

UNITED  
NATIONS



**Economic and Social  
Council**

Distr.  
GENERAL

ECE/MP.PP/WG.1/2006/5/Add.1  
9 February 2006

Original: ENGLISH

**ECONOMIC COMMISSION FOR EUROPE**

**Meeting of the Parties to the  
Convention on Access to Information,  
Public Participation in Decision-making and  
Access to Justice in Environmental Matters**

**Working Group of the Parties to the Convention  
(Sixth meeting, Geneva, 5–7 April 2006)  
(Item 7 of the provisional agenda)**

**Draft Guidance for National Nodes  
of the Clearinghouse Mechanism<sup>†</sup>**

At its first meeting (Geneva, 7–8 February 2013), the Aarhus Convention Task Force on Access to Information requested the secretariat in consultation with the Chair to update as necessary the draft Guidance for National Nodes of the Clearinghouse Mechanism (ECE/MP.PP/WG.1/2006/5/Add.1) and to submit its revised version for consideration by the Task Force at its next meeting (Geneva, 16-17 December 2013).

Parties, Signatories and other stakeholders are invited to consider this revised document and present comments **before 10 March 2014** to the secretariat ([public.participation@unece.org](mailto:public.participation@unece.org)) indicating in the subject line “Comments to the Draft Guidance for national nodes from [Party/Signatory/Organisation]”.

<sup>†</sup> ~~This document was submitted on the above date due to the need to hold in-depth consultations concerning the text with a number of leading experts on the topics covered by this guidance.~~

## CONTENTS

- I. Introduction: The Aarhus Clearinghouse Mechanism
- II. Goal of the Clearinghouse
- III. Role of national nodes
- IV. National node terms of reference
  - A. Site structure
  - B. Content attributes
  - C. Citation information
  - D. Search mechanism

### ~~V. For more information~~

#### Annex 1: Technical brief

- A. Technologies
- B. Architecture
- C. Implementation
- D. Content features
  - 1. What? How? Who? Where?
  - 2. Assigning and accessing content attributes
  - 3. Convention News
  - 4. New Resources
  - 5. Resource directory entries
  - 6. National reports
  - 7. Calendar
  - 8. Help page
  - 9. Rich Site Summary Feeds
  - 10. Sharing resources and news via on-line social media tools
  - 11. About the Clearinghouse
  - 12. Terms of use and disclaimers

#### ~~Annex 2: Preparing reference citations in Microsoft Excel or XML format~~

- ~~Reference citations in Microsoft Excel~~
- ~~Reference citations in XML~~
- ~~Content attributes and keywords~~

## I. INTRODUCTION: THE AARHUS CLEARINGHOUSE MECHANISM

1. The Aarhus Clearinghouse for Environmental Democracy<sup>2</sup> (Aarhus Clearinghouse) provides information to a wide range of users, including Parties or Signatories to the Convention on

---

<sup>2</sup> Available from <http://aarhusclearinghouse.unece.org>

Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention); other states; intergovernmental organizations (IGOs); nongovernmental organizations (NGOs); students and researchers; and other members of the public. By its design, it facilitates the exchange of information between diverse parties and stakeholders.

2. ~~A “clearing house” is a mechanism that brings together seekers and providers of goods, services or information, thus matching demand with supply.~~ The Aarhus Clearinghouse Mechanism comprises:

- (a) UNECE secretariat staff assigned to ~~the content management of the service—the Convention’s information pillar~~ Aarhus Clearinghouse (the “central node”);
- (b) Administrators designated by the Parties or Signatories to the Convention and responsible for compiling and communicating legal and practical information on issues related to the Convention at the national level, linked to the Aarhus Clearinghouse ~~for Environmental Democracy~~ (the “national node”);
- (c) Other stakeholders involved in the production and exchange of information related to the Convention’s implementation; and
- (d) Technical infrastructure underlying this information exchange, such as software, Internet sites and email.

~~2. The most visible part of the technical infrastructure is the Aarhus Clearinghouse for Environmental Democracy (<http://aarhusclearinghouse.unece.org>). It provides information on demand to a wide range of users, including Parties or Signatories to the Aarhus Convention; other states; intergovernmental organizations (IGOs); nongovernmental organizations (NGOs); students and researchers; and the general public. By its design, it facilitates the exchange of information between diverse parties and stakeholders.~~

3. This document provides guidance ~~is written for~~ administrators of the national nodes of the Aarhus Clearinghouse. The guidance provides a broad framework under which countries can add value to their existing systems or establish new websites in fulfillment of decision II/3 adopted by the Meeting of the Parties to the Convention at its second session.

4. The Aarhus Clearinghouse website was developed by UNECE in cooperation with GRID-Arendal, with the support of the Government of Norway.

