EXECUTIVE SUMMARY

REPORT

2021

Audiovisual sector in Catalonia

Consell de l'Audiovisual de Catalunya

www.cac.cat

Chapter I. Audiovisual legislation in Catalonia

Transposition of Directive 2018/1808

Directive 2018/1808, which amends the Audiovisual Media Services Directive (AVMSD), has been the most important milestone in European audiovisual legislation in recent years.[1]

One core new development in Directive 2018/1808 is the introduction of the prominence of certain contents in video on demand (VoD) services (such as Netflix). Thus, whereas 35 and article 13 prescribe the prominence of European productions in these services in order to guarantee their findability and users' effective access to them. This is a new development that may require audiovisual regulation authorities to be given new digital competences.

Likewise, the Directive opens the door for EU Member States to establish prominence for contents of general interest (whereas 25 and article 7b). Specifically, it states that Member States have the ability 'to impose obligations to ensure the appropriate prominence of content of general interest under defined general interest objectives such as media pluralism, freedom of speech and cultural diversity'.

As shall be analysed in Chapter I of this report (and previously in BIAC 19), countries or regions like Germany, Flanders, France, Ireland and Italy have incorporated the principle of prominence in contents of general interest in their respective transpositions of the Directive. In some cases, *general interest* is defined as political or local/regional information (Germany), while in others it is equated with public service (France). Furthermore, in France, the new ARCOM regulatory authority (a merger of the CSA and Hadopi) can prescribe the prominence of contents of general interest on the homepage or a screen of a user service interface, recommendation services and search engine results.

In November 2020, the Spanish government presented the Draft General Law on Audiovisual Media, objections to which may now be submitted. The CAC approved two objection reports (Board Plenary agreements 105/2020 dated 1 December and 62/2021 dated 8 July). CAC's core goal was for the new law to reflect the internal cultural and linguistic diversity of Spain. The main ideas include:

[1] Ever since the European Commission launched the proposal of the new Directive in 2016, and during the EU member States' transposition process, the CAC has been publishing analyses of it. See, for examples, the 'L'apunt' sections in the following BIAC: BIAC 19, September 2021: 'Transposition of AVMSD into EU Member States. BIAC 18, May 2021: 'Transposition of European audiovisual legislation' (description in Spain and Catalonia). BIAC 5, September 2016: Revision of the Audiovisual Media Services Directive (AVMSD)', on the European Commission's initial proposal.

- An increase of the quota of financing European works for video on demand (VoD) services from 5% to 10%, in addition to maintaining the current system for linear televisions (5% for private television and 6% for public).
- In VoD services, within the quota of works that providers have to offer in the languages of the Spanish state, earmarking half to works in the co-official languages (Catalan, Basque and Galician) and thus establishing a minimum presence of Catalan in the catalogues of these services.
- Stipulate that the public service contents in co-official languages of the Spanish state should be considered of general interest and therefore treated prominently in the content menus offered by the VoD services.

Throughout 2021, the CAC advocated the inclusion of the co-official languages in the principle of prominence for contents of general interest as a crucial part of the new Spanish audiovisual law: 'the prominence of contents in Catalan in on-demand audiovisual services shall be a fundamental instrument for Catalonia's language policy in the forthcoming decades. The CAC has the challenge of carrying out the regulatory implementation of this prominence and of guaranteeing compliance with it' (BIAC 18, 'Note section). This statement was based on article 149.1.27 of the Spanish Constitution, which states that the State holds basic competences in audiovisual legislation and that Catalonia oversees its regulatory implementation and regulation.

On 14 December 2021, the initiative became a draft law, which has been the subject of political and media debate, especially between September and November 2021. At the time this report was closed, the Congress of Deputies had just approved it, and it had been sent to the Senate to complete its parliamentary processing.

It is worth highlighting that on 8 September 2021 the Parliament of Catalonia admitted for consideration the Proposed law of the Junts per Catalunya party to amend Law 22/2005, dated 29 December, on audiovisual communication in Catalonia, to be considered by the emergency process, to approve a new Catalan audiovisual law. Subsequently, the government pledged to present a draft law, which is expected to be issued in 2022.

European digital services regulation (*Digital Services Act, DSA*)

The main draft law on digital matters in the Von der Leyen Commission has a twofold purpose:

- European regulation of digital *markets* (*Digital Markets Act*, DMA). The purpose of this initiative is to establish anti-monopoly and free market policies *ex ante* in the digital platform sector within the single digital market (SDM).

- European regulation of digital *services* (*Digital Services Act*, DSA). This norm will have profound effects on certain aspects of the distribution of audiovisual contents on digital platforms.

The first issue worth noting is that these are regulations, that is, binding EU rules (which rank higher than a directive, for example), and once approved they have to be applied directly and literally in the Member States and cannot be amended. At the time this report was closed, both the DMA and the DSA were in the final approval phase.

The DSA entails changes in the responsibility for digital platforms, including video exchange platforms (VEPs, such as YouTube and TikTok), social media with audiovisual services (like Facebook Watch) and search engines (like Google).

The draft DSA defines a specific type of actor in the online market: very large online platforms and very large online search engines. These services have an average number of active users per month equal to or higher than 45 million within the EU (10% of the population). Because of their volume, they can generate systemic risks not only in the market but also in public safety, the protection of at-risk groups, democracy and electoral processes. For this reason, apart from policies against market concentration and abuse (DMA), *policies to regulate the content* that the platforms offer the public are needed (DSA).

Thus, the draft DSA includes specific obligations for these very large operators. For example, it proposes that users should not be subjected to a recommendation system based on algorithms and other artificial intelligence tools unless they have expressed their free, specific, informed and unequivocal consent. Furthermore, online platforms must also guarantee that the algorithm used by their recommendation system is designed such that there is no risk of deceiving or manipulating users. Therefore, the DSA stipulates imposing transparency on the large platforms' recommendation and search algorithms.

Radio spectrum policies

In Spain, the new developments in relation to the radio spectrum refer to the auction of the 694-790 MHz band (known as the '700 MHz band') to telecommunications operators to deploy 5G services.

In order to situate this decision, chapter I briefly outlines the context within which the use of the radio spectrum is assigned. Specifically, it explains the regime whereby DTT and electronic communications share the UHF (470-862 MHz). This is the part of the spectrum which transmits the signal the most efficiently and cheaply, and it has been reserved for radio and television since the start of broadcasting.

With the onset of electronic communications, since 2009 states have successively agreed to cede this part of the spectrum to telecommunications companies, at the expense of DTT broadcasts (called 'digital dividends'). This process has concentrated DTT broadcasts on the sub-700 MHz band of the spectrum. In this context, 2023 is the date set to agree upon potentially assigning the sub-700 MHz band to electronic communications. This means that the entire UHF will be in the hands of mobile communications.

In 2021 there were new developments on this issue. In Europe, the Irish regulatory authority, the Commission for Communications Regulations, held an open consultation on the sub-700 MHz band in the document *Strategy for Managing the Radio Spectrum 2022 to 2024*. The purpose of this consultation is to collect the opinions of the different stakeholders involved with a view to determining the use needs of this band and the position that Ireland should defend at the 2023 International Telecommunications Union (ITU) meeting.

