

## Increased traffic to illegal websites

Danish Internet users' digital footprints are packed with visits to illegal services. Danes accessed illegal websites as many as 596 million times in 2017. These 596 million visits could have been made to legal websites offering legal products. Money from this traffic has thus fallen into the hands of criminals behind illegal services – money that should have gone to the product copyright holders, but where direct revenues from the products, advertising revenues and sensitive personal data have gone to the criminals behind these websites.

Danes' traffic on illegal websites has increased significantly compared with 2016, when illegal websites were visited 356 million times. The increase is of just over 67%. Moreover, the use of services via mobile devices grew explosively in 2017, and this is reflected in the level of use. In short, consuming illegal content has become even easier because the services now support mobile use. This is a trend that Danes have embraced, in terms of both legal and illegal use, and it is also a global trend.

One particular illegal service had a special impact on the increase in visits to illegal streaming services in 2017. The streaming service was first called 123ovies, but rebranded itself to Go-Movies, then GoStream and subsequently various other names.<sup>1</sup> The popularity of the service increased dramatically in 2017 – from 40 million visits in 2016 to 175 million visits in 2017, which equates to an increase of 337%, with the vast majority of traffic being from mobile devices.

### IPTV

A recent phenomenon in illegal streaming is the use of illegal *TV subscriptions*, also called *IPTV*. The users must often download a program to their computers which gives access to a large number of TV channels at a fraction of the market price. The number of visitors to these pages increased dramatically in 2017 – by 84% from January to December. Although the number of visitors does not say anything about the actual level of use (because, in most cases, the users only visit the pages once to download the program), the figure is a clear indication that the interest in IPTV is increasing. The number of visits to IPTV pages is still significantly lower than the number of visits to websites offering films and TV series, and it is therefore important to take action and block these IPTV services as soon as possible, so that users do not become

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<sup>1</sup> The service and the criminals behind it came under considerable pressure from several sides, including the US Government, and it was also named in a request for blocking of access from RettighedsAlliancen, and, on 19 March 2018, the service announced its closure.

accustomed to illegal TV, as has been the case with, for example, films and TV series. Once users get used to receiving all their content on the same platform free of charge, or at a very low price, it is difficult to wean them off this again.

### **Live sport**

Illegal live sports services have also caught the interest of Danes. In 2017 alone, Danes visited illegal websites with live streaming of sports matches 2.96 million times. This equates to just under 250,000 monthly visits, up 28% from January to December. As opposed to the figures for IPTV websites, these figures give a better indication of the actual level of use, as users must visit the illegal websites every time they want to see a match in order to access the live streaming. In addition, we also have an indication that users have found 'favourite services', as more than half of the traffic to the websites comes from direct entries.

### **Closed services and Danish criminals behind the services**

In 2017, there were four closed Danish services on the illegal market: DanishBits, Hounddawgs, Nordicbits and Infinity-T. DanishBits and Hounddawgs were the most popular with 18 million and 20 million visits, respectively, in 2017 alone. Infinity-T had 186,000 visits, and Nordicbits had 102,000 visits. So even though four services does not sound like much, they have an enormous impact on the illegal market in Denmark, both because of the high visitor numbers, and because the services are operated by Danish criminals and are dedicated to Danish content.

The services are popular among Danish users, one reason being that this is where Danish content is first made available. The closure of the services is therefore of great importance to the illegal market. What the four illegal services have in common is that they are operated by Danish criminals and that they are primarily used by Danes. It therefore makes sense to investigate and take legal action in Denmark against the Danish criminals behind these services, which is also a focus point for RettighedsAlliancen.

There was a lot of activity in the closed networks in 2017. Both Hounddawgs and Infinity-T closed down in the wake of a security flaw in their systems. This resulted in a 500% increase in the number of visitors to Nordicbits. This clearly shows that users of illegal file-sharing services do not have many alternatives if their preferred service closes down. There are now 'only' two major closed file-sharing services operated by Danish criminals, and RettighedsAlliancen is currently working to have these services closed down.

