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The need for protection of environmental defenders from digital intimidation: an analysis of Article 3(8) of the Aarhus Convention

Potrzeba ochrony obrońców środowiska
przed prześladowaniem cyfrowym:
analiza Artykułu 3(8) Konwencji z Aarhus

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Abstract: Digital technologies are becoming increasingly important to environmental defenders, both in terms of tools that facilitate speaking out and/or taking action, and in terms of (digital) risks they face as a result of their involvement. A growing concern has been expressed about the use of various forms of online and technology-facilitated intimidation or “digital intimidation” against environmental defenders. While the existing research on cyberbullying, digital violence and online intimidation can provide some insight, few studies and data exist on the use of such tactics against environmental defenders in particular. By leaving this issue unexamined, there remains a lack of awareness about the risks and challenges environmental defenders may face in terms of online safety and digital intimidation, which may ultimately curtail public debate on environmental issues. Fortunately, the protections under Article 3(8) of the Aarhus Convention and the recently introduced Special Rapporteur for Environmental Defenders can be useful in providing protection against digital intimidation. This paper, therefore, looks at the application of Article 3(8) to digital intimidation, through the decisions of the Aarhus Convention Compliance Committee, and also considers the mandate given to the Special Rapporteur at the 2020 Meeting of the Parties. The analysis shows that there is certainly potential for protection against digital intimidation under Article 3(8) AC, but more explicit attention and awareness may be needed.

Keywords: environmental defenders, digital intimidation, Aarhus Convention

Abstrakt: Technologie cyfrowe stają się coraz ważniejsze dla obrońców środowiska naturalnego, zarówno jako narzędzia, które ułatwiają wypowiedanie się w tej kwestii i/lub podejmowanie działań, ale także gdy idzie o (cyfrowe) ryzyko, w obliczu jakiego stają oni ze względu na swoje zaangażowanie w obronę środowiska. Zauważalna jest rosnąca troska w związku z wykorzystaniem rozmaitych form prześladowania tych działaczy w sieci i wspomaganego technologią „zastraszania cyfrowego”. Jeśli przeprowadzone do tej pory badania na temat cyberzastraszania, cyfrowej przemocy i zastraszania w sieci mogą dać pewien wgląd w tę problematykę, to nie ma zbyt wielu badań ani danych na temat wykorzystania takich taktyk przeciwko obrońcom przyrody w szczególności. Pozostawienie tej kwestii poza badaniami prowadzi do braku świadomości, na jakie ryzyko i wyzwania narażeni są obrońcy przyrody, jeśli idzie o ich bezpieczeństwo w sieci czy cyfrowe prześladowanie, co w konsekwencji prowadzi do ograniczenia debaty publicznej na temat środowiska. Na szczęście ochrona gwarantowana Artykułem 3(8) Konwencji z Aarhus oraz utworzony urząd Specjalnego Sprawozdawcy ds. Obrońców Środowiska mogą okazać się pomocne w zapewnieniu ochrony przed cyfrowym prześladowaniem. Niniejsza praca bada zastosowanie Artykułu 3(8) w sprawach cyfrowego zastraszania poprzez decyzje Komitetu ds. Zgodności Konwencji z Aarhus, a także omawia mandat nadany Specjalnemu Sprawozdawcy na Spotkaniu Stron w roku 2020. Analiza pokazuje, że zdecydowanie istnieje potencjał dla ochrony przeciwko prześladowaniu cyfrowemu w świetle Artykułu 3(8) Konwencji, jednak istnieje również potrzeba zwrócenia bardziej konkretnej uwagi oraz rozbudzenia świadomości co do tej kwestii.

Słowa kluczowe: obrońcy środowiska naturalnego, prześladowanie w sieci, Konwencja z Aarhus

1. Introduction

Numerous climate marches were organized worldwide, starting in 2018, by young activists who took to the streets to express their discontent with their government's inaction on climate change. Through the hashtag #FridaysForFuture, the call to action was shared all over social media, encouraging others to join the protest against the lack of action in addressing the climate crisis. In addition, online petitions such as *Sign the emergency appeal for climate action* (Avaaz.org) allow signatures from around the world to be gathered to effect change. Such examples show how digital technologies, especially social media, can enable rapid dissemination of actions within the movement and allow new members to be reached in different locations all over the world. It enables individuals to seek out others and interact on environmental issues without being limited by the constraints of traditional offline forms of communication (Smith and Smythe 1999; Poetranto et al. 2020).

There are several forms of digital activism that have emerged in recent years and have been used by individuals and organizations to take action and/or speak out, such as clicktivism, content sharing and creation, setting up online petitions, or hacktivism (George and Leidner 2019). At the same time,

the digital sphere also reflects and confers new dimensions to the challenges we face in our society. While digital technologies offer new opportunities to human rights defenders, including environmental defenders, they can also present risks and harmful practices that can negatively affect the environmental movement. Digital technologies are used to amplify the voice of environmental defenders, but they can also be used to silence them. It begs the question of whether environmental defenders are protected from intimidation taking place online or facilitated by technologies (or ‘digital intimidation’ for short as used in this paper). As such, this paper discusses the protection mechanism under the Aarhus Convention, specifically Article 3(8) of the Convention, and the role of the recently introduced Special Rapporteur on Environmental Defenders. An analysis of the decisions of the Aarhus Convention Compliance Committee (ACCC) will be undertaken, focusing on the extent to which the ACCC decisions address issues relevant to online safety and online or technology-facilitated forms of intimidation. Before doing so, the paper zooms in on some examples and the impact that digital intimidation can have on those targeted in order to highlight the need for protection.

2. A growing concern for environmental defenders

While promoting and protecting the environment, environmental defenders face many challenges. Numerous reports and studies stress the dire situation in which environmental defenders find themselves (Butt et al. 2019; Scheidel et al. 2020; Global Witness 2021; Bille Larsen et al. 2021; Front Line Defenders 2022). Headlines often tend to focus on rather physical forms of violence against environmental defenders, such as murder, illegal detention, and unlawful arrests.¹ Yet, some have recently expressed deep concern about a form of intimidation that is less tangible and less visible – namely, the use of various forms of online and technology-facilitated forms of intimidation or ‘digital intimidation’ (Lloro 2018; Poetranto et al. 2020; Eklöv and Francisco Alvarado Cóbar 2021). The large amount of hate Swedish climate activist Greta Thunberg received online serves as an example here (Boren and Kahya 2019; Nevett 2019). This by no means seems to be a one-off example. In 2019, the Swedish Society for Nature Conservation published the results of a questionnaire conducted among their partner organizations on the various