## II. GOAL OF THE CLEARINGHOUSE

5. The goal of the Clearinghouse Mechanism is to facilitate, through the use of electronic tools, the useful sharing of national and international information related to access to information, public participation and access to justice in an efficient, simple and well-structured manner.

## III. ROLE OF NATIONAL NODES

6. As is set out in decision II/3, Parties, Signatories and other interested States are recommended:

(a) To maintain a national website with information related to the nationwide implementation of the Convention. ~~This site will serve~~ as the national node of the Convention's Aarhus Clearinghouse Mechanism;

~~(b) They are also recommended~~ To designate contact points responsible for collecting, managing and updating the information contained in the national node and for providing the necessary information for the central node of the Convention's Clearinghouse Mechanism; ~~and~~

(c) To undertake to disseminate information to the public on the Clearinghouse Mechanism;

(d) To develop capacity for public officials managing and updating information for the national node, and for providing the necessary information for the central node of the Clearinghouse Mechanism.

7. Development of the Clearinghouse Mechanism at the national level is to be considered in the light of identified capacity-building needs and specific user requirements. ~~Many countries have yet to designate a national node. As a first step, it is recommended that they do so.~~

8. The national nodes may also be used to link information on local and national activities, including information provided by NGOs and other bodies to the Aarhus Clearinghouse for Environmental Democracy managed by the UNECE secretariat. This linkage facilitates the exchange of good practices in implementing the Convention within the UNECE region and globally on principle 10 of the Rio Declaration on Environment and Development. Easy access to information on how countries have implemented the Aarhus Convention can provide an invaluable source of inspiration for other countries that are working to develop their own procedures, mechanisms and legislation.

9. Information should be, in principle, submitted-made available in one of the three official languages of the UNECE: English, French or Russian but it can be also uploaded in other languages.

#### IV. NATIONAL NODE TERMS OF REFERENCE

##### ~~1A.~~ Site structure

10. The national focal points and technical developers are free to decide on the visual design and content of a country's Aarhus Web presence. The design of national websites will reflect national requirements and circumstances. Relevant factors include the capacity and needs of individual states, as well as the relationship between the designated national node for the Convention and the more general allocation of responsibilities in national administrations for overall control of the content and format of Web-based information. However, the following possible features cover the broad areas of information that will provide compatibility with the design of the UNECE's central node.

11. Recommended items for the national node home pages are listed below: ~~The most important components are the resource directory and the search facility.~~

(a) Resource directory ~~(the main body of Clearinghouse content)~~; with content items described according to common content attributes in section B;

(b) News;

- (c) Calendar (Convention-related activities in the countries);
- (d) Search;
- (e) Text of the Convention **and its amendment** in the national language(s);
- (f) Text of the Protocol on Pollutant Release and Transfer Registers to the Convention in the national language(s);
- (g) Information on implementation (national implementation reports)
- (h) Information on compliance (findings and recommendations of the Compliance Committee, decision(s) of the Meeting of the Parties to the Convention on compliance by an individual Party with its obligations under the Convention, information on implementation of such decision(s), as relevant);
- (i) English and local language switch button;
- (j) National coordinator, focal points for the Convention's **and other relevant experts/task forces, working groups and other bodies** (contact details);
- (k) Governmental, non-governmental, academic and other organizations most active in Convention-related activities in the country (contact details, links to websites);
- (l) Date of the last update of the page;
- (m) Link to the Aarhus Clearinghouse;
- (n) RSS feeds: (<http://aarhusclearinghouse.unep.org>)
- (o) Social media and print widgets.

The most important components are the resource directory and the search facility.

12. If requested, GRID-Arendal will provide national nodes with documentation and examples/templates with recommended site components.

## **B2. Content attributes**

13. Each national node should provide references to the documents, relevant activities, and the main policy players supporting the Aarhus Convention.

14. The information resources should include the following:

- (a) Reports on the state of the environment;
- (b) Legislation;
- (c) Policy regulations, procedures and guidelines;
- (d) Jurisprudence;
- (e) Proceedings, handbooks, manuals and methodologies;
- (f) Project descriptions and reports;
- (g) Case studies;
- (h) Other information that facilitates the application of national law implementing this Convention and Protocol on PRTRs.

15. If these documents are available on a publicly accessible server, the national node need only provide basic citation information (including a valid hyperlink reference) for each document (see "Citation information", paragraph 18 below).

16. If a document is not electronically available, the focal point should provide only citation information. Ideally, the information (at least the basic document reference) should be provided in English and/or in the local language.

17. The most important items on the national nodes are the content attributes. These include selected categories through which it will be possible to monitor the implementation of the Aarhus Convention at the national level.

18. Table 1 provides a list of the main content attributes to be included on the national websites and a brief description of each.

