which saw reported no change in domestic flights. To the extent that production companies explicitly asked employees not to use public transport, it is possible that some additional flights occurred as an alternative to longer duration train-based transport.



Case: A multi-location project grappling with Covid-19 on the move

One of our cases was a Swedish produced film that was in pre-production when the crisis first hit in March 2020. The line producer was able to rework the budget to fit with the Covid-19 restrictions, as well adopt some artistic changes to enable production to proceed. With changes made, the production managed to hold the increased production cost to approximately 10%.

One significant challenge for this project was the need to film in several different countries throughout Europe and the subsequent need to adapt to different and non-stable local regulations to enable filming and to prevent infection.

Of particular relevance to the climate footprint of the project, several travel related plans were upended as Covid-19 restrictions took hold. Due to varying states of lock-down in shooting locations, shoots were filmed in a different order than originally planned. In terms of cast and crew mobility, changes to the shooting schedule meant the planned extensive use of trains had to be reorganised and, in many instances, replaced by other means of transport. This resulted in an increase use of flight and vehicle-based travel which sets this project apart from the typical Nordic project that reported a decrease in international flights during Covid-19. The need to deviate from the original train-based travel schedule combined with social distancing requirements lead to approximately 25% greater use of cars and vans compared to that originally budgeted.

Another climate impact resulted from the need to follow new health regulations in each of the different shoot locations. Among other things, this meant greater consumption of single use plastics, wrapping, single packaging and single use health articles like facemasks and plastic gloves.

In relation to **energy**, a major **Scope 1** activity is the use of mobile power generators. According to interviewees, usage of mobile generators stayed at a normal level and was not noticeably affected by the pandemic. The production companies noted that use of generators is more convenient when filming outside of the Nordics, in rural areas, or when moving production site often. Mobile, fossil fuelled generators are only about 20-30 percent energy efficient, and previous studies have shown that substitution towards a local power grid, as well as planning use of power in an efficient way, can enable a carbon emissions reduction of up to by 80 percent¹⁷ for the powering activity. This highlights an area of significant potential for reducing the carbon footprint of film, drama series, and documentary projects. An important **Scope 2** activity is the land line/main grid energy mix, district heating and cooling. As with mobile power generators, energy use from in-studio shoots was not measurably affected there are no Covid-19 implications around using electricity. Although there may be been some substitution from studio to outdoor filming, this was not something reported in the interviews. The interviewees reported no significant changes in the

¹⁷ <https://www.zapconcepts.com/en/>

energy usage, and perhaps more tellingly, little awareness of the use of energy or the grid energy mix. For interior shoots, the use of district heating and cooling connected to the production building was reported as unchanged during the Covid-19 period. No major **Scope 3** activities were reported by our interviewees.

In relation to **other consumption**, major **Scope 3** activities identified by interviewees concern materials, items, food/catering, and accommodation. Although set design and costumes have the potential to generate a substantial footprint, there were no Covid-19 related changes noted by our cases. Several of the cases showed an impressive focus on green catering and reducing food waste, but due to Covid-19 there was a noted need to take special hygienic measures.

In all our cases, the use of face masks, gloves and other hygienic articles, as well as single-use plastic cups, single-use cutlery and plates, increased as a result of Covid-19. Otherwise, no major **Scope 1** or **Scope 2** activities were noted in this area.

In relation to **waste**, major **Scope 3** activities relate to waste treatment and waste transport. Interviewees confirmed the increase of single-use items, as described above, and an increase the amount of general waste during 2020. The interviewees also disclosed that the actual sorting of waste is not very common on film sets generally, as the correct systems have to be followed up by a dedicated member of staff which imposes an additional cost on productions. However, the Norwegian TV-series production company noted that they had a waste-oriented eco-strategy as well as an eco-manager making sure the waste was separated and recycled.

6.5. Suggestions and closing remarks

In summary, our preliminary study of the climate footprint of film, drama series and documentary projects finds key emission areas to be transport, energy, other consumption and waste, all of which generate significant direct or indirect CO_{2eq} emissions.

While we have used figures from the survey and case studies to illustrate how an emission calculation can be made, it is clear that a thorough calculation requires more detailed information than can be easily captured in broad themed industry survey. Emission calculations are complex and require a wide range of data and knowledge that can be applied to a comprehensive and well documented system. For production companies, just as for companies outside the audiovisual sector, our study draws attention to the need for management tools and competence as well as common emission factors such that the companies themselves can take responsibility for managing the climate footprint of their activities.

There are already industry specific emission calculation systems being developed; some are highly complex and resource-intensive, while others are simpler but less precise. In order to have an efficient calculation system, there would be significant advantages if the system could be factored into the scheduling and budgeting process and tools, such that emissions are automatically calculated when budgeting production costs and so that emissions become effectively become another cost consideration. Integrating the emissions calculation with budgeting also has the advantage of ensuring production and emissions decisions occur simultaneously.

Some grants and funding schemes have already made it compulsory, or a part of their criteria, for their recipients to map their CO_{2eq} emissions. One example is the English Arts Council,¹⁸ which has implemented compulsory measures to be taken by the grant recipients and included in their reports. The carbon footprint is then thoroughly mapped and can be monitored over time. Assuming climate emissions reporting becomes a requirement of Nordic film, drama series and documentary funding, knowledge and management tools that enable production companies to integrate emissions calculations with budgeting will conceivably reduce the burden of reporting.



The pandemic has shown us that it is possible to achieve productions fewer emissions. In some of our cases the emissions from travel were cut in half and, on average, nearly one quarter. It is possible to continue reducing the footprint of audiovisual projects, but it will take best practices, better planning and extensive knowledge to make the footprint even smaller.

¹⁸ <https://www.artscouncil.org.uk/developing-creativity-and-culture/resilience-and-sustainability>

7. Assessing and Looking Ahead

The previous chapters provide new insight into the economic consequences of the Covid-19 pandemic, and the restrictive and mitigating government and industry measures it has triggered for the audiovisual industry in the Nordic countries. In this final chapter we discuss key findings and provide results on producers' expectations about how Covid-19 will impact audiovisual productions going forward.

7.1. Balancing restrictions and assistance

With the objective to preserve, a reasonable principle would be that those hardest hit by a crisis should also receive the most assistance. This does not always seem to be the case when we look at how Nordic producers have experienced restrictive and mitigating Covid-19 measures. Comparing the impact of restrictive and mitigation measures we find major discrepancies for both categories of production and within countries. While our method of identifying high impact in relation to restrictive measures is not directly comparable to how high impact of mitigating measures is identified, comparison of the two nevertheless indicate where relative differences occur.

Most striking is the disparity reported for productions of drama series. While 53 percent of the projects report high impact from restrictions and recommendations, only 16 percent report mitigating measures having high impact. With longer production periods and higher budgets, it is not surprising that drama series projects are hit the hardest by restrictive measures. At the same time, they may not be as well positioned to benefit from fiscal industry specific mitigating measures since they at the outset rely less on public funding than feature films and documentaries, and these are the measures that most often is reported to have great mitigating impact. The disparity reported by drama series projects contrasts with that experienced by feature films. Feature films share many of the same production characteristics, and 41 percent of the projects report high impact from restrictions and recommendations. However, feature films rely more heavily on public funding for production financing, and may be better positioned for fiscal industry specific mitigating measures. 46 percent of the projects report high impact from mitigating measures.

When it comes to project size, measured in production budgets, there seems to be a growing imbalance between restrictive and mitigating measures with increasing size. For low budget productions (budgets under 1 million euros), the same share of projects reports high impact of restrictive and mitigating measures. Impact increases for both types of measures with increasing budget, but more so for restrictive measures than for mitigating measures. This indicates that the effectiveness of the mitigating measures introduced declines with project size.

For the projects that were in post-production or awaiting release when the first wave hit, more report high impact of mitigating than restrictive measures. This contrasts with those in earlier project stages, indicating a relative deficit of mitigating measures for these.

Among the Nordic countries, considerable disparities between the impact of restrictive and mitigating measures are reported for Finland and Sweden. Some may result from the composition of projects reporting, but it may also indicate that the effectiveness of their mitigating measures relative to restrictions and recommendations is lower than in the other Nordic countries. Iceland stands out at the other end of the scale, with a higher share of projects reporting high impact of mitigating than restrictive measures.

Table 7.1 Proportions of projects reporting high impact of restrictive and mitigating impact. (N=155)

	High impact of restrictive measures ^a	High impact of mitigating measures ^b
Denmark	25 %	20 %
Finland	42 %	15 %
Iceland	38 %	50 %
Norway	43 %	34 %
Sweden	53 %	33 %
Feature film	41 %	46 %
Documentary	28 %	19 %
Drama series	53 %	16 %
Production budget under 1m EUR	28 %	28 %
Production budget 1-4m EUR	37 %	32 %
Production budget > 4m EUR	50 %	35 %
Not yet greenlighted or greenlighted only as of 12.03.20	50 %	26 %
Pre-production or principal photography as of 12.03.20	57 %	38 %
Post-production or pre-release as of 12.03.20	8 %	19 %

^a Three or more restrictive measures recorded as having high impact

^b At least one mitigating measure recorded as having high impact

7.2. Producers' outlook

Separate to data collected on individual projects, data was also collected on producer perceptions of the longer-term industry impact of Covid-19. Below we present the attitudinal results covering the long-term impact on eight industry themes: occupational health and safety, size on production budgets, remote and online work, film/series/documentary narratives, distribution channels, labor costs, and vertical integration in the industry.

Overall, the results point to a perception that Covid-19 will have longer-term consequences in multiple areas, the most commonly expected being raised costs due to production and safety protocols, movement to remote production work, and a shift towards non-cinema distribution channels. A majority of the producers strongly agreed that there will be more production protocols and safety nets that will raise production costs, and very few disagreed. More than 8 out of 10 agreed that there will be greater flexibility in home editing and other remote production work. While there has been a reluctance in giving up theatrical releases of feature films (see section 4.5), more than 9 in 10 producers agree that there will be more feature films released via non-cinema distribution channels.

A majority of producers also expect higher labor costs due to industry exist of freelance staff, and that there will be less international co-production.

Consequences perceived to be less likely are a move to lower production budgets, greater vertical integration in film production, and change in the types of stories told. Higher budget projects have been hardest hit by Covid-19-related restrictions (see section 4.1), but producers are split between agreeing, disagreeing, and staying neutral when we ask if this will lead to a shift towards lower budget productions. With the added uncertainty of a pandemic, possibly turning into an endemic, one may also expect greater advantages of vertical integration between production and distribution. Few disagreed with this, but the majority were neutral. A slight majority agreed that there will be a change in type of story told, but many stayed neutral or disagreed.

Table 7.2 Long-term consequence of the corona crisis (N=77)

	completely disagree	partly disagree	neutral	partly agree	completely agree
There will be more production protocols and safety nets that will raise production costs	1 %	4 %	6 %	36 %	52 %
There will more lower budget productions, and a reduction in higher budget productions	9 %	22 %	29 %	31 %	9 %
There will be less international co-production	3 %	12 %	18 %	44 %	23 %
There will be greater flexibility in home editing and other remote production work	1 %	8 %	10 %	43 %	38 %
There will be a change in type of story told (e.g. stories that resonate with new modes of sociality and work)	5 %	12 %	26 %	44 %	13 %
There will be more feature films released via non-cinema distribution channels	1 %	6 %	4 %	45 %	43 %
There will be higher labour costs due to industry exist of freelance staff	0 %	8 %	23 %	40 %	29 %
There will be more vertical integration in film production	0 %	3 %	58 %	27 %	12 %

7.3. Nordic audiovisual production resilience

Finally, we like to draw attention to a finding presented in Table 1.2. Out of the 155 projects responding to our surveys only 3 were cancelled. Considering the remarkably difficult circumstances for audiovisual production under the pandemic this shows strong resilience in the Nordic production sector. High levels of both production and market uncertainty are key characteristics of the audiovisual industry also under normal circumstances (Caves, 2000), so the industry's project organizations have developed strong abilities to adapt and respond to most types of risks. Yet, it is likely that the low number of projects abandoned also reflect extraordinary efforts by both individuals and organizations that is not sustainable. Our producer interviews revealed increased use of unpaid overtime in our case studies, and survey results show production companies funding additional project costs from own resources and many projects being produced without insurance against Covid-19-related occurrences. To secure a healthy future and continued resilience the sector will have to shift from emergency mode and back to a new normal mode.



8. Appendix – Further findings

8.1. Background: The audiovisual industry in the Nordic countries

8.1.1. Cinema admissions and releases

Table 8.1 Domestic market share (cinema)

	2015	2016	2017	2018	2019	AVG
Denmark	30 %	21 %	21 %	30 %	27 %	26 %
Finland	30 %	29 %	27 %	24 %	17 %	25 %
Iceland	5 %	7 %	11 %	13 %	5 %	8 %
Norway	21 %	24 %	18 %	25 %	18 %	21 %
Sweden	20 %	15 %	17 %	19 %	13 %	17 %

Table 8.2 Total admissions (cinema)

	2015	2016	2017	2018	2019	AVG
Denmark	13 800 000	13 000 000	11 900 000	12 500 000	12 800 000	12 800 000
Finland	8 700 000	8 600 000	8 800 000	8 100 000	8 400 000	8 520 000
Iceland	1 382 494	1 420 503	1 373 178	1 445 445	1 267 298	1 377 784
Norway	11 738 329	13 097 421	11 802 789	12 193 162	11 294 219	12 025 184
Sweden	17 045 356	17 757 429	16 882 281	16 363 368	15 899 247	16 789 536

**Numbers for Finland and Denmark only available in millions.*

Table 8.3 Domestic admissions (cinema)

	2015	2016	2017	2018	2019	AVG
Denmark	4 100 000	2 700 000	2 500 000	3 700 000	3 400 000	3 280 000
Finland	2 607 786	2 477 629	2 426 580	1 909 603	1 421 836	2 168 687
Iceland	61 847	91 221	122 591	163 885	53 871	98 683
Norway	2 465 490	3 143 381	2 124 502	3 048 463	2 077 459	2 571 859
Sweden	3 402 061	2 683 110	2 908 261	3 059 882	2 102 109	2 831 085

** Numbers for Finland and Denmark only available in millions.*

Table 8.4 Annual number of domestic releases (cinema)*

	2015	2016	2017	2018	2019	AVG
Denmark	35	35	34	38	29	34,2
Finland	40	39	42	40	34	39,0
Iceland	16	14	17	15	16	15,6
Norway	26	27	35	27	21	27,2
Sweden	46	45	50	51	51	48,6

*Including documentaries

Table 8.5 Average number of admissions per capita (2015-2019)

	Admissions	Domestic Admissions
Denmark	2,20	0,56
Finland	1,54	0,39
Iceland	3,83	0,27
Norway	2,24	0,48
Sweden	1,63	0,27

8.1.2. Denmark¹⁹

Denmark had the largest market share in the Nordics, capturing 27% of cinema audiences. Although this represented a slight drop from the previous years' share of 30%, Denmark has not gone below 20% of Nordic audience share in the last 5 years. Admissions have averaged 12.8 million over the past 5 years, with a peak in 2015 of 13.8 million. Danish admissions are the strongest in the Nordics, and the only country averaging above 3 million. This tendency also holds true when adjusted for population. A total of 32 feature films were funded in 2015, decreasing to 29 including minority co-productions in 2019. 11 of these were 100% Danish financed last year. The average budget for a feature film was EUR4.1 million. With 35% being the average subsidy allocated towards these features.

8.1.3. Finland²⁰

Finland had 34 new domestic releases in 2019, with an average of 40 over the last four years. An annual average of 19 films were supported by the film institute over the past 4 years. These domestic films obtained an average of 25.4% share of the domestic market over the last 5 years, and this places Finnish films second highest in the Nordics in terms of domestic market share. In 2019, domestic features were on average 42.4% financed by Finnish Film Foundation, 16.1% from other foreign funding, 14% by TV channels, and 9.9% by the distribution companies. Funding from FFI has on average accounted for 41% of budget over the last 5 years. Drama series are estimated

¹⁹ <https://www.dfi.dk/en/english/numbers-and-statistics/facts-figures> All data from Facts & Figures reports 2020, 2019, 2018, 2017, 2016

²⁰ <https://www.ses.fi/en/yearly-statistics/> All data from Facts & Figures reports 2019, 2018, 2017, 2016, 2015, together with additional direct delivery provided by Finnish Film Foundation

to have an average of 10% of their budget covered by domestic public funding, and 7 drama series were produced with the involvement of FFI in 2019. Regional funds are estimated to only provide a few percent of the total public funding make up. In 2020 they supported 21 feature films, and 4 additional minority co-productions.

8.1.4. Iceland²¹

The smallest of the Nordic countries, Iceland released an average of 8 feature films per year over the last 5 years, with a 2019 peak of 10 feature films. Admissions to Icelandic films have fluctuated greatly between 50 000 and 160 000 admissions, obtaining an average of 98 000. This gives an average Nordic market share of 8.14%. Adjusted for population, Icelanders watch the most films in the Nordics. In 2019, Iceland produced 3 drama series with the involvement of the Icelandic Film Centre and premiered 6 documentaries. On average feature films have 50% of their costs covered by public funding through grants and reimbursements from the Icelandic Film Fund. For documentaries, the percentage is a bit higher with approximately 60% of funding covered through public sources. Drama series are estimated to have around 35% of funding covered by public sources. Overall, public funding is estimated to cover around ½ to ¾ of domestic production budgets.