This is a major issue for audiovisual policies. If no UHF space remains, after a transitional period DTT would eventually have to migrate to other less efficient bands on the spectrum which are more expensive to broadcast from—or it could simply be considered obsolete technology. And this is relevant in Europe because European audiovisual policies, which largely revolve around DTT (public service, quota of works produced in Europe, etc.), would have to be reconsidered, and so would some functions of the audiovisual regulation authorities, such as the CAC itself. This reassignment of the uses of the spectrum is implicitly related to the development of the prominence of European works and contents of general interest within the context of the Internet, as stipulated by Directive 2018/1808, mentioned above.[2]

Chapter II. Economy of audiovisual sector in Catalonia

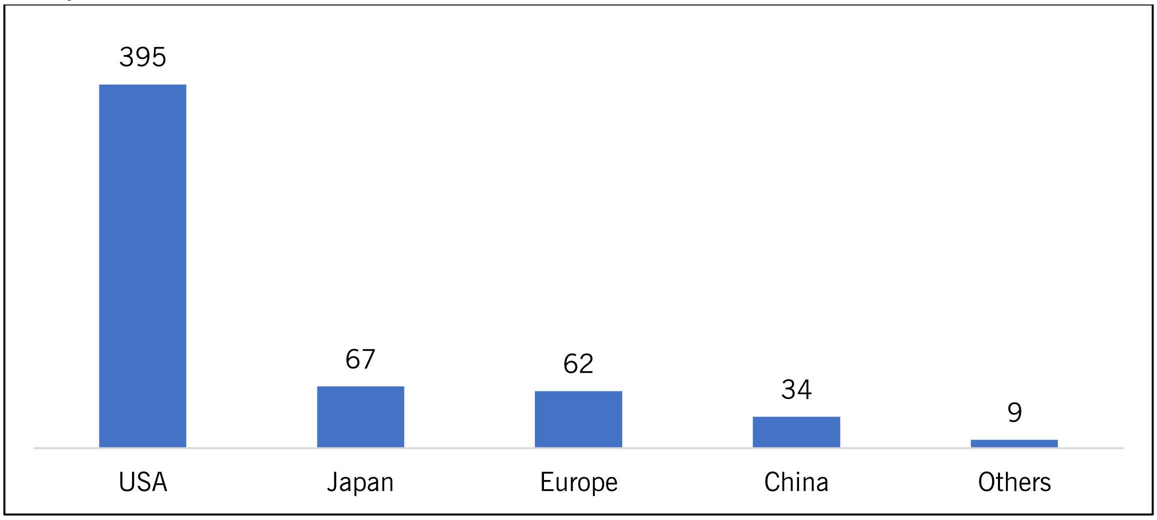
General context: Digital ascendancy of the USA and sectoral policies in Catalonia and Spain

As a global trend, we can see how US groups have increased their ascendancy in the global audiovisual sector in recent years. The large mergers (such as AT&T-WarnerMedia) have offset the stagnation in the traditional audiovisual markets. The consumer electronics giants have diversified towards audiovisuals and games (primarily Apple, Microsoft and Google). China is slowly emerging in the

[2] This issue has been discussed in other CAC sectoral reports. See particularly the Report on audiovisual sector in Catalonia 2015, in which the states that belong to the ITU reached the latest agreements on the use of UHF. See section 2.1. 'Regulation of the radio spectrum: The UHF band' in this report.

audiovisual sector, with a strong online gaming component (Tencent). And parallel to this reorganisation of the audiovisual market, the relative weight of Europe and Japan is on the wane. Their representatives among the top 50 actors are traditional communication groups which have expanded their activities on the Internet. Hardly any digital native groups have emerged in Europe.

Table 1. Income of the top 50 audiovisual groups in the world, by region, 2020 (in billions of euros)



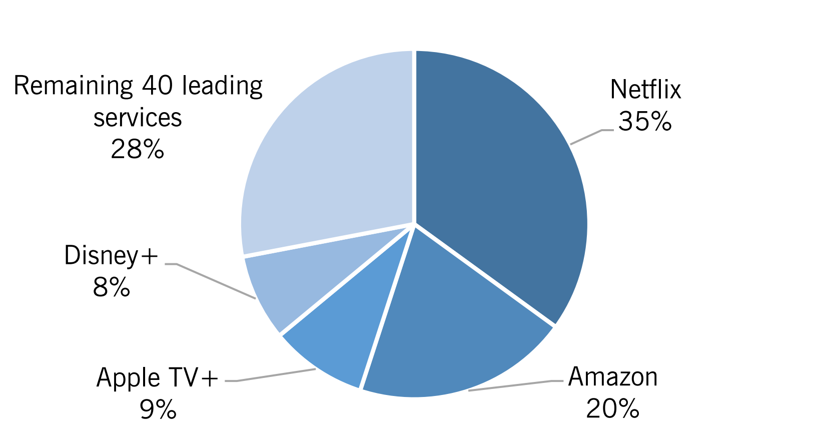
Source: Authors based on data from the European Audiovisual Observatory (EAO). *Yearbook 2021/2022. Key Trends*.

On the other hand, there is a heavy concentration in the ownership of the leading digital platforms and social media. This issue is rellevant because business conglomerates cross the access and consumption data of subscribers to the platforms in order to commercially exploit them (either directly, in their content recommendation algorithms, or via third parties, in online advertising, for example).

Alphabet is the parent company of Google, and of YouTube as well since 2006. Facebook owns Instagram (which it purchased in 2012) and WhatsApp (2014). TikTok is owned by the Chinese company ByteDance, which does not quote on the stock market, which exempts it from providing much internal financing information. In addition to TikTok, ByteDance is the parent company of other content platforms and social media, primarily in Asia. Twitch has been owned by Amazon since 2014.

Furthermore, in 2021, the American operators that lead the market expanded their services to Europe and plan to continue expanding in the future as their home market becomes saturated. This includes the launch of Disney+ in the Eastern European countries and the expansion of HBO Max, SkyShowtime and Paramount+, among others, in Europe throughout 2022 and 2023.

Table 2. Distribution of subscriptions to VoD services in Europe, 2020



Source: Authors based on data from the European Audiovisual Observatory. EAO. *Trends in the VOD market in EU28.*

In order to reverse this trend in the markets, known as winner-takes-all, the authorities are advocating sectoral policies to promote the local industries. Catalonia and Spain are following this strategy.

In Catalonia, the ICEC (Catalan Institute for Cultural Companies - Department of Culture) and the Audiovisual Cluster of Catalonia launched the *Catalunya Media City* project with an initial budget of 300 million euros and two spaces: the Parc Audiovisual de Catalunya (PAC) in Terrassa and the Tres Xemeneies space—the former power plant in Sant Adrià de Besòs. The purpose of this initiative is to turn Catalonia into the hub of audiovisual innovation in videogames in southern Europe. Catalunya Media City is based on the realisation that the game industry in Catalonia is of such a size that it can be internationally projected: according to the ICEC and the publication *Videogame Companies in Catalonia, 2021*, a total of 167 videogame companies (28% of the total in Spain) were located in Catalonia in 2020. All together they invoiced 473 million euros in 2019, a 14% increase over the previous year which accounts for 53% of the entire sector in Spain. In Catalonia, this industry employed 3,381 people. As a complement to these figures, the study conducted by ACCIÓ called *Videogames in Catalonia* states that Spain ranks fourth in Europe and ninth in the world in invoicing in videogames.