Table 1. Content attributes

Foci	Content attribute	Description
<b>What is the goal? Which Pillar?</b>		
Pillar	Access to Information	Includes <u>references to the priority types of environmental information to be disseminated in accordance with decision II/3</u> , guidebooks, methodologies, good practice examples of access to information.
Pillar	Public Participation	Includes <u>references to public participation procedures, projects, awareness raising activities (e.g., campaigns), guidebooks, methodologies and case studies<sup>3</sup> of good practice in public participation matters in both strategic decision-making and decision-making on specific activities as well as using the template<sup>4</sup> training materials, toolkits, guidance and research on participatory processes.</u>
Pillar	Access to Justice	Includes <u>references to</u> information on access to justice, including <u>jurisprudence</u> , articles, guidebooks, methodologies, best practices, projects and other relevant information.
<b>What is the focus?</b>		
Special focus	Pollutant Release and Transfer Registers (PRTR)	Includes references to technical reports, guidebooks, methodologies and good practices in implementation of national PRTRs.
Special focus	Genetically Modified Organisms	Includes references to scientific reports, guidebooks, methodologies and best practices in dealing with <u>access to information</u> , public participation in decision-making <u>and access to justice regarding</u> GMOs.
Special focus	Strategic Decision-making	Includes <u>reference to</u> information related to public participation in environmental decision-making at the strategic level, including relevant legislation, policies and projects.
<u>Special focus</u>	<u>Public Participation in International Forums</u>	<u>Includes reference to information related to public participation in international forums, including case studies of good practice (including policies, projects and practices at both national and international level), training materials, toolkits, guidance and research. relevant legislation, international forums, policies and projects as well as case studies of good practice in public participation</u>

<sup>3</sup> The template to be used for case studies is available from [http://www.unece.org/fileadmin/DAM/env/pp/ppdm/Case\\_studies\\_template\\_PPDM-form\\_final.doc](http://www.unece.org/fileadmin/DAM/env/pp/ppdm/Case_studies_template_PPDM-form_final.doc)

<sup>4</sup> Available from [http://www.unece.org/fileadmin/DAM/env/pp/ppdm/Case\\_studies\\_template\\_PPDM-form\\_final.doc](http://www.unece.org/fileadmin/DAM/env/pp/ppdm/Case_studies_template_PPDM-form_final.doc)

Special focus	Electronic information tools	Includes <u>references to</u> legislation, policy papers, project information, scientific studies and other information on the use of electronic tools to provide access to information to the public and facilitate public participation in environmental decision-making.
<u>What sector?</u>		
<u>Sector</u>	<u>Transport and infrastructure</u>	
<u>Sector</u>	<u>Energy</u>	
<u>Sector</u>	<u>Mining</u>	
<u>Sector</u>	<u>Spatial planning</u>	
<u>Sector</u>	<u>Agriculture</u>	
<u>Sector</u>	<u>Management of chemicals</u>	
<u>Sector</u>	<u>Waste management</u>	
<b>How is it achieved?</b>		
Activity	Legislation	Legislative, regulative and other measures (laws, regulations, etc.) related to the national implementation of the Aarhus Convention.
Activity	Policies	A policy is a set of plans for achieving the goal (e.g. national programmes, action plans, public commitments). This should include items only directly related to the implementation of the Convention or its themes.
<u>Activity</u>	<u>Jurisprudence</u>	<u>Case law of national courts related to the Aarhus Convention.</u>
<u>Activity</u>	<u>Convention Compliance</u>	<u>Text of the Compliance Committee findings and recommendations and decisions of the Meeting of the Parties to the Convention on compliance in the national language, legislative, regulative and other measures undertaken or to be undertaken to implement the decision, as relevant.</u>
Activity	Procedures	A series of steps taken to accomplish an end or a set of established forms or methods for conducting the affairs of an organized body. An example of the former would be guidance for environmental impact assessment; of the latter, a meeting's rules of procedure.
Activity	Projects	<u>It should include only information on projects directly contributing to implementation of the Convention in the countries. <del>Examples include the Tacis project on environment education, information and public awareness and the NIS progress report.</del></u>
Activity	Research	Information on books, articles, studies and academic projects related to the themes of the Convention.
<b>Who is doing it?</b>		
Source	Government	Official information on the national status of implementation of the Convention will be provided primarily by governments, and national nodes will provide gateways to the information stored

		on one or several government websites.
Source	Non-governmental organizations	NGOs often maintain Web pages with relevant information on projects or activities at the national or international level and may become nodes of the Clearinghouse.
<u>Source</u>	<u>Court</u>	<u>On-line available databases contained case law of national and supranational courts related to the Convention</u>
<u>Source</u>	<u>Compliance Committee</u>	<u>Information on Compliance Committee findings and recommendations.</u>
Source	Intergovernmental organizations	IGOs often post on their websites documents or policies related to the Aarhus Convention, and these sites may also become nodes of the Clearinghouse. In many cases, this information will be linked to international projects or relevant developments at the regional or global level.
Source	Academic community	The websites of educational and research institutions often provide relevant information (e.g. articles, studies, academic projects on the themes of the Convention).
<u>Source</u>	<u>Aarhus Centre</u>	<u>An Aarhus eCentre's website may serve as a national node in accordance with this guidance or provide information on the relevant news, activities and documents.</u>

Further information on content attributes appears in Annex I.