8.1.5. Norway²²

Capturing 18% of the domestic audience market in 2019, Norwegian films had the 3rd largest domestic market share among the Nordic countries in 2019. This represents a decline from 2018, when Norway captured 25% of the domestic market. Norwegian films had approximately 2 million admissions in 2019, a fall of almost a million from the year before. However, admissions have been relatively stable over the last 5 years, with an average of 2.57 million admissions. Adjusting for population, Norwegian films rank second on domestic admissions over the past five years. 2019 saw 21 feature films released, with 14 of them receiving production funding from the Norwegian Film Institute. This represents a drop from the four previous year's average of 29. Of the films that also received box office support, an average of 56% funding was received from NFI. The average public budget part of these films was NOK 208m for those with ex-post support, and 18,5m for those without. The production budget of Norwegian drama series is typically much larger than what is funded through the NFI system, and those that passed through NFI over the last 5 years had an average of 13% of their funding covered from an average budget of 48 million NOK.

²¹ <http://www.icelandicfilmcentre.is/facts-and-figures/key-figures/> together with additional direct delivery provided by Icelandic Film Centre

²² <https://www.nfi.no/statistikk/statistikk-analyse-og-rapporter> Data from Facts & Figures reports 2019, 2018, 2017, 2016, 2015, together with additional direct delivery from Norwegian Film Institute

8.1.6. Sweden²³

Over the past 5 years, Sweden has produced an average of 49 new feature film and documentary releases per year. These have captured an average of 17% of the domestic market. Film attendance which peaked in 2016 with almost 17.7 million attendees, declined to 15.9 million in 2019. Swedish films had their best year in 2016 with 3.4 million admissions, and have averaged annual audiences of 2.8 million over the past 5 years. The production budget of feature films has sharply increased since 2015, moving from an average budget of SEK18.7 million to 27,4 million towards 2020. The Swedish film institute has remained the largest contributor to feature film budgets, covering 26.6% of the production budgets in 2019. For documentaries SFI is the largest contributor, covering 40.6% of funding. For the average feature film, regional funds cover an estimate 10.2% of funding, while the estimate is at around 5,7% for documentaries.

8.1.7. Key figures

Table 8.6 Key figures for the Nordic countries

	Denmark	Finland	Iceland	Norway	Sweden
Domestic Market shares	26 %	25 %	8 %	21 %	17 %
Domestic admissions	3 280 000	2 168 687	98 683	2 571 859	2 831 085
Domestic releases	34,2	39	15,6	27,2	48,6
Domestic Pop. Adjusted	0,56	0,39	0,27	0,48	0,27
Avg. Domestic funding	39 %	41 %	50 to 75%	56 %	31 %

*Average numbers (2015-2019)

** Avg. Domestic funding Iceland is rough estimation, Norway includes EHT

8.2. Restrictive and mitigating measures - country by country

8.2.1. Measures in Denmark

In Denmark the film industry has had to adjust to the following **restrictive measures**:

Restrictions on public events

The Danish prime minister Mette Frederiksen said on March 11 that what she was about to announce would greatly impact all Danes.²⁴ Since March, the maximum number of people allowed at public gatherings (including at cinemas) has fluctuated between 10 and 100+, with local limits in force in highly populated areas such as Odense and Copenhagen.

²³ <https://www.filminstitutet.se/en/learn-more-about-film/statistics/facts-and-figures/> Data from Facts & Figures 2019, 2018, 2017, 2016, 2015, together with additional direct delivery from Swedish Film Institute

²⁴ <https://www.regeringen.dk/nyheder/2020/statsminister-mette-frederiksens-indledning-paa-pressemoeede-i-statsministeriet-om-corona-virus-den-11-marts-2020/> The speech from Mette Fredriksen.

Travel restrictions and bans

From March 14, Denmark temporarily closed its borders and imposed travel restrictions on Danes and those who had to travel for work purposes. These restrictions included quarantine requirements and country-specific travel bans/restrictions. As the country started to gradually open up to specific countries in phase 2, with an eye on summer tourism, some of the travel bans were eased.²⁵ The *Statens Serum Institut* (State Institute for Infectious Diseases) issued continual updates on which countries and region were considered “open”, “quarantine”, and “high risk” in relation to whether visitors would be required to quarantine or isolate themselves.

Quarantine, confinement, distance, and hygiene

In addition to following general occupational health and safety measures and guidelines (including day-specific measures and plans), producers have to appoint a Covid-19 representative to make sure government guidelines and restrictions are followed at all times. Specific filming plans must be drawn up to reduce the risk of infection and comply with guidelines. Everyone on the production team must be instructed in correct hand hygiene as well as other hygiene protocols. The necessary PPE equipment has to be on hand and the smallest possible cast and crew gathered at any time.²⁶

Immediate self-isolation is required at the onset of Covid-19 symptoms and is to continue until the patient is symptom-free for 48 hours. If someone has no symptoms, they can stop self-isolation after seven days from when a test was taken.²⁷ If someone is a close contact of an infected person, they must self-isolate. This also applies to those who do not have symptoms or do not feel ill. Close contacts have to be tested twice.²⁸

Social distancing requirements affect, among other things, accommodation, meals, sanitation, dressing, hair and makeup, and intimate scenes. Meals cannot be served as buffets and proper distance must be maintained when dining. Separated groupings should apply where needed. The general distance requirement is one meter, but two meters is recommended in situations where caution is required, such as in rooms with poor ventilation, when doing demanding activities, or if someone has doubts about own symptoms.²⁹ Those whose work requires close physical contact, such as hairdressers and makeup artists, must follow more specific guidelines.³⁰

Other restrictive measures

Special rules that apply to filming in public spaces are that productions must contact local police for permission to film in public spaces. Rules for outdoor meetings are continuously adjusted.³¹

²⁵ <https://www.regeringen.dk/nyheder/2020/aftale-om-yderligere-genaabning-i-fase-2/> Gradual re-opening.

²⁶ <https://pro-f.dk/nyheder/retningslinjer-genoptagelse-af-film-og-tvproduktioner>

²⁷ https://www.sst.dk/en/English/publications/2020/Important_guidance_tested_positive

²⁸ https://www.sst.dk/en/English/publications/2020/Important_guidance_close_contacts

²⁹ <https://www.sst.dk/-/media/Udgivelser/2020/Corona/Forebyggelse-af-smittespredning/Forebyggelse-af-smittespredning-publikation.ashx?la=da&hash=FD3E64042EEDB7A6C3305BD37A003B5B58B1BC79>

³⁰ <https://at.dk/nyheder/2020/04/coronasmitte-liberaleserviceerhverv/> Rules for hairdresser, cosmetologists etc.

³¹ <https://pro-f.dk/nyheder/retningslinjer-genoptagelse-af-film-og-tvproduktioner>

To mitigate the negative effects of these restrictions, a number of **mitigating measures** were introduced. Some were broad and industry non-specific, while others were made specifically for the cultural industries, or for the audiovisual industry only. The Danish Film Institute (DFI) mainly sought to mitigate increased risk and uncertainty through existing measures but raised the need for compensation schemes for the different companies that make up the industry. Government help directly to the industry was confirmed relatively late at the start of November.

General fiscal measures introduced by the government were:

Tax and VAT

The Danish Tax authorities provided liquidity measures such as postponements of payments, interest-free VAT loans, and refunds.³² Other measures included the reimbursement of R&D expenses, joint payments, payroll tax deadlines, and changes in tax credit schemes.

Income support

Season-dependent freelancers, the self-employed and artists can apply for compensation due to revenue loss and up to 60% of lost production costs for deliveries that have been changed, postponed or cancelled due to Covid.³³

Freelancers (A-Income, B-Income, mixed A/B -Income, own CVR numbers) can apply for temporary compensation for up to 90% of expected loss of income.³⁴

Other general fiscal measures

Organizers of large events postponed or cancelled due to Covid-19 may receive up to DKK 6m in compensation.³⁵

Fiscal measures aimed specifically at the cultural and audiovisual industries were:

Additional production subsidies (project-based)³⁶

The DFI allowed those in receipt of existing measures/grants to reapply for these measures to cover extra costs incurred by Covid-19, thus solving the problems caused by the pandemic through existing measures. A government package of EUR 2.5m was introduced to cover additional costs brought on by the pandemic and to secure funding for future films.

Reapplication for regional funds, due to increased costs caused by Covid-19, was also permitted. A sum of EUR 0.4m was granted by Parliament and the Ministry of Culture. A further EUR 0.7m was

³² <https://skat.dk/skat.aspx?oid=16900>

³³ <https://slks.dk/covid-19>

³⁴ https://virksomhedsguiden.dk/erhvervsfremme/content/temaer/coronavirus_og_din_virksomhed/ydelser/hjaelp-til-freelancere-der-er-beroert-af-restriktioner/b8b11f11-5d8d-4904-aa96-0ea7c5af6d4b/

³⁵ https://virksomhedsguiden.dk/erhvervsfremme/content/temaer/coronavirus_og_din_virksomhed/ydelser/faa-hjaelp-hvis-du-er-arrangoer-af-stoerre-arrangementer/7ffd1f8d-fcbd-4b95-a6f1-a3e2b4b0fa92/

³⁶ <https://www.dfi.dk/en/english/news/support-danish-film-offset-coronavirus-impact>

provided to compensate film and TV producers' losses on productions that are not supported elsewhere by DFI.

Additional distribution subsidies (project-based)

The share carried by DFI of costs already incurred prior to the cancellation of film events or launches were not subject to repayment.³⁷

Additional subsidies for companies and individuals

Ad hoc grants were provided for script-development purposes.³⁸

KODA (the society for songwriters, composers and music publishers in Denmark) allowed members to seek compensation for loss of copyright income due to Covid-19.³⁹

Other mitigating measures for the cultural and audiovisual industries were:

Modified and relaxed restrictions

Restrictions were relaxed to permit cinema re-openings on May 21, 2020 (max 50 people).

Industry operational guidelines and advice

Guidelines for the safe execution of audiovisual productions were provided by the Producers Association, Film and TV workers Association, Danish Journalists Association, Danish Actors Association, Association of Danish Film Directors, and supported by the West Danish Film Fund, and FilmFyn.

8.2.2. Measures in Finland

In Finland the film industry has had to adjust to the following **restrictive measures**:

Restrictions on public events

The Finnish have fluctuated between 10, 50, and 500 in gathering size, both private and public. At the initial outbreak, all national and municipal theatres and cultural venues were closed, and private and third-sector operators were advised to do the same.⁴⁰ For special arrangements the limit has been up to 500 for public events and meetings.⁴¹ This has naturally affected cinema audiences as well as the size of production teams.

³⁷ <https://www.dfi.dk/branche-og-stoette/aktuelt/filmbranchen-er-udfordret>

³⁸ <https://www.cineuropa.org/fr/newsdetail/387199>

³⁹ <https://www.koda.dk/om-koda/nyheder/nu-kan-koda-medlemmer-soge-kompensation-for-tabte-rettighedsindtaegter>

⁴⁰ <https://valtioneuvosto.fi/en/-/10616/hallitus-totesi-suomen-olevan-poiikkeusoloissa-koronavirustilanteen-vuoksi>

⁴¹ <https://valtioneuvosto.fi/en/-/10616/muutoksia-koronavirusepidemian-vuoksi-asetettuihin-rajoituksiin-1-kesakuuta>

Travel restrictions and bans

The Finnish closed their borders initially to everyone except returning residents,⁴² with exceptions for certain working groups. Internal travel restrictions were also applied to the region of Uusimaa.⁴³ Information on which countries meet which requirements for quarantine and isolation is continually updated by Finnish Border control.⁴⁴

Quarantine, confinement, distance, and hygiene^{45,46}

Besides the general occupational health and safety measures and guidelines, including the guidelines for production set out by Audiovisual Producers Finland (APFI), productions have had to conform to government restrictions and guidelines. A production has to clearly designate someone responsible for safety at work, who can provide information on current guidelines and also be responsible for decision making. All members of a production are required to know the occupational health and safety measures. Specific measures for film shoots have to be communicated in advance. Those at risk must be identified and production members need to be informed about the rules for sick leave and possible illness at work. Necessary PPE equipment must be on hand at all times.

Private transport has to be by the individual's own means, whenever possible. Foreign crew members have to use private transport while in quarantine.

Work has to be carried out in stages, and in separate groups, to minimize contact and the amount of people on set.

Among other things, accommodation, meals, sanitation, dressing, hair and makeup, and intimate scene are subject to social distancing requirements. Each department is responsible for organizing their work so that it is hygienic and safe. Actors have the right to refuse to take part in intimate scenes, with updated guidelines written by actor Saara Kotkaniemi distributed in October.⁴⁷ Changing rooms, break rooms, and dining areas have to be organized so that people can maintain a two-meter distance. If the two-meter rule between production members cannot be upheld, a mask is recommended.

Other restrictive measures

A risk assessment of personnel and their workflow has to be undertaken. Special arrangements must be made for those at risk, and they have to be informed of these at least one day in advance. Foreign production members are required to have travel or health insurance.

⁴² <https://valtioneuvosto.fi/en/-/1410869/suomen-rajaliikennetta-aletaan-rajoittaa-elakkeella-olevia-rajavartijoita-ja-poliiseja-voidaan-kutsua-toihin>

⁴³ <https://valtioneuvosto.fi/en/-/10616/liikkumisrajoitukset-uudellemaalle-voimaan-28-maaliskuuta-2020-klo-00-00>

⁴⁴ <https://raja.fi/en/guidelines-for-border-traffic-during-pandemic>

⁴⁵ <https://apfi.fi/wp-content/uploads/Recommended-guidelines-for-production-during-COVID-19-FINLAND-12June2020.pdf>

⁴⁶ <https://apfi.fi/en/yleinen-en/covid-19-guidelines/>

⁴⁷ ses.fi/en/story/new-guidelines-for-doing-intimate-scenes-in-camera-work/ Guidelines for intimate scenes

Production companies are responsible for arranging, paying for and complying with Covid-19 testing requirements for production crews. They are also responsible for giving foreign crew members all the necessary instructions and supervising voluntary quarantine.

To mitigate the negative effects of these restrictions, a number of **mitigating measures** were introduced. Some were broad and industry non-specific, while others were made specifically for the cultural industries or for the audiovisual industry only. The Finnish Film Foundation stated early on that they would be flexible, with a EUR 1m package coming from the Ministry of Education and Culture in late April,⁴⁸ and another package in July of EUR 5m.⁴⁹

The **general fiscal measures** were:

Tax and VAT

The Finnish tax authorities granted extended deadlines and payment arrangements, relaxed debt enforcement and VAT refunds, and reduced interest for payments.⁵⁰

Loans and loan guarantees

Finnvera (a Finnish state-owned financing company) took measures to assist with R&D and capital expenditure as well as provide for immediate cash needs.⁵¹ The application criteria for their SME Guarantee, Start Guarantee and Finnvera Guarantee were adjusted accordingly. In certain situations, direct loans from Finnvera could be granted for instalment-free periods.⁵²

Public subsidies

For a short time, Business Finland supported SME and mid-cap companies in the planning of new business operations, reorganization, and replacement of delivery chains, with a regular scheme being made available nationally. However, these programs are no more, and Business Finland has gone back to regular schemes.

Companies with less than five employees could apply to Finland's Centres for Economic Development, Transport and the Environment (ELY Centres) for an analysis of, and correctional measures for, setbacks due to the virus. Funding aimed to renew or redirect current business.⁵³

TESI, a government-owned investment company that promotes Finnish business, launched a stabilization financing programme with the purpose of investing in SME companies together with private capital.⁵⁴

⁴⁸ <https://www.ses.fi/en/story/the-finnish-film-foundation-to-award-1-million-euros-of-corona-relief-funds-to-cinemas-and-film-festivals/>

⁴⁹ <https://www.ses.fi/en/story/the-finnish-film-foundation-receives-5-million-euros-additional-funds-for-production-support/>

⁵⁰ <https://home.kpmg/fi/fi/home/Pinnalla/2020/04/finnish-tax-measures-in-response-to-covid-19-article-2.html>

⁵¹ <https://home.kpmg/xx/en/home/insights/2020/04/finland-government-and-institution-measures-in-response-to-covid.html>

⁵² <https://www.finnvera.fi/eng/growth/current-news-for-smes#toc--finnvera-s-solution-for-working-capital-needs->

⁵³ <https://www.ely-keskus.fi/web/ely-en/questions-and-answers-on-corona-funding-from-ely-centres>

⁵⁴ <https://www.tesi.fi/en/news-item/tesi-s-stability-programme-and-how-to-apply/>

Income support

Sole entrepreneurs could apply for a lump sum of EUR 2000 from ELY Centres if their financial situation had deteriorated after 16 March.⁵⁵

Fiscal measures aimed specifically at the cultural and audiovisual industries were:

Additional production subsidies (project-based)

In June the Ministry of Education granted EUR 5m, through the Finnish Film Foundation, to support new film and series productions. Funds are awarded through the regular application process.⁵⁶

In addition, the Finnish Film Foundation granted EUR 1m in production support to productions that have incurred extra expenses due to the pandemic. All productions that have previously received support are eligible. The support is for realized and additional costs caused by the pandemic between March 15 and September 30. Examples of additional costs are those incurred due to postponement of filming or increased costs due to hygiene demands.⁵⁷

Additional subsidies for companies and individuals

TAIKE, the ministry of Education and Culture, and several foundations, set up a swift grant mainly for freelancers whose work was severely hampered by the Covid-19 pandemic.⁵⁸

The Finnish Film Foundation granted EUR 1m to theatres and film festivals with the aim of securing the future operation of cinemas nationwide as well as the organizations behind film festivals.⁵⁹

Deferred and advance payments

Early in March, the Finnish Film Foundation stated they would endeavour to be flexible with support use and reporting.⁶⁰

Other mitigating measures for cultural and audiovisual industries were:

Modified and relaxed restrictions

Restriction were relaxed to permit cinema re-openings on June 1, 2020 (max 50 people).