In turn, in March 2021, the Spanish government presented the plan entitled *Spain, audiovisual hub of Europe, 2021-2025,* to which it earmarked 1.603 billion euros. The goal is to turn Spain into a European pole attracting audiovisual production. The plan includes a diverse set of measures to strengthen the audiovisual sector, revolving around four pillars:

- Digitalising, internationalising and attracting investment.
- Improving financial and fiscal instruments.
- Fostering talent and developing human capital.
- Reforming the regulatory framework and eliminating administrative barriers.

In the sphere of local media, we should mention the audiovisual initiatives carried out by the Xarxa Audiovisual Local (Local Audiovisual Network, XAL). In November 2020, it presented the *Strategic Plan 2021-2025*, which has 10 pillars for addressing the future of local communication in Catalonia, and in November 2021 it presented the *Strategic Plan for Radio 2021-2025*, which is centred on the coexistence of traditional FM and digital radio consumption.

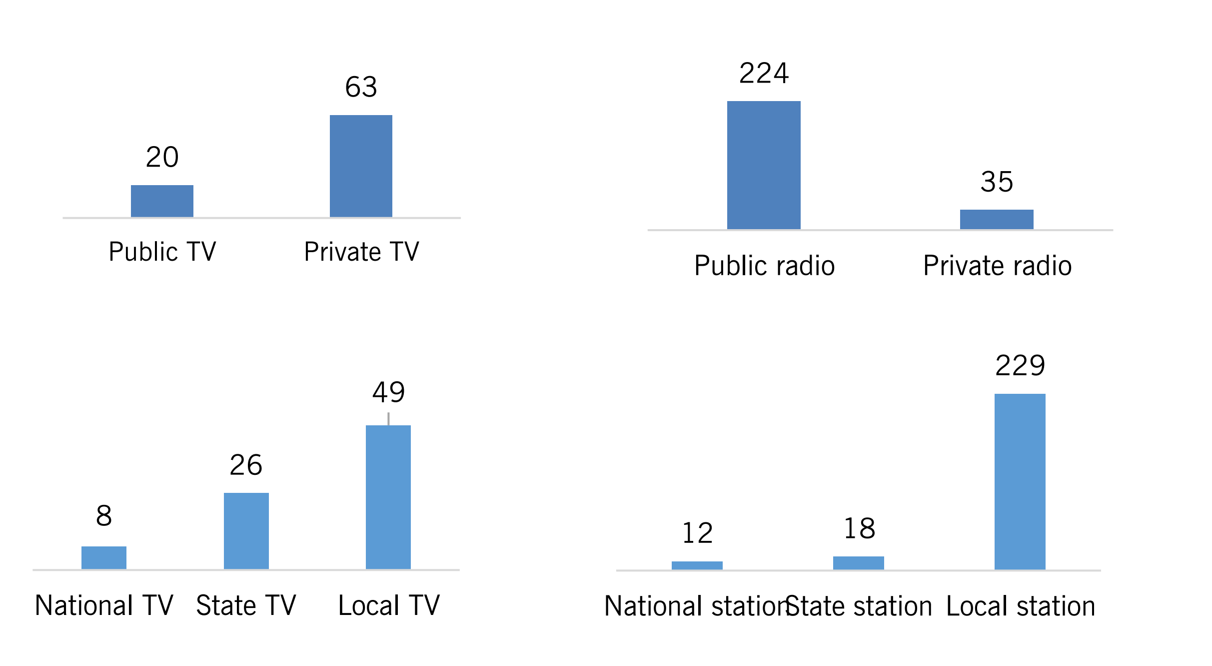
Parallel to the drafting of the strategic and industrial plans in each sphere of action, audiovisual policies are completed with public aid to the sector. While in 2020 the aid was primarily targeted at mitigating the consequences of COVID-19, the majority of the lines of support implemented in 2021 sought the sector's promotion, encouragement and recovery. As a whole, the contribution of the main public audiovisual entities in Catalonia was 77 million euros. The Catalan Institute for Cultural Companies (ICEC) was the entity that earmarked the most, almost half of the total. In turn, the specific aid related to the COVID-19 crisis was primarily targeted at the exhibition sector: 8 million euros from the ICEC and 2.5 million from the Spanish Institute of Cinematography and the Audiovisual Arts (ICAA).

Media and audiovisual communication groups in Catalonia

In 2021, Catalonia had 350 radio and television stations, an audiovisual supply similar to the previous year, divided into 83 TV stations (DTT) and 259 radio broadcasters (FM).[3] It should be noted that the non-resolution of the public tender to adjudicate six FM radio licences during the year 2021 kept the figures unchanged.[4]

[3] Figures taken from the Registry of audiovisual communication service providers of Catalonia.
[4] See Agreement 100/2020, dated 18 November 2020, of the Catalan Audiovisual Council (call for applications); Agreement 47/2021, dated 19 May 2021, of the Plenary of the Catalan Audiovisual Council (extension of the decision deadline); and Agreement 13/2022, dated 7 March 2022, of the Plenary of the Catalan Audiovisual Council (award of licenses).

Table 3. Distribution of the channels of the 84 television and 259 radio broadcasters by ownership and geographic scope of broadcasting. Catalonia, 2021



Source: Catalan Audiovisual Council.

In Catalonia the CCMA offers the public television service via four channels:TV3, 3/24, 33/Super3 and Esport3.

There are three private television providers in Catalonia:

- Emissions Digitals de Catalunya (EDICA), with the channels 8tv and Verdi Classics.
- Fundació Futbol Club Barcelona, with Barça TV.
- Alta Tecnologia en Telecomunicacions, with Fibracat TV.

Interesting new developments include the Grupo Godó's July 2021 disassociation from the company EDICA, which owns private multiplexes all over Catalonia, in favour of OC 2022.[5]

In terms of radio, the public services with coverage in Catalonia were the CCMA (Catalunya Ràdio, Catalunya Informació, iCat and Catalunya Música) and the CRTVE broadcaster Ràdio 4.[6] Locally, there are 215 public broadcasters, which means that 75% of the FM frequencies in Catalonia are publicly owned.

[5] See Agreement 68/2021, dated 15 July 2021, of the Plenary of the Catalan Audiovisual Council.
[6] To check the list of the frequencies of the CCMA and CRTVE broadcasters, see the map of FM frequencies of the CCMA and the map of frequencies of RNE, respectively.

Private radio in Catalonia encompasses five main licensees groups:

- Radiocat XXI and Ràdio Associació de Catalunya, with RAC1 (23 frequencies) and RAC105 (16 frequencies).
- Ràdio Tele Taxi de Radiodifusión and RM Radio, with Radio TeleTaxi (16 frequencies).
- Emissions Miramar, Sistema Català de Radiodifusió, Carles Cuní Llaudet and Tiana'n'man, with Flaix FM (simultaneous broadcasts on 9 frequencies) and Flaixbac (simultaneous broadcasts on 13 frequencies).
- Sociedad Española de Radiodifusión (SER), Chest Game, Emissores Catalanes Audiovisuals de Proximitat and Ràdio Lleida, with SER Catalunya (15 frequencies).
- Fundació Missatge Humà i Cristià, with Ràdio Estel (simultaneous broadcasts on 11 frequencies).