¹ This is also reflected in the Sustainable Development Goals. As set out in the global indicator framework for the Goals and targets of the 2030 Agenda, indicator 16.10.1 of Goal 16 requires quantification of the number of verified cases of “killing, kidnapping, enforced disappearance, arbitrary detention and torture” of journalists, associated media personnel, trade unionists and human rights advocates.

emerging risks to the environmental movement. It showed that a staggering number of respondents had experienced physical and/or digital surveillance (68%), or had been victims of smear campaigns (with some on social media) (44%) (Swedish Society for Nature Conservation 2019). That same year, Front Line Defenders reported that their Digital Protection Coordinators received 304 emergency requests from human rights defenders in 2019. Among these are a large number of online threats (26%) and reports of hacked/compromised accounts on social media (16%) (Front Line Defenders, 2021: 5). Of all the requests, 16% came from individuals working on land/environment/indigenous peoples' rights (Front Line Defenders, 2021: 5). Another example concerns Professor Teresa Lloro-Bidart's experience of a campaign of harassment following her critical stance on social and environmental issues, which she elaborates on in her article *An ecofeminist account of cyberbullying* (Lloro 2018). Finally, in 2019, the European Environmental Bureau (EEB) together with Justice and Environment published a report documenting and analysing the harassment of environmental defenders in the EU. The report draws on a number of case study responses from ten countries, and outlines several cases of harassment that occurred within the EU between January and November 2018. In doing so, the report aims to paint a picture of the general atmosphere in which many activists, civic movements and environmental organizations find themselves today and shows the resulting need for the protection of environmental defenders (Smith, 2019). Interestingly, the report mentions some instances of media and cyber harassment. This by both state and non-state actors (Smith, 2019, 9). The case-study responses, for example, state that the use of defamation of NGOs or individuals may have created a hostile environment for environmental defenders. From four case-study responses, there emerges an example of defamation via (social) media and the dissemination of defamatory statements via e-mail and by phone (Smith 2019: 8, 9, 11). It further indicates how media harassment may fuel negative public opinion and can create distrust and scepticism among the public. This in turn increases the likelihood of harassment, such as hate speech and individual attacks (Smith 2019: 11, 18). This report provides a glimpse into the use of digital intimidation tactics in the EU and, along with it, a possible negative impact on the climate movement.

In other words, the issue of digital intimidation against environmental defenders is slowly gaining more attention. Yet data on its specifics remain limited. While a few studies provide some insight, the data often remain vague and lack the depth to understand the complexity of digital intimidation against environmental defenders. Fortunately, the topic of online intimidation and digital violence in itself has not remained undiscussed. The existing research

on online intimidation of journalists and gender-based digital violence can further provide insight into this issue, as will be discussed below, regarding the existing tactics used and the effect of such tactics on those targeted by it. Nevertheless, more empirical research may be needed to determine which digital intimidation tactics are used against environmental defenders, what their effect is, and how environmental defenders respond to such tactics. Leaving this issue unresearched, it perpetuates a lack of awareness about the risks and challenges environmental defenders may face in terms of online safety and digital intimidation. Further research would provide insight into commonly used tactics and the extent to which environmental defenders use or lack protection mechanisms. This, in turn, may enable further awareness of the issue, while looking at its specific impact on the environmental movement, and providing recommendations to address the use of digital intimidation.

3. The notion of ‘digital intimidation’ tactics

As said, the topic of gender-based online violence and online intimidation of journalists and other media actors has gained increasing attention in the literature (e.g. Winkelman et al. 2015; Ferrier and Garud-Patkar 2018; McCully and Griffen 2019; Nadim and Fladmoe 2021; Lewis et al. 2020; Lomba et al. 2021; Macpherson 2021; Barker and Jurasz 2022). Even more recently, in the wake of the COVID-19 pandemic, it has been noted that scientists are receiving more online hate and abuse (Nogrady 2021, 2022). Yet, throughout the literature, different notions are used interchangeably to describe the range of tactics used to harass and intimidate, including ‘cyber harassment’, ‘online harassment’, ‘online harm’, ‘online abuse’, ‘cyberbullying’, and ‘digital violence’ (see for instance: Winkelman et al. 2015; Ferrier and Garud-Patkar 2018; Lloro 2018; McCully and Griffen 2019; Lewis et al. 2020; Nadim and Fladmoe 2021; Lomba et al. 2021: 49–50; Barker & Jurasz 2022; Nogrady 2022). At the moment, there is no comprehensive definition or typology to describe the tactics used to harass and intimidate online or through technological means. Rather, a non-exhaustive list of tactics commonly employed is often used. Existing research on online intimidation and digital violence shows that various tactics can be made use of, including online threats, defamation campaigns, malware attacks, cyber stalking, sexual harassment, trolling, doxing, offensive comments, spreading false information, creating deepfakes, etc (Kleemola et al. 2015; Lloro 2018; van der Wilk 2018; Pen America 2018; Poetranto et al. 2020; Article 19 2020; A. Vogels 2021; *GREVIO Recommendation* 2021; Lomba et al. 2021: 50–52). This can be well accounted for due to the ever-changing nature of technology and

digital spaces (UN Human Rights Council 2018).² In this paper, however, the term ‘digital intimidation’ is used. Several definitions of ‘harassment’ include an element of repetitiveness (as will be illustrated again below), while ‘intimidation’ can be defined as “the act of frightening or threatening someone so that they will do what you want.”³ The use of the term ‘intimidation’ allows for an understanding of this phenomenon that does not *a priori* exclude acts that may have a chilling effect but may not be repetitive. However, it is necessary to note that many environment-related documents refer to ‘harassment’, and will also be discussed as such in this paper.

By analogy with the understanding of violence against women in its digital dimension, as set out by the Council of Europe’s Expert Group on Combating Violence against Women and Domestic Violence (GREVIO), digital intimidation against environmental defenders should also be understood as encompassing both online aspects (activities performed on the Internet and data available, including through Internet intermediaries) and technologically-facilitated aspects (activities performed using technology and communication equipment, including hardware and software) (*GREVIO Recommendation 2021*). Such an understanding allows consideration of a wide range of tactics, including online intimidation tactics, such as online threats and doxing, as well as intimidation facilitated through technology, such as cyberstalking.

Moreover, some factors are characteristic of digital intimidation, and are typical to the digital sphere. Consider the rapid spread of (hateful) communications on the Internet among large numbers of people, the ability of the intimidator to remain anonymous and the potential cross-jurisdictional nature (Van Der Wilk 2018: 26–27; Barker and Jurasz 2019: 6–7, 109; Dunn 2020: 4; Lomba et al. 2021: 50, 69, 124, 151). In fact, intimidation can occur at any time, across geographic locations, and under cover of anonymity, which can exacerbate the impact and consequences of the intimidation. These characteristics, along with the realization that the possible tactics cannot be summed up into an exhaustive list, are important in understanding what ‘digital intimidation’ may entail.