Industry operational guidelines and advice

⁵⁵ <https://tem.fi/en/questions-and-answers-on-support-available-to-sole-entrepreneurs>

⁵⁶ <https://www.ses.fi/en/story/the-finnish-film-foundation-receives-5-million-euros-additional-funds-for-production-support/>

⁵⁷ <https://www.ses.fi/en/story/additional-support-to-film-productions-suffering-from-the-covid-19-pandemic/>

⁵⁸ <https://www.taike.fi/en/newsitem/-/news/1307164>

⁵⁹ <https://www.ses.fi/en/story/the-finnish-film-foundation-to-award-1-million-euros-of-corona-relief-funds-to-cinemas-and-film-festivals/>

⁶⁰ <https://www.ses.fi/en/story/response-to-the-covid-19-pandemic-at-the-finnish-film-foundation/>

Guidelines for the safe execution of audiovisual productions from the APFI, Union of Journalists of Finland, Finnish Actors Union, and the Trade Union for Theatre and Media Finland have been provided and updated throughout the year.

8.2.3. Measures in Iceland

In Iceland the film industry had to adjust to the following **restrictive measures**:

Restrictions on public events

Iceland has fluctuated between gathering size restrictions of 20 to 200, with a general rule of two meters' distance between individuals. At the introduction of the pandemic there was a ban on gatherings of more than 100 people from 16 March,⁶¹ which quickly changed to 20.⁶²

Travel restrictions and bans

Iceland early on restricted entry for foreign nationals except those from the EU/EEA and EFTA, and UK nationals,⁶³ with a requirement to self-isolate for 14 days upon arrival. In June, the rules changed to give the option of a test at the border as an alternative to a two-week quarantine requirement.⁶⁴ A special set of rules were made for those who work in the audiovisual industry.⁶⁵

Quarantine, confinement, distance, and hygiene⁶⁶

Travel within Iceland must be either by private vehicle, taxi, rental car, or transportation provided by the production company. Symptomatic individuals may not use taxis. Separate vehicles must be provided for those in quarantine and those who are not. Vehicles must be regularly cleaned and ventilated.

Besides following general occupational health and safety measures and guidelines (including day-specific measures), the production must designate someone who is responsible for safety at work. The production company is responsible for providing information and guidelines and these must be communicated to all in production. Specific information regarding shoots must be communicated in advance. The entire production team must be informed about sick leave rules. On arrival, a crew has to go straight to their accommodation or work site, and those in quarantine can only travel between work locations. Up to seven days' quarantine is required if the double testing procedure is used, otherwise 14 days' quarantine is required. Each morning cast and crew must have their temperatures checked.

⁶¹ <https://www.government.is/news/article/?newsid=8e737b9b-6535-11ea-9456-005056bc530c> Ban on 100 people

⁶² <https://www.government.is/news/article/?newsid=2f49a0ac-6c74-11ea-9462-005056bc4d74> Ban on 20 people

⁶³ <https://www.government.is/news/article/2020/03/20/Iceland-implements-Schengen-and-EU-travel-restrictions>

⁶⁴ <https://www.government.is/news/article/2020/06/02/Testing-for-international-arrivals-to-start-on-15-June/>

⁶⁵ <https://www.covid.is/categories/how-does-quarantine-work>

⁶⁶ <https://www.pafia.org/resources/Documents/ICELAND%20modified-quarantine-for-film-production-projects-final.pdf>

Facilities such as break rooms, changing rooms, and hygiene facilities must be clearly separated for quarantined and non-quarantine workers.

Social distancing requirements affect, among other things, accommodation, meals, sanitation, dressing, hair and makeup, and intimate scenes. The general rule is two meters apart and, if not possible, face masks should be used. Special recommendations apply for certain working groups of production.

Limitations on the size of gatherings mean that the size of production teams must be limited as much as possible and a two-meter distance should be upheld at all times.

To mitigate the negative effects of these restrictions, a number of **mitigating measures** were introduced. Some were broad and industry non-specific, while others were made specifically for the cultural industries or for the audiovisual industry only. The Icelandic Film Centre stated early on that they would keep applications to the fund open, and in late March advertised that a ISK 120m package from the Ministry of Education, Science and Culture was available to meet the financial shocks of the pandemic.

The **general fiscal measures** were:

Tax and VAT

The Icelandic Tax Authority allowed several categories of business, such as construction, a 100% reimbursement of VAT.⁶⁷ VAT deadlines were also extended and fines or late payment interest limited. Deferred taxes and social security contributions were also among the measures.^{68 69}

Income support

Quarantined employees were guaranteed a salary. Where employers could not provide this, or where self-employed workers did not have the right, the government provided the salary for the quarantine period.⁷⁰

Individuals who were downgraded to part-time employment had the right to unemployment benefits from the government. This was predicated on a 20% downgrade in employment percentage, with a maintenance of minimum 50% employment.⁷⁰

Other general fiscal measures

Banks, fund and the government allowed the early withdrawal of private pension savings. People could withdraw up to ISK 12m of third-pillar pension savings to support themselves and this was taxed as regular income.⁷¹

⁶⁷ <https://island.is/en/covid-operations/Iceland-works>

⁶⁸ <https://www.avalara.com/vatlive/en/vat-news/iceland-covid-19-vat-measures0.html>

⁶⁹ <https://home.kpmg/xx/en/home/insights/2020/04/iceland-tax-developments-in-response-to-covid-19.html>

⁷⁰ <https://home.kpmg/xx/en/home/insights/2020/04/iceland-government-and-institution-measures-in-response-to-covid.html>

⁷¹ <https://www.government.is/topics/economic-affairs-and-public-finances/measures-in-response-to-covid19/#Tab1>

Fiscal measures aimed specifically at the cultural and audiovisual industries were:

Additional production subsidies (project-based)

The Icelandic Film Centre and Reimbursement Committee provided funding for costs associated with Covid-19 infection control. Applications could be made for additional subsidies to cover costs related to, or that could be traced back to, disruption or postponement, or to cover other related increased costs. Only projects that had received funding previously could apply.⁷²

Projects could utilize the 25% reimbursement during production.

Additional distribution subsidies (project-based)

The Icelandic Film Centre provided promotional and marketing grants for screenings of Icelandic films or film events in domestic cinemas. The films had to have already been produced and have a plan for presentation. Those that had their screenings postponed due to Covid-19 would be considered.

Production subsidies were made available for cheaper domestic feature films or experimental projects that could start and Finnish production before 1 April, 2021.⁷³

Additional subsidies for companies and individuals

The Icelandic Film Centre initiated a development grant to counterbalance the uncertainty surrounding financing and production. The emphasis was on projects where authors, directors, and producers were involved in completing projects headed for production. A reference amount of ISK 10m was indicated.⁷⁴

Deferred and advanced payments

STEF (the Composers Rights Society of Iceland) allowed for an advance of payments.⁷⁵

Other mitigating measures for cultural and audiovisual industries were:

Modified and relaxed restrictions

Relaxing restrictions to permit cinema re-openings on May 4, 2020 (max 50 people).

The Directorate of Health and Film in Iceland modified quarantine procedures for filming in Iceland during Covid-19.

⁷² <http://www.kvikmyndamidstod.is/frettir/timabundin-breyting-a-reglum-um-kvikmyndasjod-vegna-covid-19>
Production subsidies due to Covid-19

⁷³ <https://www.dfi.dk/branche-og-stoette/aktuelt/filmbranchen-er-udfordre>

⁷⁴ <http://www.kvikmyndamidstod.is/frettir/kvikmyndamidstod-islands-auglysir-eftir-styrkumsoknum>
Development grant

⁷⁵ <http://stef.is/skopun-tonlistar/covid19/>

8.2.4. Measures in Norway

In Norway the film industry had to adjust to the following **restrictive measures**:

Restrictions on public events

March 12 marks the day the Covid-19 virus hit Norway. Prime minister Erna Solberg stated that it was crucial that all Norwegians contributed in the “dugnad” (voluntary effort) to restrict the spread of the virus.⁷⁶ Public events were initially subject to a total lockdown, with cultural- and sports events (including cinemas) being affected.⁷⁷ Gradually, the government sought to re-open, allowing for public gatherings from 50 to 200 depending on seating and location requirements.⁷⁸

Travel restrictions and bans

Travel restrictions included quarantine requirements, country specific travel bans and internal travel restrictions. The Norwegians introduced mandatory quarantine early on for travelers from “red” countries. There were also requirements for negative tests and stays at quarantine hotels, as well as a special set of rules applied to certain countries. Continual updates on the changing status of countries appeared on government websites.⁷⁹ Travel restrictions and measures have also been introduced within own borders.

Quarantine, confinement, distance, and hygiene⁸⁰

Productions are subject to general occupational health and safety measures and guidelines (including hygienic guidelines and infection control). The general distance requirement of one meter, and two meters in special situations,⁸¹ also applies. Every production has to hire an infection control officer and quarantine requirements include not travelling to work or school. Isolation is mandatory at any signs of Covid-19, with requirements to stay at home at all times, avoiding household members, who should also quarantine.⁸² All those involved in a production have to ensure they are informed about production routines and guidelines, as well as current guidelines from the health authorities.

The production must make available infection control aids, such as single-use gloves, surgical masks and other protective wear, for the production when required.

⁷⁶ <https://www.regjeringen.no/no/aktuelt/pressekonferanse-om-nye-tiltak-for-a-bekjempe-koronaviruset/id2693286/> Measures press conference on the 12th of March.

⁷⁷ <https://www.helsedirektoratet.no/nyheter/helsedirektoratet-har-vedtatt-omfattende-tiltak-for-a-hindre-spredning-av-covid-19> Restrictions on events

⁷⁸ <https://www.helsedirektoratet.no/nyheter/endringer-i-korona-tiltak-fra-15-juni> Change in requirements since June.

⁷⁹ <https://www.fhi.no/nettpub/coronavirus/fakta/reiserad-knyttet-til-nytt-koronavirus-coronavirus/>

⁸⁰ <https://www.virke.no/bransjer/produsentforeningen/veileder/#retningslinjer> Industry specific guidelines

⁸¹ <https://www.fhi.no/nettpub/coronavirus/fakta/avstand-kontakter/?term=&h=1> Distance requirements

⁸² <https://www.fhi.no/nettpub/coronavirus/fakta/karantene-og-isolering/?term=&h=1> Quarantine/Isolation

Those with symptoms have to self-isolate for 10 days after the onset of symptoms and should be fever free for 24 hours before coming out of isolation. Those who suspect they may have Covid-19 should wait for a negative test results before coming out of isolation.⁸³

Actors and crew should work in separated groups and high-risk individuals must be evaluated by infection-control officer and producers, who must decide whether their work can be performed in a justifiable manner.

Social distancing requirements affect, among other things, accommodation, meals, sanitation, dressing, hair and makeup and intimate scenes. If possible, meals should be delivered in portion packages or brought by individuals. Make-up and costume departments must follow official guidelines on one-to-one treatments from the government and consideration in this regard should also be given to production design, the use of props, actors, directors, and intimate scenes.

Limitations on the size of gatherings affects production teams, who must follow the general guidelines for workplaces. The number of staff should be minimized and essential workers prioritized. Current recommendations from the government should be upheld at all times.

Other restrictive measures

Risk assessment of personnel and their workflow should be undertaken with special consideration for those at risk and groupings of work members.

To mitigate the negative effects of these restrictions, a number of **mitigating measures** were introduced. Some were broad and industry non-specific, while others were made specifically for the cultural industries or for the audiovisual industry only. The Norwegian Film Institute has made several packages available and redistributed funds. Late in March it changed schemes to adapt to the new situation, with a focus on being helpful, flexible and approachable.⁸⁴ In April the institute redistributed NOK 85m into their Production 2 and Distribution 2 packages.⁸⁵ Later on in the year it adapted schemes further and also introduced a production guarantee.

The **general fiscal measures** were:

Tax and VAT⁸⁶

The Norwegian tax authority (*Skatteetaten*) introduced delays on VAT payments, company tax payments and tax submissions for the self-employed. There was also a reduction on VAT for cinemas (12% to 6%). Tax benefits on previous year financial losses were also granted.

Loans and loan guarantees

The government made NOK 300m available to the "interest support fund" (*Rentestøttefond*), which allowed Innovation Norway to grant interest-free risk and innovation loans to clients.

⁸³ <https://www.fhi.no/nettpub/coronavirus/testing-og-oppfolging-av-smittede/opphevelse-av-isolasjon/>

⁸⁴ <https://www.nfi.no/covid19/midlertidig-justering-av-saksbehandling-og-tilskuddsordninger>

⁸⁵ <https://www.nfi.no/covid19/dette-er-produksjonstilskudd-2>

⁸⁶ <https://www.skatteetaten.no/tiltaksapakker/#merverdiavgift> Tax related measures from Tax authority

Innovation Norway also increased its loan framework from NOK 1.6 to 3bn, aimed at new solutions, growth and strengthening working capital.⁸⁷

Banks and the government's Guarantee Institute for Export Credit (GIEK) issued loan guarantees for small- and medium-sized businesses. The government has guaranteed 90% of bank loans for SME's that are in liquidity crisis due to the Corona virus.⁸⁸

Public subsidies

Innovation Norway made NOK 2.1bn available in grants to young growth companies (*unge vekstbedrifter*) or SME companies with large growth potential.

Income support

The Norwegian Labour and Welfare Organization (NAV) granted unemployment benefits to the self-employed from day 17 of unemployment as well as 80% of the sickness benefit basis for the self-employed and 100% for freelancers from day 17. In some cases, this was changed to day 4.⁸⁹

NAV also granted unemployment benefits for temporary redundancies in own businesses, up to about NOK 600 000.⁹⁰ (The remittance degree was also increased from 80% to 100%.)

Fiscal measures aimed specifically at the cultural and audiovisual industries were:

Additional production subsidies (project-based)

Funds, such as Filmfond Nord, did not require grants given for development to be repaid.⁹¹ Similarly, the Norwegian Film Institute (NFI) did not require approved incurred costs to be paid back for many of its schemes.⁹²

The NFI made development grants available for drama series without channel contribution but these were cancelled as of June 8, 2020 due to the stabilization of development in the industry⁹³.

The NFI introduced Production Grant 2 ('Produksjonstilskudd 2') for films that had their production stopped or delayed due to the Corona crisis. All formats were eligible to apply for additional funds to continue production or prevent stoppage. This was part of an 85m redistribution of funds.⁹⁴

The NFI issued a NOK 25m Corona-related production guarantee (*Garantiordningen*) for projects that had received a production grant from the NFI regional funds. This covered going over budget, cancellation of production and Corona-related stoppages.⁹⁵

⁸⁷ <https://www.innovasjon Norge.no/no/om/nyheter/2020/krisepakke-snart-klar-for-bedriftene/>

⁸⁸ <https://www.giek.no/lanegarantiordningen/>

⁸⁹ <https://www.nav.no/en/home/benefits-and-services/Sickness-benefit-to-self-employed-persons-and-freelancers>

⁹⁰ <https://www.nav.no/no/person/arbeid/lonnskompensasjon-til-permitterte>

⁹¹ <https://filmfondnord.no/?id=1140004489&Article=83>

⁹² <https://www.nfi.no/covid19/midlertidig-justering-av-saksbehandling-og-tilskuddsordninger>

⁹³ <https://www.nfi.no/covid19/avvikling-av-midlertidig-ordning-for-dramaserier>

⁹⁴ <https://www.nfi.no/covid19/dette-er-produksjonstilskudd-2>

⁹⁵ <https://www.nfi.no/sok-tilskudd/dramaserier/koronarelatert-produksjonsgaranti>

A Stimulus Scheme (*Stimuliordningen*) was introduced by the Arts Council (*Kulturrådet*) for organizers to be compensated for the effects of Covid-19. Both distributors and cinemas may apply. Those whose ticketed cultural events were restricted or cancelled due to the pandemic, or who were in deficit of budget, were also eligible

Additional distribution subsidies (project-based)

The NFI made Launch Grant 2 (*Lanseringstilskudd 2*) available for postponed film launches due to cinema closures and restrictions.

Additional subsidies for companies and individuals

A stipend was made available by the NFI for participation in international digital courses and financing forums. This grant was mainly for courses supported by the EU's Creative Europe program.⁹⁶

Deferred and advanced payments

The NFI also extended deadlines and relaxed reporting measures for all schemes.

Other mitigating measures for the cultural and audiovisual industries were:

Modified and relaxed restrictions

Restrictions were relaxed to permit cinema re-openings on May 7, 2020 (max 50 people).

