

ISP blocking and filtering: on the shallow justification in case law regarding effectiveness of measures

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ABSTRACT

Despite the outdated copyright framework, there is still little effort to beat threats by exploring online opportunities (cf. Netflix and Spotify). In the ongoing battle to close the 'electronic colander' an interesting recurring question is how to evaluate the effects of measures used to combat online piracy. At least traditional enforcement strategies do not seem to reach the desired effects in the modern age because technology offers plenty means for circumvention.

Over the years injunction claims have been granted, though not in all cases. Different arguments have been used before the courts for both accepting and rejecting these claims. Our aim is to identify 'how much effectiveness' is needed to come to the conclusion that a measure is sufficiently effective. This paper elaborates on the concept of effectiveness using different theories and analysing case law.

Keywords: ISP blocking; copyright; online piracy; injunctions; effectiveness

1. INTRODUCTION

After a decade of court cases initiated by the Dutch anti-piracy organisation BREIN, a foundation that aims at enforcing intellectual property rights for the entertainment industry, on 14 June 2017 the CJEU decided a case between BREIN and ISP providers.^[2] The CJEU case followed a series of rulings by Dutch courts on blocking injunctions. The preliminary questions for the CJEU did not, however, concern blocking as a measure. Rather than focus on the legitimacy of injunctions, the Dutch Supreme Court asked from a copyright law perspective whether ‘The Pirate Bay’ communicates information to the public, and, if not, whether facilitation of copyright infringement is enough to ask providers to block internet traffic. After answering the first question affirmative, there was no need to elaborate on the second question. The answer to the first question added yet another piece to the erroneous communication to the public case law:

the making available and management, on the internet, of a sharing platform which, by means of indexation of metadata relating to protected works and the provision of a search engine, allows users of that platform to locate those works and to share them in the context of a peer-to-peer network. ^[3]

This interpretation means that even mediating between supply and demand is sufficient from a copyright perspective to equal the role of the supplier. The task of the European Court of Justice is not easy, for it has to struggle with fitting all kind of new developments into the outdated 2001 Infosoc Directive framework. One could also question how much sense it makes in the age of streaming media to keep focusing on downloads, and the related blocking injunctions. The entertainment industry likes to live in the past, e.g. in August 2017 a Dutch movie organization announced to go after people downloading movies.

For decades the internet offers many opportunities to make profit of copyright protected content, however the entertainment industry and its allies keep focusing largely on its threats. These threats were already identified in the early ages of internet, e.g. Dommering noticed in 1994. Around the same time (1992-93) John Perry Barlow called for a new and different approach of copyright: “We are going to have to unlearn it. We are going to have to look at information as though we'd never seen the stuff before.”^[4] The process of unlearning has not started yet, however, and the existing legal framework leads to many counter-intuitive situations.^[5]

Copyright law did not change much over the last 25 years, and currently the European Union is working on a reform of copyright. This reform is not what it should be, and instead controversial initiatives are discussed – for example, an additional copyright for online publishers, and far stretching obligations for ISPs. The EU commission proposals to amend Article 14 E-commerce Directive are discussed by Rosati (2016). As much as renewal and modernisation of copyright law is needed, this paper focuses on another though related topic: the blocking obligations for ISPs and the justificatory case law regarding the effectiveness of these measures.

Even after over a decade of case law, a recurring question is how to evaluate the effects of measures used to combat online piracy. Right holders can target the source or destination directly, for example suing the infringing users, or intermediaries (Lemley & Reese 2004). Infringing material can be removed at its source, generally implemented via extrajudicial notice and takedown (‘NTD’) requests (Urban *et al.* 2017). The effectiveness of this system

depends on the nature of the ISP (hosting, caching or mere conduit). NTD is being criticised for lacking transparency, accountability and balance (Roy & Marsoof 2016). In this paper we concentrate on the more often indirect approach: a court order to an ISP to block access to locations on the internet where infringing content resides. This does not eliminate the infringing content at its source, instead it hides infringing content from users in the country where the ISP is located. Across Europe there have been a series of blocking injunctions, including UPC/Telekabel case for the Court of Justice of the European Union (CJEU).^[6]

Often these injunction claims have been granted though not in all cases. Different arguments have been used before the courts for both accepting and rejecting these claims. Husovec & Peguera (2015) come to the interesting conclusion that:

it seems unlikely that this form of relief [injunctions on the basis of the national transpositions of Art. 8(3) InfoSoc Directive] may end up being an attractive and effective tool to curb online infringement.

However, different from our discussion of general blocking/filtering by ISPs, so concerning all their users, their paper is on blocking individual users. Frosio (2017) does provide an interesting analysis of the position of ISPs in general as private enforcers, and the

move away from a well-established utilitarian approach and toward a moral approach by rejecting negligence-based intermediary liability arrangements.

The development is characterised as a shift from liability to responsibility, and several developments in this realm, such as monitoring, algorithmic enforcement, and online search manipulation. The concept of effectiveness of blocking injunctions is not analysed. Savola (2014) developed a framework based on case law, and comes to the following general conclusion

In particular, ineffective enforcement mechanisms can be more easily accepted if the goal of symbolic, educational or politically motivated enforcement is considered legitimate. On the other hand, if the goal is to decrease the impact of infringement, higher efficiency and economically quantifiable results may be required.

Lodder & Van der Meulen (2013) developed five principles to be used to determine whether a blocking injunction is justifiable, viz. on Directness, Effectiveness, Costs, Relevance, and Time. On the principle of effectiveness they note the following:

Each action serves a goal, but if the goal is hardly reached, someone might take independent action anyway and therefore should not ask this from others. If a measure is merely symbolic or the effects are insignificant, access providers should not be asked to cooperate. Basically, the more effect a measure has, the sooner action might be asked from ISPs. It might be that what is asked for is so important that even the slightest effect is worth carrying out the action. If that is the case, normally the action should be carried out unless the costs (not only financially) associated with the action are disproportional.