² As noted by the UN Special Rapporteur on Violence against Women in the 2018 report, new technologies will continue to give rise to new and different forms of online violence. See: UN Human Rights Council, 2018.

³ ‘Harassment’ is defined as “the act of making repeated attacks on an enemy” (see: <https://www.oxfordlearnersdictionaries.com/definition/english/harassment?q=harassment>) or “illegal behaviour towards a person that causes mental or emotional suffering, which includes repeated unwanted contacts without a reasonable purpose, insults, threats, touching, or offensive language” (see: <https://dictionary.cambridge.org/dictionary/english/harassment>). The emphasis added by the authors; Definition of ‘Intimidation’, <https://www.oxfordlearnersdictionaries.com/definition/english/intimidation?q=intimidation>.

4. The impact of digital intimidation tactics

The harm caused by digital intimidation tactics can be severe and may have a detrimental impact on the climate and environmental debate. Such tactics can be categorized as a form of ‘slow violence’ against environmental defenders – a term coined by environmentalist and literary scholar Rob Nixon in the book *Slow Violence and the Environmentalism of the Poor* (Nixon 2013). The term was used to describe a type of violence that occurs “gradually and out of sight” and refers to “violence of delayed destruction that is dispersed across time and space, an attitudinal violence that is not viewed as violence at all” (Nixon 2013: 2). Drawing on several literary works from different disciplines, including ecocriticism and postcolonial studies, he highlighted the slow increase in violence against the most vulnerable as a result of a series of environmental disasters (such as climate change, air pollution, and biodiversity decline), which are often overlooked by those in more affluent positions. The book focuses specifically on environmental violence against vulnerable communities, but similar considerations can be used regarding digital intimidation tactics used against environmental defenders.⁴ First, the impact and harm caused by violence through digital technologies are often underestimated. Although research on digital intimidation and violence against journalists and women has shown that such tactics can have serious consequences for those affected by them (Ferrier and Garud-Patkar 2018; Lewis et al. 2020; Macpherson 2021; Nadim and Fladmoe 2021), the assumption remains that those who are targeted by say, online hate speech, can simply turn off their Internet and ignore the comments (Ferrier and Garud-Patkar 2018: 15–16; Barker and Jurasz 2022: 244; Nogrady 2022: 206–207). As environmental defenders use their online presence to share information and call for action, they would be deprived of an important tool to speak out and take action. Moreover, it has been argued that digital intimidation cannot be discussed without understanding the intertwining of online and offline forms of violence and intimidation (Lomba et al. 2021: 50). For instance, sharing personal data online, including someone’s home address (i.e. doxing), may eventually lead to physical violence and intimidation. Thus, the impact of digital intimidation can also extend beyond the digital sphere. Second, while some digital intimidation tactics may have an immediate effect on those targeted (e.g. attacking NGOs with malware), other tactics may occur in small(er) amounts but over a longer period of time. Whereas a single online hate comment may not have an immediate chilling effect on the person to

⁴ On the discussion of the insufficient attention paid to the connection between the harms associated with technology-facilitated violence and the legal and social recognition it receives, see the following paper: Brydolf-Horwitz, 2022

whom it is directed, when one receives numerous comments or when a group of individuals send multiple messages to a person (i.e. pile-on harassment), it can accumulate and eventually silence that person. The concept of ‘slow violence’ outlined by Nixon serves to highlight the need to give equal social and legal recognition to the issue of digital intimidation against environmental defenders in comparison to other forms of violence, while also underscoring the escalating effect that certain tactics can have on those targeted by it.

In other words, addressing digital intimidation tactics against environmental defenders in the context of environmental law is important. Digital intimidation tactics can significantly affect several human rights that are important to environmental defenders and underpin their participation in the public debate on environmental issues. These tactics can seriously interfere with the enjoyment and exercise of various human rights, such as their right to freedom of speech,⁵ their right to freedom of assembly,⁶ and their right to privacy (e.g. the dissemination of non-consensual intimate videos online or doxing).⁷ Overall, if such intimidating acts go unpunished, this can have a chilling effect that ultimately curtails debate on environmental issues.⁸ If environmental defenders, who act as ‘public and social watchdogs’, are removed from this equation, the public debate on environmental issues may be distorted altogether.

The same can be said of the environmental defenders’ procedural and environmental-related human rights. In addition to the human rights mentioned above, digital intimidation can also negatively impact the exercise of environmental (procedural) rights of environmental defenders, including those enshrined in the UNECE Aarhus Convention. These rights include the rights of access to information, public participation in decision-making and access to justice in environmental matters.⁹ In this regard, Article 3(8) of the Aarhus

⁵ Art. 10 European Convention on Human Rights (ECHR); Art. 11 of the Charter of Fundamental rights of the EU (CFREU); At the EU level, the chilling effect on the right to freedom of expression of online harassment and cyber-bullying has been underlined in particular for journalists and other media actors, such as: Recommendation CM/Rec(2016)4 of the Committee of Ministers to member States on the protection of journalism and safety of journalists and other media actors, 2016

⁶ Art. 11 ECHR; Art. 12 CFREU; (Some have raised concerns on how surveillance tactics and interference with Internet communications could infringe the freedom of assembly, such as: *Siatisa*, 2021).

⁷ Art. 8 ECHR; Art. 7 CFREU; ECtHR, *Khadija Ismayilova c. Azerbaïdjan*, 2019; ECtHR, *Vodina c. Russie*, 2021.

⁸ *Khadija Ismayilova c Azerbaïdjan* [2019] ECtHR 65286/13, 57270/14.

⁹ The Aarhus Convention, 1998; Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on Public Access to Environmental Information and Repealing Council Directive 90/313/EEC, 2003; Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 Providing for Public Participation in Respect of the Drawing up of Certain Plans and Programmes Relating to the Environment and Amending with Regard to Public Participation and Access to Justice Council Directives 85/337/EEC and 96/61/EC, 2003

Convention explicitly states that those “persons exercising their rights in conformity with the provisions of this Convention shall not be penalized, persecuted or harassed in any way for their involvement.” Given the importance of this provision in addressing intimidation against environmental defenders, this provision will be revisited in more detail in the next section of this paper. As will be shown, the provision provides some significant protection, but leaves open questions that require further consideration.

