

Policy Approaches to Compliance with the Aarhus Convention: A Scoping Literature Review

David Edwards

This report was produced during a [Scottish Graduate School of Social Sciences \(SGSSS\) internship](#)

The views and findings presented are the author's own and do not reflect the official view of Environmental Standards Scotland.

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1 Executive summary

1.1 Background

The United Kingdom is a Party to the United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the ‘Aarhus Convention’).

The Aarhus Convention (AC) establishes obligations of the parties to “guarantee the rights of access to information, public participation in decision-making, and access to justice in environmental matters” (United Nations 1998, 3).

A Scottish Graduate School of Social Science (SGSSS) internship placement at Environmental Standards Scotland (ESS) conducted a scoping literature review to develop an awareness of English-language academic sources on policy approaches to compliance with the AC, and the high-level themes that emerge in those sources.

Scoping literature reviews have been articulated in the ‘Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews’ or PRISMA-ScR (Tricco et al. 2018). Different to systematic literature reviews, which aim to answer a substantive research question, scoping literature reviews aim to identify and synthesise evidence concerning a particular topic.

1.2 Results

107 sources were reviewed, and data was reported on the geographical focus, AC right (access to information, participation in decision-making and/or access to justice), topic area and primary contribution of the source.

A thematic analysis of the primary contribution of each source was conducted, resulting in a categorisation of sources that aimed to investigate effectiveness, compare approaches, question compliance and identify innovation.

Thirty-one sources were prioritised for in-depth narrative treatment in the discussion section, which summarises evidence attained by theme.

The evidence reviewed under ‘investigating effectiveness’ tended to use historical, conceptual, quantitative and experimental arguments to consider approaches to

compliance with the AC in a broader context. This situated the AC itself in relation to environmental justice and governance more widely and encouraged reflection on how to approach implementation of the AC rights.

The evidence reviewed under 'comparing approaches' aimed to facilitate comparison of the approaches to compliance outlined. These sources drew comparisons between agreements as well as between countries and highlighted the importance of particularities in different legal systems.

The evidence reviewed under 'questioning compliance' investigated whether certain approaches were indeed compliant and whether they aligned with the values and objectives of the AC.

The evidence reviewed under 'identifying innovation' outlined prospective approaches.

1.3 Recommendations

The study provides recommendations for further research on approaches to compliance with the AC.

These include the review of typologies developed in legal research, the use of additional information sources, the expansion of keywords and the utilisation of additional methods.

A detailed overview of recommended information sources is provided.

2 Project overview

A SGSSS internship placement at ESS took place in summer 2023. The placement title was “A comparative study of the way Rights of the Public to Access Environmental Data, Decision Making and Justice (“The Aarhus Rights”) are applied in Scotland and in other countries”.

During the placement, in response to the project brief, a scoping literature review was conducted by the researcher. Scoping literature reviews have been articulated in the ‘Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews’ or PRISMA-ScR (Tricco et al. 2018). This differentiates scoping literature reviews from systematic literature reviews. Tricco et al. state that the former is well suited for establishing the nature and characteristics of evidence concerning a particular topic whereas the latter is well suited to answering substantive questions using such evidence. A further key value of scoping literature reviews highlighted is the ability to “summarize findings from a body of knowledge that is heterogeneous in methods or discipline” (Tricco et al. 2018, 467).

Two research questions were defined by the researcher in consultation with stakeholders in the ESS Strategy and Analysis team:

- what academic sources published in English can be used to compare Scotland’s policy approaches to compliance with the AC with other approaches?
- what high-level themes emerge in these sources?

The objective of the scoping literature review is to develop an awareness of the different types of published English-language academic sources on approaches to compliance with the AC in Scotland and internationally, and the high-level themes that emerge in those sources.

The decision to focus on academic sources in the scoping literature review was based on capacity and does not represent a judgment as to the relevance of other sources (e.g. legislation, case law, legal communications and/or policy reports). The decision was informed by the availability of high quality, standardised academic databases that enabled a rapid, transparent and easily replicable search process. The availability and usefulness of other types of information source is discussed in sections on study [limitations](#) and [recommendations](#).

The next section introduces the AC and summarises academic literature discussing its status in Scotland. Following this, the fourth section reports on the scoping literature undertaken, detailing methods and results. It also provides a discussion of the evidence reviewed as well as study limitations and recommendations. An annex has been used to incorporate details relating to the sources reviewed.

3 The Aarhus Convention

3.1 Overview

The United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters was signed in Aarhus in 1998 and entered into force in 2001. To date, there are 47 parties to the AC.¹ The United Kingdom signed the AC in 1998 and ratified it in 2005.

The AC establishes obligations of the parties to “guarantee the rights of access to information, public participation in decision-making, and access to justice in environmental matters” (United Nations 1998, 3).

It obliges the parties to “promote the application of the principles of this Convention in international environmental decision-making processes and within the framework of international organizations in matters relating to the environment” (United Nations 1998, 4). It is primarily concerned, though, with obligations of the parties to the ‘public’, rather than to the other parties, making the AC a human rights as well as an environmental agreement (Barritt 2020, 5).

The AC defines the public as “one or more natural or legal persons, and, in accordance with national legislation or practice, their associations, organizations or groups” (United Nations 1998, 4). It also makes reference to the ‘public concerned’, which is defined as “the public affected or likely to be affected by, or having an interest in, the environmental decision-making” (United Nations 1998, 4).

The AC further states that the public should enjoy these rights “without discrimination as to citizenship, nationality or domicile” (United Nations 1998, 5). As such, the obligations of each party extend beyond the publics of those parties as defined based on citizenship, nationality or domicile.

The three ‘pillars’ of the AC – access to information, public participation, and access to justice – reflect principle 10 of the Rio Declaration on Environment and Development (1992):

¹ The [original text and status of the Aarhus Convention](#) (e.g. ratification, acceptance, approval, accession)

“Environmental issues are best handled with participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided” (United Nations Conference on Environment and Development 1992, 4–5).

These three pillars are the subject of specific articles of the AC: access to information is covered in articles 4 and 5; public participation is covered by articles 6, 7 and 8; and access to justice is covered by article 9. An overview of these articles is included below.

Table 1: The ‘Pillars’ of the Aarhus Convention

Pillar	Article title	Article summary
Access to Information	4. Access to Environmental Information	Establishes rights of the public to request and receive information on environmental matters from Public Authorities “[w]ithout an interest having to be stated” (United Nations 1998, 5). Outlines obligations to make information available as soon as is possible and within a month from the request unless the scope of the information requested justifies an extension to two months. Establishes the conditions under which requests to information can be refused, in accordance with national law, and in relation to personal, organisational, and commercial confidentiality, national defence, the course of justice, intellectual property rights and risks to

Pillar	Article title	Article summary
		the environment (e.g. those created by disclosing the breeding sites for rare species through information disclosure).
Access to Information	5. Collection and Dissemination of Environmental Information	Establishes obligations of the parties to gather, circulate and disseminate environmental information, including through the provision of national reports on the environment and the development of a standardised nation-wide system of pollution inventories or registers. Also requires the parties to encourage environmental reporting by third party operators and develop mechanisms to ensure consumers have access to sufficient product information.
Public Participation	6. Public Participation in Decisions of Specific Activities	Establishes obligations of the parties to ensure the 'public concerned' are informed about decision-making processes concerning a list of activities provided in Annex I of the convention, their participation is facilitated, and their access to information is provided for. Also, requires parties to ensure that "due account is taken of the outcome of the public participation" in any decision reached (United Nations 1998, 11). Parties are also required to meet these obligations in respect of activities not in the Annex that have a significant impact on the environment.
Public Participation	7. Public Participation Concerning Plans,	Establishes obligations of the parties to meet various provisions of article 6,

Pillar	Article title	Article summary
	Programmes and Policies Relating to the Environment	including the obligation to take 'due account' of public participation outcomes in respect of the preparation of plans and programmes that relate to the environment. Also requests the parties to endeavour to provide for public participation in the preparation of policies relating to the environment.
Public Participation	8. Public Participation During the Preparation of Executive Regulations and/or Generally Applicable Legally Binding Normative Instruments	Establishes obligations of the parties to strive to promote public participation in respect of the preparation of executive regulations or legally binding rules that may significantly impact the environment, and to take this public participation into account "as far as possible" (United Nations 1998, 12).
Access to Justice	9. Access to Justice	<p>Establishes obligations of the parties to provide access to review procedures in a court of law or legally established independent and impartial body.</p> <p>Paragraph 1 of the article outline obligations in respect of article 4 (access to environmental information).</p> <p>Paragraph 2 stipulates that members of the public concerned with a "sufficient interest" or "[m]aintaining impairment of a right" should have access to such review procedures to challenge the legality of decisions, acts or omissions</p>

Pillar	Article title	Article summary
		<p>subject to the provisions of the convention (United Nations 1998, 12). It further specifies that “the interest of any non-governmental organization meeting the requirements referred to in article 2, paragraph 5, shall be deemed sufficient” (United Nations 1998, 12).</p> <p>Paragraph 3 outlines obligations to provide members of the public access to justice concerning measures other than those provided for under the convention, such that they can “challenge acts and omissions by private persons and public authorities which contravene provisions of its national law relating to the environment” (United Nations 1998, 13).</p> <p>Paragraph 4 of the article further stipulates that the procedures undertaken in response to paragraphs 1, 2, and 3 should “provide adequate and effective remedies, including injunctive relief as appropriate, and be fair, equitable, timely and not prohibitively expensive” (United Nations 1998, 13).</p>

Other articles relate to the AC’s objective (article 1), definitions (article 2), and general provisions (article 3) as well as governance mechanisms and processes (articles 10 to 22).

Article 10 outlines the establishment of a 'Meeting of the Parties' (MoP) and article 15, 'Review of Compliance', outlines that the MoP "shall establish, on a consensus basis, optional arrangements of a non-confrontational, non-judicial and consultative nature for reviewing compliance with the provisions of this Convention" (United Nations 1998, 16).

The 'Protocol on Pollutant Release and Transfer Registers' was agreed by the AC Meeting of the Parties in Kiev in 2003 (United Nations 2003). The protocol establishes obligations of Parties to the Protocol to "establish and maintain a publicly accessible national pollutant release and transfer register" that meets certain standards (United Nations 2003, 6). The UK signed the protocol in 2003 and ratified it in 2009 (United Nations 2023b). The protocol is intended as an 'open' treaty i.e., it is not limited to the parties to the AC or the members of the United Nations Economic Commission for Europe.

Article 6 paragraph 11 of the AC, which related to public participation in decisions concerning the deliberate release of genetically modified organisms into the environment, was replaced with a specific article relating to this issue at the MoP in Almaty in 2005 (United Nations 2005). This established obligations of the parties to "provide for early and effective information and public participation prior to making decisions" on the issue, in accordance with modalities outlined in a new annex inserted into the AC. The UK ratified this in 2009 (United Nations 2023b).

The Aarhus Convention Compliance Committee (ACCC) reviews the compliance of the parties with the convention. The governance of the ACCC was established in response to article 15 of the AC, and formally adopted in the first session of the MoP in 2002 (Economic Commission for Europe 2004). 'A Guide to the Aarhus Convention Compliance Committee' was published in 2009 (first edition) and updated in 2019 (second edition).

As outlined in the guide, there are five ways that a review of the compliance of a given party can be initiated: a communication from a member of the public; a submission by one party about a different party; a submission by one party concerning its own compliance; a referral from the secretariat; and a request from the MoP (UNECE 2019, 25).

The guide states that "[t]hus far the vast majority of the Committee's caseload has been triggered by communications from the public" (UNECE 2019, 25). An

infographic published by the Compliance Committee shows that as of October 2021 188 of the 195 cases received by the Compliance Committee were a result of communications from members of the public. 60% of communications were from non-governmental organisations (NGOs) and 22.6% were from individuals (UNECE 2021).

The Compliance Committee follows a formal process to make and adopt findings relating to the compliance of a given party. The decisions are then transmitted to and, if endorsed, also adopted by the MoP.

3.2 The Aarhus Convention in Scotland

The United Kingdom signed the AC on 25 June 1998. When signing, the United Kingdom made a declaration in relation to statements in the convention referring to the “right of every person of present and future generations to live in an environment adequate to his or her health and well-being” (United Nations 1998, 3). The declaration set out the UK’s position that this statement reflects an aspiration, and that the UK was guaranteeing the procedural rights to access information, participate in decision making and access justice outlined in the AC rather than guaranteeing this substantive right.²

While the UK’s dualist legal system requires international treaties such as the AC to be incorporated into domestic law to be given effect, there are instances in which the provisions of such treaties and the AC specifically are taken into account even if unincorporated. As Lorna Drummond writes with respect to the status of the AC in Scots law:

“The domestic courts have recognised that there is a strong presumption in favour of interpreting statute and common law in a manner which does not place the UK Government in breach of its international obligations, including provisions under the Aarhus Convention and that the convention may be taken into account in exercising judicial discretion. In the context of some international treaties, the courts have held

² The declaration recorded by the UN is as follows: “The United Kingdom understands the references in article 1 and the seventh preambular paragraph of this Convention to the 'right' of every person 'to live in an environment adequate to his or her health and well-being' to express an aspiration which motivated the negotiation of this Convention and which is shared fully by the United Kingdom. The legal rights which each party undertakes to guarantee under article 1 are limited to the rights of access to information, public participation in decision-making and access to justice in environmental matters in accordance with the provisions of this Convention” (United Nations 2023a).

that a legitimate expectation can arise that a state will act in accordance with obligations in an international treaty notwithstanding that it has not been incorporated into domestic law” (Drummond, 2015: 42)

The status of AC provisions in Scotland is complex and the subject of interpretation and dispute. Significant reasons for complexity include the need to account for devolution, the implications of the UK leaving the European Union, and the reliance on non-legislative as well as legislative instruments to fulfil obligations under the AC.

One important source for tracing the status of AC provisions is the ‘national implementation reports’ of each party required by the AC every three years. These have been published by the UK in 2008, 2011, 2014, 2017 and 2021, with contributions from Scotland and the other devolved administrations.