This paper aims to illustrate that effectiveness plays a prominent role in case law on blocking injunctions, but the arguments used to justify the injunctions are far from convincing. We provide an overview of the arguments that have been used in case law on what entails effectiveness.

2. LEGAL FRAMEWORK BLOCKING INJUNCTIONS

In order to understand what effectiveness means in the legal context we briefly discuss the legal provisions relevant in case of blocking injunctions.

2.1 ENFORCEMENT AND THE INFOSOC DIRECTIVE

The provisions concerning blocking injunctions in the Enforcement Directive and the InfoSoc Directive^[7] complement each other and are partly overlapping. In the case of copyright infringement, the InfoSoc Directive is *lex specialis* to the Enforcement Directive. Article 11 of the Enforcement Directive provides that Member States ensure that right holders of IP rights can apply for an injunction against an intermediary in the case of an infringement of their intellectual property. Article 8(3) of the InfoSoc Directive provides for a similar provision that applies only to the protection of copyright and related rights. An intermediary can also be an ISP. In LSG/Tele2, the CJEU has stipulated that Article 11 of the Enforcement Directive and Article 8(3) InfoSoc Directive also apply to access providers that merely supply the user with the connection enabling him to infringe such rights.^[8] An injunction as in article 8(3) InfoSoc Directive is also available if the provider's actions are exempt under article 5(1)(a) InfoSoc Directive that permits access providers to reproduce copyrighted works where they provide for a transmission in a network between third parties and therefore do not constitute copyright infringement. Recital 59 of the InfoSoc Directive stipulates that intermediaries are increasingly used by third parties for infringing activities. Therefore, right holders should have the possibility to apply for an injunction against an intermediary who carries a third party's infringement of a protected work or other subject-matter in a network.

The conditions and modalities relating to such injunctions should be left to the national law of the Member States. This is the reason why the blocking injunctions are handled different in every Member State. The provisions in the two directives must be proportionate and somehow effective following both from national legislation as from case law. Effectiveness plays a part in the balancing of proportionality. Three EU law Articles deal with the effectiveness of a (direct or indirect) measure. First, the proportionality of Article 52(1) Charter,^[9] viz. blocking injunctions are limitations prescribed by law cf. Article 12(3) E-commerce Directive. Proportionality and effectiveness are related, but cannot be interchanged. Rather, if a measure is effective and disproportionate the latter is decisive. One would expect in case of proportionate but ineffective injunctions a negative court decision regarding the injunction but this is not necessarily so. Second, Article 3 Enforcement Directive explicitly recognizes the effectiveness requirement. Article 3(1) holds that measures, procedures and remedies shall be fair and equitable and shall not be unnecessarily complicated or costly, or entail unreasonable time-limits or unwanted delays. Article 3(2) obliges the Member States that the measures, procedures and remedies taken shall be "effective, proportionate and dissuasive". Third, Article 8(1) of the Enforcement Directive requires that any "sanctions thus provided for shall be effective, proportionate and dissuasive".

2.2 ARTICLE 15 E-COMMERCE DIRECTIVE

An interesting question is how blocking injunctions based on the Enforcement and the InfoSoc Directive relate to the safe harbour provision set forth in the E-Commerce Directive.^[10] Article 12(1) of the E-commerce Directive defines a liability exemption for access providers ('mere conduit'), but a court or administrative authority may require the service provider to terminate or prevent an infringement (Article 12(3)). This leaves the possibility open for blocking injunctions of websites that the ISP is not responsible for (and consequently not liable). Article 12(3) does not require a certain level of specificity, though in the case of *Scarlet/SABAM* the CJEU held that an injunction that requires an internet access provider to install a filtering system that "would oblige it to actively monitor all the data relating to each of its customers" can be considered as general monitoring as prohibited in Article 15 E-Commerce Directive.^[11]

2.3 FUNDAMENTAL RIGHTS

Three fundamental rights collide when access providers are ordered to block a copyright infringing website. The first right is the right of intellectual property of the copyright holders (Article 17 of the Charter). The second right is freedom of speech (and the related right of freedom to gather information) of internet users (Article 11 of the Charter). This right does not add much weight in case where a website only offers illegal material. However, as we will discuss later, certain blocking injunctions imply a risk of so called 'over blocking'. This means not only the infringing website will be blocked but also other non-infringing websites. In this regard the right of freedom of speech plays a role. The third right is the freedom of the ISPs to conduct a business (Article 16 of the Charter). While Article 16 recognises a general right of freedom to conduct a business. This is limited by the obligation that may be imposed on an ISP under Article 12(3) E-Commerce Directive. The invocation of the right of freedom to conduct a business should therefore be treated with the most circumspection (O'Sullivan 2014). Also, an injunction to an ISP does not seem to infringe the very substance of the freedom to conduct a business of the ISP because the ISP can remain performing its core activities.^[12]

3. EFFECTIVENESS IN CJEU CASE LAW

Whether injunctions comply with Article 52(2) Charter, "necessary and genuinely meet objectives of general interest recognised by the Union or the need to protect the rights and freedoms of others." remains unanswered in CJEU cases (O'Sullivan 2014). The CJEU has, however, stipulated the requirements of proportionality and effectiveness and has given some (though very little) guidelines on their interpretation.