5. The available protection mechanism under the Aarhus Convention

5.1. The prohibition of penalization, persecution and harassment under Article 3(8) of the Aarhus Convention

When it comes to empowering and protecting environmental defenders from forms of harassment, penalization or persecution, the Aarhus Convention, as mentioned above, plays a key role. In addition to the (procedural) environmental rights laid down in the Convention,¹⁰ Article 3(8) of the Aarhus Convention specifically contains a prohibition addressed to member states that reads as follows:

Each Party shall ensure that persons exercising their rights in conformity with the provisions of this Convention shall not be penalized, persecuted or harassed in any way for their involvement. This provision shall not affect the powers of national courts to award reasonable costs in judicial proceedings.

This provision is vital for protection against a variety of threats faced by environmental defenders, and thus may also form the basis for protection against digital intimidation tactics. Given the technology-neutral wording of this provision, Article 3(8) arguably provides protection against both online forms of intimidation and technology-facilitated forms of intimidation. At the very least, Article 3(8) of the Convention applies in the digital sphere, as will be discussed in the next section.

In case of online or technology-facilitated intimidation used against environmental defenders, this could trigger a compliance review by the Aarhus Convention Compliance Committee (ACCC) (*Guide to the Aarhus Convention Compliance Committee* 2019). To date, the ACCC has dealt with only about ten cases of alleged violations of Article 3(8). Notably, the two cases related to Lithuania and Belarus are worth mentioning as they provide much insight into the analysis under the provision (ACCC/C/2014/102, Belarus 2017;

¹⁰ That is the right to access to information, public participation in decision-making and access to justice in environmental matters.

ACCC/C/2013/98, Lithuania 2021). In dealing with cases of alleged penalization, persecution, and/or harassment, a four-part analysis can be used that includes the following elements (ACCC/C/2014/102, Belarus 2017: pars. 65–75; ACCC/C/2013/98, Lithuania 2021: pars. 150–158):

a) One or more members of the public have exercised their rights in conformity with the provisions of the Convention;

b) The member of the public or those members of the public have been penalized, persecuted or harassed;

c) The penalization, persecution or harassment was related to the member(s) of the public's exercise of their rights under the Convention; and

d) The Party concerned has not taken the necessary measures to fully redress any penalization, persecution or harassment that did occur.

Based on the evidence provided in the case, the ACCC will consider whether the facts of the case amount to non-compliance with Article 3(8) of the Aarhus Convention. After examining the case, the ACCC will adopt its findings and, if necessary, make recommendations. There is nothing to suggest that this four-step analysis could not be used to examine cases of online or technology-facilitated intimidation against environmental defenders. The first two elements, however, require some further discussion, namely a) whether members of the public are exercising their rights in accordance with the AC, and b) what constitutes penalization, persecution, and harassment.¹¹ First, a brief discussion will be provided hereafter of the extent to which certain forms of digital activism fall under the exercise of “their rights in conformity with provision of the Convention” and thus may fall under the protection of Article 3(8) of the Convention. This may be particularly important to ensure that environmental defenders can operate in a safe online environment, and hence are protected when speaking out online. Second, the paper addresses the application of Article 3(8) of the Convention to forms of digital intimidation tactics. This in turn addresses the second element.

5.2. One or more members of the public have exercised their rights in conformity with the provisions of the Convention

Article 3(8) AC applies in those situations where members of the public have exercised their rights in accordance with the provision of the Convention. This covers all situations in which members of the public seek access to information, public participation, or access to justice to protect their right to live in an environment suitable for their health or well-being. In other words,

¹¹ For a further discussion of each section, see: Weber, 2022

it includes those situations related to the 'Aarhus-rights' referred to in Articles 4 through 9 of the Convention and those covered by the general obligations under Article 3 of the Convention (ACCC/C/2014/102, Belarus 2017: par. 66). In particular, the second pillar, the right to participate in decision-making, is considered to have a broad scope (Barritt 2021: 11). For instance, the ACCC has previously indicated that participating in a petition against a proposed project and participating in an authorized street action are covered by the public's right to participate in decision-making (ACCC/C/2014/102, Belarus 2017: pars. 80 and 96).

This provision also applies to acts carried out by environmental defenders exercising their (Aarhus) rights in the digital sphere. At the onset of the pandemic, Kazakhstan submitted a request for advice on whether holding public hearings via videoconferencing during the coronavirus pandemic would meet the requirements of the Convention. While it was not the first time the ACCC discussed the use of virtual means as a tool for public participation in decision-making,¹² it now provided a comprehensive overview of the requirements that should be considered to ensure compliance with the Convention (ACCC/A/2020/2, Kazakhstan 2020). The ACCC explained, amongst other things, that Article 3(8) "applies with equal force during the pandemic and with respect to persons exercising their rights to participate through virtual means" (ACCC/A/2020/2, Kazakhstan 2020: par. 31). Although the recommendation does not address the use of digital intimidation tactics, it demonstrates the applicability of protection under the Aarhus Convention in a digital space, and more specifically of persons operating in a digital space while exercising their rights in accordance with the Convention.

It has also been argued that the application of Article 3(8) goes even beyond the Aarhus rights itself (Weber 2022: 6). This is in line with the ACCC's previous findings (ACCC/C/2014/102, Belarus 2017: pars. 66 and 80). More specifically, the ACCC held that a member of the public who provides legal assistance to persons seeking to exercise their rights in accordance with the provisions of the Convention thereby takes part in the exercise of those rights by those persons (ACCC/C/2014/102, Belarus 2017: par. 80). Therefore, the ACCC stated that this individual is entitled to the protection of Article 3(8) of the Convention (ACCC/C/2014/102, Belarus 2017: par. 80). Building on this, Weber has argued that, in addition to the Aarhus rights, any right granted in domestic law can trigger Article 3(8) AC as long as it is exercised in accordance with the Convention (Weber 2022: 6). Such rights could entail

¹² More specifically, the ACCC has analysed the use of virtual means to notify the public of the decision-making. See: ACCC/C/2009/43, Armenia, 2010; ACCC/C/2014/102, Belarus, 2018)

the right to freedom of assembly (Art. 11 ECHR; Art. 12 CFREU) and the right to freedom of expression (Art. 10 ECHR; Art. 11 CFREU). Such a broad interpretation could prove useful in protecting environmental defenders who are active online in various ways, both from physical attacks and from digital intimidation tactics as a result of their online presence. This would ensure that when expressing their voice online or taking action through online means on environmental matters, these acts also fall under the protection of Article 3(8), allowing them to be active in a safe online environment.