Industry operational guidelines and advice

Guidance for audiovisual production was provided by Virke Producers Union, the Norwegian Film Makers Association (NFF), the Directors Guild of Norway, the Writers Guild of Norway, and the Actors Guild of Norway, with support from the NFI.

An infection control course was also run by Virke, NFF, and the Norwegian national broadcaster, NRK.

8.2.5. Measures in Sweden

In Sweden the film industry had to adjust to the following **restrictive measures**:

Restrictions on public events

⁹⁶ <https://www.nfi.no/covid19/na-utvider-vi-reisestipendene>

On 11 March the government banned gatherings of more than 500 people,⁹⁷ moving to 50 people in April, where those in breach could receive penalties.⁹⁸ This naturally affected cinemas and cultural events.

Travel restrictions and bans

At the start of the pandemic, Swedes were encouraged to avoid travel,⁹⁹ shortly afterwards banning non-essential travel to Sweden, except for those from the EEA.¹⁰⁰ Countries on the list of those eligible for entry has largely fluctuated, but a ban from outside EEA and EU countries has mainly applied.¹⁰¹ Sweden has not generally required quarantine or isolation for those arriving, or health checks.¹⁰²

Quarantine, confinement, distance, and hygiene

Employers are responsible for systematically investigating and preventing work environment risks so that employees can work safely and reduce transmission risk. Employers must stay continually updated on the guidelines and be able to answer questions. Everyone is required to keep their distance and act responsibly. A designated person has to be in charge of safety, answer questions, and make sure the work environment is safe for all,¹⁰³ with the rules of production being communicated to all on the team. Necessary PPE gear should be provided and paid for by the production company. Those at risk should inform the production of which risk group they belong to.

In case of illness, employees should not return to work until symptom-free for 48 hours.¹⁰⁴ Testing requirements differ in different regions, with health authorities recommending getting tested when there are symptoms of Covid-19.¹⁰⁵

Workers should be in separated groups, the size of which should be minimized as far as possible.

Social distancing requirements affect, among other things, accommodation, meals, sanitation, dressing, hair and makeup, and intimate scenes. The Swedish government has only specified that

⁹⁷ <https://www.government.se/articles/2020/03/ordinance-on-a-prohibition-against-holding-public-gatherings-and-events/>

⁹⁸ <https://www.government.se/articles/2020/04/s-decisions-and-guidelines-in-the-ministry-of-health-and-social-affairs-policy-areas-to-limit-the-spread-of-the-covid-19-virusny-sida/>

⁹⁹ <https://www.government.se/press-releases/2020/03/great-uncertainty-surrounding-travel-abroad/>
Uncertainty about travel

¹⁰⁰ <https://www.government.se/press-releases/2020/03/temporary-ban-on-travel-to-sweden-due-to-covid-19/>

¹⁰¹ <https://polisen.se/en/the-swedish-police/the-coronavirus-and-the-swedish-police/travel-to-and-from-sweden/>

¹⁰² <https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/communicable-disease-control/covid-19/if-you-are-planning-to-travel/>

¹⁰³ <https://filmtvp.se/wp-content/uploads/2020/06/Swedish-Covid-19-Guidelines-200604.pdf>

¹⁰⁴ <https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/communicable-disease-control/covid-19/protect-yourself-and-others-from-spread-of-infection/>

¹⁰⁵ <https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/communicable-disease-control/covid-19/covid-19-testing/>

people should “keep a distance”,¹⁰⁶ with a guideline being an arm’s length. Employers should provide a place to wash hands and hand sanitizers. Everyone should wash their hands before coming on set, and before and after breaks. Hygiene of workspaces, break rooms, and equipment is to be maintained throughout the day. Actors must dress themselves and set up their own microphones. Makeup and hair departments are responsible for ensuring that actors, makeup artists, designers, and hairdressers have the necessary PPE. Intimate scenes should be avoided and can be refused. Work and breaks should be scheduled to avoid unnecessary proximity. The guidelines from the public health agency of Sweden should be followed at all times. On-set catering must be in individual containers.

To mitigate the negative effects of these restrictions, a number of **mitigating measures** were introduced. Some were broad and industry non-specific, while others were made specifically for the cultural industries or for the audiovisual industry only. The Swedish Film Institute quickly altered reporting deadlines and opened for reapplications as the pandemic hit, before redistributing funds in late March¹⁰⁷ and adapting their schemes to the new situation. Later on they adapted and created schemes from a SEK 50m package¹⁰⁸ and a SEK 375m package¹⁰⁹ respectively.

The **general fiscal measures** were:

Tax and VAT

The government deferred income tax and employer contributions to welfare, provided relief on social security payments, deferred VAT payments, granted tax payment respites,¹¹⁰ tax refunds,¹¹¹ and refunds on income tax.

Loans and loan guarantees

The government secured loans of up to 70% for SME’s that had been affected by the Covid-19 pandemic, with a limit of SEK 75m per borrower.¹¹² The loans were distributed by the banks.

Income support

The government quickly covered sick leave costs from Day 1 to 14 from March to May,¹¹³ also removing the qualifying day and altering ceilings for aid granted.¹¹⁴

¹⁰⁶ <https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/communicable-disease-control/covid-19/covid-19-faq/>

¹⁰⁷ <https://pressroom.filminstitutet.se/posts/pressreleases/svenska-filminstitutet-omfordelar-40-miljoner>

¹⁰⁸ <https://pressroom.filminstitutet.se/posts/blogposts/filminstitutet-fordelar-50-miljoner-kronor-av>

¹⁰⁹ <https://pressroom.filminstitutet.se/posts/pressreleases/filminstitutet-fordelar-375-miljoner-kronor-til>

¹¹⁰ <https://www.government.se/press-releases/2020/03/crisis-package-for-swedish-businesses-and-jobs/>

¹¹¹ <https://www.skatteverket.se/servicelankar/otherlanguages/inenglish/businessesandemployers/informationforcompaniesinconnectiontothecoronavirus.4.1c68351d170ce55452715e4.html>

¹¹² <https://www.government.se/articles/2020/03/proposed-central-government-loan-guarantee-programme-for-small-and-medium-sized-enterprises/>

¹¹³ <https://www.government.se/press-releases/2020/03/sickness-benefit-qualifying-day-temporarily-discontinued/>

¹¹⁴ <https://www.government.se/press-releases/2020/05/reinforced-measures-for-employees-and-businesses/>

The short-term layoff program was strengthened throughout the Covid-19 pandemic,¹¹⁵ where the cost of reduced working hours for employees was split between employee, employer and central government, with the government taking 80% of the cost. This percentage has increased from 75% to 90% during Covid-19.¹¹⁶

Other general fiscal measures

Insurances had to be adapted due to new circumstances and requirements for eligibility for unemployment and other insurances were changed by the government and insurance companies.

Fiscal measures aimed specifically at the cultural and audiovisual industries were:

Additional production subsidies (project-based)

In March the Swedish Film Institute (SFI) withdrew reimbursement claims for aid granted for projects and activities that could not be implemented or completed.¹¹⁷

From March, productions could apply to the SFI for support for increased costs due to interruption, postponement, extended production, or change of filming country.¹¹⁸ The support was retroactively applicable.

In November the SFI adjusted its guidelines for the period 12 March 2020 to 31 May 2021 so that ex-post support could continue to be paid out and make revenue opportunities more predictable.¹¹⁹

Also in November, the SFI provided additional support to cover increased costs due to COVID -19 for feature films, drama series, documentaries, and short films.¹²⁰ Earlier financing that may have disappeared was also covered.

Additional distribution subsidies (project-based)

Prepayment of 'biotian' / 'biotjugan': In March the SFI moved to prepay support for cinema owners for open screenings of films that received launch support. Later a sum of SEK 10 was increased to SEK 20.¹²¹

The SFI strengthened its budget for launch support by SEK 5m.¹²²

¹¹⁵ <https://www.government.se/press-releases/2020/03/short-term-layoffs--strengthened-support-in-2020-for-short-time-work-schemes/> Short term layoff early pandemic

¹¹⁶ <https://tillvaxtverket.se/english/short-time-work-allowance.html>

¹¹⁷ <https://pressroom.filminstitutet.se/pressrelease/view/svenska-filminstitutet-vidtar-sarskilda-atgarder-for-svensk-filmbransch-17714>

¹¹⁸ <https://pressroom.filminstitutet.se/pressrelease/view/forlangt-tillfalligt-utokat-stod-till-produktion-for-langspelfilm-och-dokumentar-for-perioden-juni-oktober-2020-18323>

¹¹⁹ <https://www.filminstitutet.se/sv/sok-stod/filminstitutets-stod/produktionsstod/publikrelaterat-stod-prs22/>

¹²⁰ <https://pressroom.filminstitutet.se/pressrelease/view/utlysning-av-stod-till-produktionsbolag-och-film-och-dramaserieproduktioner-i-produktion-samt-extrainsatt-webbinarium-24973>

¹²¹ <https://pressroom.filminstitutet.se/pressrelease/view/svenska-filminstitutet-omfordelar-stodmedel-for-att-starka-filmbranschen-17834>

¹²² <https://pressroom.filminstitutet.se/posts/pressreleases/svenska-filminstitutet-omfordelar-40-miljoner>

In November the SFI made support available for established film distributors and film festivals that lost income due to Covid-19. The purpose was to increase the range of film opportunities.¹²³

Additional subsidies for companies and individuals

In November the SFI offered support for continued project development and fixed costs for smaller independent production companies.

SFI also provided subsidies for cinema owners for loss of ticket revenue due to Covid-19¹²⁴.

Deferred and advanced payments

The FRF (Film Producers Rights Association) allowed the pre-payment of copyright remuneration.

Other mitigating measures for the cultural and audiovisual industries were:

Modified and relaxed restrictions

Cinemas were permitted to reopen subject to audience number restrictions (max 50 people).

Industry operational guidelines and advice

Guidelines for film and TV productions were provided by The Swedish Film & TV Producers Association, Media Industries Employer Association, and The Swedish Union for Performing Arts and Film. These were updated throughout the pandemic.

8.2.6. Pan-European measures covering the Nordic countries

Although the focus of this survey has been measures undertaken by the Nordic countries, the Covid-19 pandemic has been felt throughout Europe. We briefly mention some of the key measures¹²⁵ below:

European Union

The European Union and its many bodies has been active and vocal about its respective sectors, many of which have been hit by serious liquidity crises, threatening the livelihoods of many companies. The framework¹²⁶ aimed to allow member states to supply the needed liquidity to its member state businesses, and to enable continued economic activity by:

- Allowing member states to set up schemes that could grant up to EUR 800 000 to address urgent liquidity needs.

¹²³ [filminstitutet.se/sv/sok-stod/filminstitutets-stod/distributionsstod/stod-for-inkomsbortfall-pga-covid-19/](https://www.filminstitutet.se/sv/sok-stod/filminstitutets-stod/distributionsstod/stod-for-inkomsbortfall-pga-covid-19/)

¹²⁴ <https://www.filminstitutet.se/sv/sok-stod/filminstitutets-stod/biografstod/stod-for-inkomsbortfall-pga-covid-19/>

¹²⁵ <https://rm.coe.int/iris-plus-2020-2-the-european-audiovisual-industry-in-the-time-of-covi/16809f9a46>

¹²⁶ https://ec.europa.eu/commission/presscorner/detail/en/IP_20_496

- Allowing states to guarantee loans from banks so they can supply the businesses who need them.
- Providing favorable subsidized interest on loans to help cover immediate working capital and investment needs.
- Ensuring funds that some member states chose to channel through banks went to the bank's customers and not the banks themselves. The framework also offers guidance on how not to distort the competition of banks.
- Enabling short-term export credit insurance to be provided by the state where needed.

Eurimages

Eurimages took measures to assist producers during the pandemic.¹²⁷ Among the measures were:

- A change to theatrical release requirements so that delegate producers of supported projects who had their theatrical releases cancelled or indefinitely postponed could utilize the *force majeure* clause, with Eurimages accepting other forms of presentation to the public, such as VOD, TVOD, or d-cinema, in both minority and majority producing countries.
- Enabling digitalized means of signing documents and the digitalized distribution of important documents, hard copies and publicity material.
- In case of interruption of principal photography, where there was a signed support agreement, releasing the first payment if start shooting could be confirmed. Interruption would fall under the *force majeure* clause and thus be accepted as valid interruption.

Creative Europe

Some of the measures taken by Creative Europe were:¹²⁸

- Maximum flexibility within the existing guidelines for ongoing and planned Creative Europe activity.
- Further deadline extensions to allow more time for finalizing applications.
- Clear instructions to Creative Europe desk teams on how the *force majeure* clause would work.
- EUR 2m call published in May redirecting work for the support scheme of the cross-border dimension of the performing arts works for digital culture and virtual mobility. This fund aimed to reach the creative and cultural sectors as quickly as possible.
- Speeding up selection procedures for the last literary translations call, with additional funding for book translations.
- Speeding up the evaluation of the 2020 Cooperation projects call.
- Exploring how to adapt the creative and cultural financial guarantee facility to mitigate the effects of the crisis.
- Creating a platform for member states and the sector itself to put forward their own proposals for solutions to the crisis.

¹²⁷ <https://www.coe.int/en/web/eurimages/-/breaking-news>

¹²⁸ <https://www.creativeeuropesk.eu/news/eu-outlines-creative-europe-support-measures-covid-19-crisis>
Measures from Creative Europe

8.3. Impact of restrictions and recommendations

8.3.1. Cross-country comparisons

Table 8.7 Cross-country analysis of impact of restrictions/recommendations categories (N=155)^a

		no impact	don't know	little impact	some impact	great impact
General occupational health and safety measures and guidelines, including arrangement and payment of Covid-19 testing (where applicable)	Denmark	15 %	10 %	25 %	5 %	45 %
	Finland	9 %	0 %	15 %	24 %	52 %
	Iceland	19 %	0 %	25 %	6 %	50 %
	Norway	11 %	3 %	11 %	31 %	43 %
	Sweden	12 %	8 %	0 %	29 %	51 %
Transfer and travel restrictions/recommendations, including transport by private means (where applicable)	Denmark	35 %	15 %	5 %	15 %	30 %
	Finland	9 %	0 %	9 %	30 %	52 %
	Iceland	19 %	0 %	6 %	31 %	44 %
	Norway	6 %	3 %	29 %	17 %	46 %
	Sweden	6 %	8 %	10 %	12 %	65 %
Quarantine restrictions (isolation until symptom free)	Denmark	45 %	20 %	10 %	15 %	10 %
	Finland	12 %	0 %	18 %	42 %	27 %
	Iceland	n/a	n/a	n/a	n/a	n/a
	Norway	11 %	3 %	23 %	40 %	23 %
	Sweden	18 %	12 %	8 %	25 %	37 %
General distance restrictions/recommendations (separate groupings of production crew, social distancing requirements)	Denmark	15 %	15 %	30 %	15 %	25 %
	Finland	9 %	0 %	12 %	45 %	33 %
	Iceland	13 %	0 %	13 %	25 %	50 %
	Norway	6 %	3 %	11 %	43 %	37 %
	Sweden	6 %	8 %	6 %	27 %	53 %
Restrictions/recommendations on size of gatherings in relation to shoots	Denmark	35 %	15 %	20 %	5 %	25 %
	Finland	18 %	0 %	18 %	33 %	30 %
	Iceland	13 %	6 %	13 %	44 %	25 %
	Norway	9 %	3 %	23 %	31 %	34 %
	Sweden	12 %	8 %	4 %	39 %	37 %
Restrictions/recommendations on size of gatherings in relation to cinemas and other public events	Denmark	40 %	30 %	0 %	5 %	25 %
	Finland	33 %	3 %	18 %	15 %	30 %
	Iceland	25 %	13 %	31 %	19 %	13 %
	Norway	31 %	9 %	14 %	11 %	34 %
	Sweden	35 %	18 %	6 %	16 %	25 %
Other restrictions/recommendations	Denmark	40 %	10 %	5 %	25 %	20 %
	Finland	9 %	0 %	21 %	30 %	39 %
	Iceland	n/a	n/a	n/a	n/a	n/a
	Norway	9 %	3 %	20 %	26 %	43 %
	Sweden	n/a	n/a	n/a	n/a	n/a

^a To enable cross-country comparison, each of the country specific measures have been categorized according to one of the seven broad categories listed in this table. For each project, the measure of impact for each category is then determined by the country-specific measure with the greatest impact within that category.

Highlights:

- A relatively high proportion of restrictions/recommendations have had no or little impact on projects. We see this across all five countries.
- General occupational health and safety measures and guidelines have had some or great impact in most projects across all countries.
- Transfer and travel restrictions/recommendations have had the largest impact in Sweden, with a 65% of projects signalling this area has had great impact. Danish products have been least affected by this factor.
- Comparatively, quarantine restrictions have had a lower impact on productions. Sweden has been most affected, with 37% of projects signalling great impact from this restriction.
- General distance restrictions/recommendations have had a strong impact. 53% of Swedish and 50% of Icelandic projects signalled this has had a great impact.
- Restrictions/recommendations on size of gatherings in relation to shoots most typically viewed as having 'some impact' on projects across all countries. Danish projects have been less likely to view this as having in a major impact.
- Generally lower impact of restrictions/recommendation in relation to public events.