### C. Citation information

19. Reference-Citation information for documents and activities (~~e.g. a document's title and publication date~~) may be provided in the following ways:

- (a) By using the Aarhus Clearinghouse online content management system, accessible via the Internet (recommended method);
- ~~(b) By creating a spreadsheet (e.g. Excel) with the citation information included, using a file template provided by the Clearinghouse;~~
- (b) By creating citation text documents in XML using the RSS format<sup>5</sup> and publishing them on a publicly accessible server;
- (c) By emailing the reference information to the Convention's secretariat-a Clearinghouse project officer (see contact details in paragraph 22 below).

20. The citation will normally include the following information:

- (a) Title;
- (b) Description (usually a summary of a document's contents)
- (c) Publisher
- (d) Language
- (e) Date (publication date)
- (f) Subject/keywords (using above-described content attributes)
- (g) Link (URL if document is available online)
- (h) Country.

<sup>5</sup> XML is a markup language for documents containing structured information. RSS is a format for syndicating news and the content of news-like sites. Once information about each item is in RSS format, an RSS-aware programme can check the source for changes and process the changes in an appropriate way on a website.



#### D. Search mechanism

14. Where necessary, GRID-Arendal will provide an easily implemented search mechanism for the national nodes. The mechanism will enable searching of all the resources referenced by the Clearinghouse at the central and national nodes. Implementation of the search mechanism will be very simple, requiring pasting a snippet of code on the search form page.

#### ~~V. FOR MORE INFORMATION~~

~~15. The Aarhus Clearinghouse website was developed by UNECE in cooperation with UNEP/GRID-Arendal (in Arendal, Norway), with the support of the Government of Norway.~~

~~16. For technical information about the Clearinghouse, please contact Mr. Stephen Lapointe, Senior Web Developer, UNEP/GRID-Arendal ([stephen.lapointe@grida.no](mailto:stephen.lapointe@grida.no)).~~

~~17. If you have further questions about the Aarhus Clearinghouse for Environmental Democracy, please contact:~~

~~Mr. Michael Stanley Jones  
Environmental Information Management Officer~~

~~Ms. Ljiljana Stančić  
Associate Environmental Affairs Officer~~

~~Aarhus Convention Secretariat  
Environment, Housing and Land Management Division  
United Nations Economic Commission for Europe  
Bureau 411, Palais des Nations  
1211 Geneva 10  
SWITZERLAND~~

~~E-mail: [aarhus.clearinghouse@unece.org](mailto:aarhus.clearinghouse@unece.org)~~

#### Annex 1

#### A. TECHNICAL BRIEF

1. This technical annex gives an overview of the technologies used by the central node of the Aarhus Clearinghouse, how they are implemented and features of the Clearinghouse's contents.

#### B. TECHNOLOGIES

2. The Aarhus Clearinghouse is a dynamic Web application comprised of two main components:

(a) A public website<sup>6</sup> at <http://aarhusclearinghouse.unece.org><sup>7</sup>

<sup>6</sup> Available from <http://aarhusclearinghouse.unece.org>;

<sup>7</sup> Alternatively, the address <http://aarhusclearinghouse.org> may be used.

(b) An administrative website<sup>8</sup> at <http://aarhuslearinghouse.unece.org/admin>

3. In keeping with best practices in Web development, the website content is separated from the visual design/display, with most of the actual content stored in a SQL database. Server-side scripting<sup>9</sup> is used with page templates to generate the range of content “pages” displayed in browsers.

4. The site depends on the following technologies:

- (a) Macromedia ColdFusion MX 6.1: for server-side scripting, including interaction with the SQL database
- (b) Web server: Windows 2003 Server and Internet Information Services 6
- (c) Microsoft SQL Server 2000: SQL database for storage of site content, management of metadata such as content attributes, tracking of administrators’ user roles and profiles, storage of translated English/Russian terminology, and full-text document searching functionality.