Another comment concerns the question of what acts fall under “in conformity with the provisions of the Convention”. While not explicitly stated in the Convention, the Aarhus Convention essentially provides a protective framework for environmental defenders. The term ‘environmental defender’ has gained attention in recent years, becoming the subject of academics and appearing in international environmental policy documents (UN General Assembly 2016; Butt et al. 2019: 742; Scheidel et al. 2020: 3; Verweijen et al. 2021). In the 2016 report by the UN Special Rapporteur on the situation of human rights defenders, for instance, ‘environmental (human rights) defenders’ are defined as “individuals and groups who, in their personal or professional capacity and in a peaceful manner, strive to protect and promote human rights relating to the environment, including water, air, land, flora and fauna” (UN General Assembly 2016). What is interesting about the UN definition is the mention of “a peaceful manner”. In short, this could imply that certain actions cannot be considered those of an environmental defender because they rather cross the line from ‘peaceful’ to ‘violent’. Whereas in some cases the line can be clearly drawn (e.g. forms of physical violence), for some forms of action it is not immediately clear whether or not they should be considered an act of an ‘environmental defender’. One can think about certain forms of civil disobedience resulting in damage to someone’s property as a form of expression protected by the right to freedom of expression (Weber 2022: 6). As an example, a mention can be made of an Extinction Rebellion (XR) protest in Belgium during the 2020 Brussels Car Show (*Autosalon*), where activists disrupted the event by using lipstick to write messages on car windows and smearing them with fake blood in criticism of the auto industry (De Morgen, 2020; VRT, 2020). The intention was not to cause permanent damage, according to the XR spokesman. However, should some minor harm have occurred, the question may arise as to whether or not this could be justified as a protected form of speech.

This distinction is not trivial, as Weber has pointed out:

Defacing a public building to convey the seriousness of the climate crisis may be a criminal act, but nevertheless a form of expressing someone’s views. States may criminalize this behaviour, but they have to do this in a proportionate fashion. These acts are protected by fundamental rights, even if they are not entirely non-violent, as they cause (financial) damage to somebody else’s

property. It might run counter to the concept of ‘environmental (human rights) defenders’ to categorically exclude these acts from the legitimate means available to environmental defenders (Weber 2022: 3).

While the Aarhus Convention does not explicitly limit Article 3(8)’s application to ‘peaceful acts’, a similar observation can be made. Under the Convention, those exercising their rights in conformity with the Convention can rely on the protection provided under Article 3(8) AC. The question arises of what can be considered “in conformity with”, and more importantly, what may be excluded. Certain (illegal) acts (of civil disobedience) may not qualify as acts “in conformity with” the provisions of the Convention, and thus may fall outside the scope of Article 3(8) AC (Weber 2022: 6). A strict interpretation, however, that excludes acts of civil disobedience or direct action *prima facie*, would void Article 3(8) of its meaning, as argued by Weber (Weber 2022: 7). Balancing the interests involved (i.e. limiting unlawful behaviour versus safeguarding the fundamental rights and the protection of environmental defenders) can be ensured through the proportionality test under the second step of the four-step analysis. This step examines whether the environmental defender was penalized, persecuted or harassed (ACCC/C/2014/102, Belarus 2017: pars. 67–69). As such, it could be argued that civil disobedience by environmental defenders acting in a non-physically violent manner should be considered *prima facie* to be an exercise of their rights in conformity with the Aarhus Convention, followed by a balancing of interests in the next step (Weber 2022: 7). When discussing the online safety of environmental defenders, this consideration is equally important. One can think of digital civil disobedience used by environmental defenders such as hacktivism (i.e., a combination of the words ‘hacking’ and ‘activism’, describing the act of hacking for politically or socially motivated purposes) (Romagna 2020: 744). Hacktivism balances between, on the one hand, being an act of digital civil disobedience as a form of political and social protest, protected by freedom of expression, and, on the other one, constituting a form of cybercrime with harmful consequences and security risks (O’Malley 2013; Karagiannopoulos 2018; Romagna 2020). Of course, balancing internet civil rights (such as online expression) with the need to address cybercrime for cybersecurity purposes is far from easy. Similarly, the balancing of interests in the context of the Aarhus Convention, in situations where environmental defenders may face penalization, persecution, and harassment for using such forms of digital civil disobedience, may not be straightforward, but is nonetheless important. This is especially true as digital technologies acquire greater importance for the environmental movement, both in terms of the tools they use to make their voices heard and/or take action, and the (digital) risks they face as a result of their involvement.

5.3. The member of the public or those members of the public have been penalized, persecuted or harassed

Next, in accordance with the four-step test under Article 3(8) AC, it must be ascertained whether any penalizing, persecuting or harassing acts have occurred. In this respect, Article 3(8) is not limited to acts of a state body or institution, but also includes acts of private natural and legal persons, to the extent that the member state concerned has not taken the necessary steps to prevent them (ACCC/C/2014/102, Belarus 2017: par. 70). In analysing Article 3(8), the ACCC adopts an approach similar to that under human rights instruments, meaning that it provides broad protection against human rights violations, but foresees the possibility for States to demonstrate that their action was objective and reasonable, pursued a legitimate aim and was proportionate to the circumstances of the case (ACCC/C/2014/102, Belarus 2017: pars. 68–69). This covers both the state's negative obligations to refrain from acts amounting to penalisation, persecution and/or harassment as well as their positive obligation to ensure that the necessary measures are taken to prevent such acts by private and legal persons (ACCC/C/2014/102, Belarus 2017: par. 70).

The Aarhus Convention has, however, not defined the terms 'penalisation', 'persecution' and 'harassment', and does not provide further interpretation of these terms. It is for the ACCC to consider on a case-by-case basis, whether actions of which the ACCC has been informed by the communicant(s) constitute penalisation, persecution and/or harassment (ACCC/C/2014/102, Belarus 2017: par. 69). Of the few Article 3(8) cases brought before the ACCC, most have dealt with alleged penalisation through unreasonable costs in legal proceedings. In one case, however, the ACCC held that Article 3(8) had been violated due to harassment by local authorities in the local press and mass media (ACCC/C/2009/36, Spain 2010). A number of (online) press articles were submitted to the Compliance Committee as evidence, showing that the insults were made during a press conference and later reported through the (online) press (ACCC/C/2009/36, Spain 2010: Annex 8-10 attached to communications). The ACCC's findings were brief on this point, and left open the opportunity to point out the possible exacerbating effect of harassment due to the rapid and wide dissemination of insults through the local press and mass media¹³ (ACCC/C/2014/102, Belarus 2017: pars. 63–64). Nonetheless, it makes clear that insults directed at environmental defenders – whether through newspapers or online – may trigger the application of Article 3(8) AC.

¹³ Can be understood as including various sources of information and news that reach and influence large numbers of people, e.g. the Oxford English Dictionary, online version (<http://www.oed.com/>).