## **Stream ripping**

*Stream ripping* of music also grew in popularity in 2017. Stream ripping services allow users to convert and download content from legal services such as Spotify and YouTube. This reduces the incentive to use the legal services or pay for subscriptions, as the ripping services offer all music both free of charge and in an accessible manner, also offline, for example on mobile phones.

As the above overview shows, there are many different ways of distributing and consuming content illegally. Developments in 2017 show that the problem is growing and that the dominance of illegal services on the market is having a dramatic impact on both consumers and copyright holders.

Despite the positive results achieved and the development of effective tools, criminals are still very much setting the agenda and thus contributing to regulating and controlling both market prices and the variety of legal products offered. In this way, the illegal market is undermining the legal services, resulting in a need for ever more dedicated efforts and effective tools for fighting the illegal market. For the work aimed at fighting the illegal market to have a noticeable effect, we need a stronger focus, upscaling and further development of the tools which RettighedsAlliancen has at its disposal today.

## **Milestones and progress**

RettighedsAlliancen achieved a number of important digital enforcement milestones in 2017. The successes resulted from a political awareness on the challenges of the illegal market and a determined focus on the development of legal tools and on influence of user behaviour. In RettighedsAlliancen's experience, a holistic approach combining specific enforcement tools with information and intervention in user behaviour is key to fighting the illegal services and their use.

This approach is a well-documented effective strategy, which is now spreading around the world with Denmark as the pioneer country. In 2017, this approach resulted, for example, in the blocking in Denmark of the illegal film and television series service Popcorn Time, as well as the historical sentencing of a Danish operator of an illegal service in a case concerning the promotion of the same service. In addition, in collaboration with a wide circle of online players,

RettighedsAlliancen has developed the so-called ‘Disruption Machine’<sup>2</sup>, which has already become an important tool in the fight against illegal services and which, in future, will be automated further and deployed to more stakeholders.

Although RettighedsAlliancen is successful in taking action, the use of services on the illegal market is still much too high and rapidly increasing, and continued targeted initiatives are therefore needed in this area. It is necessary to increase access to blocking illegal services by establishing a legal framework which will enable the authorities to intervene effectively, and it is necessary to guide consumers away from the illegal services and directly to the legal services. For the illegal services are still setting the agenda and contributing to controlling market prices and the variety of content and products offered. The illegal market has encroached on the financing base of the legal market and today plays an important role in connection with the financing and distribution of content. At the same time, the illegal services are increasingly using attractive content such as music, films, TV series and books to lure Internet users for the purpose of committing other forms of crime, such as theft of credit card details, takeover of access to the users’ online banking solutions, or selling this data and access to the users’ computers on the Dark Web. Both these trends are deeply worrying, and RettighedsAlliancen’s activities are therefore essential to the safety and security of the online market, for both copyright holders and users.

## **Tools against the illegal market**

In RettighedsAlliancen, we work to ensure fair business conditions and structures for our members’ products on digital platforms. RettighedsAlliancen is therefore deploying a wide range of tools in the fight against the illegal services that are undermining our members’ work.

In RettighedsAlliancen’s experience, interventions against illegal user behaviour, combined with information guiding users to legal services, play a crucial role for user behaviour on the Internet. In addition, providing information about what is legal and illegal increases the sense among users of fairness in the way in which rules are enforced in general. It also heightens the users’ sense of responsibility for their own conduct if they are made aware that they are visiting an illegal page. Until 2017, the primary focus of RettighedsAlliancen’s work was to stop and intervene in the traffic to illegal websites, and, in 2018, our focus will be on redirecting traffic to legal websites. RettighedsAlliancen works to remove as many of the barriers to making a

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<sup>2</sup> <https://torrentfreak.com/danes-deploy-disruption-machine-to-curb-online-piracy-171119/>

legal choice as possible. The purpose is to make it easy and intuitive for users to choose legal content and for the legal content to become their preferred choice.