### C. ARCHITECTURE

5. The [Aarhus](#) Clearinghouse website is built around a standard application server<sup>10</sup> architecture. Whenever a client browser makes a request of a Clearinghouse Web page, here’s what happens:

- a. The request is routed from the Web server to the Macromedia ColdFusion application server.
- b. Macromedia ColdFusion processes any server-side logic required for that page, including database queries retrieved from a separate database server, file includes, and user session information.
- c. Once these server-side processes have occurred, the generated file content is passed back to the Web server, which serves the page to the client’s browser.

Note that this whole process takes a fraction of a second.

### D. IMPLEMENTATION

6. Clearinghouse website implementation involves a range of programming components. Following are brief descriptions of the major ones.

#### 1. Resource directory browsing

7. The browsing model is based on faceted classification, rather than hierarchical classification. A faceted classification differs from a traditional one in that it does not assign fixed slots to

<sup>8</sup> Available from <http://aarhuslearinghouse.unece.org/admin>

<sup>9</sup> Server-side scripting is a Web server technology in which a user's request is fulfilled by running a script directly on the Web server to generate dynamic HTML pages. It is usually used to provide interactive websites that interface with databases or other data stores. (~~Explanation from [en.wikipedia.org/wiki/Server\\_side\\_scripting](http://en.wikipedia.org/wiki/Server_side_scripting)~~)

<sup>10</sup> An application server is a server program in a distributed network that provides the execution environment for an application programme. (Explanation from [publib.boulder.ibm.com/infocenter/wxdoc51/topic/com.ibm.wasxd.doc/glossary.html](http://publib.boulder.ibm.com/infocenter/wxdoc51/topic/com.ibm.wasxd.doc/glossary.html).)

subjects in sequence, but uses clearly defined, mutually exclusive and collectively exhaustive aspects, properties or characteristics of a class or specific subject. Such aspects, properties or characteristics are called facets of the class or subject.<sup>11</sup> This method of classifying information leaves room for future development of the Clearinghouse's unique system of classification. It enables the expression of complex relationships and their subsequent retrieval.

8. Each information resource is categorized using four different sets of facets: topic, activity, source, region. When a user filters all directory resources using one facet (e.g. with the source being IGOs), the number of resources matching remaining facets is recalculated appropriately. Users can thus create their own trails of "breadcrumbs"<sup>12</sup> based on their own approaches to this content.

9. A single table in the database is used for all sets of attributes, making the system extremely flexible. A new set of attributes could be added, and most of the existing content management and public website functionality would support that new set of facets.

## **2. Full-text search**

10. Full-text searching is implemented using Microsoft SQL Server's built-in full-text indexing/search functionality.

11. Special ColdFusion scripting has been developed to support various kinds of search functionality, including the display of the snippet containing the document text matching the query term.

## **3. Content management**

12. The content management system offers roles-based editing of the document collection, news items and authorized list of users. The UNECE secretariat can control editing rights by assigning user roles to each national node content manager, or to other authorized users. It is possible to define precisely the areas of a document that each user has the rights to edit.

13. This functionality is implemented with standard Web forms using ColdFusion to enable content storage in the SQL database.

14. Content management session control is handled within ColdFusion, with a table in the SQL database storing basic user authentication information.

## **4. Multilingualism**

15. The Clearinghouse content management site can be used with either an English or a Russian interface. The translated interface terms are stored in a SQL database table, with any required translations being retrieved from the database and made available as ColdFusion variables for use on the page.

---

<sup>11</sup> Wynar, Bohdan S. *Introduction to cataloging and classification*. 8th edition. p. 320.

<sup>12</sup> "Breadcrumbs" are a form of navigation whereby a user's current location within a website is indicated by a list of pages above a given page in the hierarchy, up to the main page (e.g. [Home](#) > [Products](#) > [Clothes](#) > [Shoes](#) > Sneakers).

16. Currently, only the Clearinghouse administrative site has multilingual features. Multilingual features could be added to the public website using the technology that supports the administrative site.

## E. CONTENT FEATURES

### 1. What? How? Who? Where?

17. The Clearinghouse's Resource Directory is designed to be very user-friendly. The home page is dominated by four coloured bars (see box 1 below).

The Aarhus Clearinghouse for Environmental Democracy serves to collect, disseminate, and exchange information on laws and practices relevant to the rights of public access to environmental information, public participation in environmental decision-making, and public access to justice on environmental matters.

The Convention's three pillars make a framework for the public to participate in decisions that directly affect their lives, including in specific areas of public concern, such as GMOs.

Effective public involvement in environmental issues is made possible through adoption of laws, policy development, capacity-building, research, etc.

Different actors, including governments, nongovernmental organisations, and academia, promote public participation in environmental issues.

The clearinghouse showcases information on the Aarhus Convention originating primarily from Europe, but it includes relevant resources from all over the world.

Advanced search...