Table 8.8 Characteristics of projects experiencing low and high impacts of restrictive measures

	Low impact: All restrictive measures have no or low impact	High impact: 3 or more restrictive measures have high impact	N
Denmark	40 %	25 %	20
Finland	21 %	42 %	33
Iceland	31 %	38 %	16
Norway	23 %	43 %	35
Sweden	20 %	53 %	51
Feature film	25 %	41 %	63
Animated feature film	25 %	50 %	4
Documentary	25 %	28 %	32
Drama series	24 %	53 %	51
Animated series	50 %	50 %	2
Other	0 %	67 %	3
Production budget not stated	23 %	58 %	43
Production budget under 1m EUR	23 %	28 %	40
Production budget 1-4m EUR	34 %	37 %	38
Production budget > 4m EUR	18 %	50 %	34
Not yet greenlighted or greenlighted only as of 12.03.20	20 %	50 %	50
Pre-production or principal photography as of 12.03.20	16 %	57 %	68
Post-production or pre-release as of 12.03.20	46 %	8 %	37

Highlights:

- A higher proportion of restrictive measures have had 'no impact' or 'low impact' in Danish and Icelandic produced projects, projects with mid-range production budgets, and projects in pre-production or later as of 12.03.2020.
- A higher proportion of restrictive measures have had 'great impact' in Swedish, Norwegian and Finnish produced projects, drama series and animated feature films, projects with higher production budgets and those not stating budgets, and projects that were not yet in pre-production as of 12.03.20.

8.3.2. Country by country

Table 8.9 Impact of restrictions and recommendations on Danish productions (N=20)

	no impact	don't know	little impact	some impact	great impact
Special rules that apply to filming in public spaces	40 %	10 %	5 %	25 %	20 %
General occupational health and safety measures and guidelines (including day-specific measures and plans)	15 %	10 %	25 %	5 %	45 %
Self-isolation until symptom free requirement	45 %	20 %	10 %	15 %	10 %
Separated grouping of work members	20 %	15 %	35 %	15 %	15 %
Transfer and travel restrictions (including quarantine requirements, country specific travel bans/restrictions)	35 %	15 %	5 %	15 %	30 %
Social distancing requirements (accommodation, meals, sanitation, dressing, hair and makeup restrictions, intimate scenes, etc.)	20 %	15 %	25 %	20 %	20 %
Limitations on size of gatherings (in relation to production)	35 %	15 %	20 %	5 %	25 %
Limitations on size of gatherings (in relation to cinemas/events)	40 %	30 %	0 %	5 %	25 %

Highlights:

- Danish projects have experienced the greatest impact from general occupational health and safety measures and guidelines and transfer and travel restriction.
- Self-isolation, rules about filming in public spaces, and also cinema restrictions have had relatively less impact.

Table 8.10 Impact of restrictions and recommendations on Finnish productions (N=32)

	no impact	don't know	little impact	some impact	great impact
General occupational health and safety measures and guidelines (including APFI guidelines for productions)	12 %	0 %	15 %	27 %	45 %
Risk assessment of personnel and their workflow	9 %	0 %	21 %	30 %	39 %
Self-isolation until symptom free requirement	12 %	0 %	18 %	42 %	27 %
Transport by private means	9 %	0 %	12 %	36 %	42 %
Separated grouping of work members	12 %	0 %	15 %	45 %	27 %
Arrangement, payment, and compliance with Covid-19 testing for production crew	21 %	0 %	21 %	33 %	24 %
Transfer and travel restrictions (including quarantine requirements, country specific travel bans, internal travel restrictions)	18 %	0 %	9 %	24 %	48 %
Social distancing requirements (accommodation, meals, sanitation, dressing, hair and makeup restrictions, intimate scenes, etc.)	12 %	0 %	15 %	39 %	33 %
Limitations on size of gatherings (in relation to production)	18 %	0 %	18 %	33 %	30 %
Limitations on size of gatherings (in relation to cinemas/events)	33 %	3 %	18 %	15 %	30 %

Highlights:

- Across the board, and to a larger extent than other Nordic countries with the sole exception of Sweden, restrictions have primarily had some or great impact on Finnish productions.
- Finnish projects have experienced the greatest impact from general occupational health and safety measures and guidelines and transfer and travel restrictions.

Table 8.11 Impact of restrictions and recommendations on Icelandic productions (N=16)

	no impact	don't know	little impact	some impact	great impact
Transfer and travel restrictions (including quarantine requirements)	25 %	0 %	6 %	25 %	44 %
Vehicle requirements	50 %	6 %	6 %	31 %	6 %
Following general occupational health and safety measures and guidelines (including day-specific measures)	19 %	0 %	25 %	6 %	50 %
Separated grouping of work members (for example, between quarantine and non-quarantine)	25 %	0 %	6 %	44 %	25 %
Social distancing requirements (accommodation, meals, sanitation, dressing, hair and makeup restrictions, intimate scenes, etc.)	13 %	0 %	13 %	25 %	50 %
Limitations on size of gatherings (in relation to production)	13 %	6 %	13 %	44 %	25 %
Limitations on size of gatherings (in relation to cinemas/events)	25 %	13 %	31 %	19 %	13 %

Highlights:

- Icelandic projects have experienced the greatest impact from general occupational health and safety measures and guidelines, social distancing requirements, and transfer and travel restrictions.

Table 8.12 Impact of restrictions and recommendations on Norwegian productions (N=35)

	no impact	don't know	little impact	some impact	great impact
General occupational health and safety measures and guidelines (including hygienic guidelines, infection control, use of infection control officer, etc.)	11 %	3 %	11 %	31 %	43 %
Risk assessment of personal and their workflow	9 %	3 %	23 %	29 %	37 %
Availability of necessary infection control equipment	29 %	3 %	29 %	23 %	17 %
Requirement for isolation until symptom-free (zero tolerance)	11 %	3 %	23 %	40 %	23 %
Separation and grouping of actors and crew, as well as specific measures for high-risk individuals.	11 %	3 %	17 %	40 %	29 %
Transfer and travel restrictions (including quarantine requirements, country specific travel bans, internal travel restrictions)	6 %	3 %	29 %	17 %	46 %
Social distancing requirements (accommodation, meals, sanitation, dressing, hair and makeup restrictions, intimate scenes, etc.)	6 %	3 %	11 %	49 %	31 %
Limitations on size of gatherings (in relation to production)	9 %	3 %	23 %	31 %	34 %
Limitations on size of gatherings (in relation to cinemas/events)	31 %	9 %	14 %	11 %	34 %

Highlights:

- Norwegian projects have experienced the greatest impact from general occupational health and safety measures and guidelines and transfer and travel restrictions.
- Otherwise, there has been some or great impact associated with most restrictions.

Table 8.13 Impact of restrictions and recommendations on Swedish productions (N=51)

	no impact	don't know	little impact	some impact	great impact
General occupational health and safety measures and guidelines (including day-specific measures)	12 %	8 %	0 %	29 %	51 %
48-hour symptom free requirement	18 %	12 %	8 %	25 %	37 %
Separated grouping of work members	18 %	8 %	6 %	35 %	33 %
Transfer and travel restrictions (including quarantine requirements, country specific travel bans)	6 %	8 %	10 %	12 %	65 %
Social distancing requirements (accommodation, meals, sanitation, dressing, hair and makeup restrictions, intimate scenes, etc.)	8 %	10 %	6 %	29 %	47 %
Limitations on size of gatherings (in relation to production)	12 %	8 %	4 %	39 %	37 %
Limitations on size of gatherings (in relation to cinemas/events)	35 %	18 %	6 %	16 %	25 %

Highlights:

- Swedish projects have experienced the greatest impact from transfer and travel restrictions, followed by general occupational health and safety measures and guidelines and social distancing requirements.

8.3.3. Impact on production content - country by country

Table 8.14 Impact of restrictions and recommendations on production content, Denmark productions (multiple selection possible, N=20)

	No impact	Changes to script	Changes to key cast and/or crew	Change to locations/ settings	Other production content impact
Following general occupational health and safety measures and guidelines (including day-specific measures) no impact	40 %	20 %	30 %	40 %	30 %
48-hour symptom free requirement no impact	65 %	5 %	15 %	25 %	25 %
Separated grouping of work members no impact	60 %	0 %	15 %	30 %	30 %
Transfer and travel restrictions (including quarantine requirements, country specific travel bans/restrictions) no impact	45 %	15 %	30 %	30 %	40 %
Social distancing requirements (meals, sanitation, dressing, hair and makeup restrictions, intimate scenes, etc.) no impact	55 %	5 %	20 %	30 %	30 %
Limitations on size of gatherings (in relation to production) no impact	45 %	5 %	30 %	30 %	30 %

Highlights:

- In relation to all restrictive measures, there has been a high occurrence of no impact on production content.
- Changes to location and setting have been linked to multiple restrictions, particularly OHS measures.
- Changes to key cast and crew particularly have been linked to OHS measures and travel and transfer restrictions.
- Few changes to script required, and where so they have been associated with OHS measures

Table 8.15 Impact of restrictions and recommendations on production content, Finnish productions (multiple selection possible, N=32)

	No impact	Changes to script	Changes to key cast and/or crew	Change to locations/settings	Other production content impact
Following general occupational health and safety measures and guidelines (including day-specific measures and plans, cleaning guidelines)	30 %	15 %	21 %	42 %	36 %
Self-isolation until symptom free requirement (zero tolerance policy)	39 %	9 %	36 %	15 %	24 %
Separated grouping of work members and specific measures for high-risk individuals	39 %	12 %	27 %	21 %	21 %
Transfer and travel restrictions (including quarantine requirements, country specific travel bans)	39 %	6 %	18 %	33 %	12 %
Social distancing requirements (accommodation, meals, sanitation, dressing, hair and makeup restrictions, intimate scenes, etc.)	33 %	12 %	12 %	27 %	27 %
Limitations on size of gatherings (in relation to production)	39 %	21 %	12 %	24 %	27 %

Highlights:

- Clear majority of Finnish projects have implemented one or more forms of change to production content.
- Changes to location and setting particularly have been linked to OHS measures.
- Changes to key cast and crew have been particularly related to self-isolation restrictions.
- A comparatively low but still significant proportion of restrictions have caused no impact on production content.

Table 8.16 Impact of restrictions and recommendations on production content, Icelandic productions (multiple selection possible, N=16)

	no impact	changes to script	changes to key cast and/or crew	change to locations/settings	other production content impact
Following general occupational health and safety measures and guidelines (including day-specific measures)	50 %	0 %	6 %	13 %	38 %
Transfer and travel restrictions (including quarantine requirements)	38 %	6 %	13 %	0 %	44 %
Separated grouping of work members (for example, between quarantine and non-quarantine workers)	56 %	0 %	0 %	25 %	19 %
Social distancing requirements (accommodation, meals, sanitation, dressing, hair and makeup restrictions, intimate scenes, etc.)	56 %	0 %	0 %	19 %	31 %
Limitations on size of gatherings (in relation to production)	56 %	0 %	6 %	25 %	25 %

Highlights:

- Majority of Icelandic projects have indicated no change to production content in response to all but one restriction/recommendation measures.
- Transfer and travel restrictions have had a greater impact on production content, specifically causing changes to 'other production content' and to key cast and/or crew.

Table 8.17 Impact of restrictions and recommendations on production content, Norwegian productions (multiple selection possible, N=35)

	no impact	changes to script	changes to key cast and/or crew	change to locations/settings	other production content impact
General occupational health and safety measures and guidelines (including hygienic guidelines, infection control, use of infection control officer, etc.)	17 %	34 %	23 %	37 %	40 %
Risk assessment of personal and their workflow	29 %	17 %	23 %	20 %	46 %
Availability of necessary infection control equipment	69 %	0 %	3 %	3 %	29 %
Requirement for isolation until symptom-free (zero tolerance)	46 %	11 %	23 %	14 %	40 %
Separation and grouping of actors and crew, as well as specific measures for high-risk individuals	26 %	17 %	20 %	31 %	51 %
Transfer and travel restrictions (including quarantine requirements, country specific travel bans, internal travel restrictions)	26 %	23 %	29 %	29 %	60 %
Social distancing requirements (accommodation, meals, sanitation, dressing, hair and makeup restrictions, intimate scenes, etc.)	17 %	17 %	17 %	37 %	74 %
Limitations on size of gatherings (in relation to production)	29 %	29 %	11 %	23 %	51 %

Highlights:

- For majority of Norwegian projects, all restrictions but the availability of infection control equipment have caused changes to production content.
- Changes to script have been most associated with OHS restrictions and limitation on size of gatherings.
- Changes to cast and crew have been most associated with transfer and travel restrictions.
- Changes to locations/set have been most associated with OHS restrictions and social distancing requirements.

Table 8.18 Impact of restrictions and recommendations on production content, Swedish productions (multiple selection possible, N=51)

	no impact	changes to script	changes to key cast and/or crew	change to locations/settings	other production content impact
General occupational health and safety measures and guidelines (including day-specific measures)	27 %	33 %	29 %	35 %	31 %
48-hour symptom free requirement	53 %	6 %	25 %	10 %	25 %
Separated grouping of work members	43 %	6 %	4 %	18 %	39 %
Transfer and travel restrictions (including quarantine requirements, country specific travel bans)	29 %	18 %	35 %	31 %	41 %
Social distancing requirements (accommodation, meals, sanitation, dressing, hair and makeup restrictions, intimate scenes, etc.)	35 %	14 %	18 %	25 %	51 %
Limitations on size of gatherings (in relation to production)	27 %	16 %	12 %	24 %	53 %

Highlights:

- For majority of Swedish projects, all restrictions but 48-hour symptom free requirement caused changes to production content.
- Changes to script have been most associated with OHS restrictions.
- Changes to cast and crew have been most associated with transfer and travel restrictions.
- Changes to locations/set have been most associated with OHS restrictions and transfer and travel restrictions.

8.4. Other findings on restrictive measures

8.4.1. Adapting to restrictions and recommendations

Table 8.19 How productions adapted to Covid-19: impact on scripts, production content and production schedule (percentages by country, N=155)

	Denmark	Finland	Iceland	Norway	Sweden
Number of productions in category	20	32	16	35	51
Adjusted the number of shooting days	10 %	33 %	25 %	34 %	35 %
Rescheduled shooting days for later	35 %	45 %	63 %	43 %	55 %
Recasting and/or re-crewing	30 %	30 %	19 %	46 %	53 %
Change of sub-contractors (post-production services, other service providers)	20 %	27 %	19 %	17 %	22 %
Reduced travel for non-essential team members	40 %	45 %	38 %	51 %	55 %
Reduced travel for essential team members (producers, director, heads of departments, lead cast)	45 %	48 %	63 %	54 %	69 %
Increase shipping (equipment and other materials) to reduce need for personnel to travel	5 %	18 %	38 %	14 %	35 %
Substituted in-camera shoots with CGI/VFX	5 %	9 %	0 %	11 %	14 %
Changed from indoors to outdoor sets and locations	10 %	27 %	0 %	20 %	27 %
Moved domestic filming locations to safer areas	0 %	18 %	0 %	26 %	20 %
Dropped international filming locations	5 %	15 %	6 %	20 %	31 %
Change of co-producers	0 %	0 %	0 %	6 %	10 %
Made necessary changes to film script and/or content (e.g., to drop crowded, indoor, intimate scenes)	20 %	36 %	19 %	43 %	43 %
Worked with reduced production crew	45 %	36 %	38 %	43 %	22 %
Moved meetings and other production work (e.g., post-production work) online	70 %	70 %	75 %	74 %	88 %

Highlights:

- In responding to Covid-19, a clear majority of Icelandic projects have rescheduled shoots and restricted travel for essential team members.
- A majority of Norwegian and Swedish projects have reduced travel for non-essential team members.
- Most projects in Iceland, Norway and Sweden have restricted travel for essential team members
- Moving meetings and other production work on online was adopted by most projects in all Nordic countries

Table 8.20 How productions adapted to Covid-19 impact on scripts, production content and production schedule (percentages by production type, N=155)

	Feature film	Animated feature film	Documentary	Drama series	Animated series	Other
Number of productions in category	63	4	32	51	2	3
Adjusted the number of shooting days	32 %	0 %	31 %	33 %	0 %	0 %
Rescheduled shooting days for later	40 %	25 %	47 %	63 %	0 %	67 %
Recasting and/or re-crewing	41 %	0 %	25 %	51 %	0 %	67 %
Change of sub-contractors (post-production services, other service providers)	17 %	0 %	28 %	20 %	50 %	67 %
Reduced travel for non-essential team members	51 %	25 %	47 %	47 %	50 %	67 %
Reduced travel for essential team members (producers, director, heads of departments, lead cast)	54 %	75 %	69 %	51 %	50 %	100 %
Increase shipping (equipment and other materials) to reduce need for personnel to travel	21 %	0 %	38 %	18 %	0 %	67 %
Substituted in-camera shoots with CGI/VFX	13 %	0 %	3 %	12 %	0 %	0 %
Changed from indoors to outdoor sets and locations	14 %	0 %	13 %	33 %	0 %	67 %
Moved domestic filming locations to safer areas	13 %	0 %	13 %	22 %	0 %	67 %
Dropped international filming locations	14 %	0 %	22 %	24 %	0 %	67 %
Change of co-producers	5 %	0 %	0 %	8 %	0 %	0 %
Made necessary changes to film script and/or content (e.g., to drop crowded, indoor, intimate scenes)	29 %	0 %	25 %	55 %	0 %	67 %
Worked with reduced production crew	35 %	25 %	41 %	25 %	50 %	100 %
Moved meetings and other production work (e.g., post-production work) online	71 %	75 %	81 %	80 %	100 %	100 %

Highlights:

- In responding to Covid-19, majority of drama series have rescheduled shooting days.
- Animated series likely to have change sub-contractors (post-production services, other service providers) and reduced travel for non-essential team members.
- Documentary, drama and animated series have reduced travel for essential team members.
- Drama series most likely to have made necessary changes to film script and/or content.
- Moving meetings and other production work on online has been adopted by most projects across all production types.