The national implementation reports provide a high-level overview of the parties’ response to the provisions in the AC, and document and summarise additional sources of information deemed relevant to these responses. The AC Secretariat publish a ‘synthesis report’ on the basis of the national implementation reports for the consideration of the MoP.³

The ACCC scrutinise the national implementation reports as part of their ordinary work. They may also initiate a review of the compliance of a given party as a result of a referral from the secretariat (although this has never happened at the time of writing⁴) or a request from the MoP (this has happened on five occasions⁵).

As above, though, the vast majority of ACCC cases result from communications from members of the public. The communications made to the ACCC as well as the various documentation by AC bodies relating to these communications and to the compliance of the UK also provide resources for tracing the status of AC provisions in Scotland.⁶

As of writing, of the 200 communications made by members of the public to the ACCC, 45 relate to the UK and a further two relate jointly to the UK and the European Union.⁷ This is far higher than for any other party. (There have been 12

³ [The national implementation reports and synthesis reports](#)

⁴ [Referrals by the Secretariat](#)

⁵ [Requests from the Meeting of Parties](#)

⁶ [Extensive documentation is provided on each communication.. Decisions then adopted by the MoP](#) also published.

⁷ [Communications from the public](#)

communications made concerning both Spain and the Republic of Ireland, which constitute the joint-second highest number of communications).

Responding to this disparity, Jonas Ebbesson, Chair of the ACCC between 2011 and 2021, stated in 2013 that “the number of communications concerning the UK is not in itself an accurate representation of the UK's compliance compared to other parties to the Convention” and that it “may also reflect the large and active NGO community in the UK and the tradition of active and activist citizenship, where members of the public have been used to challenging decision-makers” (Ebbesson 2013, 56).

Ebbesson further stated that “[w]hen considering the performance of the UK, it is more relevant to look at the cases where the Compliance Committee has indeed found that the UK fails to comply with the Convention” (Ebbesson 2013, 58). Adverse findings made by the ACCC concerning the UK's compliance have been adopted by the MoP in 2011, 2014, 2017, and 2021.⁸

There is extensive engagement and analysis of the status of AC provisions in Scotland and the broader UK by a broad range of civil society actors, which also results in extensive resources for tracing the status of AC provisions in Scotland. This engagement and analysis can be found in a broad range of publications. Some relevant organisations that have made recent representations to the ACCC related to Scotland and/or the UK are included below:⁹

⁸ Environmental Rights Centre Scotland have compiled [a timeline of 10 instances](#) in which the ACCC or the MoP have made or endorsed decisions of UK noncompliance that are of relevance to the Scottish legal system.

⁹ Many of these are members of an association called [Scottish Environment LINK \(SE LINK\)](#):

- [Environmental Rights Centre for Scotland](#)
- [Friends of the Earth Scotland](#)
- [Royal Society for the Protection of Birds](#)
- [Planning Democracy](#)
- [WWF UK](#)
- [Greenpeace UK](#)
- [Green Alliance](#)
- [Sustain](#)
- [Trade Justice Movement](#)
- [Compassion in World Farming](#)
- [Tenant Farmer's Association](#)
- [Soil Association](#)

The status of AC provisions in Scotland and the UK has also been a focus among academic and legal sources. There is overlap between these. Notable academic sources on the status of the convention in Scotland and the UK such as those by (Drummond 2015) and (Day 2018), for example, are written by a prominent judge (Drummond) and lawyer (Day).

There is also extensive engagement in legal sources that are not published in academic journals or edited collections, whether in the form of legal updates, case law, practice notes, blogs, reports, or other outputs.¹⁰ Many of these legal sources are collected in legal databases such as those provided by Lexis+ UK, Practical Law, Hein Online and Westlaw UK, which also provide proprietary content on the status of the AC.

The below overview is based on (Drummond 2015), which focuses specifically on Scotland, covers each of the pillars, and provides a useful outline of some of the key areas of contention. It is intended as an introduction to some of the key issues, for background, and has not been comprehensively updated to reflect more recent developments.

3.2.1 Access to environmental information

AC provisions relating to access to environmental information (articles 4 and 5) were transposed in the EU via the 2003 'Access to Environmental Information Directive' (European Parliament and European Council 2003b). This was transposed into domestic law through the Environmental Information (Scotland) Regulations 2004 (Scottish Government 2004b).

¹⁰ Landmark Chambers have published an '[Aarhus Blog](#)'

3.2.2 Participation in decision-making

AC provisions relating to public participation in projects (article 6) were transposed in the EU via the 2003 'Public Participation Directive' (European Parliament and European Council 2003a). This amended the 1985 Environmental Impact Assessment (EIA) Directive. In 2011, the EIA Directive and its amendments, including those made in the 2003 Public Participation Directive, were codified in a new EIA Directive (European Parliament and European Council 2011), which was then amended in 2014 (European Parliament and European Council 2014).

Drummond notes that article 6 of the AC is also implemented in the EU through the 2010 Directive on industrial emissions (European Parliament and European Council 2010).

In Scotland there has been a "multi-regime approach to transposition of the EIA Directive... [with] at least 11 discrete sets of environmental impact assessment regulations for which the Scottish Parliament has legislative competence" (Drummond 2015, 51). The 11 sets Drummond refers to relate to "town and country planning, trunk roads, land drainage, marine works, infrastructure projects, energy consents, agriculture, controlled activities (water), flooding, ports and harbours and forestry" (2015, 51). The amended 2014 Directive was transposed in 2017 via a range of different regulations (e.g. Scottish Government 2017).

AC provisions relating to public participation in plans and programmes (article 7) were transposed in the EU via the 2001 'Strategic Environmental Assessment Directive' (European Parliament and European Council 2001). This was transposed into Scots law by the Environmental Assessment of Plans and Programmes (Scotland) Regulations 2004 (Scottish Government 2004a), which was subsequently repealed by the Environmental Assessment (Scotland) Act 2005 (Scottish Government 2005).

3.2.3 Access to justice

The provisions of the AC relating to access to justice have been controversial both with respect to EU and to Scots law.

In the case of the EU, the so-called 'Aarhus Regulation' (2006) was introduced to give effect to access to justice provisions as they applied to opportunities for legal

review of the acts, decisions and omissions of the EU institutions themselves. In 2017, the ACCC found the EU non-compliant with article 9 paragraphs 3 and 4. It noted issues with the limited types of action covered by the Aarhus Regulation (e.g. acts ‘under’ environmental law rather than all acts relating to the environment, and acts of ‘individual scope’ rather than acts with general applicability) and limitations on standing in the Treaty on the Functioning of the European Union (TFEU) not substantively amended by the Aarhus Regulation (e.g. to NGOs with a ‘direct concern’ with a particular issue rather than a general concern with safeguarding the environment).¹¹

The Aarhus Regulation was amended in 2021 in response to these concerns, expanding the types of action and the scope of standing provided for under the regulation. Outside of EU institutions, a draft directive on access to justice was proposed in 2003 but never progressed beyond draft stage and was eventually withdrawn in 2014 (European Commission 2014).

The European Commission webpage on the AC notes that access to justice provisions are included in the 2003 Access to Environmental Information and Public Participation directives but that “there is no directive specifically dedicated to access to justice in EU Member States which would apply horizontally in all sectors” (Commission 2023, np). In view of this, it further notes that “the [European] Court of Justice has developed extensive jurisprudence on the subject” and that “there is a growing number of access to justice provisions in new and revised EU law” (Commission 2023, np).

Given this, there was no general directive on access to justice at EU level to be transposed prior to the UK leaving the EU, adding to the complexity of tracing the status of the AC’s access to justice provisions in Scots law. Writing in 2015, Drummond identified three areas of controversy surrounding the status of the provisions in Scotland: a) the ability to access review procedures; b) the timing of legal review procedures; and c) the expense of litigation.

¹¹ The ACCC provided an [overview of the EU’s failure to comply with article 9, paragraphs three and four of the Aarhus Regulation](#)

The ability to access review procedures

Drummond describes conventions in Scots law that required individuals to have both 'title' and 'interest' to bring judicial review procedures, but states that case law such as in 'AXA General Insurance Ltd and others v HM Advocate and others', 'Walton vs Scottish Ministers' ('Walton'), and 'McGinty vs Scottish Ministers' ('McGinty') "represents a shift in thinking consistent with the need to recognise a wider category of person that have rights to access to justice under the EU Directives and the Aarhus Convention" (Drummond 2015, 62). This relates to article nine paragraph 3, which stipulates that members of the public concerned with a 'sufficient interest' should have access to such review procedures, and specifies that "the interest of any non-governmental organization meeting the requirements referred to in article 2, paragraph 5, shall be deemed sufficient" (United Nations 1998, 12).

In 'AXA General Insurance Ltd and others v HM Advocate and others', the Supreme Court's ruling confirmed that rather than, as before, a "strong private interest[,...] standing to take part in judicial review proceedings, depended instead on demonstrating a sufficient interest in the issues raised by the application" (Drummond 2015, 61).

In 'Walton', the Supreme Court "accepted that a 'person aggrieved' or having a 'sufficient interest' might include those who are not themselves directly affected but who are legitimately concerned about damage to wider public interests such as the damage to the environment" (Drummond 2015, 61).

In 'McGinty', the Extra Division of Scotland's Court of Session provided additional clarification on how to interpret such concerns, holding that the appellant Mr McGinty was "entitled to rely on his objective of protecting the interest of the general public as a basis for bringing proceedings" (Drummond 2015, 62).

The timing of legal review procedures

Drummond notes the ACCC's adverse finding in 2010 as regards the UK's obligations under article 9 paragraph 4 of the AC to enable 'timely' access to justice procedures in view of the lack of clear timeframes for requesting judicial review. The subsequent Courts Reform (Scotland) Bill removed a reference to a need for proceedings to be brought 'promptly' and required proceedings to be brought within

3 months from the date for the grounds for requesting that procedure emerged. Drummond notes that the time limits reduced uncertainty in this area but controversy may remain relating to whether petitions meet the time limit, may be allowed extensions, and may access legal aid, and suggests the definition of time limits may result in reduced access to justice in some cases.

The expense of litigation

The expense of litigation has been especially contentious. The issue in question is the provision that access to justice should not be 'prohibitively expensive' in article 9 paragraph 4 of the AC. As outlined in a recent [ESS pre-investigation review on this matter](#), the UK government was required to publish an action plan in response to the most recent finding of non-compliance on this issue made by the ACCC and endorsed by the MoP in Decision VII/8s in 2021.

As noted above, adverse findings made by the ACCC concerning the UK's compliance with this provision have been adopted by the MoP in 2011, 2014, 2017 and 2021. Prior to the UK leaving the European Union, the European Commission also initiated infraction proceedings against the UK in 2011 following warnings made since 2007 concerning the costs of challenging environmental decisions. The European Court of Justice found in 2014 that the UK's costs regime (as of 2010) did not meet the requirements of the AC.

The UK government published the action plan required in 2022, with inputs from the Scottish Government. As per the ESS pre-investigation review, this includes several commitments relevant to Scotland. Among these are a review of the court rules that govern Protective Expense Orders (PEOs) and the introduction of Bills for Legal Aid Reform and Human Rights in the current parliament term (2021-2026). The pre-investigation review also notes that Section 41 of the UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021 (the Continuity Act) required the Scottish Government to consult and report on the effectiveness of environmental governance arrangements, including whether these could be enhanced by the creation of an environmental court.

4 Scoping literature review

4.1 Methods

4.1.1 Protocol and registration

The literature review protocol was developed by the researcher using the PRISMA-ScR guidelines (Tricco et al. 2018). It was presented to ESS stakeholders at a framing meeting on 26 June 2023 at which the use of the protocol was confirmed. A further milestone meeting was held on 31 July 2023 to review progress.

4.1.2 Eligibility criteria

The following eligibility criteria for individual sources were developed.

- publication date: 2008-2023
- language: English
- type: academic
- publication status: published

The decision to limit the review to sources published since 2008 was made to increase the relevance of sources to current and future approaches to compliance, given the ongoing development of relevant legislation and case law. Sources included in languages other than English were excluded due to capacity and available language skills. The prioritisation of published academic sources, as above, reflected the availability of standardised academic databases, and the capacities of these for developing an efficient and rigorous review, rather than a judgment on the relevance of other sources.

4.1.3 Information sources

Scopus, provided by Elsevier, and the Web of Science, provided by Clarivate Analytics, were selected for use as information sources in the study. Both databases are widely used for the purposes of scoping and systematic academic literature reviews. An initial search using keywords such as 'Aarhus Convention' identified a wide range of individual sources in both databases, demonstrating some overlap but also substantively different coverage. An overview of the search process and results, and the steps taken to manage the data is included in the next section.

Scopus contains over 90 million records, and covers over 26,000 peer reviewed journals, 292,000 books, and 148,000 conferences and events (Scopus 2020, 4). Searches in the Web of Science were conducted using the Web of Science Core Collection. This contains over 85 million records, and covers over 21,000 peer-reviewed journals, 300,000 conferences, and 134,000 books in 254 subject categories in the sciences, social sciences, arts and humanities (Clarivate 2023).

The researcher used their access to the University of Glasgow library's online resources to access the information sources and the underlying source content. There were a number of instances in which the content was not available from the University of Glasgow library's online resources. In these cases, source content was retrieved using google searches if possible. If not, this functioned as a reason for the exclusion of the source. There are 43 instances in which this occurred.

4.1.4 Search

Given the criteria for selection was that the source should display a substantive focus on policy approaches to compliance with the AC, searches using the title, abstract, and keywords were preferred over full-text search, and limiting the search query to keywords that specifically refer to the AC was deemed appropriate. A more expansive approach to the research question could rely on developing keywords that refer to the individual rights proposed in the AC or to individual measures that have been used to implement those rights.

Based on a review of the abstracts of sources derived from a search in the two databases for the keyword "Aarhus Convention", the keywords "Aarhus Rights" and "Aarhus Regulation" were also included.

The search queries are included in Table 2. The Web of Science 'TS' code refers to a 'topic' search, which interrogates the title, keywords, and abstract fields of Web of Science records.