The fight against the illegal services today calls for a more holistic digital approach. It takes great understanding of the combination of digital dynamics, human motivational factors and legal frameworks in order to identify the measures that work. Firstly, the enforcement of rights therefore focuses on demotivating the illegal services, for example by making the traffic flow and cash flows more difficult. Secondly, the objective is to inform users and take action against illegal behaviour by blocking traffic, removing illegal products, providing information through advertisements on websites offering illegal services etc. and to promote the legal services by making them visible to users. This combination is an effective strategy that is spreading to other countries with Denmark as the pioneer country.

The tools that RettighedsAlliancen is making available today and that we are working to develop further are introduced in the following.

## **Blocking**

Blocking of Internet users' access to illegal services is the most effective tool for eliminating illegal services. In Denmark, we have one of the most effective blocking system in the world, and we attribute this to the behavioural design that we in RettighedsAlliancen have prepared in cooperation with the Danish Ministry of Culture and the telecom industry. The purpose of the *Share With Care* platform is to motivate and guide users away from the illegal services and to the legal services. The blocking sign which pops up on illegal, blocked websites, today links to the *sharewithcare.dk* website, where users can find an overview of legal services. In 2018, the objective is to make it even easier for users to make the legal choice. RettighedsAlliancen is working on *Share With Care version 2*, where a search function will be implemented which will allow users to search for the film or TV series that they are looking for, after which the legal viewing options are presented.

There is a great need to block illegal services. In 2017 alone, 500 of the most popular films and TV series were downloaded more than 15 million times from Danish IP addresses, and this solely from the file-sharing networks, the so-called peer-to-peer networks. Today, RettighedsAlliancen uses so-called judicial blocking, which requires manual monitoring and identification of the most visited, illegal websites, which we subsequently ask the courts to pronounce illegal. This means that the telecom companies can then block the illegal websites, in-

serting the blocking sign with a link to the Share With Care platform. In 2017, the legal framework was changed – rather than court orders being pronounced on website addresses, dynamic court orders are now issued on the illegal services. This means that today we can close down traffic to services and their mirror sites which provide access to the illegal service, without having to obtain a new court order every time a new version of the illegal service emerges. This was, for example, the case with 123Movies described above. However, dynamic blocking must be developed further. In 2018, RettighedsAlliancen is therefore working for the necessary legal framework to be established and for legislation to be passed which will allow the police to block illegal websites.

The effect of such blocking is unmistakable. On average, a blocking results in a 75% decrease in the number of visitors from Danish IP addresses. One example was the closure of five popular websites with illegal content through a court order in February 2017. Before the court order, the websites had 1.7 million monthly visitors from Danish IP addresses, but, after the court order, the number of monthly visits dropped by just under 76% in October to 416,000. One of the main reasons why the websites do not see a 100% drop in visitors is that not all Danes use their telecom provider's DNS service.

## **Disruption Machine**

In collaboration with a wide circle of online players, RettighedsAlliancen has developed a tool that we call 'the Disruption Machine'. The machine consists of a list of illegal websites which is shared in a network of players and partners who then ensure that the websites are blocked, so that for instance advertisements are not sent to them. The purpose of the Disruption Machine is to stop traffic and cash flows to the illegal services and thus hit the criminals behind these services where it hurts – their revenues. The list today contains more than 2,500 illegal websites and is updated monthly.

So far, a large number of advertising companies and the Danish telecom companies subscribe to the list, and we are engaged in a dialogue with various payment service providers, which we would also like to subscribe to the list. We do not yet have precise measurements of the efficacy of the Disruption Machine, but we can see that it works. We have started measuring its efficacy, and the results will be available during 2018. In the coming year, our focus will be on automating the machine and increasing the user base to include payment service providers, educational establishments, online platforms and social media to create 360-degree protection.