New Aarhus Convention Task Force to launch consultations on public participation in international forums. 30 Sep 2005

International Policy Fellowships extended deadline announced. 23 Sep 2005

IFC Draft Policy on Disclosure of Information released for public comment. 22 Sep 2005

Europe | Statement of the Council's Reasons on the application of the Aarhus Convention to Community institutions and bodies Council of the European Union, 2005

Europe | Draft EU Recommendation on the application of the provisions of Aarhus Convention to Community institutions and bodies European Parliament, 2005

About the Aarhus Clearinghouse | Contact Us | Terms of Use

Copyright ©2004-2005 UNECE. All rights reserved.

The Aarhus Clearinghouse for Environmental Democracy is a service of the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (the Aarhus Convention), developed under the auspices of the United Nations Economic Commission for Europe (UNECE).

### Box 1. Home page of the Aarhus Clearinghouse for Environmental Democracy (colour bars removed)

Each bar asks a question which readers (users) might bring to their search for information, followed by a brief example. Reading from left to right, these questions are:

#### (a) Which type of resources?

18. Effective public involvement in environmental issues is made possible through adoption of laws, policy development, capacity-building, research and so on.

#### (b) What is the goal/purpose?

19. The Convention's three pillars make a framework for the public to participate in decisions

that directly affect their lives, including in specific areas of public concern, such as GMOs.

**a) How is it achieved?**

~~19. Effective public involvement in environmental issues is made possible through adoption of laws, policy development, capacity building, research and so on.~~

**(c) Who is doing it?**

20. Different actors, including governments, nongovernmental organizations, [Aarhus centres](#) and academia, promote public participation in environmental issues. **(d) Where in the world?**

21. The Clearinghouse showcases information on the Aarhus Convention originating primarily from Europe, but it includes relevant resources from all over the world.

**2. Assigning and accessing content attributes**

22. Below each question is a scroll window containing “content attributes”.<sup>13</sup> These attributes are assigned to the individual resources found in the Directory’s relational database. Table 2 gives a complete list of the first three types of content attributes.

Table 2: Content attributes

Content attributes
<b><u>Which type of resource?</u></b>
<a href="#">Event</a>
<a href="#">Experts</a>
<a href="#">Funding</a>
<a href="#">Jurisprudence</a>
<a href="#">Legislation</a>
<a href="#">Media</a>
<a href="#">Policy</a>
<a href="#">Procedures</a>
<a href="#">Projects</a>
<a href="#">Research</a>
<a href="#">Training materials</a>
<b><u>Which pillar? What is the goal?</u></b>
Access to Information
Public Participation
Access to Justice
<b><u>What special focus</u></b>
Pollutant Release and Transfer Registers (PRTR)
Genetically Modified Organisms
<a href="#">Public Participation in International Forums (new attribute)</a>
<a href="#">Strategic Decision making</a>

<sup>13</sup> ~~“Who is doing it?” does not have a scroll bar, as all four attributes fit into the displayed window.~~

Electronic information tools
<u>Convention Compliance</u>
<u>Public Participation in International Forums (new attribute)</u>
<u>What sector?</u>
<u>Transport and infrastructure</u>
<u>Energy</u>
<u>Mining</u>
<u>Spatial planning</u>
<u>Agriculture</u>
<u>Management of chemicals</u>
<u>Waste management</u>
<b>How is it achieved?</b>
<u>Legislation</u>
<u>Policies</u>
<u>Procedures</u>
<u>Projects</u>
<u>Research</u>
<b>Who is doing it?</b>
<u>Government</u>
<u>Non-governmental organisations</u>
<u>Court</u>
<u>Compliance Committee</u>
<u>Intergovernmental organizations</u>
<u>Academic community</u>
<u>Aarhus Centres (new attribute)</u>

23. The fourth type of attribute is geographic. Resource entries may be assigned a specific country (e.g. Austria), continent (e.g. Europe) or supra-region (e.g. Asia and the Pacific) according to the geographic scope of the activity or, in some cases, the source of the information.

24. When a geographic attribute is assigned, the logic of the Clearinghouse promotes the entry into the Home Page New Resources window. Without a geographic attribute, the entry will not appear on the Home Page. It will, however, be accessible through its other attributes in the Resource Directory.

25. Multiple geographical attributes may be assigned to a resource entry. In this case, the Home Page New Resource feature will present the entry twice, selecting the first two geographic entries it finds assigned to the resource. To prevent this from happening, it is preferable to assign only one geographic attribute. The UNECE provides an interesting example. The UNECE region encompasses Europe, the North American States of Canada and the United States, Israel, the Caucasus and Central Asia. Generally, the attribute “Europe” is used, rather than “Asia and the Pacific”, “Europe” and “North America”. However, other attributes need not be assigned uniquely. The logic of faceted classification allows multiple attributes to be assigned to any given resource entry.