Table 2 - An Overview of the Search Queries

Information Source	Search date	Search query	Results
Scopus	12 July 2023	(TITLE-ABS-KEY ("Aarhus Convention") OR TITLE-ABS-KEY ("Aarhus Rights") OR TITLE-ABS-KEY ("Aarhus Regulation")) AND PUBYEAR > 2007 AND PUBYEAR < 2024 AND (LIMIT-TO (LANGUAGE , "English"))	260
Web of Science Core Collection	12 July 2023	((TS=("Aarhus Convention")) OR TS=("Aarhus Rights")) OR TS=("Aarhus Regulation") and English (Languages) and 2023 or 2022 or 2021 or 2020 or 2019 or 2018 or 2017 or 2016 or 2015 or 2014 or 2013 or 2012 or 2011 or 2010 or 2009 or 2008 (Publication Years)	177

Data was extracted from the databases, formatted, merged and deduplicated using the simple, no-code process suggested by Caputo and Kargina (2022). Following the de-duplication process, 312 of the 437 records remained.

4.1.5 Selection of sources of evidence

Individual sources in the search results were selected for inclusion in the scoping literature review if they displayed a substantive focus on approaches to compliance with the AC.

Two phases of selection were conducted: a selection based on title and abstract, and a selection based on title and abstract plus source content. The reporting of the [selection of sources of evidence](#) outlines the number of sources included and excluded in each phase and summarises common reasons for the exclusion of sources.

4.1.6 Data charting process

Data charting refers to the creation of data ('data items') on the sources selected for inclusion in the scoping literature review. Data charting was conducted independently by the researcher using column headings developed a priori in MS Excel. These are outlined in the next section on [data items](#). A first draft of the results was presented on 31 of July 2023 at the project milestone meeting.

4.1.7 Data items

The column headings developed a priori consisted of the following:

- **Geographies:** whether the source has a particular focus on specific geographies. Geographies at the country level or above were included. The member nations of the United Kingdom were recorded separately if the source focused on a specific member nation rather than the whole of the UK. The EU was included as a geography where the focus of the article was EU territory as a whole. No changes have been made to reflect the different compositions of the EU prior to and after the UK leaving the EU. A small number of source geographies were coded under Europe where the geographical focus extended beyond the EU to the broader region. Where there was a focus on an individual member state this was coded (in addition to the EU if the source had a substantive focus on both of these geographies). Several other regions (e.g. Africa; Asia; Latin America and the Caribbean) are included as geographies as per the focus of the sources in question.
- **Pillar:** whether the source relates to the access to information, public participation, and/or access to justice pillars.
- **Topic area:** what constitutes the primary topic of the source, over and above its engagement with the AC and its pillars.
- **Contribution:** what, in one sentence, constitutes the principal contribution of the source in relation to the objectives of the scoping literature review.

4.1.8 Synthesis of results

Results of the scoping literature review were synthesised in response to the two research questions and in line with the reporting guidance of the Prisma-SCR guidelines.

In response to the first research question, the standard Prisma-SCR flow diagram is used to provide an overview of the [selection of sources of evidence](#). A brief note was made on the reason for the exclusion of each source of evidence, and a high-level categorisation of these reasons is provided in the flow diagram.

Data charting was then used to synthesise the [characteristics of sources of evidence](#) including source geographies, pillars, and topic area.

In response to the second research question, the [synthesis of results](#) provides the outcome of a thematic analysis. This was conducted independently by the researcher subsequent to the initial data charting. The thematic analysis was conducted on the basis of the contributions of each source identified in data charting. As such, the themes are inductively defined categorisations of the 'type' of contribution identified in each article.

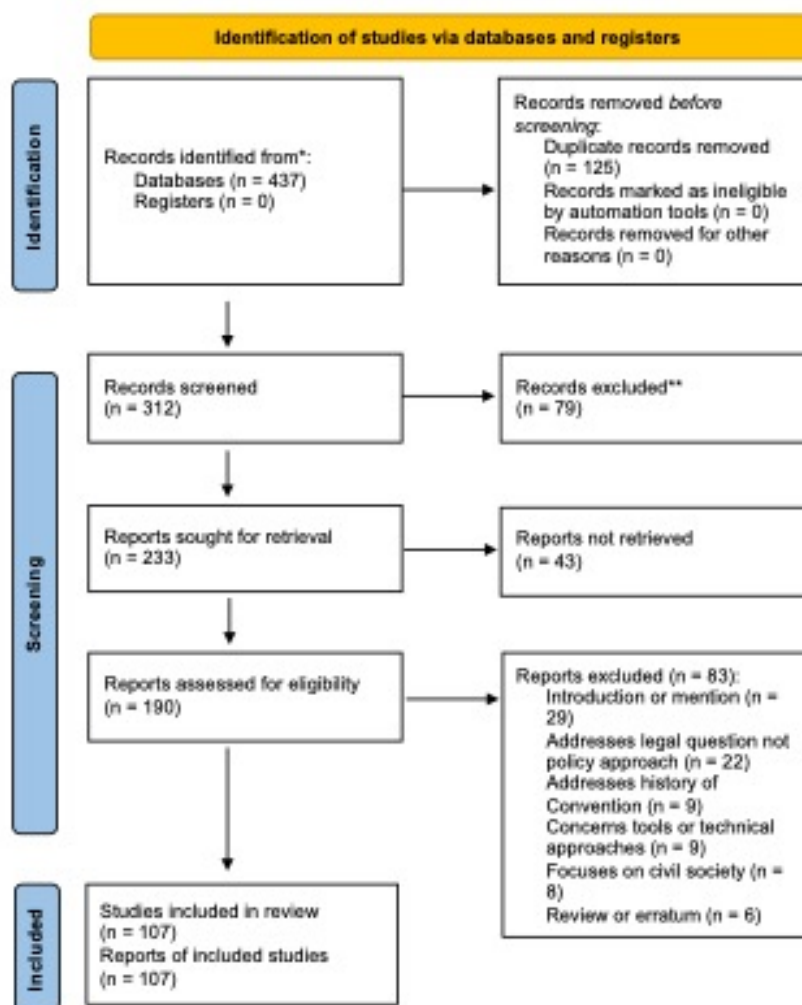
The contributions of each source are reported under the respective themes in [Annex A](#). Where source contributions were coded under multiple themes, the sources are reported multiple times, i.e. they are reported under each of those themes.

4.2 Results

4.2.1 Selection of sources of evidence

As is visualised in Figure 1, of 312 unique records retrieved, 79 were excluded based on title and abstract, 43 were excluded due to unavailable source content, and 83 were excluded based on source content. As such, 107 sources were included in the review.

Figure 1: Prisma-SCR Flow Diagram.



Source: (Tricco et al. 2018). [PRISMA editable flow diagram](#)

4.2.2 Characteristics of sources of evidence

Data on 90 of the 107 sources were entered for geography. The other 17 sources did not have a geography-specific focus.

The geographical focus of the sources is displayed in Table 3 (top 10 geographies) and Figure 2 (all geographies). A clear focus on Europe consistent with the membership of the AC is notable, with a prevalence of discussion of the EU but also widespread discussion of European nation-states.

There is also limited discussion of other regions, often due to comparisons made between the AC and other regional agreements such as the Escazú Agreement

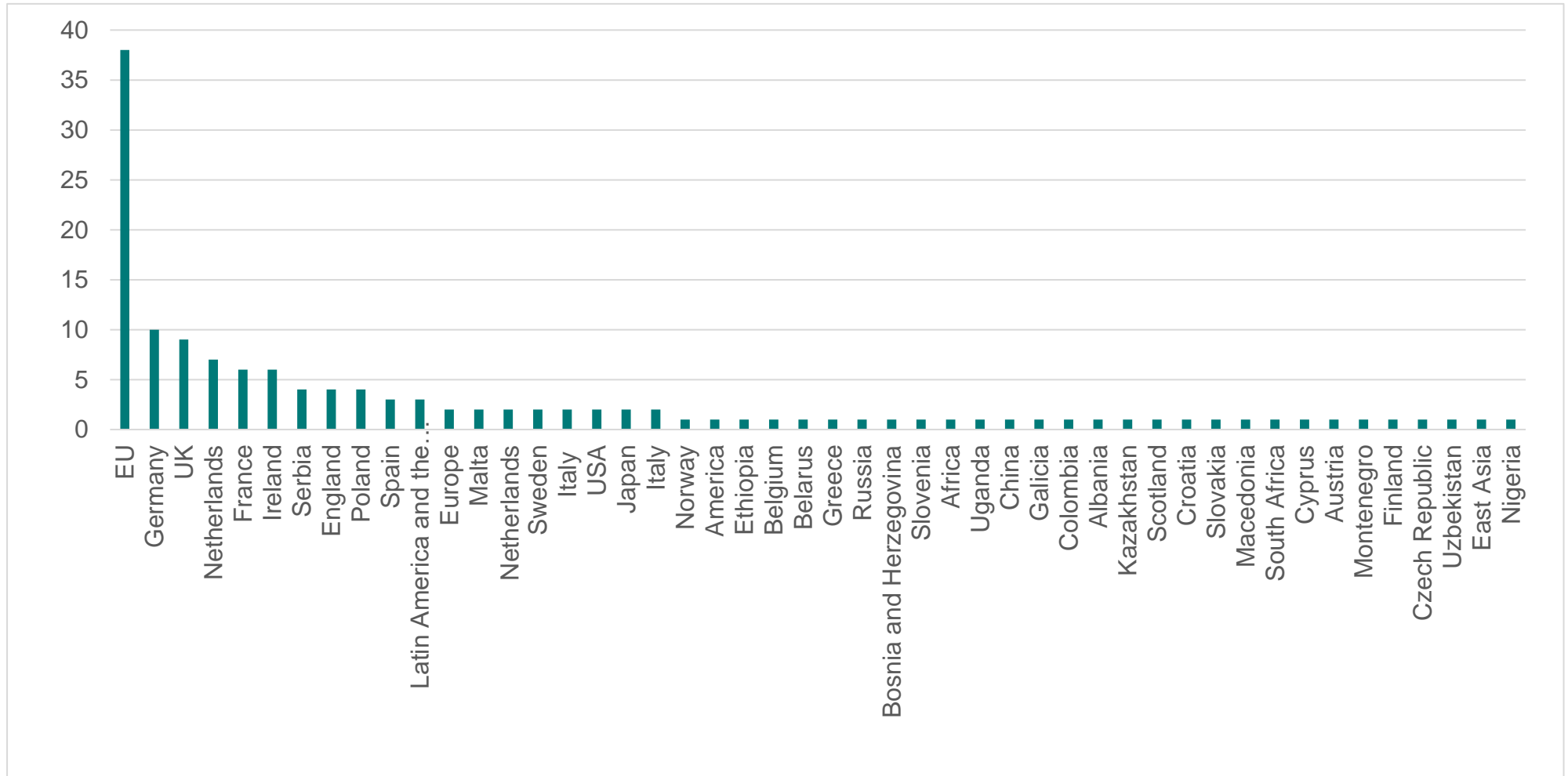
(Latin America and the Caribbean), the American Convention on Human Rights (America), or the African Charter on Human's and Peoples' Rights (Africa).

A limited number of nation-states that are not members of the AC are also represented, where approaches in other countries have been outlined as comparison. Given the keywords used, these comparisons have made explicit reference to the AC, the Aarhus rights, or the Aarhus regulation. Future research could identify sources on approaches in different countries that do not refer to the AC.

Table 3: Top 10 Article Geographies.

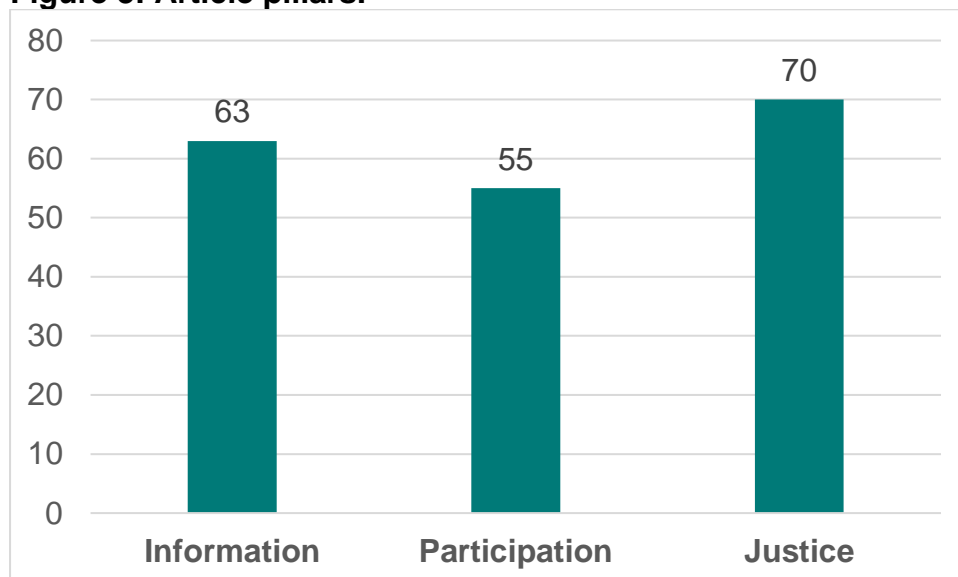
Geography	Articles
EU	38
Germany	10
UK	9
Netherlands	7
France	6
Ireland	6
Serbia	4
England	4
Poland	4
Spain	3

Figure 2: Article geographies.



Data on all 107 of the sources were entered for one or more of the pillars (see Figure 3 below). Forty-one of the 107 sources were associated to all three of the pillars, and the remaining 66 were associated to one specific pillar (participation = 14, information = 22, and access to justice = 39).

Figure 3: Article pillars.



Data was entered for topic area on 55 of the 107 sources (see Table 4 below). The data is intended only as an indication of the diversity of different topics discussed rather than a systematic appraisal. Only one topic area was entered for a given source, where a substantive topic over and above the source’s engagement with the AC and its pillars was clearly evident.

Table 4: Article topic areas.