3.1 FROM PROMUSICAE TO UPC/TELEKABEL

First, in 2008, the CJEU in *Promusicae*^[13] assessed copyright protection in the context of civil proceedings in the light of a duty on internet intermediaries to retain and communicate personal data of users generated by their communications. The CJEU held that the Enforcement Directive and the Privacy Directive do not require Member States to lay down an obligation to communicate the personal data in order to ensure effectiveness. However, the

Member States do have the duty when transposing the directives to strike a fair balance between various fundamental rights protected by the community legal order.

Subsequently, in the *Ladbroke*-case,^[14] the CJEU has elaborated on the principle of proportionality. According to the CJEU national courts are not required to determine, in each case, whether the implementing measure intended to ensure compliance with that legislation is suitable for achieving the objective of that legislation and is compatible with the principle of proportionality, in so far as the measure is necessary to ensure the effectiveness of that legislation and does not include any additional restriction over and above the legislation itself.^[15] It appears that the CJEU does not impose the duty to determine what effectiveness is on the courts. However, the courts must make sure that any measure is useful and does not imply any additional restrictions.

A year later, the CJEU has widened its interpretation of proportionality given in the *Ladbroke* case. The CJEU explained in *L'Oreal/eBay*^[16] that not only should infringements be brought to an end by any injunction, they should also prevent further infringements. In this context those "*injunctions must be effective, proportionate, and dissuasive and must not create barriers to legitimate trade.*"^[17] This statement establishes a minimum level for an injunctive relief^[18] and has given a greater obligation to the courts in assessing the impact of any measure than was given in the *Ladbroke*-case.

These three cases showed the importance of proportionality of measures by courts, but no actual guidelines were given on the interpretation of what effectiveness means in the context of blocking injunctions until March 2014 in *UPC/Telekabel*.^[19] In that case the CJEU elaborated on the concept of effectiveness. It held that the national implementation of the possibility of blocking injunctions "*must be sufficiently effective to ensure genuine protection of the fundamental right at issue*".^[20] The threshold the CJEU describes in this case is twofold. A measure is compatible with EU law if it is (1) not infringing user rights and (2) simultaneously preventing or at least impeding and discouraging access to the illegal content.^[21] What the CJEU basically said was: as long as a measure is not entirely ineffective, or aims not to be entirely ineffective, or at least suggests that users should not really be doing this, it is acceptable.^[22] Too bad the last question of the Austrian court in *UPC/Telekabel* was left unanswered by the CJEU:

Could specifically identified measures intended to block access to a website containing infringing material be imposed by a court on an intermediary, even if those measures would require considerable costs for the intermediary and could be easily circumvented by the users?^[23]

An answer to this question would provide guidelines on how to interpret effectiveness. On the notion of efficacy the assessment of the AG in *UPC/Telekabel* is insightful. His assessment is twofold. The first step states that measures should not entail inconsiderable costs and should not be easily circumvented without any special technical knowledge. In that regard, guidelines should be given for assessing the proportionality of specific blocking measures.^[24] As to the circumvention issue, the opinion of the AG is that circumvention *per se* does not automatically make blocking measures inappropriate. According to the AG it by no means follows from the possibility of circumvention that the users will actually do so. Users who learn through a block that the page is illegal may forgo access to the website. The AG stipulates that not all users intend to further breach the law and that while quite a few users may be in the position to circumvent a block, far from all users would actually be in

such position.^[25] This assessment by the AG is somewhat symbolic, and does not give adequate guidelines on how to qualify the effects. The AG continues by stating that the possibility that the operator may provide the page in identical form under another IP address and/or domain name^[26] “does not, in principle, preclude the appropriateness of blocking measures.”^[27] It appears that the AG does not use the criterion of efficacy but the criterion of appropriateness. However, what the precise difference is remains unclear. The AG gives two reasons for his qualification of appropriateness. First, again, users having their attention drawn by the blocking measure to the illegality of the content may forgo visiting the page. Second, users will have to resort to search engines in order to find the page. With repeated blocking injunctions, even a search engine will have difficulties finding the page.^[28]

After explaining the requirement of appropriateness instead of effectiveness the AG continues with the second step. This second step constitutes the requirements of necessity and proportionality. In this regard the AG states that the “*quantitative assessment of the foreseeable success of the blocking measure is one factor to be weighed.*” It continues that the complexity, costs and duration of the measure must also be weighed together with the other factors. Should a specific measure prove to be disproportionate in that regard in view of its complexity, costs and duration, it must be considered whether proportionality can be established by a partial or full assumption of the cost burdened by the right holder. It concludes that it is for the national courts, in a specific case, taking into account all relevant circumstances, to weigh the fundamental rights of the parties against each other and thus strike a fair balance between those fundamental rights.^[29]

3.2 PROPORTIONALITY AND AN INTERIM CONCLUSION ON EFFECTIVENESS

Following the general requirement of the balancing of rights in Article 52(1) Charter and the case law of the CJEU (especially the *Promusicae*-case), proportionality means that the different fundamental rights should be weighed against each other. Effectiveness of a blocking injunction gives weight to the rights of the right holder of intellectual property rights. Whereas the rights of the ISP and the right holders should be balanced against each other, effectiveness (just like costs of a block for the ISP) is a factor in the overall assessment you might as well call the requirement of proportionality. It adds value to the rights of the right holders at the expense of the rights of the ISP and the rights of the users. When enough value is added by effectiveness of the measure, the right of the right holders outweighs the right of the ISP and the user.

The question that follows is: how much effectiveness is enough to outweigh the rights of the users and the rights of the ISPs? The costs of a blocking injunction for the ISP should also be taken into account. Another question is: what is the purpose of a blocking injunction to weigh effectiveness against? Does effectiveness presuppose a complete hurdling of an online infringement so that the infringements no longer occur on the blocked website? Is merely a signal of illegality to infringing users, as the AG considers, enough? Or can anything else in between these opposites be considered as being effective? As follows from the forgoing, the CJEU has decided that a measure should make it *difficult to achieve* and *seriously discourage* further internet users from accessing the subject-matter that has been made available to them in breach of the intellectual property right. Unfortunately, this only shows what can be considered as being not ineffective. It does not give a clear threshold what measure should be considered effective and what should be considered ineffective.