Table 8.21 How productions adapted to Covid-19 impact on scripts, production content and production schedule (percentages by production budget and production phase as of 12.3.20, N=155)

	Production budget				Production phase		
	Not stated	Under 1m EUR	1-4m EUR	> 4m EUR	Not yet greenlighted or greenlighted only as of 12.03.20	Pre-production or principal photography as of 12.03.20	Post-production or pre-release as of 12.03.20
Number of productions in category	43	40	38	34	50	68	37
Adjusted the number of shooting days	33 %	25 %	26 %	38 %	28 %	43 %	11 %
Rescheduled shooting days for later	60 %	40 %	32 %	62 %	50 %	66 %	14 %
Recasting and/or re-crewing	58 %	25 %	24 %	53 %	36 %	60 %	8 %
Change of sub-contractors	14 %	30 %	18 %	24 %	16 %	24 %	24 %
Reduced travel for non-essential team members	58 %	38 %	45 %	53 %	46 %	62 %	27 %
Reduced travel for essential team members	58 %	63 %	50 %	59 %	56 %	59 %	57 %
Increase shipping to reduce need for personnel to travel	26 %	28 %	16 %	24 %	22 %	28 %	16 %
Substituted in-camera shoots with CGI/VFX	14 %	3 %	5 %	18 %	6 %	16 %	3 %
Changed from indoors to outdoor sets and locations	33 %	20 %	16 %	12 %	28 %	26 %	0 %
Moved domestic filming locations to safer areas	19 %	13 %	18 %	15 %	22 %	18 %	5 %
Dropped international filming locations	28 %	13 %	18 %	18 %	12 %	29 %	11 %
Change of co-producers	12 %	0 %	0 %	6 %	4 %	7 %	0 %
Made necessary changes to film script and/or content (e.g., to drop crowded, indoor, intimate scenes)	44 %	30 %	29 %	41 %	42 %	47 %	8 %
Worked with reduced production crew	30 %	43 %	29 %	35 %	40 %	35 %	24 %
Moved meetings and other production work (e.g., post-production work) online	74 %	80 %	74 %	82 %	74 %	79 %	78 %

Highlights:

- Largest projects by budget most likely to have rescheduled shooting days for later and have reduced travel for non-essential team.
- Smallest and highest budget projects most likely to have reduced travel for essential team members.
- Not a significant difference between projects that were in pre-production of later as of 12.03.20 and those that weren't. The most notable difference is that the latter are more likely to have changed from indoors to outdoor sets and locations.
- Moving meetings and other production work on online has been adopted by most projects across all production budgets and phases of production as of 12.03.20.

Table 8.22 Projects on hold and reasons preventing restart (by country and type of production, N=13)

	Denmark	Finland	Iceland	Norway	Sweden	Feature film	Documentary	Drama series	Other
Projects on hold	2	3	1	3	4	3	5	4	1
Lost access to essential content elements (actors, locations, and so on)	100 %	67 %	100 %	67 %	0 %	67 %	60 %	25 %	100 %
Lost access to key people in the project crew (director, photography, design, etc.)	100 %	33 %	0 %	33 %	0 %	0 %	20 %	50 %	100 %
Higher crew rates due to limitations on personnel availability	0 %	0 %	0 %	33 %	0 %	0 %	0 %	25 %	0 %
Lost parts of original funding	50 %	0 %	0 %	33 %	50 %	0 %	20 %	75 %	0 %
Lack of financing for additional costs incurred (due to interruption, etc.)	50 %	0 %	0 %	33 %	25 %	0 %	20 %	50 %	0 %
Problems with getting the necessary insurance coverage	0 %	33 %	0 %	33 %	25 %	33 %	0 %	50 %	0 %
Impossible to carry out planned production due to Covid-19 restrictions	100 %	100 %	100 %	33 %	50 %	33 %	80 %	75 %	100 %
Have not been prevented from starting up again	0 %	0 %	0 %	33 %	0 %	0 %	0 %	25 %	0 %
Lost access to banks for liquidity management	0 %	0 %	0 %	33 %	0 %	0 %	0 %	25 %	0 %
Had to reapply for existing schemes/funding	0 %	0 %	0 %	33 %	0 %	0 %	0 %	25 %	0 %
Other	0 %	0 %	0 %	33 %	50 %	67 %	0 %	25 %	0 %

Highlights:

- Of the very few projects on hold, there is relatively high number of documentaries.
- Projects most likely to have remained on hold due to lost access to essential content elements, and Covid-19 restrictions making it impossible to carry out planned production.

- Otherwise too few projects on to draw conclusions on a country or type of production basis.

Table 8.23 Projects on hold and reasons preventing restart (production budget and production phase as of 12.3.20, N=13)

	Production budget not stated	Production budget under 1m EUR	Production budget 1-4m EUR	Production budget > 4m EUR	Before pre-production as of 12.3.20	Pre-production or principal photography as of 12.03.20	Post-production or pre-release as of 12.03.20
Projects on hold	4	4	3	2	7	5	1
Lost access to essential content elements (actors, locations, and so on)	25 %	100 %	33 %	50 %	71 %	33 %	0 %
Lost access to key people in the project crew (director, photography, design, etc.)	50 %	50 %	0 %	0 %	43 %	17 %	0 %
Higher crew rates due to limitations on personnel availability	25 %	0 %	0 %	0 %	14 %	0 %	0 %
Lost parts of original funding	75 %	0 %	0 %	50 %	29 %	33 %	0 %
Lack of financing for additional costs incurred (due to interruption, etc.)	50 %	0 %	0 %	50 %	29 %	17 %	0 %
Problems with getting the necessary insurance coverage	25 %	0 %	33 %	50 %	29 %	17 %	0 %
Impossible to carry out planned production due to Covid-19 restrictions	100 %	75 %	67 %	0 %	86 %	50 %	0 %
Have not been prevented from starting up again	25 %	0 %	0 %	0 %	14 %	0 %	0 %
Lost access to banks for liquidity management	25 %	0 %	0 %	0 %	14 %	0 %	0 %
Had to reapply for existing schemes /funding	25 %	0 %	0 %	0 %	14 %	0 %	0 %
Other	25 %	0 %	33 %	50 %	0 %	50 %	100 %

Highlights:

- Of the projects on hold, there is relatively high number of projects that were not yet at pre-production stage as of 12.03.20.

- Projects are most likely to remain on hold due to lost access to essential content elements and Covid-19 restrictions making it impossible to carry out planned production.

Otherwise too few projects on to draw conclusions on basis of production budget.

8.4.2.Challenges when moving activities online

Table 8.24 Characteristics of projects moving meetings and other production work online (N=155)

	Did not move meetings and other production work online	Moved meetings and other production work online
Projects in this category	35	120
Not yet greenlighted or greenlighted only as of 12.03.20	37 %	31 %
Pre-production or principal photography as of 12.03.20	40 %	45 %
Post-production or pre-release as of 12.03.20	23 %	24 %
Total	100 %	100 %
Low production complexity (relative to budget)	6 %	4 %
Moderately low production complexity (relative to budget)	11 %	8 %
Mid-level production complexity (relative to budget)	31 %	33 %
Moderately high production complexity (relative to budget)	37 %	33 %
High production complexity (relative to budget)	14 %	22 %
Total	100 %	100 %

Highlights:

- Most projects have adapted to Covid-19 by moving production work online.
- Compared to projects that didn't move meetings and other production work online, those that did experienced only slightly longer production times, but noticeably higher changes in production costs.
- There is no clear association between decision to move production work online and production stage as of 12.03.20.
- There are higher levels of self-rated project complexity among projects that moved meeting and other production work online.

Table 8.25 Impact of moving meetings and other production work online (N=155)

	Did not move meetings and other production work online	Moved meetings and other production work online
Projects in this category	35	120
Average actual or estimated shooting days as % of budgeted shooting days	104 %	108 %
Average actual or estimated production period as % of originally planned production period	118 %	121 %
Average actual or estimate of production costs as % of original 'locked budget'	105 %	111 %

Highlights:

- Relative to what was budgeted, the Covid-19 related change in shooting days, production period and production costs were higher for projects that moved meetings and other production work online compared to those that didn't.

8.4.3. International productions

Table 8.26 Number of countries shooting occurs, co-producers, percentage foreign case and crew (by country, production type, production budget and production phase as of 12.3.20, N=155)

	Average number of countries shooting occurs	Average number of co-producers (including majority producer)	Average percentage of foreign (without permanent address) cast and crew
Denmark	1.9	2.1	16 %
Finland	1.6	2.1	14 %
Iceland	1.7	2.4	17 %
Norway	1.8	2.1	23 %
Sweden	2.1	3.0	14 %
Feature film	1.6	2.9	20 %
Animated feature film	1.8	2.3	29 %
Documentary	2.7	2.3	20 %
Drama series	1.3	1.9	8 %
Animated series	1.0	3.0	10 %
Other	1.3	1.7	1 %
Production budget not stated	n/a	2.3	0 %
Production budget under 1m EUR	2.1	1.9	13 %
Production budget 1-4m EUR	1.5	2.7	20 %
Production budget > 4m EUR	1.7	2.8	17 %
Before pre-production as of 12.03.20	1.3	2.2	13 %
Pre-production or principal photography as of 12.03.20	1.8	2.4	17 %
Post-production or pre-release as of 12.03.20	2.2	2.8	19 %

Highlights:

- Projects with a higher number of countries for shooting include Swedish productions, documentaries, and interestingly, lower budget productions.
- The number of co-producers has been higher for Swedish productions, feature films, animated series, higher budget productions.
- Percent of foreign cast and crew (without permanent address in country of production) has been higher for Norwegian productions, feature films, animated films, and documentaries, mid-range production budgets, and projects that were at pre-production or later as of 12.03.12.

Table 8.27 Project's level of internationalization and change in budget, shooting days and production period (N=152 & 97)^a

	Actual or estimate of production costs as % of original 'locked budget'	Actual or estimated shooting days as % of budgeted shooting days	Actual or estimated production period as % of originally planned production period	N
Sole production company	111 %	109 %	123 %	55
1 co-producer	108 %	106 %	121 %	38
2 co-producers	108 %	103 %	122 %	22
3 co-producers	110 %	105 %	110 %	16
4+ co-producers	111 %	108 %	120 %	21
0% foreign (without permanent address) cast and crew	112 %	109 %	121 %	26
1-25% foreign (without permanent address) cast and crew	110 %	106 %	121 %	48
>25% foreign (without permanent address) cast and crew	109 %	104 %	118 %	23

^a In relation to the number of co-producers, the sample of 152 is less than 155 due to 3 cancelled projects being excluded from the question. In relation to the question covering foreign crew, data is missing data due to the non-forced property of the question.

Highlights:

- Projects with higher percentage of foreign crew (more international) have experienced slightly lower increases in budget, shooting days, and production period.
- There has been no discernible association between number of co-producers and change in production costs, change in shooting days, and change in production period.

Table 8.28 Project's level of internationalization and impact of occupational health and safety related recommendation and restrictions (N=152 & 97)^a

	no impact	don't know	little impact	some impact	great impact	N
Sole production company	11 %	2 %	13 %	18 %	56 %	55
1 co-producer	16 %	5 %	13 %	18 %	47 %	38
2 co-producers	14 %	0 %	9 %	32 %	45 %	22
3 co-producers	13 %	6 %	19 %	19 %	44 %	16
4+ co-producers	10 %	5 %	5 %	43 %	38 %	21
0% foreign (without permanent address) cast and crew	15 %	4 %	19 %	19 %	42 %	26
1-25% foreign (without permanent address) cast and crew	8 %	2 %	13 %	21 %	56 %	48
>25% foreign (without permanent address) cast and crew	17 %	0 %	22 %	26 %	35 %	23

^a In relation to the number of co-producers, the sample of 152 is less than 155 due to 3 cancelled projects being excluded from the question. In relation to the question covering foreign crew, data is missing data due to the non-forced property of the question.

Highlights:

- Some evidence that the impact of OHS related measures has been higher among projects with lower percentage of foreign cast and crew (less international).
- Generally, there has been little discernible association between the impact of OHS related recommendations/restrictions and number of co-producers. However, greatest impact of OHS measures has been for sole productions (less international).

Table 8.29 Project's level of internationalization and impact of travel and transfer related recommendation and restrictions (N=152 & 97)^a

	no impact	don't know	little impact	some impact	great impact	N
Sole production company	13 %	4 %	11 %	22 %	51 %	55
1 co-producer	13 %	5 %	18 %	21 %	42 %	38
2 co-producers	14 %	0 %	14 %	9 %	64 %	22
3 co-producers	13 %	6 %	13 %	13 %	56 %	16
4+ co-producers	5 %	5 %	10 %	29 %	52 %	21
0% foreign (without permanent address) cast and crew	23 %	4 %	23 %	15 %	35 %	26
1-25% foreign (without permanent address) cast and crew	8 %	2 %	10 %	25 %	54 %	48
>25% foreign (without permanent address) cast and crew	17 %	0 %	13 %	17 %	52 %	23

^a In relation to the number of co-producers, the sample of 152 is less than 155 due to 3 cancelled projects being excluded from the question. In relation to the question covering foreign crew, data is missing data due to the non-forced property of the question.

Highlights:

- Predictably, projects with some level of foreign cast and crew (more international) have experienced higher impact of travel restrictions compared to those reporting no foreign cast or crew.
- Generally, there have been little discernible association between the impact of travel related recommendations/restrictions and number of co-producers.

Table 8.30 Project’s level of internationalization and impact of quarantine restrictions (N=152 & 97)^a

	no impact	don't know	little impact	some impact	great impact	N
Sole production company	20 %	4 %	14 %	31 %	31 %	55
1 co-producer	23 %	13 %	16 %	19 %	29 %	38
2 co-producers	15 %	0 %	10 %	35 %	40 %	22
3 co-producers	20 %	7 %	20 %	47 %	7 %	16
4+ co-producers	16 %	11 %	16 %	42 %	16 %	21
0% foreign (without permanent address) cast and crew	25 %	4 %	17 %	38 %	17 %	26
1-25% foreign (without permanent address) cast and crew	18 %	5 %	13 %	49 %	15 %	48
>25% foreign (without permanent address) cast and crew	20 %	0 %	20 %	25 %	35 %	23

^a In relation to the number of co-producers, the sample of 152 is less than 155 due to 3 cancelled projects being excluded from the question. In relation to the question covering foreign crew, data is missing data due to the non-forced property of the question.

Highlights:

- The impact of quarantine restrictions have been felt more strongly by projects with a higher percentage of foreign cast and crew (more international).
- There has been little discernible association between the impact of quarantine restrictions and number of co-producers.

Table 8.31 Project’s level of internationalization and impact of general social distancing related recommendations/restrictions (N=152 & 97)^a

	no impact	don't know	little impact	some impact	great impact	N
Sole production company	7 %	4 %	7 %	33 %	49 %	55
1 co-producer	8 %	5 %	13 %	32 %	42 %	38
2 co-producers	14 %	0 %	18 %	36 %	32 %	22
3 co-producers	6 %	6 %	19 %	38 %	31 %	16
4+ co-producers	10 %	5 %	14 %	33 %	38 %	21
0% foreign (without permanent address) cast and crew	15 %	4 %	15 %	27 %	38 %	26
1-25% foreign (without permanent address) cast and crew	6 %	2 %	17 %	35 %	40 %	48
>25% foreign (without permanent address) cast and crew	9 %	0 %	22 %	26 %	43 %	23

^a In relation to the number of co-producers, the sample of 152 is less than 155 due to 3 cancelled projects being excluded from the question. In relation to the question covering foreign crew, data is missing data due to the non-forced property of the question.

Highlights:

- Distancing-related recommendations and restrictions have had greater impact on sole productions (less international) compared to those with several co-producers, and have had a marginally greater impact on projects with higher percentages of foreign cast and crew (more international).

Table 8.32 Project’s level of internationalization and impact of production (shoot) gathering recommendations/restrictions (N=152 & 97)^a

	no impact	don't know	little impact	some impact	great impact	N
Sole production company	11 %	4 %	15 %	27 %	44 %	55
1 co-producer	18 %	5 %	21 %	37 %	18 %	38
2 co-producers	18 %	0 %	18 %	23 %	41 %	22
3 co-producers	19 %	13 %	13 %	31 %	25 %	16
4+ co-producers	19 %	5 %	0 %	52 %	24 %	21
0% foreign (without permanent address) cast and crew	19 %	4 %	15 %	19 %	42 %	26
1-25% foreign (without permanent address) cast and crew	21 %	4 %	13 %	35 %	27 %	48
>25% foreign (without permanent address) cast and crew	17 %	0 %	22 %	39 %	22 %	23

^a In relation to the number of co-producers, the sample of 152 is less than 155 due to 3 cancelled projects being excluded from the question. In relation to the question covering foreign crew, data is missing data due to the non-forced property of the question.