Topic Area	Count
Human Rights	5
GMOs	3
State Aid	2
Shared environmental information systems (SEIS)	2
Citizen Sensing	2
International Agreements	2
Regional Integration	1
Park Management	1
Climate Resilience	1

Collective Litigation	1
Pollution	1
Commercially Sensitive Environmental Information	1
Climate Change Policy	1
Disaster Recovery	1
Multi-Level Governance	1
E-government	1
Planning	1
Energy Policy	1
Private Bodies	1
Environmental Defenders	1
SEVESO III	1
Environmental Democracy	1
Trade Unions	1
Environmental Impact Assessments	1
Marine Spatial Planning	1
EPTR	1
Nuclear Proliferation	1
Extraterritoriality	1
Pharmaceuticals	1
Farming	1
Plastics	1
Freedom of Information	1
Post Emergency Communications	1
Biodiversity Conservation	1
Regional Agreements	1
Bali Guidelines	1
Right to Water	1
Hunting	1
Civil Society	1
Animal Rights	1
Technology Regulation	1
Landscape Planning	1
Water Governance	1
Local Government	1
Marine Conservation Zones	1

4.2.3 Results of individual sources of evidence

The contribution of each source by theme has been included in [Annex A](#).

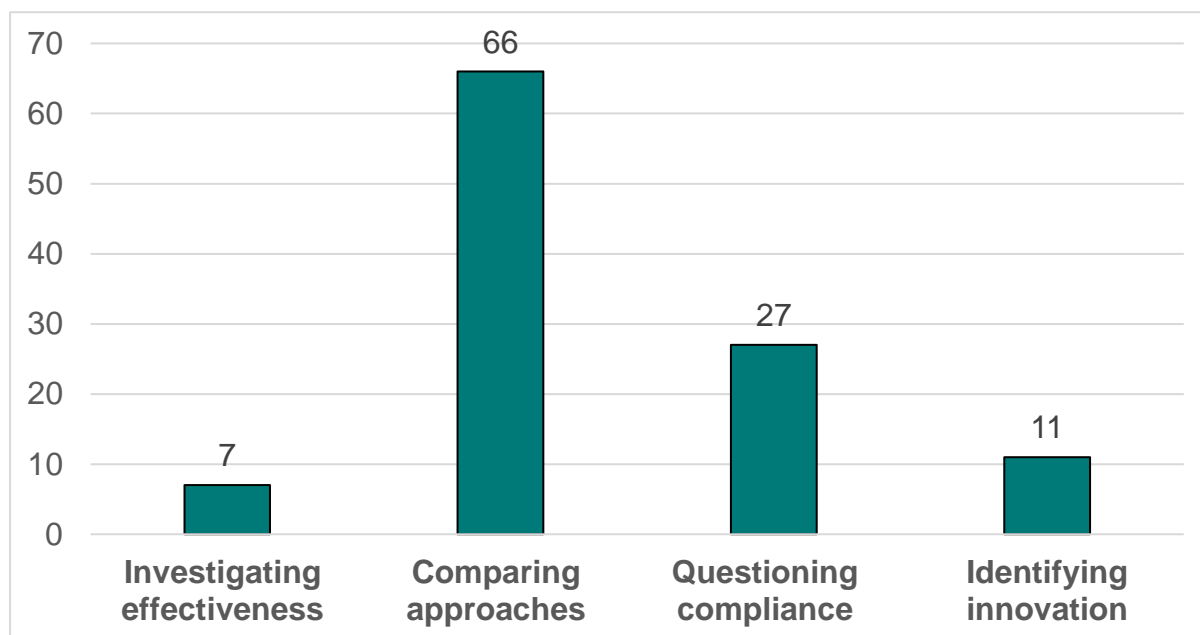
4.2.4 Synthesis of results

The inductively defined themes are as follows:

- **Investigating effectiveness:** In some cases, the primary contribution of the source was to investigate the effectiveness of the approaches to compliance outlined. These sources tended to use historical, conceptual, quantitative, and experimental arguments to consider approaches to compliance with the AC in a broader context, situating the AC itself in relation to environmental justice and governance more widely, and encouraging reflection on how to approach implementation of the AC rights.
- **Comparing approaches:** In most cases, the primary contribution of the source was to facilitate comparison of the approaches to compliance outlined. These sources drew comparisons between agreements as well as between countries and highlighted the importance of understanding particularities seen in specific approaches.
- **Questioning compliance:** In many cases, the primary contribution of the source was to question whether the approach to compliance outlined was indeed compliant and whether it is aligned with the values and objectives of the AC. While this is similar in some respects to ‘comparing approaches’, the focus on a particular issue in relation to compliance present in these sources was deemed to be a sufficient basis for a distinct theme.
- **Identifying innovation:** In some cases, the approaches to compliance outlined were prospective, recommended approaches. This was deemed different to ‘comparing approaches’ in view of this.

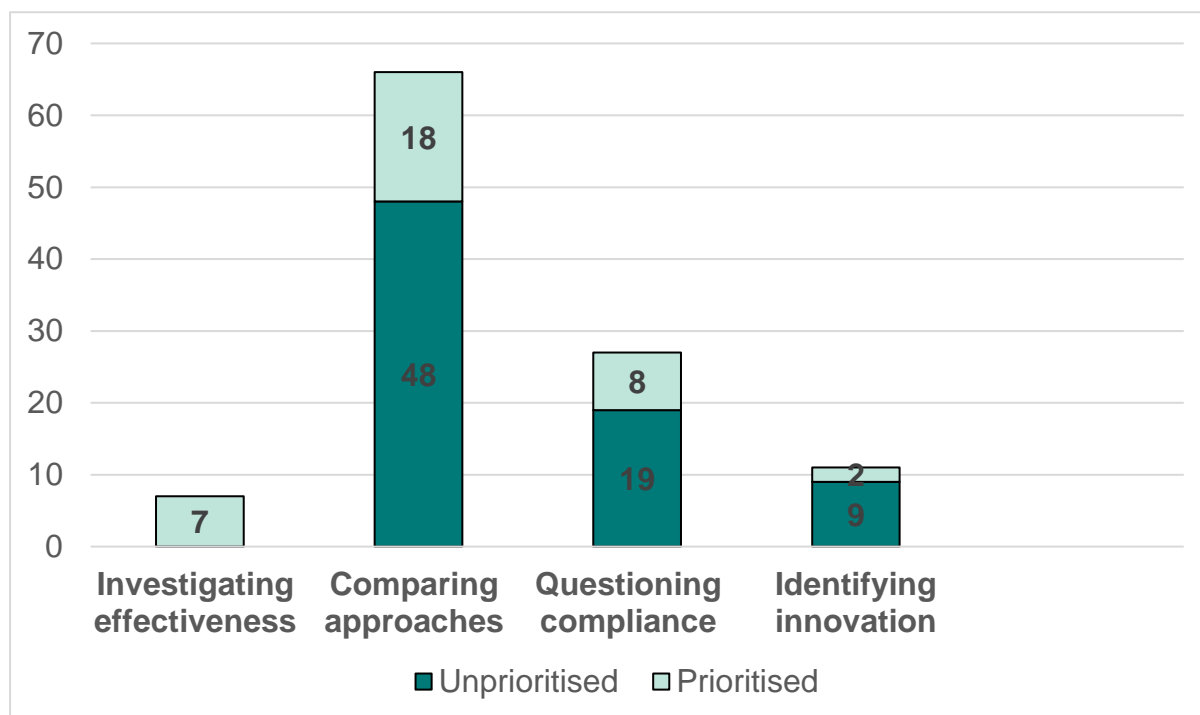
The sources coded under each theme are shown in Figure 4. A small number of the 107 sources were coded under multiple themes such that a total of 111 source-codes were recorded.

Figure 4: Article themes.



Sources coded under each theme were prioritised for narrative treatment in the [summary of evidence](#) section based on a qualitative assessment of their relevance to the objectives of the study. Thirty-five of the 110 source-codes were prioritised, which equated to 31 unique sources. The prioritised sources are visualised in Figure 5. As per the previous section, the contribution of all the sources has been summarised, and this information has been included in Annex A.

Figure 5: Article themes with priority sources.



4.3 Discussion

4.3.1 Summary of evidence

The summary of evidence has been organised by theme and similar sources under each theme have been clustered as appropriate to ease readability.

Investigating effectiveness

The review of effectiveness in (Mason 2014) relies on a historical and documentary analysis of the drivers for the emergence, institutionalisation, and effects of the AC's information disclosure requirements. Specifically, Mason looks at democratisation and marketisation as such drivers. While he finds both very significant, he argues that "the UNECE's promotion of political modernization in Central and Eastern Europe has deferred in practice to market liberal norms of governance" (Mason 2014, 84).

Mason's review of procedural, substantive, and normative effects of national approaches to the AC's information disclosure requirements finds that there is "a structural imbalance in the articulation of Aarhus rights between social welfare and market liberal perspectives, and that the dominance of the latter has eroded the

efficacy of the convention's information disclosure obligations" (Mason 2014, 85). This argument is informed by the identification of procedural flexibility allowed to implement the AC rights in accordance with national legislative frameworks, a lack of specification of substantive as opposed to procedural environmental rights, and a normative aversion to applying information disclosure obligations to private enterprise.

(Whittaker, Mendel, and Reid 2019) also traces trends in the implementation of information access rights to the historical context for the emergence of the AC, and links this to effectiveness. The broad focus of the paper is how the AC's conceptualisation of these rights has informed the way in which research on them has been conducted. The study provides a literature review of scholarship on information rights in the UK since the 1980s, and finds two key trends in the research that they argue are derived from the AC's conceptualisation: a "dominance of research focusing on the disclosure of environmental information through requests over the proactive disclosure of environmental information" and a "focus on the holders of environmental information over the users of the right and the motivations of these users" (Whittaker, Mendel, and Reid 2019, 466).

The authors argue that these trends result in research gaps that undermine the effective guarantee of access to environmental information in the UK. They advocate, therefore, for empirical studies in response to these gaps. Also they support critical engagement with the impacts of the AC's conceptualisation of rights on their practical implementation as well as the academic discourse concerning this issue.

A series of sources led by Professor Susanne Kingston, an academic and judge in the EU's General Court, investigate the effectiveness of AC-derived rights and the variable ways in which these have been applied in the domain of nature governance.

(Kingston, Wang, Alblas, Callaghan, Foulon, Lima, et al. 2022) introduces the development of the 'Nature Government Index' (NGI), which codes more than 6,000 international, EU, and national laws to trace the evolution of law relating to nature governance in the EU. At a national level, this focuses on France, the Netherlands, and Ireland; these countries were selected to ensure coverage of countries with different sizes, legal traditions (common and civil), records of compliance with the AC, and time taken to ratify the AC (by 2002, 2004, and 2012 respectively).

The NGI provides “strong empirical confirmation of the democratic turn in European environmental governance, while revealing the significant divergences between legal systems that remain absent express harmonisation of the Aarhus Convention’s principles in EU law” (Kingston, Wang, Alblas, Callaghan, Foulon, Lima, et al. 2022, 27).

In a partner article (Kingston, Wang, Alblas, Callaghan, Foulon, Daly, et al. 2022) the authors build on the NGI to develop 'Nature Governance Effectiveness Indicators' (NGEIs). This relies on a database developed by the research team of instances in which the nature governance laws have been used by the EU, state, and private or non-state actors between 1992 and 2015, tracked against the 14 indicators developed.

For example, an EU-led NGEI is “[n]umber of Article 258 TFEU Nature infringement proceedings commenced by the European Commission against the Member State”, a state-led NGEI is “[s]tate-led proceedings to enforce EU nature law before national courts” and a private or non-state led NGEI is “[n]umber of decided cases before national courts where a private party seeks to enforce EU nature law” (Kingston, Wang, Alblas, Callaghan, Foulon, Daly, et al. 2022: 802).

The research reported in the paper involved regressing the NGEI against the NGI as well as against control variables for Gross National Income (GNI) per capita and urbanisation. The principal findings of the research include that “by strengthening private nature governance laws, States may also in fact improve traditional State enforcement of nature laws on the ground” (Kingston, Wang, Alblas, Callaghan, Foulon, Daly, et al. 2022: 809), that “while strengthening private governance laws significantly improved levels of State nature enforcement, strengthening traditional governance laws did not” (Kingston, Wang, Alblas, Callaghan, Foulon, Daly, et al. 2022: 810), and that there is a “disconnect between Europe’s revolution in private governance laws on the books, and the use of these laws in practice” (Kingston, Wang, Alblas, Callaghan, Foulon, Daly, et al. 2022: 811).

In more recent research, (Kingston and Wang 2023) also highlights the importance of developing empirical evidence on the effectiveness of what they describe as a transition from ‘traditional’ to ‘private’ environmental governance rules. Here, traditional environmental governance rules refer to civil fines, criminal penalties, and the use of incentives while private environmental governance rules refer to rules that

encourage private actors, defined as non-state actors, to conduct environmental governance themselves based on their AC-derived rights.

The authors use experimental behavioural research based on a serious game to test hypotheses that a combination of traditional and private rules increases compliance compared to traditional rules alone, and that private rules are more likely to be used when traditional rules are perceived as ineffective. Findings from 300 participants in the serious game are seen to support the first hypothesis but not the second.

This is discussed in relation to the research teams findings in (Kingston et al. 2021), based on around 2000 survey responses and over 150 interviews with farmers, environmental non-governmental organisation (ENGO) representatives and citizens in France, Ireland and the Netherlands. This research found that the impact of the new wave of private environmental governance rules is variable, such that the rules can either “crowd out intrinsic environmental motivation, resulting in less compliance and subverting policy objectives” or “crowd in voluntary pro-environmental activity on the part of not only third parties, but also farmers” (Kingston et al. 2021, S144). The authors found that this variability is dependent on the presence of a “supportive regulatory culture, fostered by the State” (Kingston et al. 2021, S157) and discuss a series of potential measures to develop this informed by the findings in the study.

Looking forward, current Chair of the ACCC Áine Ryall, writing in a personal capacity, provides a commentary on how the AC is responding to ‘tempestuous times’ (Ryall 2023). This notes the pressure placed on AC rights by calls to accelerate decision making in response to drivers including climate and biodiversity crises, the Covid-19 pandemic, as well as the war in Ukraine and related energy market impacts.