Finally, the majority of local media in Catalonia were also part of multimedia communication groups, radio and television stations, including most prominently the multimedia communication groups Segre, ETV, Cadena Pirenaica, Mola, Ebre, Corisa Media Grup and Costa Brava Global Media. In local television, there is Teve.cat and Taelus, while in radio stations we find GUM, Simalro and Ràdio Marina.[7]

Video on demand services

Video on demand services (VoD) offer a closed catalogue of contents over which they exercise editorial responsibility and certain rights (like copyright). They may be open services, subscription services (SVoD) or transaction services (TVoD), which consist in purchasing or renting specific content without necessarily any further commercial relationship.

[7] For more information on the local public and private media in Catalonia, see the map of radio and television stations in Catalonia of the Catalan Audiovisual Council.

Table 4. Main on-demand services of the traditional audiovisual and IPTV providers operating in Catalonia, 2021

Traditional provider	On-demand services
CCMA	TV3alacarta CatalunyaRàdioalacarta
XAL	Alacarta.cat XALA!
RTVE	RTVEalacarta Playz
Atresmedia	Atresplayer Atresplayer Premium Flooxer Novelas Nova kidz
Mediaset	Mitele Mitele Plus mtmad
IPTV*	
Telefónica	Movistar+ Movistar+Lite
Orange	Orange Videoclub
Vodafone	Vodafone TV

* Note: IPTV refers to VoD services provided by the telecommunication companies that own the networks.
Source: Authors.

Audiovisual production in Catalonia

According to figures from the Catalan Department of Business and Labour, in 2021 there were more than 3,609 companies in Catalonia in the audiovisual sector, which together invoiced 6.703 billion euros and employed 31,000 people.[8]

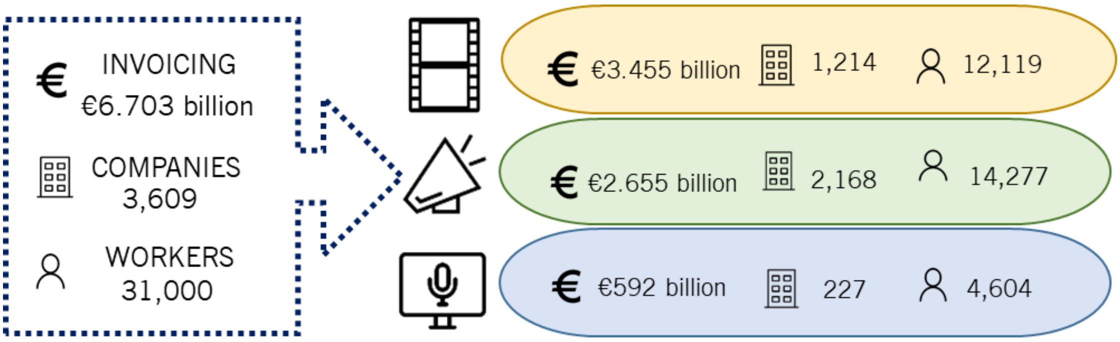
These figures are the sum of the three main business segments in the audiovisual sector in Catalonia.

- Audiovisual entertainment (films, series, documentaries or videogames).
- Communication and advertising.
- The media.

The audiovisual entertainment sector had the highest aggregate invoicing because of the importance of the audiovisual production subsector (which accounted for 66% of the segment's total invoicing). The corporate communication, advertising and events area invoiced 2.65 billion euros, and the media came in third, with 592 billion euros.

[8] Figures taken from the study entitled *The audiovisual sector in Catalonia* by the Strategy and Competitive Intelligence Unit of ACCIÓ and the Directorate General of Industry (DGI) of the Department of Business and Labour of the Government of Catalonia.

Table 5. Economic indicators of the main business segments in the audiovisual sector in Catalonia, 2021

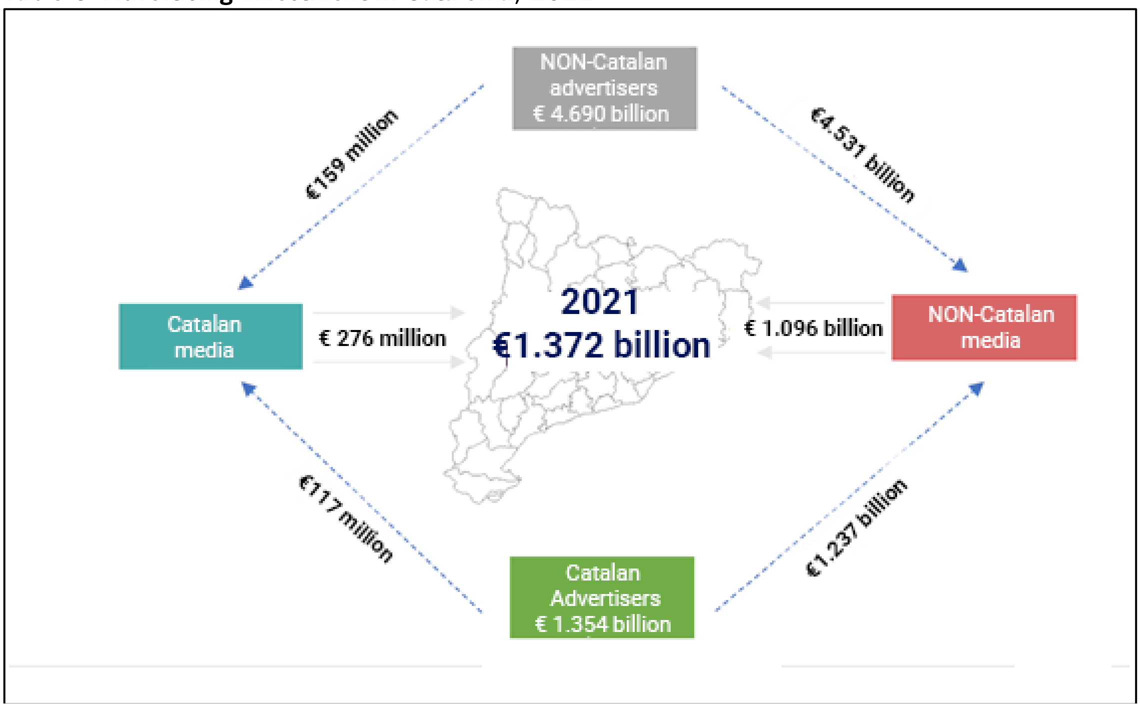


Note: This encompasses all the companies that meet the following criteria: company currently operating, figures available from at least the past 5 years and headquarters or major activity in Catalonia. Source: Authors based on figures from ACCIÓ.

Advertising investment in Catalonia

In 2021, the investment in the advertising market in Catalonia was 1.372 billion euros, 13.3% more than the previous year according to figures from the Associació Empresarial de Publicitat (Advertising Company Association, AEP). This volume of investment is virtually equal to that of 2019, after the dip in 2020, in which it dropped 15.2% due to COVID-10.

Table 6. Advertising investment in Catalonia, 2021



Source: Advertising Company Association (AEP).