Highlights:

- Recommendations and restrictions related to the size of production gatherings have had greater impact on sole productions (less international) compared to those with a several co-producers, and has had a greater impact on those with no foreign cast and crew (less international) compared to those with higher percentages of foreign cast and crew.

Table 8.33 Project's level of internationalization and impact of public event recommendations/restrictions (N=152 & 97)^a

	no impact	don't know	little impact	some impact	great impact	N
Sole production company	36 %	11 %	16 %	13 %	24 %	55
1 co-producer	42 %	16 %	5 %	11 %	26 %	38
2 co-producers	36 %	0 %	18 %	23 %	23 %	22
3 co-producers	25 %	13 %	19 %	6 %	38 %	16
4+ co-producers	19 %	24 %	5 %	19 %	33 %	21
0% foreign (without permanent address) cast and crew	27 %	15 %	12 %	12 %	35 %	26
1-25% foreign (without permanent address) cast and crew	31 %	6 %	21 %	15 %	27 %	48
>25% foreign (without permanent address) cast and crew	13 %	9 %	13 %	22 %	43 %	23

^a In relation to the number of co-producers, the sample of 152 is less than 155 due to 3 cancelled projects being excluded from the question. In relation to the question covering foreign crew, data is missing data due to the non-forced property of the question.

Highlights:

- The impact of public event recommendations/restrictions has been slightly greater among projects with higher number of co-producers (more international) and projects with a higher percentage of foreign cast and crew (more international).

8.5. Mitigating Measures

8.5.1. Use of Financial Mitigating Measures – country by country

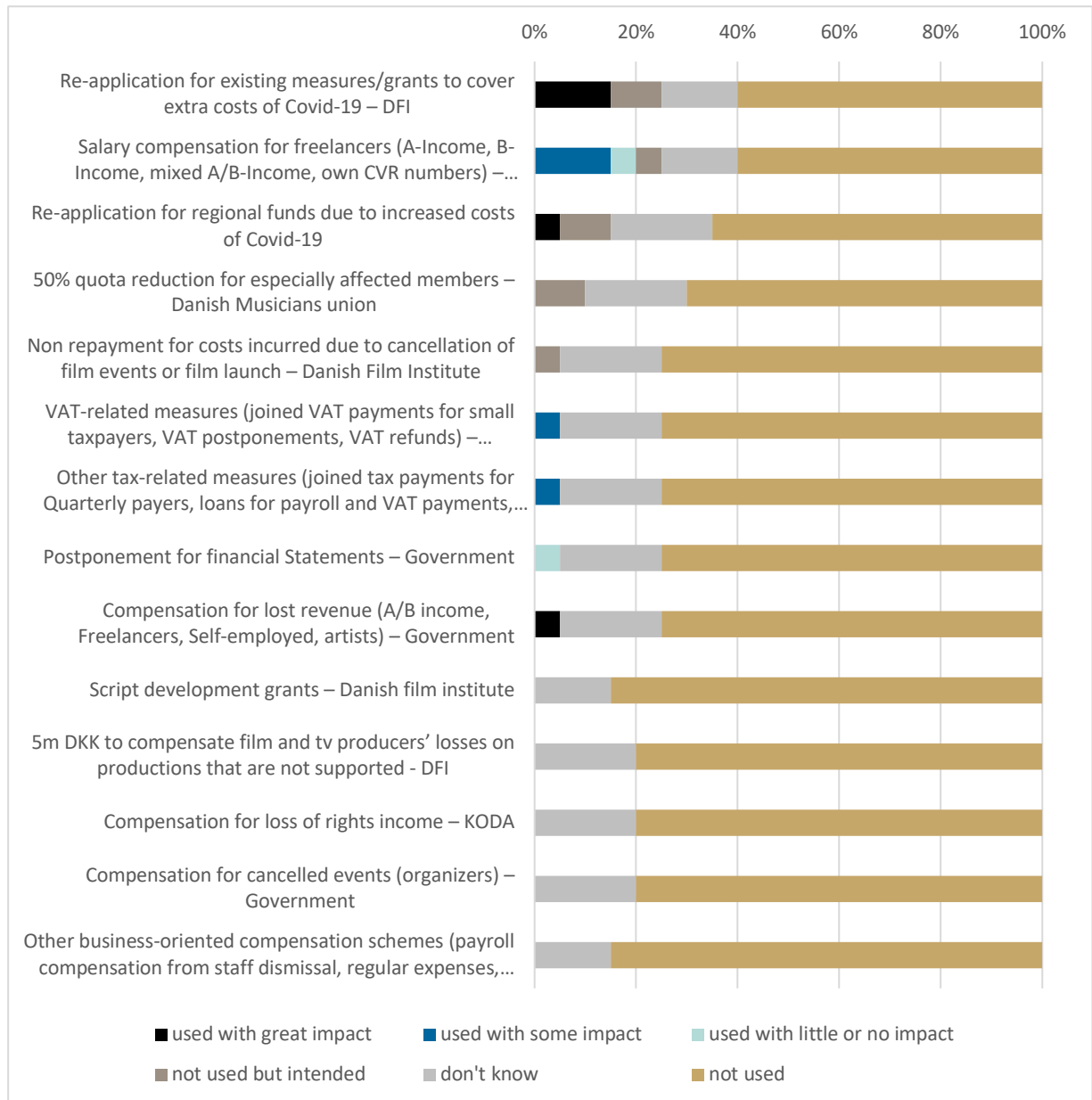


Figure 8.1 Impact of government and industry Covid_19 measures, Denmark (N=20)

Highlights:

- A large number of Danish measures, including industry specific, have not been used.

- Of those that have been used, the greatest beneficial impact has come from additional production subsidies (project-based), government assisted income support, and to a lesser extend tax measures.

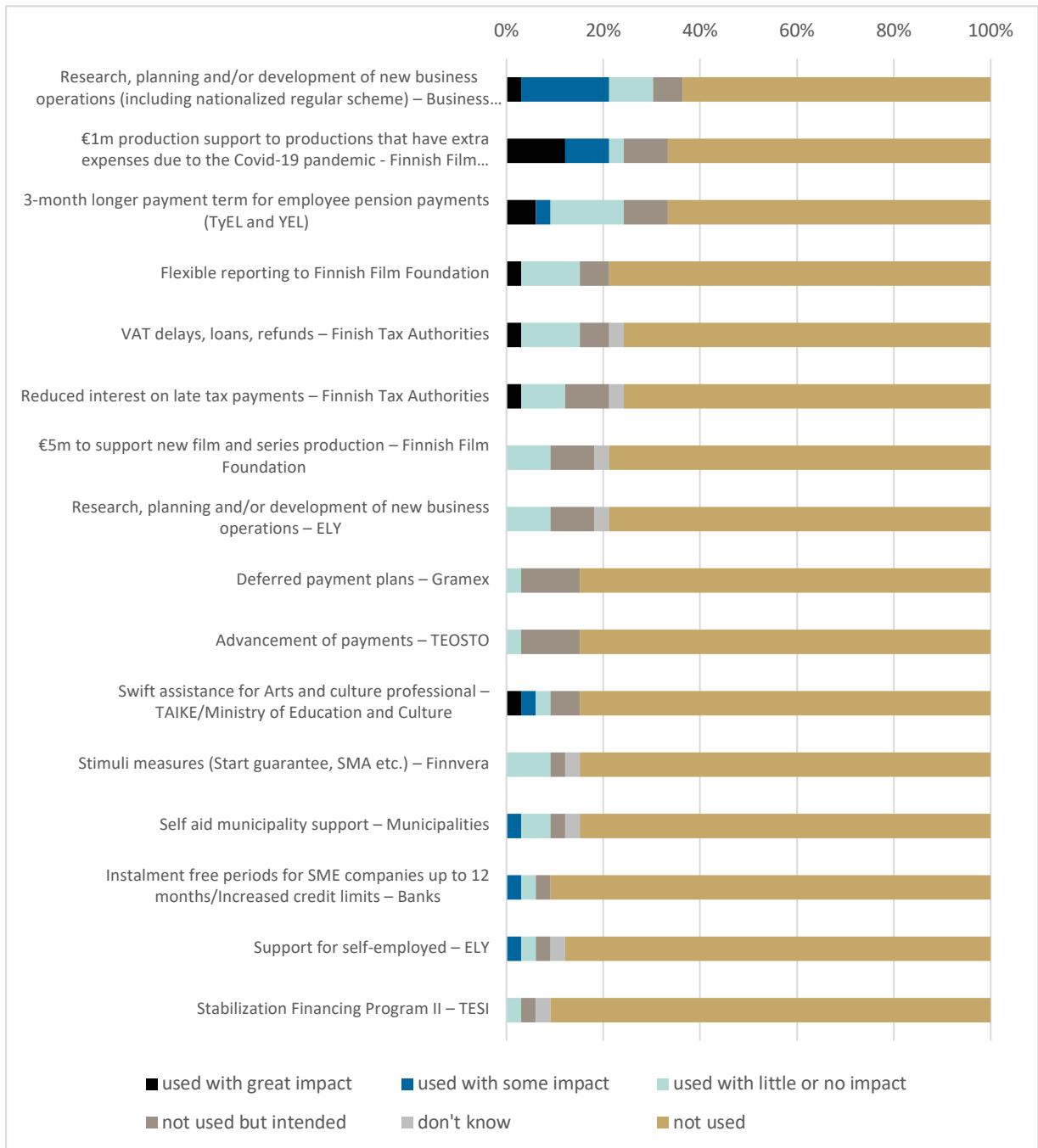


Figure 8.2 Impact of government and industry Covid_19 measures, Finland (N=33)

Highlights:

- Comparatively, Finnish producers have benefited from a wider range of measures.
- Most effective have been generalized public subsidies for new business operations, production subsidies (project-based), and delays in payment of employee pensions.

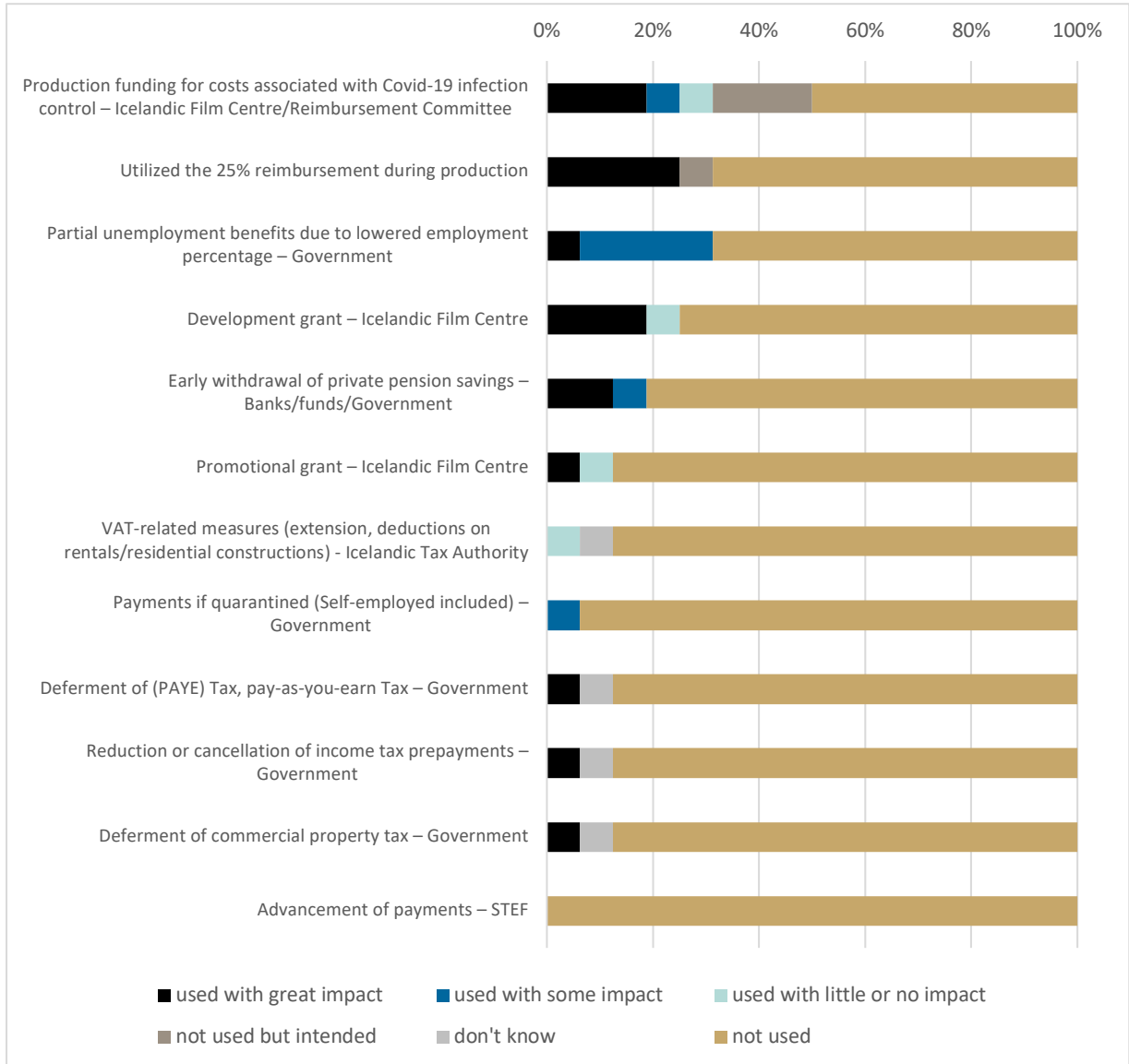


Figure 8.3 Impact of government and industry Covid_19 measures, Iceland (N=16)

Highlights:

- A large number of Icelandic measures, mostly non-industry specific, have not been used.
- Most effective have been production subsidies (project-based), government assisted income support, development grants, and early access to pension savings.

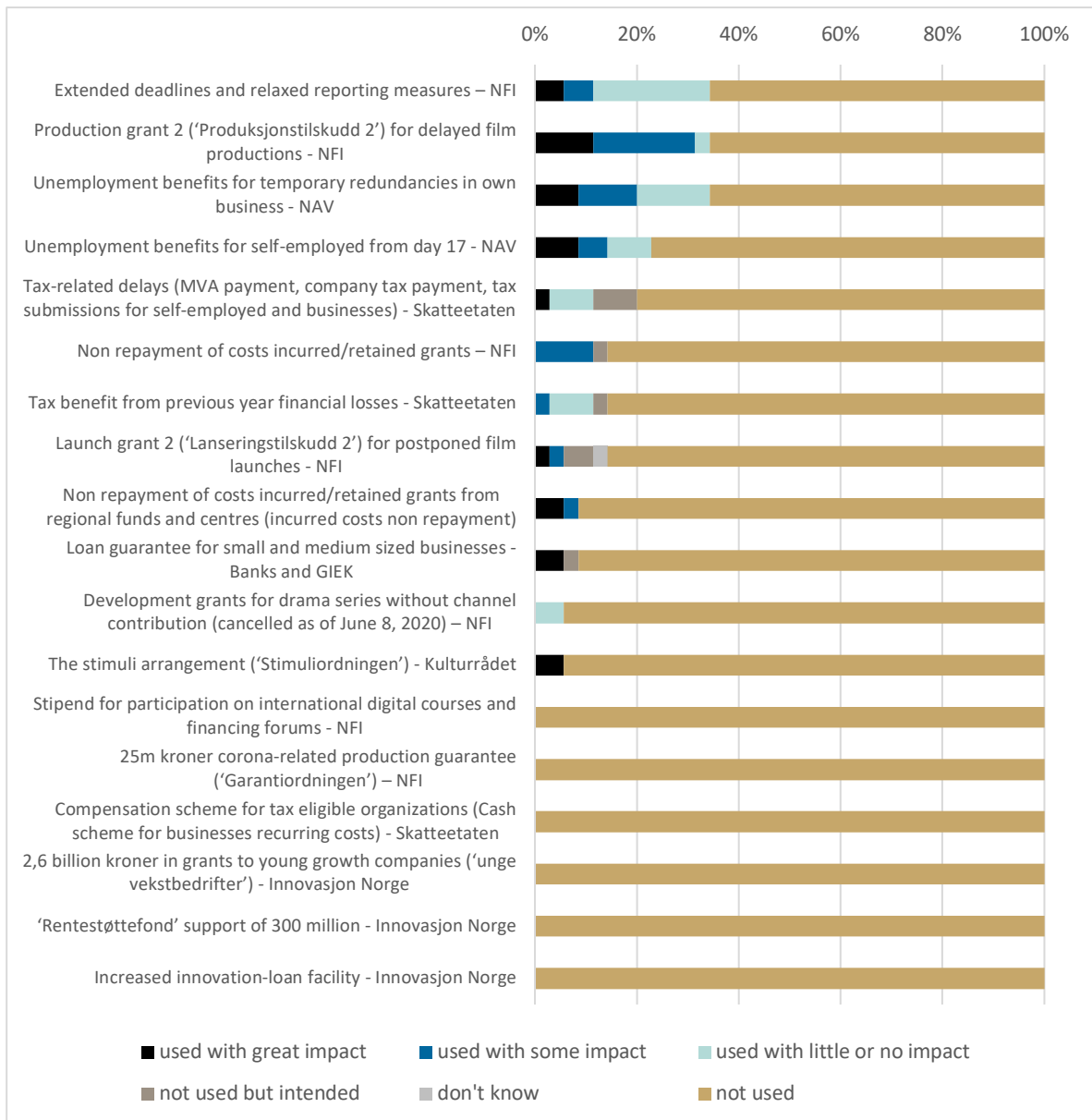


Figure 8.4 Impact of government and industry Covid_19 measures, Norway (N=35)

Highlights:

- A large number of creative industries / cultural oriented measures have not been used.
- Most effective have been production subsidies (project-based), extended/relaxed reporting requirements, government assisted income support, development grants, and tax-related reporting extensions.