The commentary focuses on how AC bodies have responded to this pressure and sought to offer greater protection to environmental defenders and combat the erosion of opportunities to speak out on environmental issues. Specific measures discussed include: the establishment of a Special Rapporteur on Environmental Defenders; the preparation of advice for Ukraine relating to the AC rights during conflict; and the issuance of the Geneva Declaration that acknowledged AC rights were and may have been curtailed as a result of policy responses to Covid-19, affirmed the AC rights remained in effect throughout this time, and noted the

importance of alternate means of disseminating environmental information e.g. digitally.

In offering this discussion, the commentary provides opportunities for reflection on effective implementation by individual parties in response to these drivers. Further, it provides an overview of how the ACCC are reviewing the implementation of MoP decisions relating to the compliance of individual parties. It notes that this process has not been a core focus of scholarly attention, and highlights that the associated documentation provides important insights on how to overcome barriers to prompt implementation of AC rights.

Comparing approaches

Several sources situate approaches to compliance with the AC in light of the differences between the AC and other agreements, providing a high-level overview of the way in which the rights are expressed in these. (Peña and Hunter 2020), for example, trace the development of the three rights expressed by the AC in international law with reference to agreements including the Rio Declaration, the AC, the Bali Guidelines, and the Escazú Agreement.

They provide an overview of the approach and provisions of the Escazú Agreement as a basis for comparison with the AC. Highlighted features include the development of a pillar on the rights of environmental human rights defenders, and an obligation for their protection, a “stronger and more direct relationship with human rights law” (Peña and Hunter 2020, 127), and a reference to the guarantee of a substantive right to live in a healthy environment.

In their own comparison of the agreements, (Harris 2021) state that the Escazú Agreement’s guarantee of standing “in the public interest of environmental protection” was not present in the AC and the emergence of a broader interpretation of standing has only been achieved as a result of ACCC efforts (Harris 2021, 288).

The human rights basis of the AC and its similarities, differences and relations to other human rights instruments is also a consistent feature of comparative analysis.

(Slowik 2023) compares the lack of an obligation to guarantee a substantive right to the environment in the AC with the inclusion of such an obligation in the Banjul Charter, the San Salvador Protocol, and the Escazú Agreement.

(Peters 2018) compares procedural environmental rights in the AC and the ECHR and argues that attention is needed to how these “differ considerably in objective, content, and scope” (Peters 2018, 1) in order to move away from a ‘unitary perspective’ and “concretise the doctrine of existing and emerging procedural environmental rights” (Peters 2018, 27). One notable example cited is the intended beneficiaries: while the AC is intended for the public at large, the article notes, the ECHR focuses on those directly affected by human rights violations (see Peters 2018, 26–27).

(Braig, Kutepova, and Vouleli 2022) compare the AC with the jurisprudence of the European Court of Human Rights (ECtHR) and make a case for the ECtHR to “stop playing second fiddle to Aarhus” (Braig, Kutepova, and Vouleli 2022, 74). For example, it notes possibilities for the ECtHR to extend standing in view of the wide-ranging impacts of environmental damage and the role of NGOs in supporting vulnerable people to safeguard their rights.

Sources also compare how parties to the AC approach the obligation to promote the principles of the AC in the conduct of their own international affairs. (Duyck 2015) reflects on the AC’s requirement in article 3 paragraph 7 that parties “promote the application of the principles of this Convention in international environmental decision-making processes and within the framework of international organizations in matters relating to the environment” (United Nations 1998, 4) and the subsequent agreement of the Almaty Guidelines in 2005, which led to the development of institutional mechanisms in support of this obligation.

Duyck finds that the support of the AC has been focused on developing awareness of the obligation and the associated guidelines and that “the parties tend to favour domestic solutions (such as the inclusion of civil society representatives in governmental delegations) rather than reflect the Aarhus principles in their negotiating positions” (Duyck 2015, 123).

This is based on a comparative review of national implementation reports, which highlights the increasing number of countries that detailed measures undertaken in response to the requirement following guidelines issued in 2010, as well as responses to a survey issued by the AC in 2015. The article also reviews submissions of AC parties to the United Nations Framework Convention on Climate Change (UNFCCC) and notes the support expressed by AC parties such as the EU,

Switzerland and Norway for access to information and participation in the UN climate regime.

A large number of sources provide comparative analysis of how individual parties approach compliance with the three core pillars of the AC. As previously outlined, research led by Susanne Kingston uses quantitative legal research to compare the evolution and effectiveness of the Aarhus rights in the domain of nature governance, with a focus on France, the Netherlands and Ireland (Kingston, Wang, Alblas, Callaghan, Foulon, Daly, et al. 2022; Kingston, Wang, Alblas, Callaghan, Foulon, Lima, et al. 2022).

In the NGI, what they term ‘inter-jurisdictional normalisation’ is used to enable the quantitative comparison of Aarhus rights in individual jurisdictions. For example, they quantify the strength of ‘Access to Information’ (ATI) in international, European, French, Dutch and Irish law as 30.12, 62.6, 41.45, 82.61, and 46.64 respectively.

The typology developed in the NGI enables detailed comparative metrics that are associated to underlying governance rules. One significant finding they report is that “[w]hereas the NGI Aarhus sub-indices increase largely in lockstep for the five jurisdictions in the case of public participation and access to information, the spread of trajectories is markedly wider for access to justice” (Kingston, Wang, Alblas, Callaghan, Foulon, Lima, et al. 2022, 40). This is attributed to the lack of EU-led harmonisation of access to justice provisions, and this in spite of CJEU case law in ‘Slovak Brown Bear’ (2011) intended to strengthen the implementation of these provisions.

The development of the NGEI also enables comparison of the use of these governance rules in different jurisdictions. As such, the NGI records Aarhus rights ‘on the books’ and the NGEIs record use of the Aarhus rights in practice. At a high level, the authors find that “the use of private nature governance mechanisms in practice has not kept pace with their development in law” (Kingston, Wang, Alblas, Callaghan, Foulon, Daly, et al. 2022: 814).

They also note that this is compounded by the difficulties they faced compiling information on the use of the Aarhus rules, reflecting “a basic lack of transparency on the success of these new governance mechanisms, a situation itself incongruous with the aims of the Aarhus Convention” (Kingston, Wang, Alblas, Callaghan, Foulon, Daly, et al. 2022: 814).

In this context, they discuss the findings in the paper outlined earlier reporting survey and interview data on the attitudes to and use of AC rights in France, the Netherlands, and Ireland among farmers, ENGO representatives and citizens (Kingston et al. 2021). As discussed, the authors found variability in use of the AC rights to be dependent on the presence of a state-led regulatory culture that was supportive. The comparative analysis of the culture in the three countries they present, therefore, represents an analysis of the effectiveness of the AC rights, given the disparities they note between their existence and use.

Other examples of comparative analysis of approaches in different EU member states include (Keller 2020), (Ohler, Peeters, and Eliantonio 2021), (Gieseke 2020), (Jendrośka 2012), and (Bünger and Schomerus 2011).

(Keller 2020) sets out to identify and highlight potential challenges for domestic legal practitioners when applying EU environmental law in different jurisdictions. One example cited is the difference between French and German approaches to standing, in view of the relatively broad standing allowed under the ‘qualified interest’ test in France and the relatively narrow standing allowed in instances where ‘Schutznormtheorie’ (protective norm theory) is applied in Germany.

(Ohler, Peeters, and Eliantonio 2021) review 20 years of the development of Germany’s approach to article 9 paragraph 3, noting that public interest litigation was not traditionally possible in Germany. The authors state that this history has consisted of “adding fragmented amendments which often generated more complexity and legal uncertainty” (Ohler, Peeters, and Eliantonio 2021, 388) and advocate for a simplification and affirmation that ENGOs should consistently have standing.

(Jendrośka 2012) provides a broad overview of the status of the three pillars at EU and member state levels and highlights some issues in implementation. On access to information, for example, the author notes issues derived from the existence of parallel legal regimes in many countries for access to information in general and access to environmental information in particular, including with respect to definitions of information and documents, timeframes for information provision and provisions relating to confidentiality (see Jendrośka 2012, 81).

(Bünger and Schomerus 2011) identify issues with a lack of definition of private bodies in UK and Germany.

As previously outlined, (Mason 2014) compares national approaches to information disclosure as part of an overall argument concerning the role of democratisation and marketisation drivers in the emergence and institutionalisation of the AC.

His overall argument is that AC requirements for information disclosure rely on a market liberal approach, for example by exempting private companies from information disclosure unless they perform the functions of a 'public authority', and allowing a discretion to members in how this is determined that enables significant discrepancies (the example he cites is the difference between a restrictive definition in the UK and a broad definition in Ireland).

As such, the examples of national implementation he compares tend to be instances in which parties to the AC have approached information rights in a way that has "minimal market restricting effects" (Mason 2014, 95). One exception is the right to access information directly from private companies enjoyed by the public in Norway. Mason notes that the EU vetoed a Norwegian proposal to extend this right under the AC during discussions on the 2009-14 AC strategic plan.

With respect to the EU, prior to the ACCC finding of non-compliance in 2017 and the subsequent revision to the Aarhus Regulation in 2021, (Squintani and Plambeck 2016) argued that the EU's approach to plans and programmes was non-compliant with article 9 paragraph 3. They highlight the importance of this given the reliance on a 'programmatic approach' by EU institutions as well as member states including the Netherlands and Germany.

(Leonelli 2021) reviews the changes in the revised Aarhus Regulation and highlights the extension of scope of the access to justice provisions to 'all non-legislative acts' as the most significant change.

Sources often identify individual countries as comparators for best practice.

(Graver 2017) outlines the Norwegian access to environmental information act and its provision for access to environmental information from private entities.

(Hadjiyianni 2020) highlights approaches to standing in Cyprus to advocate for a move away from restrictive interpretations of standing.

(Danthinne, Eliantonio, and Peeters 2022) outlines how courts in Belgium, Germany, and the Netherlands have used the generous approach to standing in article 9 paragraph 2 in interpretation of article 9 paragraph 3, which has a broader scope in

that it relates to all national laws relating to the environment but is much more vague in relation to standing for ENGOs.

(Ryall 2011) argues that the establishment of a Commissioner for Environmental Information has been a valuable extra-judicial mechanism for Ireland's delivery of the AC's rights on access to information, given this has highlighted "deficient administrative practices, poor enforcement and weak judicial control" in Ireland's delivery of these rights (Ryall 2011, 46)

Questioning compliance

With respect to the UK, sources coded under this theme addressed debates including whether the definition of private bodies in Scotland, England, Wales, and Northern Ireland was sufficient in view of AC access to information provisions (Bünger and Schomerus 2011). Furthermore, whether changes to civil procedure rules on costs for environmental claims in England and Wales were sufficient for compliance with provisions on prohibitive expense (Sarathy 2015; Knibbe 2017), and whether the 2021 Environmental Act was consistent with AC public participation requirements (Lee 2023).

Sources further addressed issues of compliance in view of the systemic nature of the climate crisis and the implications for traditions of legal standing based on the identification of individual litigants.

(Kelleher 2022), for example, "explores whether an exceptional approach to standing rules is needed to square the gatekeeping function of the courts of states/international organisations that are signatories to the Aarhus Convention with the complexity and urgency of the climate crisis" (Kelleher 2022, 107).

She argues that standing rules do not need to be rearticulated but parties to the AC "need to take procedural human rights obligations under the Aarhus Convention seriously" (Kelleher 2022, 107). The article further argues that the CJEU and the Irish Supreme Court have not adopted a sufficiently broad approach to standing in view of the systemic nature of the climate crisis and suggests that Dutch case law in 'Urgenda' "could provide a template for standing rules that are suitable for realising the environmental stewardship and accountability purposes of the Aarhus Convention" (Kelleher 2022, 133).

The relationship between the AC and broader human rights obligations also emerged as a prominent concern. (Slowik 2023) claims that the substantive right to "an environment adequate to his or her health and well-being" referenced in the objectives of the AC has not attracted significant attention, and sets out to explore obligations in relation to this substantive right under the AC.

As noted previously, Slowik compares the lack of a specific obligation to guarantee rather than contribute to such a substantive right in the AC with the inclusion of such an obligation in the Banjul Charter, the San Salvador Protocol, and the Escazú Agreement. In view of this, he concludes that the 'definitional argument' for such a lack, revolving around the challenges inherent in defining such a right, is not a strong one.

With respect to the status of the right as outlined in the AC, and therefore with implications for approaches to compliance with the AC, Slowik argues that "the substantive human right to the environment is an abstract moral claim which is substantiated by Aarhus' procedural rights" (Slowik 2023, 206). This argument is informed by the view that rather than a 'backdrop' (Barritt 2020) the delivery of the substantive right is a long-term objective of the AC inherently linked to short-term obligations relating to procedural rights (Dellinger 2012).

Finally, (Hadjiyianni 2017) explores regulatory mechanisms to discipline the conduct of EU external actions in line with AC obligations, and queries the abilities of third countries to access justice in view of these. This usefully highlights the importance of the way in which AC obligations extend to the public "without discrimination as to citizenship, nationality or domicile" (United Nations 1998, 5).

Identifying innovation

Two articles led by Anna Berti Suman develop a case for the legal recognition of citizen sensing activity as a fundamental part of approaches to compliance. (Suman 2021) asks "[c]an the Aarhus Convention framework legitimize citizen sensing and form an obligation for the state to listen to the citizen-generated information, when filling environmental information gaps?" (Suman 2021, 36).

In response, Suman argues that the practice of citizen sensing is justified by the AC right to access environmental information, further noting that AC provisions

concerning information exhaustiveness and accuracy strengthen this justification in that these are concerns that motivate the practice of citizen sensing.

Suman further argues that legal recognition for citizen sensing activity is needed, and that such recognition may also compel authorities to consider data derived from citizen sensing when information from official sources is not available.

In conjunction with these arguments, Suman states that competent institutions possess the primary duty for the provision of environmental information, such that there is a responsibility for such institutions to consider whether these duties may be better performed with the assistance of citizen sensing activity.