Chapter III. The supply of audiovisual contents in Catalonia

Television programming in Catalonia

Generally speaking, in 2021 the programme listings of the different TVC channels resumed the volume that characterised them prior to the COVID-19 pandemic. In the distribution of contents according to genre, the figures show a return to the proportions that each channel had recorded two years earlier.

The programming of 8tv varied significantly in the fourth quarter of the year, dovetailing with the change in the shareholder structure of the company ECIDA.

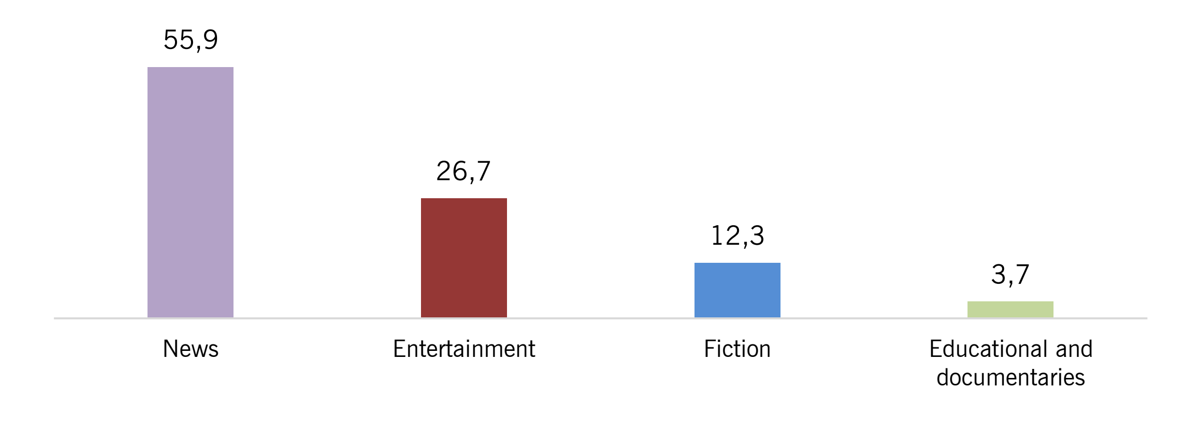
Televisió de Catalunya: TV3, 33, Super3 and Esport3

On TV3, **news** was the focal point of the channel's programming, primarily through its different news editions in the morning, midday and evening. This was complemented with magazines with news contents, such as *Els matins, Planta baixa, Més 324* and *Preguntes freqüents*. It also broadcast news specials and reports related to current events (Parliament of Catalonia elections, COVID-19 vaccines and variants, climate crisis, etc.).

The releases of **entertainment** programmes are concentrated in the evening. Examples include the magazine *Nexes* (Wednesdays at 10:10 pm, February-April), on the life experiences of anonymous people; the music contest *A 2Veus* (Thursdays at 11:20 pm, February-March); the variety programme *Celebrem!* (Thursdays at 11:20 pm, April-May); and the spaces *Fake Night* (humour and interviews, Thursdays at 10:50 pm, September-October) and *Labanda sonora* (interviews with artists and references to musical hits, first Monday and then Thursday at 11:45 pm, October-December).

The **fiction** programming included series like *Moebius* (Mondays at 10:10 pm, May-June) and *L'última nit del karaoke* (Mondays at 10:40 pm, October-December).

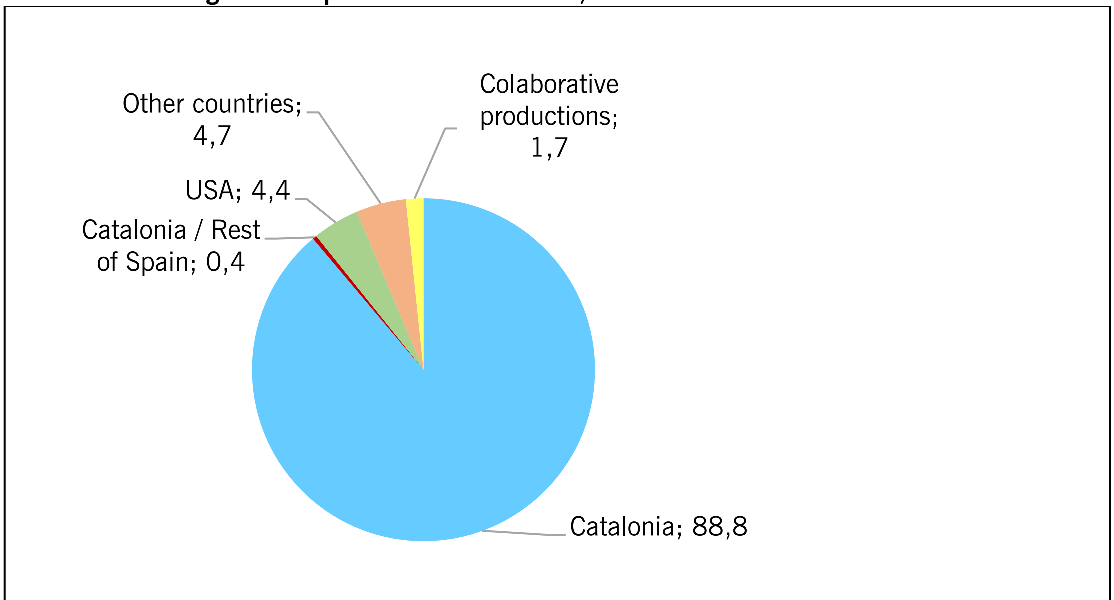
Table 7. TV3. Type of programmes, 2021 (in %)



Source: Catalan Audiovisual Council.

The origin of the productions broadcast by TV3 in 2021 was primarily European (94.3%). Catalan productions lead the ranking (with 88.8%), followed by American productions (4.4%).

Table 8. TV3. Origin of the productions broadcast, 2021



Note: Origins of productions accounting for higher than 1% of the total programming.
Source: Catalan Audiovisual Council.

On channel 33, the educational programmes and documentaries remained the genre with the strongest presence in the listings in 2021 (68.6% of the time). This figure is seven percentage points higher than the previous year. Likewise, there was also an increase in entertainment programmes (9.1%) compared to previous years: in 2020 they accounted for 5.5% and in 2019 3.2% of total time. On the other hand, there is a decline in fiction programmes (8.2%) compared to the previous two years (around 18.5%).

In terms of the origin of the productions, European productions accounted for 90.7% of the programming time on channel 33 in 2021. Of this percentage, almost half the contents (46.7%) were produced in Catalonia. The origin of the rest of the productions is distributed among European countries (primarily the United Kingdom, with 10.6%, and France, with 9.7%) and the United States (4.1%), among others.

With regard to Super3, fiction remained the most common content in the listings throughout 2021, with much higher broadcast times than the other genres (91.2%). At the same time, educational programmes and documentaries gained prominence on this children's channel (5.6%), a trend that began in 2020 with a shift in the programming based on the COVID-19 pandemic (educational programmes and documentaries accounted for 7.5%). In 2021, even though they did not reach the same figures as in the previous year, this category's relative weight was eleven times higher than it had been in 2019 (0.5%).