4. SO WHAT IS AN EFFECTIVE BLOCKING INJUNCTION?

Effectiveness is an element of the proportionality test, and basically comes down to striking a fair balance between the rights harmed by the measure, namely the burden it implies on ISPs, and the gain it implies for the right holders in terms of less copyright infringement. It gives weight to the fundamental right of the right holders, namely the right to (intellectual) property. After the CJEU cases we only know what can be considered to be not ineffective. That was also what we found looking at the Dutch case law that ended with CJEU ruling mentioned in the introduction, and inspired us to write this article. In this section we will therefore briefly recapture this Dutch case, followed by a discussion of case law from Norway, UK and USA. First, we distinguish three types of blocking orders.

4.1 THREE TYPES OF BLOCKING ORDERS

Three injunction orders are IP blocking, DNS blocking and URL blocking. Every blocking measure carries several relevant commodities for the proportionality balance: costs of implementation, risks of over-blocking, ease of circumvention for the website operators and ease of circumvention by the users.

An advantage of IP blocking is the low cost, but there are some serious disadvantages. The first is the high risk of over-blocking. Because a single IP address is often used to host multiple (sometimes hundreds of) websites, an IP block also blocks those other websites. Those websites are often unrelated and offer lawful material. It is typically not possible for anyone other than the hosting provider to determine with certainty whether an IP address is used by multiple websites.^[30] This over-blocking has consequences for the right of freedom of speech. Because lawful material is blocked, freedom of speech of the ISP and freedom to obtain information of the user is limited. The second disadvantage is the ease at which IP blocking can be circumvented by the website operators. The website operators can obtain a new IP address and re-configure their domain name so that it resolves to that new IP address. For users it is more difficult to circumvent an IP block. They can only circumvent the block by relaying their traffic over a server that (1) is connected to a different ISP or (2) if the blocking is implemented at the backbone level, routes its traffic over a different backbone operator.

DNS blocking is rather easy to implement and therefore implies low costs for the ISP.^[31] A disadvantage, like with IP blocking, concerns the effects. While it is difficult for the website operator to circumvent this blocking method, it is very easy for the user to do so. The website operator can only circumvent the block by using another domain name. The user can configure their computer to an alternative DNS system, for example by typing in the IP address instead of the domain name.^[32] The only way an ISP can make sure the user will not easily circumvent the block is to implement a proxy that leads all traffic over this proxy. Unfortunately, the bigger the ISP, the more traffic it hosts, the greater the costs for implementing this kind of proxy. Plus, the proxy makes the traffic vulnerable for cyber crime and disruptions because all traffic passes one single point that creates a so called *single point of failure*.^[33] Though still the user can circumvent the block by installing a proxy himself. It should be noted that this method is unavailable to backbone operators because they do not operate any DNS server.^[34]

URL blocking can be done by so called deep packet inspection or by (also) implementing a proxy all users are forced to use to access the web. This type of blocking has two main disadvantages. First, it conflicts with the internet's architectural principles. Second, it is highly resource intensive. This method has great advantages too. For website operators circumvention is just as difficult as for DNS blocking, while for its users it would be as difficult as in case of IP blocking.[35] In addition URL blocking carries the lowest risk of over-blocking so that the interference in the right to freedom of speech is limited.[36]

Different studies have examined the actual effects blocking injunctions have on user behaviour. Despite the possibility of circumvention the relevant question is whether a block *will* be circumvented, not if it *can* be circumvented.[37] Different studies show different actual behaviour of website operators and users after a block.[38] These studies do not add much overall value to the discussion on effectiveness, because they all use different factors to come to their conclusion. For example, some studies only measure the circumvention to the blocked sites while others also measure the use of alternative torrent sites. Another difference is the measurement of the (changed) use of legal sites. A problem also is that different countries have used different sorts of blocks causing different effects. In addition to these problems users will react differently on blockings over time and in different countries. For these reasons no general conclusions can be drawn from the studies. Fortunately this is no real problem for establishing a threshold for effectiveness in relation to a certain purpose, this paper aims at finding, as our aim is to identify 'how much effectiveness' is needed to come to the conclusion that a measure is effective enough.

4.2 BLOCKING INJUNCTIONS IN THE NETHERLANDS

The Dutch case discussed here concerns a blocking injunction between the Dutch anti-piracy organisation, BREIN, and Ziggo, the largest access provider in the Netherlands. The legal battle started in 2010. Because the Dutch providers did not agree to filter out The Pirate Bay traffic upon request, BREIN based a claim on the Dutch implementation of Article 11 Enforcement Directive in a summary proceeding. The summary judge did not grant the request. It held that the injunction is allowed only in cases of direct infringement, and the ISP did not infringe any copyright itself.