## **IP task force**

As a result of political awareness and good cooperation with, for example, the Confederation of Danish Industry (DI) and the Danish Chamber of Commerce, in November 2017 the Danish Minister for Justice Søren Pape Poulsen set up a special IP crime unit. The unit operates under the State Prosecutor for Serious Economic and International Crime (SØIK) and focuses on the organised part of IP crime – the criminals behind the websites. The Danish Government's decision to establish an IP task force is a major and important step in the fight against IP crime and a recognition that this is a common challenge that requires focused action.

The task force has been set up on a six-month trial basis, but RettighedsAlliancen is advocating that the task force be made permanent, as there is a massive need to fight IP criminals. According to reports from the EU and Europol, IP crime is one of the most lucrative criminal activities and usually closely linked to organised crime. In RettighedsAlliancen, we therefore believe that it is also important for the task force to develop some dynamic enforcement tools – including blocking of illegal websites by the police.

One example showing the importance of a permanent IP task force is the criminal proceedings against the illegal service Popcorn Time. In 2015, RettighedsAlliancen reported the service to the police, which resulted in the closure of two websites that formed part of the service, but the service itself was not blocked because the police did not have, and still do not have, the necessary powers to do so. As the police were unable to block the Popcorn Time Service, RettighedsAlliancen brought a civil action against the service, and Popcorn Time was blocked in 2017, so that today Danes cannot use the service.

Based on RettighedsAlliancen's report to the State Prosecutor for Serious Economic and International Crime (SØIK), in February 2018 the criminal behind the website was found guilty of having promoted the Popcorn Time service. The sentence is a milestone in the fight against illegal Internet streaming, and it is also a result of increased political awareness of the issue. The criminal behind the website was given a suspended sentence of six months' imprisonment.

Shutting down an illegal service like Popcorn Time is complicated because of the decentralised structure of the service, which is not located on a single server, but is spread out on different networks and services. Based on recent rulings by the European Court of Justice, and other sources of law, the Danish courts also chose a technology-neutral approach to the blocking of websites, which means that the road has been paved for using the blocking tool for purposes other than blocking websites. RettighedsAlliancen is now working to block *live streams* used

for illegal broadcasting of sporting events and stream ripping services used for illegal downloading of permanent copies of music from YouTube.

### **Concept and campaign tools**

RettighedsAlliancen fundamentally believes that it is necessary to insist on responsible and safe user behaviour which also includes a general perception that it is serious illegal to consume illegal products. RettighedsAlliancen is therefore working to motivate users to conduct themselves responsibly via the platforms that they use, such as YouTube and Facebook. We are also basing our approach on behavioural science because peoples' behaviour is very much controlled by norms and autonomous reaction patterns. Through behavioural designs and information campaigns, RettighedsAlliancen therefore aims to change user behaviour and the norms that govern such behaviour. At the same time, we are promoting user responsibility through the provision of information, because informed users view the enforcement of the law, for example through the blocking of illegal websites, as being reasonable.

One example of an awareness campaign that also has a behavioural design is *Share With Care*. This is a campaign that was developed in cooperation with the Danish Ministry of Culture and telecom companies for the purpose of redirecting users from blocked illegal websites by providing a link to the Share With Care platform from the blocked websites.

The Share With Care platform provides a list of legal services which users can use, thus 'pushing' them away from illegal services and towards legal services. In addition, information signs have been posted on illegal websites to make user aware of the consequences etc. of using illegal websites. Finally, RettighedsAlliancen uses Google Adwords to inform users who are searching for an illegal website that the website is illegal. The Share With Care website has been visited more than one million times.

The development of the *Share With Care 2* design commenced in 2017, and it is to make it easier for users to make the legal choice, by also implementing a search engine in continuation of the blocking sign. The search engine can guide users directly to a legal website offering the title that they are looking for.