European productions were in the majority (59.8%) on the children's channel in 2021, at 16.5 points higher than in 2019. Still, the figures from 2021 were lower than those from 2020, when the changes in the programming stemming from COVID-19 led European works to account for 71.9% of the programming time. Productions from France were the most numerous (16.1%), followed by works from **Catalonia** (13.6%) and the United States (10.2%).

Finally, on the Esport3 channel, the strictly sports programming (79.3% of broadcast time) came in the guise of news programmes and magazines (43%) or broadcasts of sporting events (36.3%). Educational programmes and documentaries on sports and other topics (13.3%) were the second most common genre in the listings.

TVE Catalunya

The range of programmes on TVE Catalunya in 2021 continued to encompass a wide variety of programmes: news, educational, informational and entertainment, from Monday to Friday and at weekends, on both its first channel, La 1, and its second one, La 2. They broadcast longstanding programmes like *L'informatiu* and *La Missa* and introduced new educational, informational, documentary and entertainment spaces with the programmes *Amor gastronòmik*, *Perseguint cognoms*, *Helvètica*, *Efecte Collins* and *Quarta paret*.

On the other hand, continuing from the previous year, in 2021 spaces like *Cafè d'idees*, *Obrim fil*, *Desmarcats*, *La Metro, Calidoscopi* and *En línia* were kept, while other programmes were dropped, including *Menja't el món*, *La meva mascota i jo*, *Insòlits*, *Músics* and *20vint*.

Radio[9]

In 2021, the radio programming of the stations being analysed (Catalunya Ràdio, RAC1, Cadena SER, Onda Cero and COPE) generally kept their same listings as in the fourth quarter of 2020, when the exceptional situation caused by the COVID-19 pandemic ended. This range of programming which carried over from 2021 was complemented with an increase in contents in the on-demand services.

Catalunya Ràdio[10]

The two main genres on this station were news (36.5%), which remained in a proportion that is virtually identical to the period before the exceptional situation caused by COVID-19 in 2020 (36.6%), and entertainment (35.2%), which rose 1.5 percentage points from the previous year. Just as in previous seasons, this station's programming was characterised by a diversity of genres, which maintained similar proportions to what they had in the last quarter of 2020.

RAC1

News was the genre with the strongest presence on RAC1 in 2021 (38.4%), with a 2.8 percentage point rise compared to the period prior to COVID the previous year, followed closely by entertainment (34%), which rose 1.2 points.

SER[11]

Ràdio Barcelona (which issues the product Cadena SER) continued to focus its programming on three genres in virtually identical proportions: news (31%), entertainment (30.7%) and sports (30.1%).

Onda Cero[12]

News (30.9%), which dropped 3.2 percentage points compared to the period prior to COVID in 2020, and entertainment (27.9%), which dropped 1.2 points, were once again the leading genres on the Onda Cero line-up in 2021. Sports were in third place (22.8%). Furthermore, there was an upswing in news contents: in 2019 they accounted for 10.6%, in 2020 15.9% and in 2021 18.5%.

[9] The analysis of the radio programming is based on a sample taken by the CAC technical services. Likewise, in this section, the term *news* includes daily news reports, hourly news bulletins and the news section of magazines.

[10] The figures on the programming of Catalunya Ràdio correspond to what is broadcast on the 102.8 MHz frequency in Barcelona and apply to all the frequencies that broadcast the same product.

[11] The figures on the programming of Ràdio Barcelona (Cadena SER) correspond to what is broadcast on the 96.9 MHz in Barcelona and apply to all the frequencies that broadcast the same product.

[12] The figures on the programming of Onda Cero correspond to what is broadcast on the 93.5 MHz frequency in Barcelona and apply to all the frequencies that broadcast the same product.

COPE[13]

Entertainment and news continued to be the two leading genres on COPE. In 2021, entertainment programmes (38.5%, with a 2.1-point increase compared to the period prior to COVID in 2020) outstripped news programmes (35% and a decrease of 2.2 points) and became the most prominent genre.

Xarxa Audiovisual Local (XAL)

In 2021, the Xarxa Audiovisual Local (Local Audiovisual Network, XAL) continued managing the production and co-production of local contents, especially news, entertainment and sports programmes. The XAL is the public company of the Barcelona Provincial Council which manages and supports local Catalan audiovisual sector. It is made up of 180 organisations divided into 32 television stations, 131 radio stations and 17 radio and television media.

In 2021, the contents they offered included different types of programmes, organised into four areas: news, sports, entertainment, and quality and promotion.

Supply of online audiovisual contents in Europe

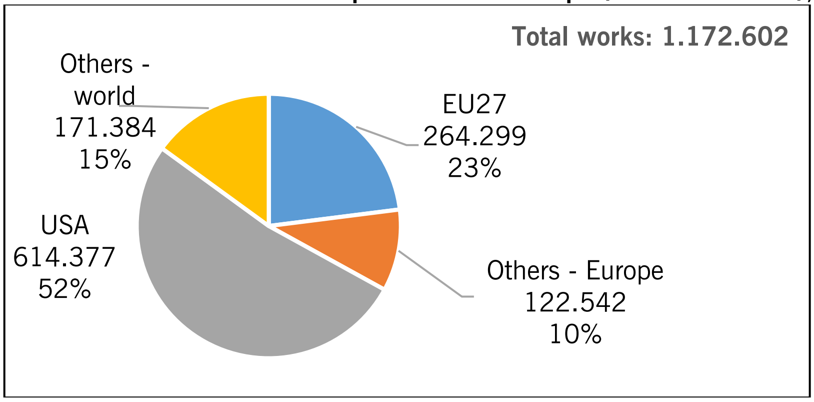
In accordance with Directive 2018/1808, at least 30% of the programmes in the catalogues of VoD services under the jurisdiction of the Member States must be European, and they also have to guarantee their prominence (whereas 35 and article 13). The origin of the production is a relevant issue from not only a cultural but also an industrial standpoint. The transposition of this directive to each Member State poses the regulatory challenge of how to effectively implement this legal precept, and the CAC is a *natural* institution to implement the regulation and conduct regulatory monitoring within the competences it holds—and those it may be assigned in the forthcoming general audiovisual communication law, currently in Parliament.

With the goal of helping in this undertaking, the European Audiovisual Observatory (EAO) publishes the report *Film and TV content in VoD catalogues* every year, which makes a distinction between the categories ‘Films’ (which have just a single episode) and ‘TV Contents’ (or at times ‘TV seasons’, which have more than one episode, although the seasons are counted separately).

[13] The figures on the programming of COPE Barcelona correspond to what is broadcast on the 102.0 MHz frequency in Barcelona and apply to all the frequencies that broadcast the same product.

The USA clearly dominates in terms of the origin of the productions offered in VoD services, either by subscription (SVoD) or by purchase/rental transactions for a single video or show (TVoD).

Table 9. Film and TV content production in Europe (SVoD and TVoD), by region, 2021



Source: European Audiovisual Observatory.

In terms of the circulation of European works within the European Union, works from France predominate (especially in film) and Germany (in what are categorised as 'TV Contents', which are multi-title series). Running behind these two main producers are Italy and Spain, as well as Scandinavian countries that export serial contents within the EU.[14]

Content management in VEPs and social media

Content monitoring systems in the broadcast universe are not applicable to VEPs and social media. Notions like programming, protected viewing time, editorial responsibility, type of genres broadcast, etc., are not useful for describing the *actual, viewed* range of contents on the platforms.