BREIN started a proceeding on the merits in which it basically claimed the same as in the summary proceeding. The judge based its ruling on *L'Oreal/eBay*, stating that a ruling can also be used to prevent further infringements, and *Scarlet/SABAM*, emphasizing that active monitoring for illegal material cannot be asked from access providers. The court granted the injunction because BREIN did not ask for this kind of monitoring but for a block of domain names and IP addresses. It held that the interest of copyright holders outweighed the interest of internet users and ISPs. The access providers were demanded to block 24 websites. BREIN was granted the right to change the list anytime they believed necessary, without judicial intervention.[39]

Ziggo and XS4ALL appealed against the judgement. In appeal the central question was whether the blocking injunction was effective. The Court of Appeals of The Hague ruled in favour of the ISPs.[40] According to the court a blocking injunction should be effective and proportionate, as follows from article 52(1) Charter and *L'Oreal/eBay*. The court held that a measure could only be effective when (a) the number of infringements drop because the existing infringers no longer or less infringe, or (b) the impact of the infringements will reduce because of a diminution in the public that will see the infringements.[41] Ziggo held that the

block of The Pirate Bay would not decrease infringements because the users would circumvent the block by using proxies and VPNs or by accessing the same material using alternative torrent sites. BREIN's intended objective, namely a decrease of the number of infringements, was not achieved. This argument was crucial for the court to conclude that an injunction is ineffective and so for rejecting BREIN's claim. The court justified its decision based on a number of research outputs.^[42] In addition the court held that the injunction entails a limitation for the access providers because, even if the injunction is costless, it restricts access providers to act at their own discretion.^[43] According to BREIN this measurement of effectiveness was incorrect because their injunction was part of a step-by-step approach. One of these steps was to sue other major torrent providers such as Kickass.to, Torrentz.eu and possibly Isohunt. The court considered this argument invalid because BREIN did not take other intended steps in this or parallel proceedings. The explanation that the current case was a test case did not convince the court.^[44]

BREIN brought the case before the Dutch Supreme Court. The Supreme Court held that the Court of The Hague used an incorrect test of what constitutes an effective measure. According to the Supreme Court the Court of The Hague misinterpreted effectiveness by measuring it against BREIN's intended purpose to completely eliminate copyright infringement. This was a misinterpretation because even if certain measures cannot lead to a complete elimination of copyright infringements, they can still be in compliance with Article 52(1) Charter. This reasoning follows from *UPC/Telekabel* because the CJEU held that even if a blocking injunction can be circumvented, it can still be effective.^[45] The court also wrongly held that an injunction as in these proceedings could only be awarded if all (relevant) torrent sites are involved. Without further motivation it is incomprehensible why BREIN would not have a valid interest to start with demanding an order to block one website. This step-by-step approach is not in conflict with article 52(1) Charter. The court also did not make clear why an ISP is burdened with the assessment of effectiveness.^[46]

It is clear from these Dutch proceedings that different arguments, like effectiveness of blocking, costs, circumvention, type of blocks, play a role in the court's assessment. What struck us is that despite the central role effectiveness plays, there is by far a clear answer to the question what constitutes an effective measure.

4.3 PROPORTIONALITY

The question remains where the threshold lies for a measure to be effective, also in the light of clarifying what the exact purpose of a blocking injunction is. The latter question is crucial for deciding whether the measure is effective. Following this measurement of effectiveness the question is whether the right to (intellectual) property of the right holder has enough weight to outweigh the rights of the ISP and of the users (even without any effectiveness of the blocking injunction). But the question has a second dimension: is the right to an effective remedy of the right holder covered by the measure? In an attempt to answer this question we analyse regulations and case law from the UK, as another (leading) EU country, Norway, as a non-EU country in Europe, and the US, as a leading country in technical innovation.

All judges in the examined systems use some proportionality test in which they also assess effectiveness. In some countries judges use separate requirements to come to the conclusion that an injunction is or is not proportional. Other judges only use proportionality as a test. In Norway and the US proportionality exists as a separate test, though in the US it is followed by other requirements.

The Norwegian copyright act simply states that the reasons in favour of the particular measures requested must outweigh the negative effects of such measure.^[47] In the most recent case in Norway the court addressed the question of efficacy. A number of domain names belonging to eight file sharing networks and streaming services (including The Pirate Bay) got a blocking order. The court pointed at the extensive number of infringing works made available in the particular case and considered to find no reason to assume that the infringing activity would cease without effective preventive measures.^[48] The court found this conclusion enough to consider the measure proportional.

Title 17 USC Section 512 (j)(1)(B)(ii) forms the legal basis for limitations on liability relating to material online. The first of four requirements is that an injunctive relief cannot be ordered if it significantly burdens either the provider or the operation of the provider's system or network. This implies some sort of proportionality test. Unfortunately section 512 (j)(1)(B)(ii) has been invoked only in one case. In *Arista Records, Inc. v. AT&T Broadband Corp.* members of the recording industry tried to obtain an injunction against internet backbone operators. One of these backbone operators is AT&T. The claim was issued against their enjoinder from routing any traffic to Listen4Ever, a website offering copyrighted music files for download located in China. However, the site was already offline within days and the plaintiffs voluntarily withdrew their complaint.^[49] Because the judge has not given an explanation on this provision, we do not know with certainty how it would be used in other cases.

Burden on ISPs, circumvention, and economic considerations have shown to be factors in case law to come to the conclusion that a block is proportionate or not. Only for some factors effectiveness is a requirement, though in all cases it shows to be relevant for balancing different interests. The different factors will be discussed in the next sections. The law in the UK forms an example of this sort of system.

4.4 CIRCUMVENTION

In all case law on blocking injunctions we looked into circumvention appears to be an important argument. As discussed before, in the context of blocking injunctions circumvention can mean the ability for infringing users to circumvent a block, the actual circumvention by these users and/or circumvention by website operators. Circumvention is important for ISPs to argue that a block has no positive effect and so the burden it imposes upon them is disproportional.