~~26. For example, the resource entry “Environmental Democracy—Access to Information on the Environment” directs the reader to a rich collection of research reports prepared for Ireland’s~~

~~Department of the Environment, Heritage and Local Government. Because of its wide ranging content, this collection has been assigned the Aarhus Convention pillar attribute “Access to Information” as well as the activity type attributes “Legislation”, “Policy”, “Projects” and “Research”, and to the Aarhus Convention foci attributes “Convention Compliance” and “Strategic Decision-making”, in addition to the geographic attribute “Ireland” and the organization type “Government”. Someone searching for resources fitting the description “Access to Information” and “Ireland” would quickly find the entry among the limited number of entries sharing those two attributes. If they were to add “Research” and “Government” to their search, the database would serve them an even shorter list of entries, including the desired collection.~~

~~27. The order in which someone initiates a search makes no difference. “Government”, “Ireland”, “Research” and “Access to Information” will all yield the same results.~~

26. To access the Resource Directory from the home page, users left-click the attribute text appearing in the display window. Alternatively, they can click the thumbnail map appearing in the lower right-hand corner of the page. This will open a digital map of the pan-European region. Clicking over the territory of any member State will initiate a geographic search of the Resource Directory entries for that country.

27. “Who is doing it?” generally refers to the producer of the activity described in the Resource entry. In some cases, however, it refers to the origin of the information contained in the resource. In the example given in paragraph 27 above, a government department published the collection of research reports; the attribute “Government” is therefore assigned to the Resource. The actual activities reported in some of the papers might have been undertaken by university researchers or community organizations.

### 3. Convention News

28. The Convention News feature presents up-to-date news items related to the Convention’s implementation and principle 10 developments nationally, regionally and worldwide. Its coverage, then, is broader than that of the news found on the Aarhus Convention website<sup>14</sup>, where news about the Convention and its subsidiary bodies is posted regularly.

29. In addition to publicizing the activities undertaken by the Parties and secretariat to implement the Convention itself, the Convention News feature aims to broaden public understanding of the impact of the Convention and its principles in related areas of activity. Part of the outreach strategy of the Clearinghouse is to attract a wider readership by providing such information. ~~Thus, for example, someone searching for information on “citizenship and the environment” might be drawn to the Clearinghouse website by a news story announcing the upcoming Third World Environmental Congress dedicated to participative management of environmental resources.~~

30. The home page features only the headlines associated with the three most recently entered news items. Clicking over the headline reveals the complete text of the news item.

<sup>14</sup> Available from <http://www.unccc.org/env/pp/news.htm>

31. The 10 most recent news headlines, along with their dates and subheadings, can be viewed by clicking News on the home page. Earlier news items are stored in the database and can only be accessed by the central node administrator.

#### 4. New Resources

32. The lower right-hand side of the home page features the two most recently entered Resources. For each Resource, it shows the following:

- (a) Geographic origin;
- (b) Title;
- (c) Author or publisher;
- (d) Year of publication.

In the following example

~~Croatia | Croatia Biotechnology: New Law on Genetically Modified Organisms (GMOs)  
USDA Foreign Agricultural Service, 2005~~

The title is a hyperlink. Clicking on the title takes the user directly to the source of the Resource.

33. Nearly all of the resources indexed in the Clearinghouse are published electronically. In contrast to the News items featured in Convention News, which are served by the Clearinghouse's server, the Clearinghouse does not hold or publish electronic resource documents. Instead, it hyperlinks viewers' browsers to external websites where such documents are held, or indicates other means of accessing the documents.

34. The Clearinghouse is an Internet portal, not an electronic document repository.

35. The New Resources feature does not take users into the Clearinghouse Resource Directory. It bypasses this step by directing the viewer's browser to the requested external website.

#### 5. Resource Directory Entries

36. Paragraphs ~~27-29~~<sup>26</sup> of this annex described ways in which users could access resources by clicking on combinations of attributes. The database will generate just find those resource entries which fit the selected set of attributes. For example, selecting "Ireland" will generate all resources in the database with this attribute. Following this selection with "Access to Information" will then select the subset with this second attribute out of the out of the original selection "Ireland" (excluding resources from other countries addressing "Access to Information"). Users can refine their selections as many times as they want. Here is a closer look at how the entries themselves are devised.