In the Belarus case, the ACCC provided further insight into the application of Article 3(8) AC. According to the communication, the notions ‘penalized’, ‘persecuted’ and ‘harassed’ are to be understood according to their ordinary meaning in their context and in the light of the Convention’s object and purpose. As such, following the ACCC’s reference to the Oxford English Dictionary: ‘to penalize’ means to impose a restriction or penalty on, to put at a disadvantage; ‘to harass’ means to trouble or vex by repeated attacks; and ‘to persecute’ means to seek out and subject (a person, group, organization, etc.) to hostility or ill-treatment, on grounds of political belief, religious faith, race, etc.; to oppress, to torment (ACCC/C/2014/102, Belarus 2017: par. 67). Interestingly, the concept of harassment here is linked to a ‘repetitive’ element (“by repeated attacks”). The reference to ‘repetition’ may not be preferable as such an interpretation may be too restrictive and exclude *a priori* acts that have a chilling effect on environmental defenders but are not repetitive (see earlier on the concept of ‘digital intimidation’). However, the ACCC’s definition of ‘to harass’ should be nuanced considering the ACCC’s more recent findings. In the case of Lithuania, members of an environmental NGO who took part in consultations and hearings on the construction project were contacted by phone and in person by state security forces due to their opposition to the project. The ACCC emphasized that “even just one telephone call from State security services [...] may constitute penalization, persecution or harassment under article 3(8)” (ACCC/C/2013/98, Lithuania 2021: par. 154). In this particular case, however, other acts of harassment had also been identified, and the acts were carried out by officers of the security department. It is not clear to what extent a similar analysis would be used when discussing the positive obligations of member states in taking the necessary measures to prevent (digital) harassing act(s) by (an) individual(s) toward environmental defenders. According to the Guidance Document applicable to the Convention, Article 3(8) AC should be interpreted broadly as it aims is to prevent retribution of any kind (*The Aarhus Convention: An Implementation Guide* 2014: 71–72). Still, it may not be feasible or desirable to require member states to punish every individual who posts one intimidating comment on an online platform. In contrast, when it comes to an NGO facing a single cyber-attack (Kleemola et al. 2015), the answer may be different. Where the threshold lies is not entirely clear, and needs further research. In any case, it should be interpreted in line with the Convention’s purpose of protecting members of the public exercising their (Aarhus) rights in environmental matters. Given the (chilling) effect that digital intimidation may have on the public debate on environmental issues, attention should be paid to addressing both online and technology-facilitated intimidation. Following the positive obligation in taking necessary measures to prevent harassing

acts by private persons under Article 3(8), member states may be required to establish a sound legal framework that protects environmental defenders from digital intimidation, and to provide adequate (legal or non-legal) safeguards for victims when they face digital intimidation.¹⁴ What such a legal framework should entail equally requires further research.

6. Remedies through the Special Rapporteur on Environmental Defenders

To enhance the protection of environmental defenders, the 2021 Meeting of the Parties under the Aarhus Convention adopted the so-called Rapid Response Mechanism (RRM) to ensure more timely protection measures in cases where environmental defenders face or are at imminent risk of penalization, prosecution or harassment. This took the form of the world's first Special Rapporteur on environmental defenders under the UNECE Aarhus Convention (MOP Decision VII/9 on the Rapid Response Mechanism 2021). In June 2022, Mr Michel Forst was elected as the world's first Special Rapporteur on environmental defenders. In November 2022, a meeting with parties to the Aarhus Convention, other member states, civil society and international partners was held with the newly appointed Special Rapporteur, where he presented his views on the mandate to ensure the protection of environmental defenders (Press Release UN Special Rapporteur on Environmental Defenders 2022). To elaborate on his mandate, the Special Rapporteur outlined seven principles for protecting environmental defenders, including the need to focus on the 'holistic' security of environmental defenders, particularly their physical security, digital security, and psychosocial well-being. He further stressed, among other things, that environmental defenders are targets of digital surveillance, cyberbullying, cyber-attacks, and other forms of digital threats. As this can lead to a great sense of insecurity regarding their digital presence, he underscored the need to work with organizations that provide essential training, resources, and support in these areas, and in particular to raise awareness of available resources, programs, and mechanisms to environmental defenders. While it is not entirely clear whether this falls within the scope of the Special Rapporteur's mandate to take measures, the focus on ensuring digital security for environmental defenders can certainly be welcomed. As shown above, attention to digital intimidation against environmental defenders is growing. A first step in ad-

¹⁴ With regard to the positive obligations, see: ACCC/C/2014/102, Belarus, 2018; On the topic of positive obligations of member states in establishing a sound legal framework addressing cyber violence, see: ECtHR, Volodina c. Russie, 2021.

addressing this problem can be through awareness-raising and highlighting the available resources to those facing digital unsafety.

7. Conclusion

In recent years, a number of voices have been raised to call for more attention to the use of digital intimidation against environmental defenders. Existing research on cyberbullying, digital violence against women, and online intimidation of journalists can be used in this regard to understand the commonly used tactics and the impact of tactics to harass, intimidate, and shame. It is clear, then, that digital intimidation directed against environmental defenders, if left unaddressed, can silence those against whom it is directed and may ultimately curtail the public debate on environmental issues. Currently, however, there are few studies and data that focus on the use of such tactics against environmental defenders in particular. This article, therefore, wishes to draw attention to this issue and highlights the need for more research and awareness-raising.

In any case, the existing environmental legislative framework already provides a foundation on which to build protection for environmental defenders against digital intimidation. The wording of Article 3(8) of the Aarhus Convention is sufficiently technology-neutral and allows for a broad interpretation to provide protection in the online environment. In fact, the ACCC has already indicated that protection extends to those exercising their rights through virtual means. Nevertheless, more clarity may be needed on the concept of ‘harassment’ under Article 3(8) AC (e.g. with respect to the element of repetition), and further elaboration of the (positive) obligations of Member States with respect to digital intimidation remains desirable. That said, it can be argued that Article 3(8) AC can serve as a ground to call for the protection for environmental defenders against digital intimidation.

Fortunately, the importance of Article 3(8) in combating digital intimidation against environmental defenders has been made more explicit under the mandate of the Special Rapporteur on Environmental Defenders. As became clear at the 2022 meeting with the Special Rapporteur, attention will be given to environmental defenders’ digital security. While it remains to be seen how this translates into practice, this certainly shows an important step in ensuring a safe online environment for environmental defenders.

Abbreviations

AC – Aarhus Convention

ACCC – Aarhus Convention Compliance Committee

References

Legislation

- Council of Europe Recommendation 2016: Recommendation CM/Rec(2016)4 of the Committee of Ministers to member States on the protection of journalism and safety of journalists and other media actors.
- Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC, CONSIL, EP, 156 OJ L (2003).
- The UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) (1998).
- Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC, CONSIL, EP, 041 OJ L (2003).