(Suman et al. 2023), building on this work, develops a framework for implementing a “right to contribute information” alongside the “right to obtain information” currently recognised by the AC, with attention to the “legal and governance processes, capacities, and infrastructures” that would be required (Suman et al. 2023, 1).

4.3.2 Limitations

The study limitations identified include those discussed as follows.

Additional review

The study has not benefited from the involvement of one or more additional reviewers to provide a comparison with the original reviewer’s source identification and screening, data charting, thematic analysis, and prioritisation for narrative treatment. In the absence of this, the reviewer repeated these phases.

Specificity of terms

The study may have benefitted from greater specificity concerning the definition of ‘policy approaches to compliance’. The meanings of this term are broad and can be said to include, for example, both the development of legislation and the use of enforcement mechanisms. The term is also not specific about the actors involved.

This said, the broad terminology used had benefits as well as disadvantages. The approach enabled a broad set of results containing a wide range of different insights. There was also a clear and simple relationship to the search queries developed.

Limiting the search query to keywords that specifically refer to the AC was deemed appropriate given this terminology, and this resulted in a reasonably targeted set of results.

As discussed in the recommendations section further below, future research could adopt or develop a more advanced typology, potentially with reference to those adopted in the development of the NGI and NGEIs previously discussed (Kingston, Wang, Alblas, Callaghan, Foulon, Lima, et al. 2022; Kingston, Wang, Alblas, Callaghan, Foulon, Daly, et al. 2022).

Fragmented and incomplete information sources

Irrespective of the specific terms used, the study was challenged by fragmented and incomplete information on policy approaches to compliance with the AC in general.

This is noted in the development of the NGI and NGEIs, the most comprehensive similar efforts identified in the study. The NGI involved efforts by the research team as well as 50 law graduates and students over a five-year period (see Kingston, Wang, Alblas, Callaghan, Foulon, Lima, et al. 2022, 36).

The information used in the development of the NGEIs derive from a large range of public databases (see Kingston, Wang, Alblas, Callaghan, Foulon, Daly, et al. 2022, 815) as well as “over 300 formal and informal requests for access to environmental information made to the European Commission and to national and sub-national bodies within Ireland, France and the Netherlands” (Kingston, Wang, Alblas, Callaghan, Foulon, Daly, et al. 2022, 800).

Even then, as above, they note how difficult compiling the information was, citing a lack of transparency. Related, they further state that “[w]hile certain information can be found in the Aarhus State Parties’ periodical reports to the Aarhus Convention Secretariat, this information is patchy and is largely confined to reports of legal implementation (law “on the books”)” (Kingston, Wang, Alblas, Callaghan, Foulon, Daly, et al. 2022, 797).

Information sources and source eligibility criteria

The information sources used and related source eligibility criteria significantly informed the outcomes. As discussed in the methods section, the decision to limit

the review to sources published since 2008 was made to increase the relevance of sources to current and future approaches to compliance, given the ongoing development of relevant legislation and case law. Sources included in languages other than English were excluded due to capacity and available language skills; and the prioritisation of published academic sources reflected the availability of standardised academic databases, and the capacities of these for developing an efficient and rigorous review, rather than a judgment on the relevance of other sources such as legislation, case law, legal communications and/or policy reports.

It is worth noting that the focus on academic sources had benefits as well as disadvantages. In terms of benefits, academic sources included a broad range of analytical and conceptual as well as descriptive information that would arguably not be present in many other source types (e.g. in national implementation reports). Academic sources also included sources from a range of disciplines that would not necessarily be represented in other source types (e.g. in legal databases). In terms of disadvantages, it was challenging to screen academic sources to only include those that displayed a substantive focus on 'policy approaches to compliance' given this was often not the primary aim of the source in question.

Academic information sources used

More widely, there are specific limitations relating to the two academic databases used (Scopus and the Web of Science Core Collection). Notably, a focus on journals as opposed to books was evident in the search results. Although many books were included in the search results, several prominent examples were missing (e.g. Barritt 2020)

4.3.3 Recommendations

The study aimed to contribute to the review of Scotland's implementation of its obligations under the AC, and to demonstrate due regard to developments in international environmental protection legislation when doing so.

While the study objective was to develop an awareness of available academic literature on approaches to compliance with the AC in Scotland and internationally, these recommendations relate to the broader aim. As such, they consider the

relevance of both academic and non-academic sources. They also make limited reference to methods that could be used to build on the scoping literature review conducted in this study.

Typologies

Future research may benefit from a more advanced typology to specify and prioritise different types of policy approaches to compliance with the AC. The development of the NGI and NGEIs provides a useful comparison to the study and could be used as a basis for this. These focus on law and practice respectively and intend to capture the approaches of a broad range of actors whether national or sub-national, state or non-state. As such, they can be understood to develop a database of ‘policy approaches to compliance’ that benefits from an advanced and relevant typology worthy of further attention.

By ‘nature governance laws’ or ‘nature governance rules’ (the two are used interchangeably), the NGI research team mean “legal tools or ‘architectures’ used to promote compliance with nature conservation rules” (Kingston, Wang, Alblas, Callaghan, Foulon, Lima, et al. 2022, 30).¹² This includes ‘all forms of law’ including legislation, case law, and non-binding ‘soft-law’ (e.g. EU ‘Communications’ or ‘Notices’). The laws included are categorised in a typology comprising four sub-indices (3 of which correspond to the AC rights), each with 6-15 variables.

The associated Nature Governance Effectiveness Indicators (NGEIs) sets out to identify instances in which the laws in the NGI are used by a range of bodies including state, non-state, national, and sub-national actors. The researchers also develop a process of ‘inter-jurisdictional normalisation’ to facilitate the comparison of laws across different national legal systems.

The researchers suggest the extension of their approach to other states and other domains of environmental law such as for air water quality (see Kingston, Wang, Alblas, Callaghan, Foulon, Daly, et al. 2022, 812).

¹² The use of the term ‘architectures’ is from (Heyvaert 2018, 31).

Information sources

Future research would benefit from engaging with a wider range of information sources. A list of recommended source types is included below.

Academic sources identified in this study

Many of the sources identified in this study have conducted their own literature reviews and comparative analyses, and these sources and their underlying data, when available, would be beneficial in future research. As previously noted, the development of the NGI and NGEI are significant examples. This research is the outcome of a [European Research Council project](#).

AC national implementation reports

The [national implementation reports](#) provide a useful overview of the policy approaches to compliance undertaken by each party to the AC. As above, this information has been described as patchy and incomplete, but it relies on a standardised format and can facilitate comparative analysis.

AC synthesis reports

The AC Secretariat publish a '[synthesis report](#)' in response to the national implementation reports for the consideration of the MoP.

EU national and synthesis reports

In-depth national and synthesis reports and information overviews have been undertaken in response to direction by EU bodies and institutions. Several such resources are available at the '[Convention and the EU](#)' webpage. Prominent examples include:

- [Public-facing webpages on the European-Justice Portal on access to justice in environmental matters](#);

- The '[Study on EU implementation of the Aarhus Convention in the area of access to justice in environmental matters](#)' (2019) or so-called 'Milieu Reports';
- [Synthesis reports on implementation of Articles 9.3 and 9.4 of the Aarhus Convention](#) (2012 and 2013);
- The [Environmental Governance Assessment](#) (2017).

The webpage also makes reference to the 'Commission's expert group on Aarhus Implementation'. Further information can be found in the [minutes and summary reports](#) resulting from this group's meetings.

ACCC documents

Extensive documentation is provided on each communication made to the ACCC. This is available in the recorded [communications from the public](#). Where a decision has been adopted by the Compliance Committee, the decision is also posted here. UNECE then records all [decisions adopted by the MoP](#).

MoP compliance review process documents

As stated prior, ACCC Chair Áine Ryall notes that "an increasing amount of the Compliance Committee's time and resources are now devoted to reviewing the implementation of decisions of the Meeting of the Parties (MOP) on individual Parties' compliance" and that "[t]he Committee's reports, and progress reviews, on the implementation of MOP decisions provide valuable guidance on what compliance with the Convention's provisions in practice requires"(Ryall 2023, 164). These resources are available for the [most recent MoP in October 2021](#).

Aarhus Clearing House / Aarhus Centers

The '[Aarhus Clearing House](#)' exists to collect information relevant to the AC rights at a national, regional, and global level. 'Aarhus Centres' also provide an infrastructure for the review and development of approaches to compliance with the AC. There are 60 such Aarhus Centres, spread across 15 countries. These are clustered in Eastern Europe (Belarus, Moldova and Ukraine), South-eastern Europe (Albania, Bosnia and

Herzegovina, Montenegro, North Macedonia and Serbia), the South Caucasus (Armenia, Azerbaijan and Georgia), and Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan). The Organization for Security and Co-operation in Europe (OSCE) provide an [introduction to Aarhus Centres](#).

Civil society actors

As stated previously, there is extensive engagement and analysis with the AC provisions in Scotland and the UK by a broad range of civil society actors, which can be found in a wide range of publications. Some relevant organisations that have made recent representations to the ACCC related to Scotland and/or the UK are included below. As also noted, many of these organisations are members of:

- [Environmental Rights Centre for Scotland](#)
- [Friends of the Earth Scotland](#)
- [Royal Society for the Protection of Birds](#)
- [Planning Democracy](#)
- [WWF UK](#)
- [Greenpeace UK](#)
- [Green Alliance](#)
- [Sustain](#)
- [Trade Justice Movement](#)
- [Compassion in World Farming](#)
- [Tenant Farmer's Association](#)
- [Soil Association](#)

Legal sources

As previously noted, it would be beneficial to engage with legal sources that are not published in academic journals or edited collections, whether in the form of legislation, case law, legal communications, practice notes, blogs, reports, or other outputs. Many of these legal sources are collected in legal databases such as those provided by Lexis+ UK, Practical Law, Westlaw UK, and Hein Online, which also provide proprietary content on the status of the AC.

Keywords and research questions

A more expansive approach could rely on developing keywords and/or specific research questions that relate to the individual rights proposed in the AC or to individual measures that have been used to implement those rights.

Methods

Additional methods could be utilised alongside or instead of the desk-based research undertaken. In the first instance, the study would benefit from broader engagement with stakeholders. Such engagement could have included using additional approaches to the acquisition of information. For example, future research could benefit from engagement through information requests (as seen in the development of the NGI and NGEIs) or surveys (as seen in the development of the 2012 and 2013 synthesis reports on implementation of articles 9.3 and 9.4 of the AC).

More widely, interviews and/or workshops could have helped to provide insight on context in Scotland, established priorities for analysis, and developed recommendations as a result of the research.

5 Annex A: Article contribution by theme

5.1 Investigating effectiveness

Source	Title	Geographies	Contribution
Mason M, 2014, Transpar In Global Environmental Gov: Critical Perspectives	'So Far But No Further? Transparency and Disclosure in the Aarhus Convention'	EU	Provides comparison of national approaches to transparency and information disclosure as part of overall argument concerning role of marketisation trends on emergence and institutionalisation of AC.
Whittaker S, 2019, J Environ Law	'Back to Square One: Revisiting How We Analyse the Right of Access to Environmental Information'	UK	Argues that the way we conceptualise the right to access information is informed by the AC to the extent that we ignore other ways of conceptualising it (e.g. proactive rather than reactive provision).

Source	Title	Geographies	Contribution
Kingston S, 2022, Int Envir Agreem Polit Law Econ-A	'The Democratisation of European Nature Governance 1992–2015: Introducing the Comparative Nature Governance Index'	EU, France, Netherlands, Ireland	Uses quantitative legal research to compare democratisation of environmental law in the EU envisioned in the AC, with a focus on France, the Netherlands and Ireland.
Kingston S, 2022, Int Envir Agreem Polit Law Econ	'Europe's Nature Governance Revolution: Harnessing the Shadow of Heterarchy'	France, Ireland, Netherlands	Develops 'Nature Governance Effectiveness Indicators' and tests these in France, Ireland and the Netherlands and argue this shows how AC provisions are not being used consistently across different contexts.
Kingston S, 2021, Regul Governance	'Magnetic Law: Designing Environmental Enforcement Laws to Encourage Us to Go Further'	France, Ireland, Netherlands	Suggests that enforcement of Aarhus rights is not necessarily improving outcomes, informed by interviews with farmers, landholders, ENGOs, and the public, and suggests ways laws can better facilitate changes in social norms.

Source	Title	Geographies	Contribution
Ryall A, 2023, J Environ Law	'A Brave New World: the Aarhus Convention in Tempestuous Times'		Provides a commentary on key issues of concern in the implementation of the Aarhus rights, specifically protections for environmental defenders, pandemic impacts on participation, the AC rights during war, and pressure on AC rights from calls to speed up decision making.
Kingston S, 2023, Ecol Econ	'How Do Nature Governance Rules Affect Compliance Decisions? an Experimental Analysis'		Identifies a lack of empirical analysis on effectiveness of AC rules as new generation of 'private' environmental governance rules and uses experimental analysis to argue that a combination of traditional and private rules increases efficacy of outcomes.

5.2 Comparing approaches

Source	Title	Geographies	Contribution
Peña Ng, 2019, Advocating Social Change Through International Law: Exploring The Choice Between Hard And Soft International Law	'The Hard Choices in Promoting Environmental Access Rights'		Traces development of the three rights in international law with reference to AC, Ezcahu, Bali Agreement and earlier international agreements.
Unnerstall H, 2008, J Eur Environ Plan Law	'Public Participation in the Establishment and Management of the Natura 2000 Network-Legal Framework and Administrative Practices in Selected Member States'	EU, Netherlands, Italy, Finland, France, Germany	Compares legal and administrative approaches to public participation in the development of the Natura 2000 network.
Luis Miralles I Garcia J, 2008, Proceedings Of The 1St Wseas International Conference On Landscape Architecture (La `08): New Aspects Of Landscape Architecture	'Landscape Management. Case Study: The Situation in the Autonomous Community of Valencia (Spain)'	Spain	Outlines how AC obligations for public participation are operationalised in landscape planning following the European Landscape Convention.