37. Resource entries held in the Directory are summaries which capture key aspects of the content of resources. ~~Here is an example:~~

~~Caucasus Environmental NGO Network (CENN). Founded by environmental NGOs in Azerbaijan, Armenia and Georgia, CENN seeks to establish an easily accessible environmental information space and coordinate efforts to develop compatible environmental strategies and policies in countries of the Caucasus. With electronic bulletin, NGO country directories and~~



~~links. In English and Russian. CENN, 2004.~~

~~The title of the entry (which in the above example is also the name of the organization) is followed by additional details on the resource's geographic scope and its purpose or mission. The summary concludes with a list of features found in the resource (e.g. "electronic bulletin") and the languages in which the resource is available (when the language of publication is other than Croatian, English, French or Russian or more than one language is used). The last line shows the author/publisher of the resource. In the above example, the organization's acronym CENN is used for sake of brevity.~~

38. Entries can be quite short, especially when their relevance to the Convention is self-evident:

~~Implementing the Aarhus Convention: a user guide for civil society in Azerbaijan. The national user guide of Azerbaijan for civil society. In Russian and Azerbaijani. Regional Environmental Center for Central and Eastern Europe, 2004.~~

## 6. National reports

~~39. National reporting is an online tool aiming at facilitating access to the Convention's national implementation reports. A country's implementation report can be accessible through the navigation of the National Reports page from the Home page and selection of the language, year of publication, country name and question or questions for retrieval from the database. Scroll down to the bottom of the page and click on the "Submit" button. The selected question(s) and response will appear.~~

## 7. Calendar

39. The Calendar feature links to the official ~~Aarhus Convention~~ calendar of meetings and events under auspices of the Aarhus Convention and the Protocol on PRTRs<sup>15</sup> at <http://www.unecce.org/env/pp/calendar.htm>.

## 8. Help page

40. This page provides help to general users of the Clearinghouse.

## 9. Rich Site Summary (RSS) Feeds

41. The Aarhus Clearinghouse Resource Directory and News sections are syndicated using RSS, the most common syndication format. These feeds always show the latest content published by the Clearinghouse. Most content management systems now include simple modules for integrating RSS feeds into your website.

## 10. Sharing resources and news via on-line social media tools

<sup>15</sup> Available from <http://www.unecce.org/environmental-policy/treaties/public-participation/meetings-and-events.html>

42. The Aarhus Clearinghouse can provide for the possibility to share the resource and news through the the online social media tools (ie. Twitter, Facebook and others).

## 11. About the Clearinghouse

43. In addition to introducing the scope and purpose of the Clearinghouse and its intended audience, the statement found here credits the role of GRID/Arendal in the development of the website and the financial support of the Government of Norway. GRID-Arendal continues to provide server-side support for the Aarhus Clearinghouse.

## 12. Terms of use and disclaimers

44. This page contains the copyright notice, terms of use and disclaimer notices for use on United Nations websites subscribed to by the United Nations Economic Commission for Europe and governing the Aarhus Clearinghouse. Among the disclaimers attached to the Clearinghouse is the following:

“Materials provided on this Site are provided “as is”, without warranty of any kind, either express or implied, including, without limitation, warranties of merchantability, fitness for a particular purpose and non-infringement. The United Nations specifically does not make any warranties or representations as to the accuracy or completeness of any such Materials.”

It is recommended that national Aarhus Convention websites, where they incorporate materials from or links to external sources, include a similar statement, in accordance with national law.

### Annex 2

#### PREPARING RESOURCE CITATIONS IN MICROSOFT EXCEL OR XML FORMAT<sup>16</sup>

~~1. The best way to provide reference information for your Aarhus related content is by using the Clearinghouse’s Web based content management system. You just log in, fill in a short form for every content item, and you are done. However, if you have unreliable or expensive Internet access, you may wish prepare the reference citations for your content in a Microsoft Excel spreadsheet or in XML format.~~

#### ~~Reference Citations in Microsoft Excel~~

~~2. Here is how you would prepare and provide the reference citations in Microsoft Excel:~~

~~a. Obtain the sample Microsoft Excel template by email or download it from the Clearinghouse website.~~

~~b. In Excel, enter one citation per row for each content item.~~

~~e. After you have prepared this Microsoft Excel document, email it to the Clearinghouse team.~~

<sup>16</sup> ~~If you have reliable Internet access, please disregard this section.~~

**Comment [MY1]:** I have deleted this annex as nobody was following it. If someone cannot log-in to the system, they can send a title, link and brief description and we will upload the proposed resource / news.

**Reference Citations in XML**

~~3. To prepare and provide the reference citations in XML format:~~

- ~~a. Obtain the sample XML template by email or download it from the Clearinghouse website.~~
- ~~b. Using any text editor, such as Notepad on a PC, prepare one XML file for all content items.~~
- ~~c. After you have prepared these XML files, publish them to an accessible directory on a Web server or email them to the Clearinghouse team.~~

**Content Attributes and Keywords**

~~4.1. In assigning keyword attributes to content items, please use the short list of categories and corresponding codes, which are available online or in print format. Instead of writing out category words, simply indicate the appropriate category code(s) for each citation.~~