Judicial decisions

- ECtHR, Khadija Ismayilova c. Azerbaïdjan, Nr. 65286/13, 57270/14 (10 January 2019).
- ECtHR, Volodina c. Russie (n° 2), Nr. 40419/19 (14 September 2021).
- Findings and recommendations Aarhus Convention Compliance Committee of 7 June 2021, *ACCC/C/2013/98 Lithuania*, ECE/MP.PP/C.1/2021/15.
- Findings and recommendations Aarhus Convention Compliance Committee of 18 June 2010, *ACCC/C/2009/36 Spain*, ECE/MP.PP/C.1/2010/4/Add.2.
- Findings and recommendations Aarhus Convention Compliance Committee of 17 December 2010, *ACCC/C/2009/43 Armenia*, ECE/MP.PP/2011/11/Add.1.
- Findings and recommendations Aarhus Convention Compliance Committee of 18 June 2017, *ACCC/C/2014/102 Belarus*, ECE/MP.PP/C.1/2017/19.
- Recommendations Aarhus Convention Compliance Committee of 1 July 2020, *ACCC/A/2020/2 Kazakhstan*, ECE/MP.PP/C.1/2021/6.

Secondary sources

- Article 19. 2020. *Investigating online harassment and abuse of women journalists*. Article 19. <https://www.article19.org/wp-content/uploads/2020/11/Gender-Paper-Brief-3-.pdf>.
- Barker, Kim, and Olga Jurasz. 2019. *Online Misogyny as Hate Crime A Challenge for Legal Regulation?* Taylor & Francis. DOI: 10.4324/9780429956805.
- Barker, Kim, and Olga Jurasz. 2022. *Violence Against Women, Hate and Law: Perspectives from Contemporary Scotland*. Springer International Publishing. DOI: 10.1007/978-3-030-99375-7.

- Belga 2020. Actie klimaativisten op Autosalon krijgt juridisch staartje. VRT, <https://www.vrt.be/vrtnws/nl/2020/01/21/actie-klimaativisten-op-autosalon-krijgt-juridisch-staartje/>.
- Belga and HL. 2020. Extinction Rebellion verstoort Autosalon: al zeker 185 actievoerders opgepakt. *De Morgen*, <https://www.demorgen.be/nieuws/extinction-rebellion-verstoort-autosalon-al-zeker-185-actievoerders-opgepakt~b2d5693b/>.
- Barritt, Emily. 2021. *Foundations of the Aarhus convention: Environmental democracy, rights and stewardship*. Oxford: Hart Publishing.
- Bille Larsen, Peter, Phillippe Le Billon, Mary Menton, Jose Aylwin, Jorg Balsiger, David Boyd, Michel Forst, Fran Lambrick, Claudelice Santos, Hannah Storey, and Susan Wilding. 2021. Understanding and responding to the environmental human rights defenders crisis: The case for conservation action. *Conservation Letters* 14(3): e12777. DOI: 10.1111/conl.12777.
- Boren, Zach, and Damian Kahya. 2019. *German far right targets Greta Thunberg in anti-climate push*. Unearthed, <https://unearthed.greenpeace.org/2019/05/14/germany-climate-denial-populist-eike-afd/>.
- Butt, Natalie, Frances Lambrick, Mary Menton, and Anna Renwick. 2019. The supply chain of violence. *Nature Sustainability*, 2(8): 742-747. DOI: 10.1038/s41893-019-0349-4.
- Dunn, Suzie. 2020. Technology-facilitated gender-based violence: An overview. *Centre for International Governance Innovation. Supporting a Safer Internet Paper 1*, https://www.cigionline.org/static/documents/documents/SaferInternet_Paper%20no%201_0.pdf.
- Eklöw, Karolina, and José Francisco Alvarado Cobar. 2021. Surveillance as slow violence: Experiences from young environmental activists. *SIPRI*, <https://www.sipri.org/commentary/blog/2021/surveillance-slow-violence-experiences-young-environmental-activists>.
- Ferrier, Michelle, and Nisha Garud-Patkar. 2018. Trollbusters: Fighting online harassment of women Journalists. *Mediating Misogyny: Gender, Technology, and Harassment*, (eds.) Jacqueline Ryan Vickery, Tracy Everbach, 311-332. Springer International Publishing. DOI: 10.1007/978-3-319-72917-6_16.
- Front Line Defenders. 2021. *Front Line Defenders Global Analysis 2020*. https://www.frontlinedefenders.org/sites/default/files/fld_global_analysis_2020.pdf.
- Front Line Defenders. 2022. *Front Line Defenders Global Analysis 2021*. https://www.frontlinedefenders.org/sites/default/files/2021_global_analysis_-_final.pdf.
- George, Jordana, and Dorothy E. Leidner. 2019. From clicktivism to hacktivism: Understanding digital activism. *Information and Organization* 29(3): 100249. DOI: 10.1016/j.infoandorg.2019.04.001.
- Global Witness. 2021. *Annual report 2021: Our case for change*, <https://www.globalwitness.org/en/about-us/global-witness-annual-reports/>.
- GREVIO Recommendation. 2021. *General Recommendation No. 1 on the digital dimension of violence against women*, <https://rm.coe.int/grevio-rec-no-on-digital-violence-against-women/1680a49147>.
- Karagiannopoulos, Vasileos. 2018. Looking into the positive and negative aspects of hacktivism. *Living With Hacktivism: From Conflict to Symbiosis*, (ed.) V Vasileos Karagiannopoulos, 43-90. Springer International Publishing. DOI: 10.1007/978-3-319-71758-6_3.
- Kleemola, Katie, Masashi Crete-Nishihata, Adam Senft, and Irene Poetranto. 2015. Targeted malware attacks against NGO linked to attacks on Burmese government websites.