Source	Title	Geographies	Contribution
Bodiguel L, 2010, The Regul Of Genet Modif Org: Comp Approaches	'Genetically Modified Organisms and the Public: Participation, Preferences, and Protest'	UK	Compares legislative frameworks on governance of agricultural biotechnology in AC, Cartagena Protocol, African Union, US, UK and New Zealand.
Banas Pa, 2010, Environ Policy Gov	'International Ideal and Local Practice - Access to Environmental Information and Local Government in Poland'	Poland	Outlines application of rights to access information at lowest governance level in Poland with reference to e-government and urban/rural divides.
Peeters M, 2020, Chin J Environ Law	'Judicial Enforcement of Environmental Democracy: A Critical Analysis of Case Law on Access to Environmental Information in the European Union'	EU	Calls for comparative analysis of the application of environmental democracy and therefore traces how AC approaches access to information, making some comparisons with e.g. Ezcahu.
Mauerhofer V, 2016, Land Use Policy	'Public Participation in Environmental Matters: Compendium, Challenges and Chances Globally'		Provides the results of a global literature review on approaches to the three AC pillars in the five continental regions.

Source	Title	Geographies	Contribution
Dios M, 2012, Wit Trans Ecol Environ	'Evaluation of the E-PRTR Emissions Inventory: the Galician Case'	Spain, Galicia	Presents approach to emissions inventories in Galicia.
Formosa S, 2012, Lect Notes Comput Sci	'Taking the Leap: From Disparate Data to A Fully Interactive SEIS For the Maltese Islands'	Malta	Presents national project to develop a Shared Environmental Information System (SEIS) in response to AC information provisions.
Epstein Y, 2013, J Eur Environ Plan Law	'The Wild Has No Words: Environmental NGOs Empowered to Speak For Protected Species as Swedish Courts Apply EU and International Environmental Law'	Sweden	Outlines development of procedural law in Sweden in view of AC and eventual granting of standing to ENGO in case concerning hunting (which was not under Sweden's Environmental Code), enabling legal challenge under Habitats Directive.

Source	Title	Geographies	Contribution
Schall C, 2008, J Environ Law	'Public Interest Litigation Concerning Environmental Matters Before Human Rights Courts: A Promising Future Concept?'	Europe, America, Africa	Compares basis for public interest legislation in regional human rights bodies in Europe, Africa, and America and affirms AC as a model for developing a multilateral treaty based on substantive environmental rights with an environmental court.
Braig Kf, 2022, J Eur Environ Plann Law	'Playing Second Fiddle to the Aarhus Convention: Why the ECtHR Can and Should Go Further'		Outlines how jurisprudence of ECtHR goes further than AC in some respects, outlining several additional procedural rights relating to the environment.
Formosa S, 2013, Int J Geoinformatics	'One Small State's Preparation For Climate Change: Building an Integrated Socio-Technic Informational Infrastructure'	Malta	Outlines integration of environmental, spatial planning and social data in shared environmental information system.

Source	Title	Geographies	Contribution
Somarakis G, 2014, Future Internet	'Public Involvement in Taking Legislative Action as to the Spatial Development of the Tourist Sector in Greece-the ``Opengov'' Platform Experience'	Greece	Outlines use of ICT platforms to facilitate public participation in development of tourism sector in Greece.
Peters B, 2018, J Environ Law	'Unpacking the Diversity of Procedural Environmental Rights: The European Convention on Human Rights and the Aarhus Convention'	EU	Compares procedural environmental rights in AC and ECHR and argues these are very different.
Mason M, 2014, Transpar In Global Environmental Gov: Critical Perspectives	'So Far But No Further? Transparency and Disclosure in the Aarhus Convention'	EU	Provides comparison of national approaches to transparency and information disclosure as part of overall argument concerning role of marketisation trends on emergence and institutionalisation of AC.
Etemire U, 2014, Trans Environ Law	'Public Access to Environmental Information: A Comparative Analysis of Nigerian Legislation With International Best Practice'	Nigeria	Compares Nigerian Freedom of Information (FOI) Act (2011) with access to information provisions of the AC

Source	Title	Geographies	Contribution
Durling J, 2014, Inst Chem Eng Symp Ser	'Developing Options For Providing COMAH Site Information to the Public, Under the SEVESO III Directive'	UK	Outlines regulator's proposals for providing information pursuant to 2015 updates to the Control of Major Accident Hazards (COMAH) regulations derived from transposing the SEVESO III directive.
Agudo Gonzalez J, 2014, Eur Public Law	'The Implementation of the Aarhus Convention in Spain: Progresses and Paradoxes'	Spain	Compares AC rights pre- and post-implementation of AC and identifies steps forward and backward, finding progress from the audit alteram partem principle in access to information and steps backward in participation and access to justice
Elia Antonio M, 2014, Leg Issues Econ Integr	'Collective Redress in Environmental Matters in the EU: A Role Model Or A 'Problem Child'?'	EU	Provides an overview of mechanisms for collective litigation in EU member states.

Source	Title	Geographies	Contribution
Drenovak-Ivanovic M, 2015, Transylv Rev Adm Sci	'The Development of the Right to Public Participation in Environmental Matters as a New Concept of Administrative Decision Making in Serbia'	Serbia	Assesses proposals for standing of collective interest representatives in draft of new General Administrative Procedural Act (GAPA) in Serbia.
Ofak L, 2015, Judicial Application Of International Law In Southeast Europe	'Application of the Aarhus Convention in Southeast Europe'	Albania, Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Slovenia, Serbia	Reviews application of AC in South East Europe including in view of monistic approach to law whereby international treaties have equivalent status to national law.
Squintani L, 2016, J Eur Environ Plann Law	'Judicial Protection Against Plans and Programmes Affecting the Environment: A Backdoor Solution to get an Answer From Luxembourg'	Netherlands, Germany, EU	Argues that the EU lacks a sufficient basis for access to justice in context of regulatory plans and programmes required by 9(3), highlights the importance of this given shift to 'programmatic approach' by member states, and evidences different approaches to this in Netherlands, Germany and EU institutions.

Source	Title	Geographies	Contribution
Okubo N, 2016, Land Use Policy	'The Development of the Japanese Legal System For Public Participation in Land Use and Environmental Matters'	Japan	Outlines the development of the Japanese legal system for land use and environmental matters before and after the Rio Summit, highlighting a strong voluntarist ethos, and advocates a combination of rights and voluntarist-based approaches.
Mauerhofer V, 2016, Land Use Policy-A	'Judicial Perspectives From the European Union For Public Participation in Environmental Matters in East Asia'	EU, East Asia	Reviews legislation and case law implementing AC in EU in order to consider implications for East Asian regional integration initiatives.
Whittaker S, 2017, Trans Environ Law	'The Right of Access to Environmental Information and Legal Transplant Theory: Lessons From London and Beijing'	England, China	Proposes use of 'legal transplant theory' to compare and contrast England and China's approach to AC rights and identify cross-learning in area of definition of 'public authorities' and exceptions to the right to access information.

Source	Title	Geographies	Contribution
Etemire U, 2016, J Environ Law	'Insights on the UNEP Bali Guidelines and the Development of Environmental Democratic Rights'		Compares articles of AC and UNEP 'Guidelines for the Development of National Legislation on Information, Public Participation and Access to Justice in Environmental Matters' (Bali Guidelines).
Zuluaga J, 2017, Rev Eur Comp Int Environ Law	'Access to Environmental Information From Private Entities: A Rights-Based Approach'	Colombia, South Africa	Outlines applications of rights-based approaches in a range of jurisdictions for access to environmental information from private companies.
Fraenkel-Haeberle C, 2018, Rev Catalana Dret Public	'Direct and Indirect Europeanisation of National Administrative Systems. Implementation and Spillover Effects of the Environmental Information Directives in A Comparative Perspective'	France, Germany, Italy	Traces transposition of environmental information directive and analyses implementation of access to information in national legal systems of France, Germany and Italy.

Source	Title	Geographies	Contribution
Barral V, 2018, Int Comp Law Q	'Towards Judicial Coordination For Good Water Governance?'		Conducts comparative analysis of procedural applications of human rights and environmental law concerning the right to water, and identifies opportunity for cross-fertilisation.
Hassenforder E, 2019, Int J Water Resour Dev	'What's the Middle Ground? Institutionalized Vs. Emerging Water-Related Stakeholder Engagement Processes'	Netherlands, USA, Uganda, Ethiopia	Proposes ways to integrate top-down and bottom-up stakeholder engagement processes based on experiences of four countries.
Keller D, 2019, Era Forum	'EU Environmental Impact Assessment: Frequently Asked Questions By Domestic Legal Practitioners'	EU	Includes overview of how EU states are set to adjust notions of subjective right or sufficient interest so as to provide for NGO standing in EIA processes given requirements of AC.

Source	Title	Geographies	Contribution
Jendroška J, 2012, J Eur Environ Plann Law	'Citizen's Rights in European Environmental Law: Stock-Taking of Key Challenges and Current Developments in Relation to Public Access to Information, Participation and Access to Justice'	Europe	Provides overview of legal status of AC and analysis of issues facing delivery of AC rights at EU and national level informed by ACCC and other sources.
Harris Me, 2021, The Transformation Of Environmental Law And Gov: Risk, Innovation And Resil	'Resilience and Access to Climate Justice'		Compares AC provisions with multiple examples deemed to foster climate resilience, e.g. citing use of actio popularis in South Asia and advocates for broader understanding of public interest litigation.
Keller M, 2020, Era Forum	'National Court Review in Environmental Matters: Part of the Problem Or Part of the Solution?'	EU, Austria, Czech Republic, Germany, France, Sweden, Italy	Compares national systems in Austria, Czech Republic, Germany, France, Sweden, Italy with respect to the application of EU environmental law.

Source	Title	Geographies	Contribution
Pocuca M, 2018, Ekon Poljopr	'The Analysis of the Aarhus Convention in the Context of Good Environmental Governance'	Serbia	Outlines legislation that transposes AC requirements in Serbia.
Stec S, 2019, J Environ Law	'The Escazú Agreement and the Regional Approach to Rio Principle 10: Process, Innovation, and Shortcomings'	Latin America and the Caribbean	Provides an overview of the Escazú agreement and a comparison of the AC where appropriate.
Tilling S, 2013, Era Forum	'Access to Commercially Sensitive Environmental Information'	England	Identifies learnings from the approach to balancing access to environmental information with the right to protest commercially sensitive information.
Kingston S, 2022, Int Envir Agreem Polit Law Econ-A	'The Democratisation of European Nature Governance 1992–2015: Introducing the Comparative Nature Governance Index'	EU, France, Netherlands, Ireland	Uses quantitative legal research to compare democratisation of environmental law in the EU envisioned in the AC, with a focus on France, the Netherlands, and Ireland.

Source	Title	Geographies	Contribution
Kingston S, 2022, Int Envir Agreem Polit Law Econ	'Europe's Nature Governance Revolution: Harnessing the Shadow of Heterarchy'	France, Ireland, Netherlands	Develops 'Nature Governance Effectiveness Indicators' and tests these in France, Ireland and the Netherlands and argue this shows how AC provisions are not being used consistently across different contexts.
Danthinne A, 2022, Rev Eur Comp Int Environ Law	'Justifying A Presumed Standing For Environmental NGOs: A Legal Assessment of Article 9(3) of the Aarhus Convention'	EU, Belgium, Netherlands, Germany	Outlines how some states and national courts have used generous wording of 9(2) in interpretation of 9(3), thus according greater standing for ENGOS despite 9(3) remaining vague on this point.

Source	Title	Geographies	Contribution
Fitzmaurice M, 2016, The Glob Community Yearb Of Int Law And Jurisprud 2015	'A Human Right to A Clean Environment: A Reappraisal'		Reviews status of various international agreements on human rights/environment and suggests approach to substantive right to a clean environment in courts and tribunals very different to the practice of states and suggests a focus on ensuring procedural rights in the AC.
Duyck S, 2015, Rev Eur Comp Int Environ Law	'Promoting the Principles of the Aarhus Convention in International Forums: The Case of the UN Climate Change Regime'	EU	Reviews 2005-15 progress in promoting principles of AC in international forums following the agreement of Almaty Guidelines for this in 2005, including actions of parties (e.g. on implementation of Art. 6 of UNFCCC, UNFCCC processes more generally)

Source	Title	Geographies	Contribution
Van Wolferen M, 2020, Research Handb On Eu Environmental Law	'Access to Justice in Environmental Matters in the EU: The Eu's Difficult Road Towards Non-Compliance With the Aarhus Convention'	EU	Analyses view expressed by EU that access to justice will be achieved mainly at national level in terms of implications for approaches to compliance.
Barritt E, 2020, Research Handb On Transnatl Environmental Law	'Global Values, Transnational Expression: From Aarhus to Escazú'		Compares distinctive characteristics of AC and Escahu Agreement.
Leonelli Gc, 2021, Yearb European Law	'Access to the EU Courts in Environmental and Public Health Cases and the Reform of the Aarhus Regulation: Systemic Vision, Pragmatism, and a Happy Ending'	EU	Provides an overview of the revised Aarhus Regulation and argues that the scope of this - 'all non-legislative acts' is the most important change in relation to the compliance of the EU with the AC.

Source	Title	Geographies	Contribution
Ryall, 2011, J Environ Law	'Access to Environmental Information in Ireland: Implementation Challenges'	Ireland	Argues that the establishment of Commissioner for Environmental Information has been a valuable extra-judicial mechanism for Ireland's delivery of rights under the 2003 Directive on public access to environmental information and that this has highlighted "deficient administrative practices, poor enforcement and weak judicial control" in Ireland's delivery of these rights.
Kingston S, 2013, European Perspectives On Environmental Law And Gov	'European Perspectives on Environmental Law and Governance'	Ireland, EU	Includes chapters on enforcement of AC in EU law and three chapters on enforcement of AC and other EC law in Ireland.