The unlimited volume of contents offered on the Internet gives predominance to artificial intelligence tools that index, organise and recommend contents. For this reason, recommendation systems based on algorithms are fundamental pieces when analysing and describing what a platform offers each user. They are information filtering systems that seek to predict a user's preference for a given content. In the sphere of digital platforms, this technology is used to make recommendations in video or music service playlists or to make content recommendations on the social media.

[14] For more information on this point, see section 4.1. Video on demand, in chapter III of this report.

In this way, the recommendation algorithms act as promoters of audiovisual consumption and condition (but do not determine) the type of contents to which a connected person has access. And among the video recommendation systems, YouTube is crucially important.

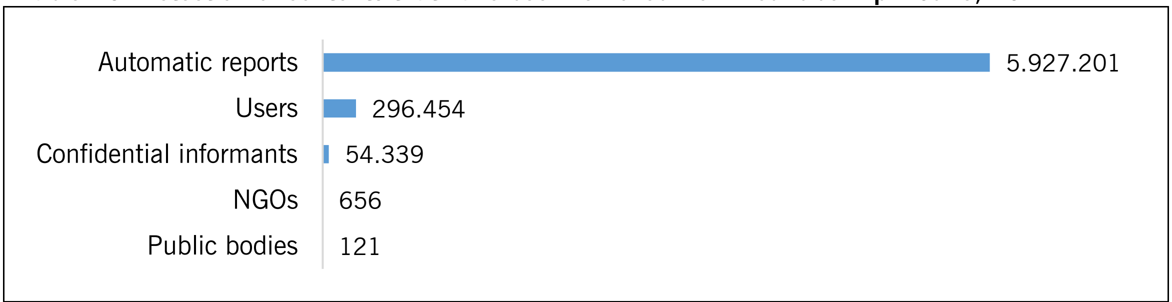
Based on figures from Statista, YouTube is the leading VEP in terms of accesses around the world, in addition to having an exclusive traffic in audiovisual contents. This means that the this platform's recommendation system plays a fundamental role in the range of contents which much of the world's population accesses.

In the document *On YouTube's recommendation system* (September 2021), the platform explains how its recommendations algorithm works and the control mechanisms that users can activate to preserve their online privacy, detect low-quality contents (that would degrade those within the recommendation algorithm), manage disinformation on the platform via the *Community Guidelines*, etc. On 19 October 2021, Alphabet (the mother company of Google and YouTube) published its *General Guidelines* document which provides details on issues such as search quality ratings.

Of the almost 6.3 million videos (*sic*) that YouTube removed from its platform between April and June 2021, almost all of them had been detected by artificial intelligence tools ('automatic reports'). It should be noted that this procedure is a threat to, or at least casts doubt on, YouTube's respect for the right to free expression. This report discusses the problems posed by the recommendation and self-regulation systems implemented by the platform on the contents it hosts and offers to the public. Likewise, it also analyses the shortcomings of the regulatory authorities in this new scenario and cites as an example an action carried out by the French regulator CSA (now ARCOM) in the analysis of YouTube's recommendation system.

In terms of the human detection of illicit content, it can come from a user or a member of the YouTube Confidential Informants Programme. This programme is comprised of organisations like NGOs and public bodies which have proven themselves to be particularly efficient when warning YouTube about contents that infringe on the Community Guidelines.

Table 10. Detection of contents that have been removed from YouTube. April-June, 2021



Source: YouTube, *Progress in content management*.

Chapter IV. Audiovisual consumption in Catalonia

After a year of record television audiences due to the lockdown prompted by the COVID-19 pandemic, in 2021 the trends from recent years resumed with an increase in Internet penetration (+2 points) and a drop in television penetration.

The improvement in the epidemic and the lifting of restrictions meant that people were spending more time outside their homes, especially compared to 2020. Coupled with the upswing in the consumption of contents on streamed platforms, in addition to a loss in the amount of time spent consuming traditional television, this reveals the generational gap in the use and consumption of Internet and the conventional media. On the other hand, 2021 was the year when sports activities and live broadcasts resumed due to the lifting of the severe restrictions owing to COVID-19.

Television

With regard to the television audience by channels, in 2021 TV3 led the viewership in Catalonia for the twelfth year in a row with a share of 14.0%. Second place in the ranking went to Telecinco (12.4%), which was 1.6 behind the frontrunner. In third place, just like the previous year, was Antena 3 TV (11.1%), whose share rose 2.1 points, closing the distance from its direct competitor, Telecinco. La 1 came in fourth, with a percentage similar to that of 2020, followed by LaSexta, which lost 0.6 percentage points compared to the previous year. Finally, Cuatro remained in sixth place.

Table 11. Screen quota of the leading television stations in Catalonia, 2017-2021 (in %)

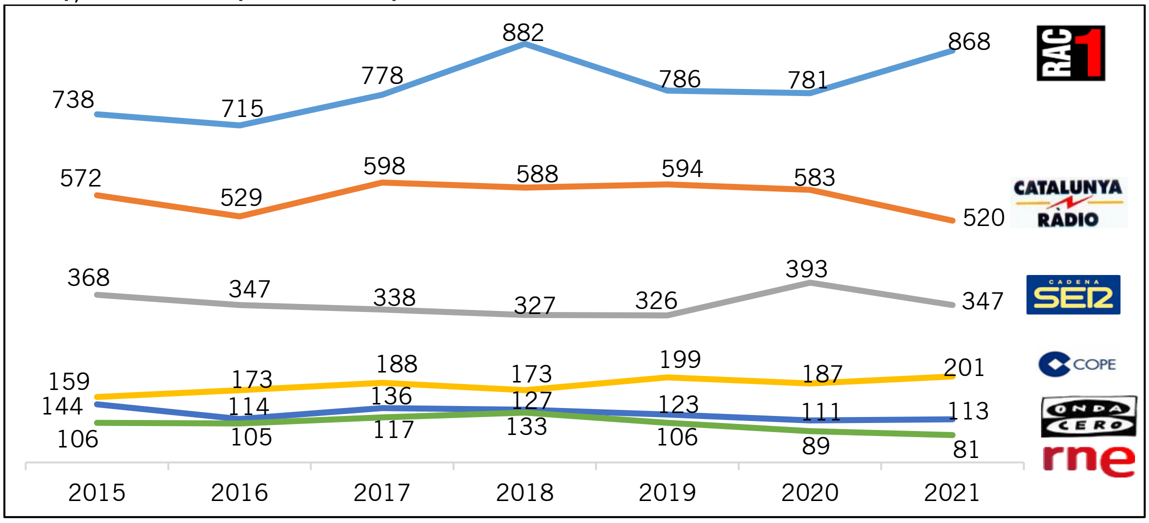
	2017	2018	2019	2020	2021	2020 vs. 2021
3	11.8.	14.0	14.6	14.6	**14.0**	↓
5	10.1	9.8	11.1	11.0	**12.4**	↑
Antena 3	9.6	9.8	9.6	9.0	**11.1**	↑
1	7.5	7.2	6.2	6.9	**7.0**	↑
6	6.4	6.6	6.8	6.8	**6.2**	↓
cuatro	5.5	5.6	4.6	4.9	**4.7**	↓
E.	2.3	2.5	3.0	2.8	**2.8**	=
2	1.9	2.2	2.2	2.4	**2.4**	=
F.	3.2	3.1	2.8	2.4	**2.2**	↓
d.	2.4	2.2	1.9	2.0	**2.1**	↑

Note: Screen quota: The percentage of individuals which are the audience of a station (in a given programme or time bracket) over the percentage of individuals watching television during this same programme or time bracket.
Source: Authors based on data from Barlovento.