In the UK different cases comprehensively discuss circumvention. In the UK the so-called notice and block approach has seemingly proved to have positive results to battle circumvention by website operators.^[50] This approach allows right holders to notify ISPs where an online location changes its IP address or URL after a blocking injunction without court intervention.^[51]

The first case where a blocking injunction was ordered in the UK is *Twentieth Century Fox v. British Telecommunications*. In this case six film production companies sought to find an injunction to the largest British ISP, BT, to block www.newzbin.com. In a previous case, the British judge Kitchen J held that Newzbin infringed the Studios' copyright. After the injunction to Newzbin to restrain further infringements they moved to the Seychelles. The result was that the British court had no jurisdiction over Newzbin anymore. It was common ground that, if the order were to be implemented by BT, it would be possible for the largest ISP subscribers to circumvent the blocking required by the order. Evidence was presented

proving that the operators of the infringing website (Newzbin2) had already made plans to assist users to circumvent a blocking.

The British judge that handled the case, Arnold J, considered the technical expertise of those affected by the order.^[52] Arnold J concluded, despite the fact that the comparative level of technical expertise required to use Newzbin2 and to circumvent the blocking appears reasonable, that the measure is not ineffective.^[53] Even if only a minority of users are prevented from accessing the website it can be sufficient to justify the interference with the users' and the service provider's rights.^[54] Arnold J had three reasons to come to the conclusion that the measure was 'effective enough'. First, he found it likely that circumvention would require many users to acquire additional expertise beyond what they already possess. Second, evidence filed by Studios suggests that circumvention measures are likely to lead to slower performance and lower quality downloads, at least unless users are prepared to pay for a certain service provided by a different provider (though it is not necessarily the case that all users will be prepared to do this). The third reason will be discussed under the paragraph on economic considerations.

In a later UK case, *EMI Records v. British Sky Broadcasting*, Arnold J again considered the effectiveness and the role of circumvention of a blocking injunction. The effectiveness issue played a big role in this case. The possibility of circumvention of the block appeared to be crucial. Arnold J again gave three arguments in this respect. The first is that a blocking order may be justified even if it only prevents access for a minority of users. The second is that efficacy depends on the precise form of the order. The third is that the evidence indicated that blocking orders are reasonably effective.^[55] This third argument is based on the following data. The effect of an order made in Italy with regard to The Pirate Bay was a 73% reduction in audience accessing The Pirate Bay in Italy and a 96% reduction in page views. The blocking order made in Italy in relation to another torrent site had a similar effect. As for the effect of the orders made in England in relation to The Pirate Bay, on 19 December 2011 The Pirate Bay was ranked by Alexa as number 43 in the UK, while on 21 November 2012 its UK ranking had dropped to number 293.^[56] This third argument suggests that only some users circumvent the block and therefore the injunction is reasonably effective.

A more recent case in the UK was about the order to an ISP to block a website infringing trademarks instead of copyright. This case is High Court of England and Wales *Cartier vs. Sky 2014*. A website offered jewellery holding the Cartier trademark. In this case efficacy is also part of the proportionality test.^[57] Infringement in the UK was supposedly dropped, while visits to non-blocked websites and websites located in the rest of the world increased. This suggests that the block to the particular website was not circumvented but the access to the works was. Therefore it does not imply a decrease of infringement. This would suggest that this factor is not crucial. It was enough that the reduction of visits to the targeted website was dropped. It was not accepted that Cartier needed to establish that the blocking measure would lead to a reduction in the overall infringement of the trade marks. Evidence was introduced that previous copyright orders were considered effective: the use of infringing websites was reduced.^[58] This same reasoning was followed in *1967 Ltd v. British Sky Broadcasting 2014*.^[59]

Another (of four) requirements of section 512 (j)(1)(B)(ii) in the US is that an injunctive relief has to be effective. This means that the court has to consider whether an injunction would be 'technically feasible and effective', and 'would not interfere with access to non-infringing material at other online locations'. Circumvention is an important element for deciding whether the injunctive relief is effective. With regard to circumvention the question is not

whether the website operators and/or the users *could* circumvent the block but (1) how many users - or in the case of a blocking, whether the website operator - would actually *do so* and (2) *how long it would take* them to perform the circumvention. This also refers to the interference with access to non-infringing material at other locations. The precision of the blocking is thereby relevant.

4.5 BURDEN ON ISPS

From case law follows that the costs of the block is also a relevant criterion for deciding if a measure is proportionate. The higher the costs, the more effective a measure should be to be effective. In the UK the costs of a block did not get a lot of attention.

A third threshold for granting an injunctive relief in the US of Section 512 (j)(1)(B)(ii) is that it cannot be ordered if it significantly burdens either the provider or the operation of the provider's system or network.

A fourth criterion is that it has to be considered whether "*other less burdensome and comparably effective means of preventing or restraining access to the infringing material are available*" (subsidiarity). An obvious alternative is a lawsuit against the operator of the website in question. But of course jurisdictional problems arise here.^[60]

In the UK and Norway the burden an blocking injunction implies for the ISP is not considered very important. Judges tend to grant a block irrespectively the burden it implies on ISPs.^[61]

4.6 ECONOMIC CONSIDERATIONS

In the already mentioned *Twentieth Century Fox v. British Telecommunications*, economic considerations were a factor in assessing the possible measure. It is important not to overlook the question of economics. In addition to paying for (a) a Usenet service and (b) Newzbin2, the users must pay for an additional service for circumvention purposes, then the cost differential between using Newzbin2 and using a lawful service (such as a DVD rental service) will narrow still further.^[62] Arnold J considers injunctions to be effective enough, despite the evidence that users will circumvent the block.

4.7 SHARED LIABILITY BY ISPS

In the US a blocking injunction can only be granted if the requirements of section 502 is fulfilled. This provision entails the requirement of contributory liability for the intermediaries that hosts an infringing website. This means that the plaintiff has to establish copyright infringement - direct, vicarious or contributory.