Source	Title	Geographies	Contribution
Kingston S, 2021, Regul Governance	'Magnetic Law: Designing Environmental Enforcement Laws to Encourage Us to Go Further'	France, Ireland, Netherlands	Suggests that enforcement of Aarhus rights is not necessarily improving outcomes, informed by interviews with farmers, landholders, ENGOs, and the public, and suggests ways laws can better facilitate changes in social norms.
Koniuszewska E, 2021, J Eur Environ Plan Law	'Legal Guarantees of Public Participation in Spatial Planning and Development'	Poland	Outlines Poland's approach to participation in spatial planning and suggests potential improvements for substantive as well as procedural engagement.
Vanhala L, 2013, Representation	'Civil Society Organisations and the Aarhus Convention in Court: Judicialisation From Below in Scotland?'	Scotland	Outlines processes of legal mobilisation among ENGOs and civil society groups using the Aarhus Convention and traces impacts in judicial institutionalisation i.e. greater role of judges and law in outcomes in Scotland.

Source	Title	Geographies	Contribution
Michalak M, 2021, J Eur Environ Plann Law	'The Aarhus Convention and Polish Regulations Concerning Parties to Proceedings For Issuing the EIA Decisions'	Poland	Outlines focus on 'legal interest' in approach to standing in Poland's Code of Administrative Procedure and describes consensus derived from administrative law on determination of legal interest in the country.
Mangold Ak, 2014, Indian J Global Leg Stud	'The Persistence of National Peculiarities: Translating Representative Environmental Action From Transnational Into German Law'	Germany	Argues that national peculiarities persist when conducting legal translations of AC provisions, using Germany's 19C notion of an 'individual public right' as example.
Graver Hp, 2017, Front Law China	'Business Enterprises and the Environmental Information Act in Norway'	Norway	Outlines Norwegian access to environmental information act that is said to go further than AC provisions, including in access to environmental information from private entities.

Source	Title	Geographies	Contribution
Kalisz A, 2021, Stud Iuridica Lublinensia	'Right to Court in Climate Matters in the Light of the Aarhus Convention and the Case Law of Polish Administrative Courts'	Poland	Outlines application of AC in case law of Polish Supreme Administrative Court, noting that while the treaty is directly applicable under Polish law the wording of the Convention precludes such direct application.
Gieseke U, 2020, J Eur Environ Plann Law	'The Aarhus Convention in Practice: Challenges and Perspectives For German Environmental Authorities'	Germany	Provides a general overview of several administrative challenges that Germany has faced in implementing the Aarhus rights.
Hadjiyianni I, 2020, European Public Law	'Multi-Level Governance in Action: Access to Justice in National Courts in Light of the Aarhus Convention'	EU, Cyprus	Uses Cypriot case study to advocate for move away from restrictive interpretation of standing.
Toshboeva Rs, 2022, Environ Ecol Res	'Environmental Information and Management of Ensuring Access to It (On the Example of Uzbekistan)'	Uzbekistan	Advocates accession of Uzbekistan and conducts comparative analysis of article 4 with laws and civil code of the country.

Source	Title	Geographies	Contribution
Rasquin C, 2021, Law Dev Rev	'Unlocking Legal Gridlock in High-Income Countries: How Excessive Litigation Hampers Growth and Harms Democracy'	Germany	Provides overview of how Germany approaches standing issues with the aim of overcoming administrative gridlock.
Spoerer M, 2022, Era Forum	'The European Ombudsman's Role in Access to Documents'	EU	Describes how the European Ombudsman, in conjunction with ECJ, has set best practices for enabling access to EU documents.
Inshyn M, 2022, Intereulaweast	'Trade Union Factors in the Implementation of Environmental Policy in Framework with the SDGs, International Environmental Agreements: the Example of the CIS Countries'	Russia, Kazakhstan, Belarus	Provides an overview of how trade unions used the AC and other agreements to engage in the development of the sustainable development goals (SDG) in Commonwealth of Independent States (CIS) countries.

Source	Title	Geographies	Contribution
Weber T, 2023, Rev Eur Comp Int Environ Law	'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'		Analyses the Rapid Response Mechanism for environmental defenders agreed by the AC MoP and outlines how environmental defenders may appeal to the Special Rapporteur established by the mechanism.
Etemire U, 2023, Trans Environ Law	'Public Voices and Environmental Decisions: the Escazú Agreement in Comparative Perspective'	Latin America and the Caribbean	Conducts a comparative analysis of participation provisions of Escazú Agreement in relation to AC and Bali Guidelines.
Etemire U, 2023, J Energy Nat Resources L	'The Escazú Agreement: Public Access to Environmental Information and the Goal of A Sustainable Future'	Latin America and the Caribbean	Analyses 'quality' of provisions in Escazú Agreement and assesses how access to information provisions support its objectives.

Source	Title	Geographies	Contribution
Ohler A, 2021, J Eur Environ Plann Law	'How to Represent the Silent Environment? An Update on Germany's Struggle to Implement Article 9 (3) of the Aarhus Convention'	Germany	Reviews 20 years of development of approach to article 9 (paragraph 3) in Germany, noting that public interest litigation was not possible traditionally in Germany, and identifies continuing issues for concern.
Eliantonio M, 2019, Rev Eur Administrative Law	'The Relationship Between EU Secondary Rules and the Principles of Effectiveness and Effective Judicial Protection in Environmental Matters: Towards A New Dawn For the 'Language of Rights'?'	EU	Discusses member state approaches to procedural rules in context of analysis of CJEU approach to secondary rules.

5.3 Questioning compliance

Source	Title	Geographies	Contribution
Tolsma H, 2009, J Environ Law	'The Rise and Fall of Access to Justice in the Netherlands'	Netherlands	Outlines emergence of right to access courts in the Netherlands for environmental organisations since the 1980s and several steps constraining these rights enacted since 2005 (abolishing actio popularis in 2005, discussion of new standing requirements).
Herman C, 2010, J Eur Environ Plan Law	'Lisbon and Access to Justice For Environmental NGOs: A Watershed? A Case Study Using the Setting of the Total Allowable Catches Under the Common Fisheries Policy'	EU	Assesses approach to standing in Lisbon treaty and its implications for access to justice.
Centner Tj, 2010, Water Resour Manage	'Discerning Public Participation Requirements Under the US Clean Water Act'	USA	Outlines analysis of participation in the development of effluent limitations in the US National Pollutant Discharge Elimination System (NPDES) and suggests public not able to access the rights made available under the AC.
Eliantonio M, 2011, Croat Yearb Eur	'Towards an Ever Dirtier Europe? The Restrictive	EU	Assesses approach to standing in Lisbon treaty and argues that it has not changed access to justice for ENGOS.

Source	Title	Geographies	Contribution
Law Policy	Standing of Environmental NGOs Before the European Courts and the Aarhus Convention'		
Marsden S, 2012, Nord J Int Law	'Direct Public Access to EU Courts: Upholding Public International Law via the Aarhus Convention Compliance Committee'	EU	Reviews EU approach to standing and investigates whether preliminary reference procedure from national courts bypasses these restrictions.
Poncelet C, 2012, J Environ Law	'Access to Justice in Environmental Matters- Does the European Union Comply With Its Obligations?'	EU	Reviews implications for standing in 2009 revisions of the Treaty on the Functioning of the EU and the 2006 Aarhus Regulation and argues that the EU's compliance with the AC is questionable.
Krämer L, 2013, Era Forum	'The EU, Access to Environmental Information and the Open Society'	EU	Argues that EU practice in the area of access to environmental information suggests a closed rather than an open society.
Heffron R, 2014, J Contemp Eur Res	'Challenges to the Aarhus Convention: Public	UK	Suggests that a change in approach to the development of energy policy frameworks in the UK involving a strict implementation of the

Source	Title	Geographies	Contribution
	Participation in the Energy Planning Process in the United Kingdom'		2008 Planning Act challenges rights to participation enshrined in AC.
Schomerus T, 2011, J Eur Environ Plan Law	'Private Bodies as Public Authorities Under International, European, English and German Environmental Information Laws'	UK, Germany	Identifies issues with a lack of definition of private bodies in UK and Germany and advocates the development of a joint statute to resolve the lack of implementation guidance in Germany compared to the UK.
Peeters M, 2014, Rev Eur Comp Int Environ Law	'Climate Change-Related Aarhus Conflicts: How Successful Are Procedural Rights in EU Climate Law?'	EU	Discusses whether approaches to climate change policy of the EU and member states are compliant with the AC.
De Santo Em, 2016, Mar Policy	'Assessing Public "Participation" in Environmental Decision-Making: Lessons Learned From the UK Marine Conservation Zone (MCZ)	UK	Reviews implementation of AC obligations for participation in site-selection process for Marine Conservation Zones.

Source	Title	Geographies	Contribution
	Site Selection Process'		
Stražičar B, 2016, J Radiol Prot	'The Aarhus Convention in the Nuclear Sector - Right to Information Versus Nonproliferation?'		Proposes solutions to potential tensions between AC access to information provisions and the Nuclear Proliferation Treaty (NPT).
Sziebig Oj, 2019, European Stud: Rev European Law, Econ Polit	'The Implementation of the Aarhus Convention's Third Pillar in the European Union - A Rocky Road Towards Compliance'	EU	Traces steps taken by EU institutions to achieve compliance with article 9.
Oelkers K, 2020, Regul Toxicol Pharmacol	'The Accessibility of Data on Environmental Risk Assessment of Pharmaceuticals – Are Environmental Risk Assessments Information on Emissions With Respect to International		Argues that data on active pharmaceutical ingredients reported under environmental risk assessments should be made available to the public in order to achieve compliance with AC article 4.

Source	Title	Geographies	Contribution
	and European Environmental Information Law?’		
Siman M, 2020, Czech Yearb Public Priv Int Law	‘Methods of Application of the Aarhus Convention in the Case-Law of the EU Court of Justice’	EU	Notes that given EU courts do not give AC direct effect the indirect effect of the AC on the way in which regulation is interpreted is the most direct impact of the AC in the EU's case law.
Lanceiro R, 2021, German Law J	‘The Genetically Modified Organisms’ Regime: A Playground For Multi-Level Administration and A Nightmare For Effective Judicial Protection?’	EU	Assesses whether EU approaches to genetically modified organisms (GMO) regulation meet obligations under AC and proposes that holistic judicial review of CJEU allows for compliance despite composite procedures of multiple regimes.
Delarue J, 2021, Era Forum	‘Access to Justice in State Aid: How Recent Legal Developments Are Opening Ways to Challenge Commission	EU	Argues reform is required such that entities that are not market operators can access justice in respect of state aid measures in EU courts, given ACCC findings and relation between internal market and state aid regime.

Source Title Geographies Contribution

State Aid Decisions That May Breach EU Environmental Law'		
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5.4 Identifying innovation

Source Title Geographies Contribution

Švajda J, 2008, Int J Biodiversity Sci Manage	'Participatory Conservation in a Post-Communist Context: The Tatra National Park and Biosphere Reserve, Slovakia'	Slovakia	Proposes recommendations for national approaches emerging from participatory approaches used in the development of a new plan for the Tatra National Park.
Bell K, 2008, Environ Justice	'Achieving Environmental Justice in the United Kingdom: A Case Study of Lockleaze, Bristol'	UK	Outlines recommendations for how local state agencies can facilitate participation of people in deprived communities on issues pertaining to environmental justice.

Source	Title	Geographies	Contribution
D'Silva J, 2010, Stud Ethics Law Technol	'For Me to Know and You to Find Out? Participatory Mechanisms, the Aarhus Convention and New Technologies'	EU	Proposes guidelines for participatory frameworks for development of regulation for new technologies with nanotechnology as an example.
De Santo Em, 2011, Mar Policy	'Environmental Justice Implications of Maritime Spatial Planning in the European Union'	UK, EU	Suggests that procedural links between human and environmental rights could be developed in EU marine spatial planning through participation of ENGOs enabled by Aarhus Convention, informed by UK case study.

Source	Title	Geographies	Contribution
Ivanovic Md, 2011, Eur Energy Environ Law Rev	'Implementation of the Aarhus Convention in Serbia'	Serbia	Proposes a series of model bylaws and mechanisms for local government units to implement the AC, including through establishing a 'Green Ombudsman' and a 'Green Telephone', and the establishment of an Environmental Protection Council (Green Council) at a national level to monitor local government compliance.
Heriard-Dubreuil G, 2016, Radioprot	'Supporting People Building Their Own Response to the Consequences of A Nuclear Accident: Complexity Management, Trust and the Aarhus Convention'		Outlines use of trust to address complexity in approach to compliance with AC requirement for dissemination of information in event of threats to environment and health.

Source	Title	Geographies	Contribution
Von Essen E, 2017, Env Commun	'Solidarity Between Human and Non-Human Animals: Representing Animal Voices in Policy Deliberations'		Assesses how non-human animals can be represented by NGOs.
Leonelli Gc, 2019, Maastricht J Eurcomp Law	'GMO Authorisations and the Aarhus Regulation: Paving the Way For Precautionary GMO Governance?'	EU	Proposes how ENGOS can take steps to encourage the EU to adopt a socially acceptable risk approach to the governance of GMOs.
Suman Ab, 2021, J Eur Environ Plann Law	'Citizen Sensing From A Legal Standpoint: Legitimizing the Practice Under the Aarhus Framework'	Japan, Italy,	Argues that practice of citizen sensing is provided a legal basis by AC articles on access to accurate environmental information.
Akrofi Df, 2022, European J Legal Stud	'Reconsidering Approaches Towards Facilitating Non-State Actors' Participation in the Global Plastics Regime'		Proposes ways to operationalise Rio Declaration article 10/AC rights in formulation of a multilateral environmental agreement (MEA) specifically the proposed global plastics treaty.

Source	Title	Geographies	Contribution
Suman Ab, 2023, Citiz Sci Theory Practice	'When Concerned People Produce Environmental Information: A Need to Re-Think Existing Legal Frameworks and Governance Models?'	EU	Proposes a fourth right of 'meaningfully contributing data' under the AC and outlines how this could be operationalised.

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CONTACT

Environmental Standards Scotland
Thistle House
91 Haymarket Terrace
Edinburgh
Scotland
EH12 5HD

E-mail: enquiries@environmentalstandards.scot

Telephone: 0808 1964000

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