- Citizen Lab Research Report – University of Toronto* 65, <https://citizenlab.ca/2015/10/targeted-attacks-ngo-burma/>.
- Lewis, Seth C., Rodrigo Zamith, and Mark Coddington. 2020. Online harassment and its implications for the journalist – audience relationship. *Digital Journalism* 8(8): 1047-1067. DOI: 10.1080/21670811.2020.1811743.
- Lloro, Teresa. 2018. An ecofeminist account of cyberbullying: Implications for environmental and social justice scholar-educator-activists. *The Journal of Environmental Education* 49: 1-10. DOI: 10.1080/00958964.2017.1400513.
- Lomba, Niombo, Cecilia Navarra, and Meenakshi Fernandes. 2021. *Combating gender-based violence: Cyber violence*. Think Tank. European Parliament (PE 662.621). European Parliamentary Research Service (EPRS).
- Macpherson, Aida. 2021. *(Not) Part of the Job: Een exploratief onderzoek naar de ervaringen van gekleurde vrouwelijke journalisten en opiniemakers in Vlaanderen en Brussel met online intimidatie*. De Vlaamse ScriptieBank. KU Leuven Publicaties, <https://www.scriptiebank.be/scriptie/2021/not-part-job-een-exploratief-onderzoek-naar-de-ervaringen-van-gekleurde-vrouwelijke>.
- McCully, Jonathan, and Scot Griffen. 2019. *Legal Responses to Online Harassment and Abuse of Journalists: Perspectives from Finland, France and Ireland*. OSCE.
- Nadim, Marjan, and Audun Fladmoe. 2021. Silencing women? Gender and online harassment. *Social Science Computer Review* 39(2): 245-258. DOI: 10.1177/0894439319865518.
- Nevett, Joshua. 2019. Greta Thunberg: Why are young climate activists facing so much hate? *BBC News*, <https://www.bbc.com/news/world-49291464>.
- Nixon, Rob. 2013. *Slow Violence and the Environmentalism of the Poor*. Harvard University Press.
- Nogrady, Bianca. 2021. 'I hope you die': How the COVID pandemic unleashed attacks on scientists. *Nature* 598: 250-253. DOI: 10.1038/d41586-021-02741-x.
- Nogrady, Bianca. 2022. Online harassment: A toolkit for protecting yourself from abuse. *Nature* 609: 205-207. DOI: 10.1038/d41586-022-02766-w.
- O'Malley, G. 2013. Hacktivism: Cyber activism or cyber crime. *Trinity College Law Review* 16: 137.
- Pen America. 2018. *Defining "Online Abuse": A Glossary of Terms*. *Online Harassment Field Manual*. <https://onlineharassmentfieldmanual.pen.org/defining-online-harassment-a-glossary-of-terms/>.
- Poetranto, I., S. Chan, and S. Anstis. (2020). ON/OFFLINE: Multidimensional threats faced by environmental human rights defenders in Southeast Asia. *Global Information Society Watch 2020 – Technology, the Environment and a Sustainable World: Responses from the Global South*, (eds.) A. Finlay, L. Nordstorm, 72-77. Association for Progressive Communications and Swedish International Development Cooperation Agency.
- Press Release UN Special Rapporteur on Environmental Defenders. 2022. *UN Special Rapporteur on Environmental Defenders presents his vision for mandate to ensure protection under the Aarhus Convention*. <https://unece.org/climate-change/press/un-special-rapporteur-environmental-defenders-presents-his-vision-mandate>.
- Romagna, Marco. 2020. Hacktivism: Conceptualization, techniques, and historical view. *The Palgrave handbook of international cybercrime and cyberdeviance*, 743-769. DOI: 10.1007/978-3-319-78440-3_34.

- Scheidel, Arnim, Daniela Del Bene, Juan Liu, Grettel Navas, Sara Mingorría, Federico Demaria, Sofía Avila, Brototi Roy, Irmak Ertör, Leah Temper, and Joan Martínez-Alier. 2020. Environmental conflicts and defenders: A global overview. *Global Environmental Change*, 63: 102104. DOI: 0.1016/j.gloenvcha.2020.102104.
- Siatisa, I. 2021. *Freedom of assembly under attack: General and indiscriminate surveillance and interference with internet communications*. International Review of the Red Cross. <http://international-review.icrc.org/articles/freedom-assembly-under-attack-surveillance-interference-internet-communications-913>.
- Smith, K. 2019. *The Harassment of Environmental Defenders in the European Union: a case study report*. EEB, <https://eeb.org/wp-content/uploads/2019/12/The-Harassment-of-Environmental-Defenders-in-the-European-Union-%E2%80%93-A-Case-Study-Report.pdf>.
- Smith, Peter J., and Elizabeth Smythe. 1999. Globalization, citizenship and technology: The mai meets the internet. *Canadian Foreign Policy Journal* 7(2): 83-105. DOI: 10.1080/11926422.1999.9673213.
- Swedish Society for Nature Conservation. 2019. *Environmental Report defenders under attack: The threats facing people who protect nature*. Swedish Society for Nature Conservation, <https://www.naturskyddsforeningen.se/artiklar/report-environmental-defenders-under-attack-the-threats-facing-people-who-protect-nature/>.
- UN General Assembly. 2016. *Situation of human rights defenders* (A/71/281).
- UN Human Rights Council. 2018. *Report of the Special Rapporteur on violence against women, its causes and consequences on online violence against women and girls from a human rights perspective* (A/HRC/38/47).
- UNECE. 2014. *The Aarhus Convention: An implementation guide* (Second edition).
- UNECE. 2019. *Guide to the Aarhus Convention Compliance Committee*, <https://unece.org/info/Environment-Policy/Public-participation/pub/2291>.
- UNECE. 2021. Decision VII/9 on a Rapid Response Mechanism to Deal with Cases Related to Article 3 (8) of the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters. UN Doc ECE/MP.PP/2021/CRP.8, https://unece.org/sites/default/files/2021-11/ECE.MP_PP_2021_RRM_CRP8_3.pdf
- van der Wilk, Adriane. 2018. *Cyber violence and hate speech online against women*. European Parliament's Committee on Women's Rights and Gender Equality. DOI: 10.2861/738618.
- Verweijen, Judith, Fran Lambrick, Philippe Le Billon, Felipe Milanez, Ansumana Manneh and Melisa Moreano Venegas. 2021. "Environmental defenders": The power/disempowerment of a loaded term. *Environmental and Land Defenders: Deadly Struggles for Life and Territory*, (eds.) Mary Menton and Philippe Le Billion, 37-49. Routledge.
- Vogels, E.A. 2021. *The State of Online Harassment*. Pew Research Center, <https://www.pewresearch.org/internet/2021/01/13/the-state-of-online-harassment/>.
- Weber, Teresa. 2022. Are climate activists protected by the Aarhus Convention? A note on Article 3(8) Aarhus Convention and the new Rapid Response Mechanism for environmental defenders. *Review of European, Comparative & International Environmental Law*. DOI: 10.1111/reel.12465.
- Winkelman, Sloane Burke, Jody Oomen Early, Ashley D. Walker, Lawrence Chu, and Alice Yick-Flanagan. 2015. Exploring cyber harrasment among women who use social media. *Universal Journal of Public Health* 3(5): 194-201. DOI: 10.13189/ujph.2015.030504.