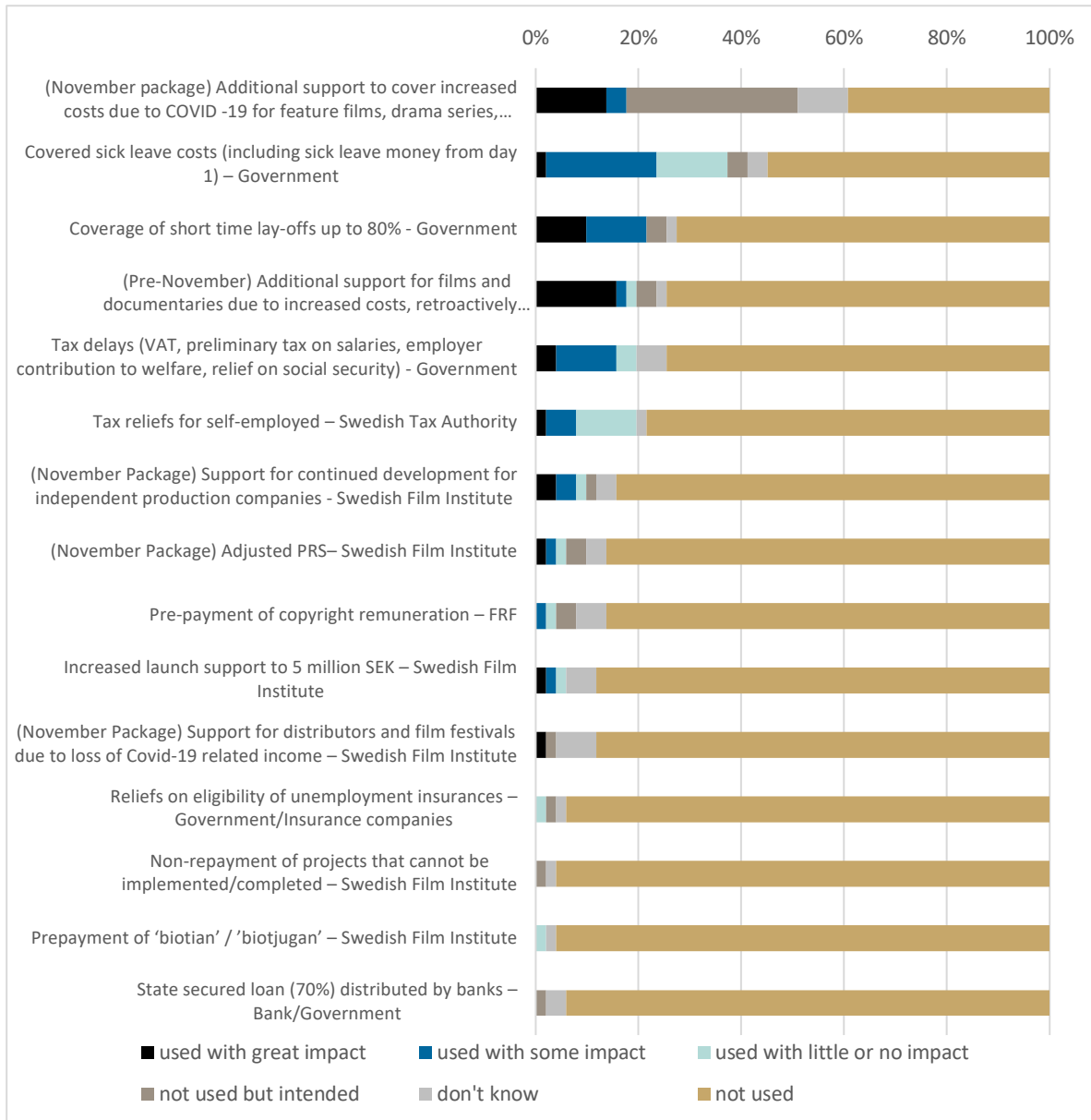


Figure 8.5 Impact of government and industry Covid_19 measures, Sweden (N=51)

Highlights:

- Compared to other Nordic countries, Swedish producers (like their Finnish counterparts) have benefited from a wider range of measures.
- Particularly successful has been the November release package to cover additional Covid-19-related production costs.
- Also effective has been assisted income support, production subsidies (project-based), extended/relaxed reporting requirements, government assisted income support, tax delays and relief, and industry specific development grants.

8.5.2. Impact of Other Mitigating Measures - country by country

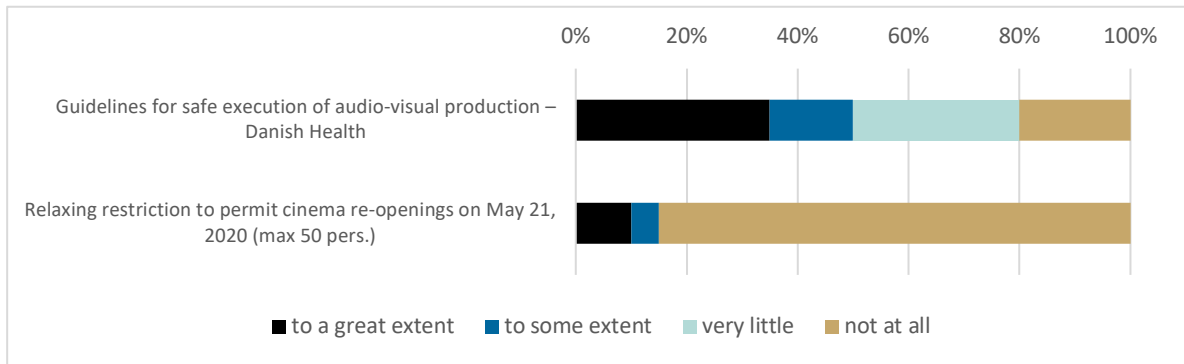


Figure 8.6 Impact of additional governmental, industry, and film agency measures since Covid-19 restrictions, Denmark (N=20)

Highlights:

- Industry specific guidelines have been a success.

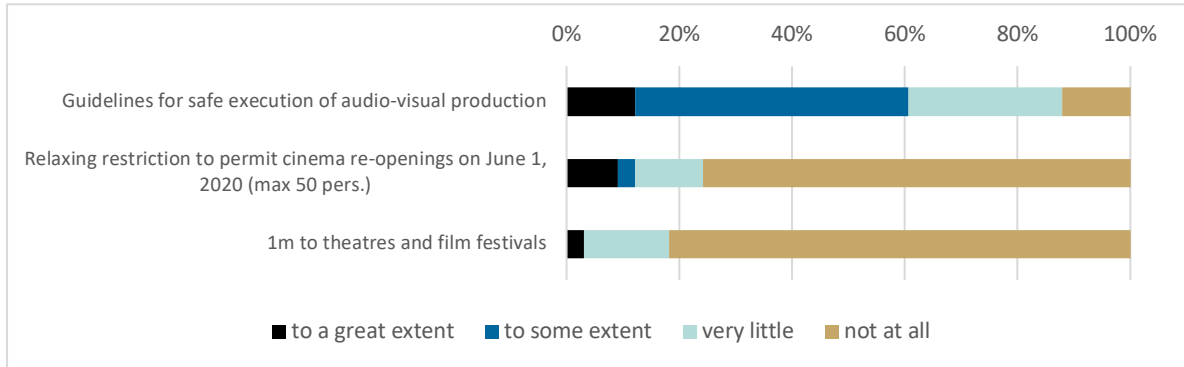


Figure 8.7 Impact of additional governmental, industry, and film agency measures since Covid-19 restrictions, Finland (N=33)

Highlights:

- Industry specific guidelines have been less effective but have been used.

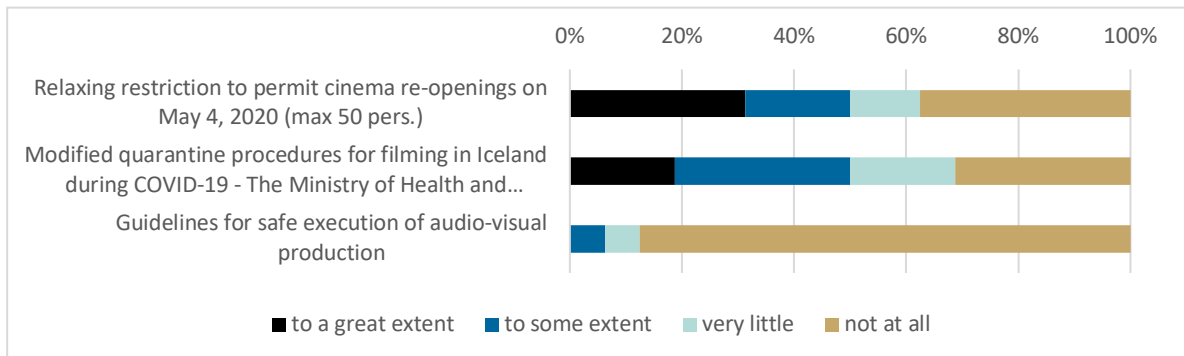


Figure 8.8 Impact of additional governmental, industry, and film agency measures since Covid-19 restrictions, Iceland (N=16)

Highlights:

- Industry specific guidelines are not viewed as effective.

- Relaxing cinema restrictions and modified quarantine procedures for filming in Iceland have been somewhat successful.

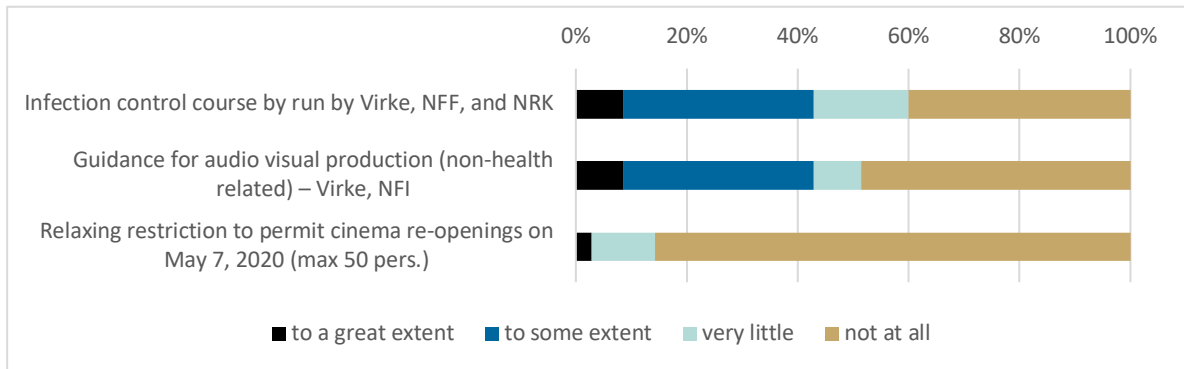


Figure 8.9 Impact of additional governmental, industry, and film agency measures since Covid-19 restrictions, Norway (N=35)

Highlights:

- The infection control course and guidance for audio visual production (non-health related) have been used but perceived to be of only some benefit.
- Cinema openings perceived to have had little impact.

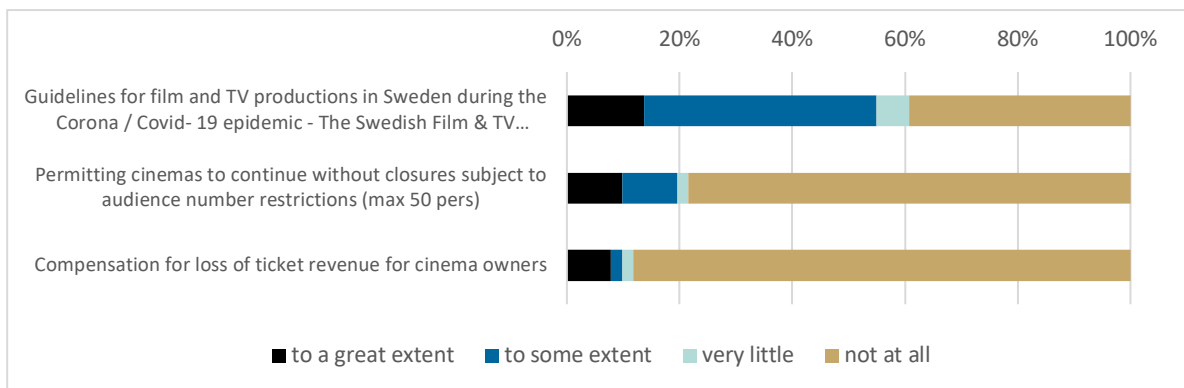


Figure 8.10 Impact of additional governmental, industry, and film agency measures since Covid-19 restrictions, Sweden (N=51)

Highlights:

- Industry specific guidelines are viewed as somewhat effective.

9. About the Researchers

Terje Gaustad is Assistant Professor in Communication and Culture and Associate Dean at BI Norwegian Business School. He holds a PhD in Strategic Management from BI Norwegian Business School and an M.A. in Communication Management from the University of Southern California. His main research interests are in institutional and organizational economics applied to the entertainment industries.

Peter Booth is Associate Professor at BI Norwegian Business School connected to the Nordic Centre for Internet and Society and BI's Centre for Creative Industries. He is trained as economist at The London School of Economics, in visual arts at the Oslo National Academy of the Arts, and completed his doctorate in Cultural Economics at Erasmus University Rotterdam. His research broadly covers sociology of art and finance, artist labour, and the impact of technologies on the cultural and creative sectors.

Endre Offerdal is research assistant at BI's Centre for Creative Industries. He is currently completing his MSc in Finance from BI Norwegian Business School. He holds a double degree with a degree in International Marketing from BI, and International Business with finance from Grenoble Ecole de Management. He is a former entrepreneur and has worked as a consultant for listed and non-listed firms in Norway.

Linnéa E. Svensson is a lecturer at the Department for Communication and Culture at the BI Norwegian Business School in the area of Creative Industries Management, specifically Event Management. She has since 1997 worked with festivals, conferences and other events in the areas of project management, production, sponsorship and sustainability. She is a sustainability consultant working in the event industry, the author of the Sponsorship Handbook for Festivals, the Environmental Handbook for Outdoor Events and Environmental Handbook for Norwegian Sports as well as other practical guides in Sustainability. She is now the project manager for the Green Road Map for the Norwegian Arts- and Cultural Sector. She is one of the co-founders of there European network and think tank for sustainable events; Green Operations Europe.

Anne-Britt Gran is professor of cultural policy and arts management, and director of the BI Centre for Creative Industries at BI Norwegian Business School. She has researched modern theatre history and theatre organizing, postmodernism and postcolonialism, cultural policy, cultural sponsorship, digital cultural consumption and digitization.

10. References

- Bilabel, J., Polania Giese, J. C., Gentis, S., Schneider, W., & Schipper, M. (2011). *Cut!CO2! The Carbon Film Quote*. <http://greeneconet.eu/cutco2-carbon-film-quote>
- Cabrera Blázquez, F.J., Cappello, M., Chochon, L., Fontaine, G., Milla, J.T. & Valais, S. (2020). *The European audiovisual industry in the time of COVID-19*. European Audiovisual Observatory. Strasbourg. June 2020
- Caves, R.E. (2000). *Creative Industries: Contracts between Art and Commerce*. Cambridge, MA: Harvard University Press.
- Jones, M. (2018). *Sustainable Event Management: A Practical Guide*. Routledge.
- Gaustad, T., Grünfeld, L.A., Guldvik, M.K., & Westberg, N.B. (2020). *Koronakrisens virkninger på film- og dataspillbransjene [Corona-Crisis Effects on the Film and Gaming Industries]*. Report 100/2020. Oslo: Menon Economics.
- Larson, E.W. & Gray, C.F. (2021). *Project Management: The Managerial Process* (8th ed.). New York, NY: McGraw-Hill.
- Kääpä, P. & Hjort, M. (2020). Nordic Production Studies. *Journal of Scandinavian Cinema*, 10(2), 89-92
- Noonan, C. (2020). Public Funding in a Time of Crisis: Film Funds and the Pandemic. *Baltic Screen Media Review*, 8(1), 10-17
- Svensson, L. E. (2018). *Climate footprint report ISO 14064 Bislett Games 2016-2018*. Greener Events.
- Thorsen, H., & EY. (2020). *NRK's Climate and Environmental Calculations with Sustainability strategy/ NRKs klima og miljøregnskap med bærekraftsstrategi*. NRK & EY.
- Waterman, D. (2005). *Hollywood's Road to Riches*. Cambridge, MA: Harvard University Press.
- Øfsti, M. (2020). Distributor Strategies in the Face of Closed Cinemas: Norwegian Responses to Covid-19. *Baltic Screen Media Review*, 8(1), 54-66