This requirement might explain why section 512 (j)(1)(B)(ii) has been invoked only once. Direct liability is not very likely to be established, following *Netcom*. In this case the court held that internet access providers and internet backbone operators do not typically "*take any affirmative action that directly results in copying*". Several courts followed this reasoning so it seems like this is established case law. Vicarious infringement by ISPs requires (1) that the defendant has the right and ability to supervise the infringing activity and (2) has a direct financial interest in such activities. Typically ISPs will not be guilty of vicarious copyright infringement by routing internet traffic alone. This is also confirmed in case law. Contributory infringement arises where a party "*with knowledge of the infringing activity, induces, causes, or*

materially contributes to the infringing conduct of another". From the Amazon case follows that a computer system operator is contributory liable if it "has actual knowledge that specific infringing material is available using its system" and can "take simple measures to prevent further damage to copyrighted works, yet continues to provide access to infringing works". Such actual knowledge arises when the operator receives a notification by a copyright holder. The 'simple measures' requirement also follows from the before mentioned the first requirement of Section 512 (j)(1)(B)(ii). Though to come to the four requirements, first the court needs to establish simple measures are possible.^[63]

5. CLOSING REMARKS

The question 'What constitutes an effective measure?' in cases of blocking injunctions is not satisfactorily answered in either regulations or case law. Two key findings do give some clarity at how to approach the question. First, effectiveness is an element that gives weight to the interest of the right holders of an intellectual property right. This interest should be balanced against the rights of the ISP and the user of the service of the ISP. How much weight effectiveness adds differs between jurisdictions and judges. Second, the weight effectiveness has depended on the purpose of the blocking injunction. At least a total end to infringements is an illusion. Every blocking injunction can be circumvented, though not every blocking is as easy to circumvent than others may be.

Other indications we found in *L'Oreal / eBay*, viz. that for a minimum level of injunctive relief *injunctions must be effective, proportionate, and dissuasive and must not create barriers to legitimate trade.*"^[64] Illustrative is what *UPC / Telekabel* basically said: as long as a measure is not entirely ineffective, or aims not to be entirely ineffective, or at least suggests that users should not really be doing this, it is acceptable. What we know for sure is what can be considered as being *not* ineffective. It does not give a clear threshold what measure should be considered effective and what should be considered ineffective.

A crucial question was left unanswered by the CJEU in the case of *UPC / Telekabel*: Could specifically identified measures intended to block access to a website containing infringing material be imposed by a court on an intermediary, even if those measures would require considerable costs for the intermediary and could be easily circumvented by the users? As to the circumvention issue, the opinion of the AG in *UPC / Telekabel* is that the possibility of circumvention not necessarily means a blocking measure is inappropriate. The AG uses the criterion of appropriateness instead of effectiveness.

A shortcoming in the considerations of the court is that it does not give attention to the reason why an ISP should be burdened with the assessment of effectiveness. Circumvention, the burden on ISPs, the economic considerations, the availability of alternative measures and the shared liability by the ISP appear to be factors for assessing proportionality. A few considerations that are not mentioned in case law, but seem relevant for the question what constitutes an effective measure, are dissuasiveness, impact on lawful users of the internet, and the signalling function of a measure.

We believe that blocking injunctions are not the best line of action. It would be valuable if existing copyright would be evaluated from the perspective on what the underlying interests are, and what can be best done to realize these. More focus on online legal alternatives, and

informing the general audience of the rationale that entertainment products come with a price in the end may sort more effect. Unfortunately, given the recent proposals for EU copyright law, we are afraid the role of ISPs is moved further in the direction of policing the internet. Since these are still proposals, we hope the genuine rethinking of copyright one day will get shape.

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FOOTNOTES

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[2] Judgment of the Court (Second Chamber) of 14 June 2017, *Stichting Brein v Ziggo BV and XS4All Internet BV*, C-610/15, ECLI:EU:C:2017:456.

[3] Most prominently the *Sanoma/GeenStijl*-case in which some uses of hyperlinks were qualified as a communication to the public. Judgment of the Court (Second Chamber) of 8 September 2016, *GS Media BV v Sanoma Media Netherlands BV, Playboy Enterprises International Inc., Britt Geertruida Dekker*, Case C-160/15, ECLI:EU:C:2016:644, for a discussion see e.g. Loderer (2016), Senftleben (2016), Rendas (2017).

[4] <https://homes.eff.org/~barlow/EconomyOfIdeas.html>

[5] For instance, the difference between streaming video on top of torrents (Popcorn) is considered a copyright violation because it implies downloading. Streaming on its own is not (yet) considered an infringement since it only concerns temporary copies and these are excluded from copyright. A shift to concepts that fit in better with what actually is happening is needed, in many situations.

[6] CJEU 27-3-2014, C-314/12 (*UPC / Telekabel*).

[7] 'Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights' and 'Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society'.

[8] CJEU 19-2-2009, C-557/07 (*LSG / Tele2*), par. 43.

[9] Article 52(1) Charter: *"Any limitation on the exercise of the rights and freedoms recognized by this Charter must be provided for by law and respect the essence of those rights and freedoms. Subject to the principle of proportionality, limitations may be made only if they are necessary and genuinely meet objectives of general interest recognized by the Union or the need to protect the rights and freedoms of others."*

[10] Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce).

[11] CJEU 24 November 2011, C-70/10 (*Scarlet/SABAM*), par. 40

[12] CJEU 27 March 2014, C-314/12 (*UPC / Telekabel*), par. 51.

[13] CJEU 29 January 2008, C-275/06 (*Promusicae*), par. 40.

[14] CJEU 3 June 2010, C-258/08 (*Ladbroke*).

[15] CJEU 3 June 2010, C-258/08 (*Ladbroke*), par. 50.

[16] CJEU 12 July 2011, C-324/09, (*L'Oreal / eBay*).