From 2016 to 2017, the campaign *Os Der Elsker Film (We Who Love Films)* was conducted based on the alarming growth in the illegal streaming of films and series, especially among young people, as well as a generally high level of illegal use of protected content.

The *Os Der Elsker Film* initiative succeeded in uniting the whole film industry as well as a number of other key organisations and authorities in a joint campaign and a joint message platform. The objective of *Os Der Elsker Film* was to create a massive focus on the consequences of illegal streaming.

The results of the campaign show that the use of humour, methods and channel mix in *Os Der Elsker Film* were well received by the primary target group, who generally liked the campaign. The campaign film was seen approximately 10 million times in Danish cinemas and 1.3 million times online, and 81% of those who saw it responded that they thought it was good or very good. RettighedsAlliancen is further developing the messages and activities from *Os Der Elsker Film*.

This includes a three-year campaign focusing on textbooks, which RettighedsAlliancen launched in August 2017. Under the title *Os Der Elsker Viden (We Who Love Knowledge)*, the campaign focuses on the illegal sharing of textbooks. In step with increased digitisation, the illegal sharing of, in particular, e-books and digital articles is increasingly challenging the educational sector and the publishing industry. In close cooperation with educational establishments throughout Denmark as well as bookstores, lecturers and librarians etc., *Os Der Elsker Viden* therefore enters into a dialogue with students to inform them about the rules governing the sharing of textbooks. The industry, the Danish Ministry of Higher Education and Science and the Danish Ministry of Culture are behind the campaign.

The response so far has been positive, and the campaign has been greatly appreciated by students, lecturers and authors. RettighedsAlliancen will continue to develop the campaign to ensure that *Os Der Elsker Viden* contributes to creating a sustainable digital culture and digital education for all in the coming years.

RettighedsAlliancen is in the process of developing an EU-funded teaching concept aimed at raising awareness of copyright and changing behaviour among 12 to 16-year-old children and adolescents. The concept includes the production of a number of tools for teachers, based on pupils' behaviour on illegal websites, thus presenting narratives on the consequences of visiting illegal websites and why copyrights are important. The project will be further developed and implemented, for example in cooperation with Alinea, a publishing house specialising in teaching aids and materials for primary schools, and /KL.7, a company specialising in behavioural design.

## **Main priorities in 2018**

In 2018, RettighedsAlliancen will continue to make an important difference in the fight against the illegal market. It will become even more difficult for criminals to operate illegal websites and services, and information campaigns and guides to legal services will be launched.

In 2018, RettighedsAlliancen will give priority to drawing attention to the availability of legal services. We will do so by further developing and deploying our Disruption Machine, which, through the embedding of a search field in connection with the blocking signs on illegal websites, can guide users to the legal services where the requested film or series can be found. In addition, we will continue our campaign and information activities, which, in 2018, include *Share With Care 2*, a behavioural design that draws attention to legal services, *Os Der Elsker Viden*, a campaign focusing on the illegal sharing of literary material, as well as a teaching concept aimed at raising awareness of copyright law and changing online behaviour among children and adolescents.

Another main priority is to continuing to work for political awareness around the issues with the illegal market and criminals behind the services to ensure a permanent IP task force under the State Prosecutor for Serious Economic and International Crime (SØIK) and to establish a legal framework giving the police authority to block illegal services.

RettighedsAlliancen's activities are important and necessary in the fight against the huge, illegal online market. New illegal services are constantly popping up and enticing users with free content – and lots of it. This is contributing to undermining the legal market and acts as a barrier to the development of new web shops and products. It also channels money flows to criminals, and these funds are used to help finance organised crime. In 2018, RettighedsAlliancen must therefore stand firm in its fight against the massive growth in and use of illegal services. To ensure fair business conditions and safe frameworks for our members and for Internet users.

*RettighedsAlliancen's data is supplied by SimilarWeb and MarkMonitor.*

*Copenhagen, March 2018*

On behalf of The Board of RettighedsAlliancen

CEO Maria Fredenslund