Radio

In radio, according to figures from the EGM, RAC1, the station owned by Grupo Godó, kept its leadership among the general radio stations and surpassed its audience numbers from 2020: it went from 781,000 to 868,000 listeners (7 days a week). Catalunya Ràdio, with 520,000 listeners, and Cadena SER, with 347,000 ranked second and third, although they both lost listeners compared to 2020.

Table 12. Evolution in the cumulative audience of general radio stations in Catalonia (7 days a week), 2015-2021 (in thousands)



Source: EGM. Figures for Catalonia. February-November 2021

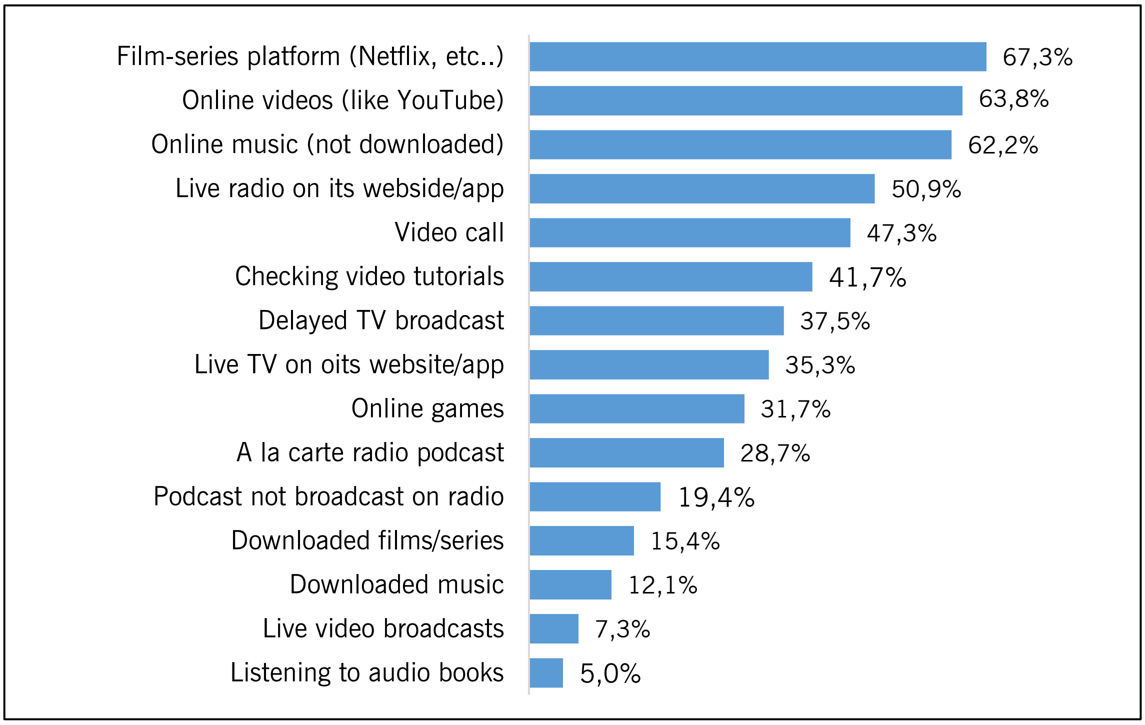
Internet

According to the latest figures from the annual survey of the AIMC *Internet Browsers*, after the pandemic, the social media have continued to play a prime role and have become among the leading communication and entertainment media.[15]

The trends that developed in the online environment in 2021 were activities like accessing film and series on platforms like Netflix (67.3%), watching online videos on platforms like YouTube (63.3%) and listening to music online (62.2%). Likewise, more than half the Internet users (50.9%) listened to a live radio station.

[15] The *24th AIMC Internet Browsers Survey* was conducted with voluntary interviews with Internet users. Fieldwork: October and December 2021. Database for Catalonia: 2,209 participants (1,508 males and 701 females).

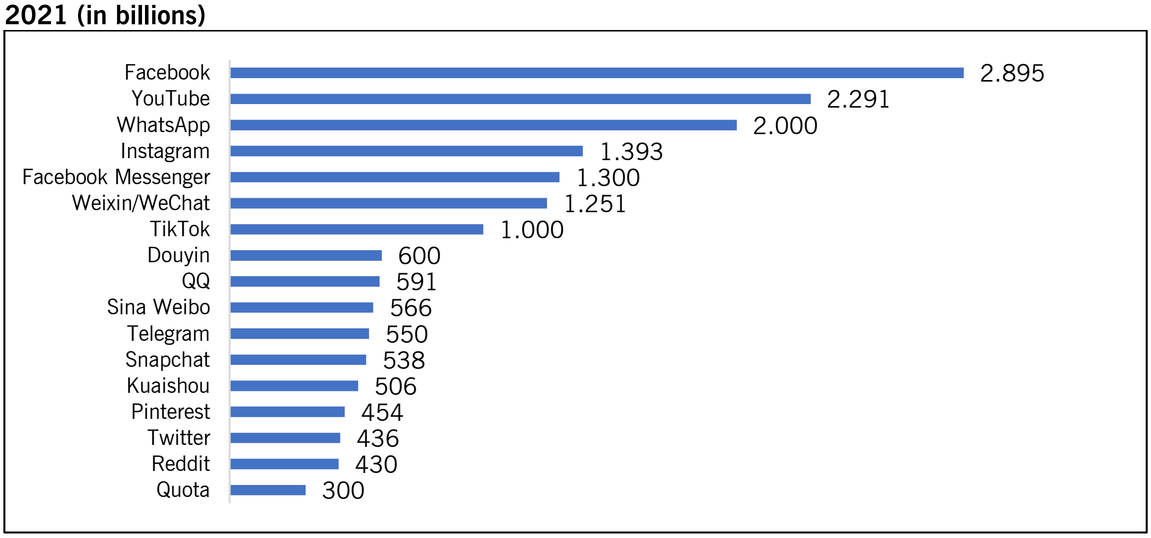
Table 13. Audiovisual consumption activities via the Internet in the past 30 days. Catalonia, 2021



Source: Authors based on data from the AIMC (Internet Browsers).

Finally, this report analyses four of the platforms and social media with the most impact on the global digital market: Facebook, YouTube, TikTok and Instagram. Worth noting is that it found that in 2021 Facebook remained the social media with the most users in the world, although its growth curve is beginning to flatten out. According to figures from Statista, in 2021 the growth in the number of Facebook users was 2.0%. On the other extreme, TikTok witnessed an exceptional increase in active users all over the world: a 38% upswing from 2019 to 2021.

Table 14. Ranking of the VEPs and social media with the most active users in the world. October 2021 (in billions)



Source: Statista.