[17] CJEU 12 July 2011, C-324/09, (*L'Oreal / eBay*), par. 144.

[18] CJEU 12 July 2011, C-324/09, (*L'Oréal / eBay*), par. 136.

[19] CJEU 27 March 2014, C-314/12 (*UPC / Telekabel*).

[20] CJEU 27 March 2014, C-314/12 (*UPC / Telekabel*), par. 62.

[21] *“(i) they do not unnecessarily deprive internet users of the possibility of lawfully accessing the information available and (ii) that they have the effect of preventing unauthorised access to protected subject-matter or, at least, of making it difficult to achieve and of seriously discouraging internet users who are using the services of the addressee of that injunction from accessing the subject-matter that has been made available to them in breach of the intellectual property right.”* See CJEU 27 March 2014, C-314/12 (*UPC / Telekabel*), par. 63 and Angelopoulos 2014, p. 818.

[22] Angelopoulos 2014, p. 819.

[23] CJEU 27 March 2014, C-314/12 (*UPC / Telekabel*), par. 17.

[24] AG Cruz Villalón, 27 March 2014, C-314/12 (*UPC / Telekabel*), par. 91.

[25] AG Cruz Villalón, 27 March 2014, C-314/12 (*UPC / Telekabel*), par. 100.

[26] Different blocking and circumvention possibilities will be discussed in par. 3.

[27] AG Cruz Villalón, 27 March 2014, C-314/12 (*UPC / Telekabel*), par. 101.

[28] AG Cruz Villalón, 27 March 2014, C-314/12 (*UPC / Telekabel*), par. 101

[29] AG Cruz Villalón, 27 March 2014, C-314/12 (*UPC / Telekabel*).

[30] Feiler 2012, p. 9-10.

[31] This method is used in Norway. See Standpunt Xs4all, par. 26.

[32] Standpunt Xs4all, par. 28.

[33] Standpunt Xs4all, par. 29.

[34] Feiler 2012, p. 7.

[35] Meaning the website operator can only circumvent the block by using another domain name and the users can only circumvent the block by relaying their traffic over a server that (1) is connected to a different ISP or (2) if the blocking is implemented at the backbone level, routes its traffic over a different backbone operator.

[36] Feiler 2012, p. 10 – 11.

[37] Feiler 2012, p. 61.

[38] Different studies are Poort *et al.* 2014, Saunders 2015 and Danaher, Smith and Telang 2015.

[39] Rechtbank Amsterdam 16 juni 2010, ECLI:NL:RBAMS:2010:BN1626, par. 4.6.

[40] Hof Den Haag 28 January 2014, ECLI:NL:GHDHA:2014:88 (*Ziggo/ BREIN*), par. 7.1.

[41] Hof Den Haag 28 January 2014, ECLI:NL:GHDHA:2014:88 (*Ziggo/ BREIN*), par. 5.10.

[42] This will be presented in par 4.4.

[43] Hof Den Haag 28 January 2014, ECLI:NL:GHDHA:2014:88 (*Ziggo/ BREIN*), par. 5.13 – 5.22.

[44] Hof Den Haag 28 January 2014, ECLI:NL:GHDHA:2014:88 (*Ziggo/ BREIN*), par. 5.23.

[45] As mentioned earlier, it follows from *UPC/Telekabel* it is enough that a blocking, insofar it cannot prevent infringements, will make it difficult and seriously discourages internet users who are using the services of the addressee of that injunction from accessing the subject-matter that has been made available to them in breach of the intellectual property right.

[46] HR 13 November 2015, ECLI:NL:HR:2015:3307 (*BREIN / Ziggo*), par. 4.1.1 – 4.6.4.

[47] Songe-Møller and Foss 2016, p. 38.

[48] Songe-Møler and Foss 2016, p. 39.

[49] Feiler 2012, par. 4.2.

[50] *“The UK has experienced a significant decrease in traffic to blocked websites (-71.2%), whereas the rest of the world has experienced an increase in traffic to those websites (27.8%). On the other hand, the UK has experienced a greater increase in traffic to non-blocked websites (146%) than the rest of the world (67.6%). This suggests that many UK users who have been blocked from accessing websites as a result of section 97A orders have not circumvented the blocks, but have started using different websites instead. Nevertheless, the overall increase in use of these websites is lower for the UK (10.6%) than for the rest of the world (51%). This suggests that the section 97A orders have resulted in a decrease in the overall level of infringement in this sector in the UK.”* See *Cartier vs. Sky* [2014] EWHC 3354 (Ch).

[51] Roy and Marsoof, p. 99.

[52] *Twentieth Century Fox v. British Telecommunications* [2011] EWHC 1981 (Ch), par. 193.

[53] *Twentieth Century Fox v. British Telecommunications* [2011] EWHC 1981 (Ch), par. 193.

[54] Feiler 2012, p. 62.

[55] *EMI Records v. British Sky Broadcasting* [2013] EWHC 379 (Ch), par. 104 – 106.

[56] *EMI Records v. British Sky Broadcasting* [2013] EWHC 379 (Ch), par. 106.

[57] Cartier vs. Sky [2014] EWHC 3354 (Ch), par. 218.

[58] Jones 2015, p. 468.

[59] 1967 Ltd v. British Sky Broadcasting [2014] EWHC 3444 (Ch).

[60] Feiler 2012, par. 4.2.5.

[61] See paragraph 5.1 & 5.2.

[62] Twentieth Century Fox v. British Telecommunications [2011] EWHC 1981 (Ch), par. 196.

[63] See Feiler 2012, par. 4.2.

[64] CJEU 12 July 2011, C-324/09, (*L'Oreal / eBay*), par. 144.