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Meeting of the Parties to the Convention
on Environmental Impact Assessment
in a Transboundary Context
Working Group on Environmental Impact Assessment
(Third meeting, 9-12 October 2000)
(Item 2a (vi) of the provisional agenda)

DRAFT DECISION II/6 ON THE DATABASE ON ENVIRONMENT IMPACT ASSESSMENT

Submitted by the delegations of Hungary and Poland

The Meeting,

Recognizing the value of the information currently in the Database;

Also recognizing the important role a comprehensive database could play in the implementation of the Convention;

Urging Parties to be proactive in entering information into the Database;

Having considered the report by Poland as a lead country in use of the Database on Environmental Impact Assessment in a Transboundary Context during the trial period of two years between the first and the second Meeting of the Parties.

Having also considered the report by Hungary as a lead country on evaluation of the Database.

GE.00-32339

1. Decides that the Database on Environmental Impact Assessment in a Transboundary Context will continue to operate under the auspices of the Convention for the period up to the third Meeting of the Parties;

2. Welcomes and accepts the offer of the Polish Government to continue to host the Database on their server and to provide the technical and staff support necessary for running the Database;

3. Decides that during the period up to the third Meeting of Parties the Database should be available to the public via the Internet, should be expanded in the three official languages of ECE, and that the secretariat should arrange for translation;

4. Encourages Parties to update the information included in the Database on a regular basis, and recommends that information on the actual cases be submitted as soon as possible after the time of notification as well as on legislation, on research and on training and information;

5. Adopts the report on the ENIMPAS Database Evaluation and on the use, cost-effectiveness and possible future developments as annexed to this decision.

Annex I

Introduction

1. At their first meeting in Oslo 1998 the Parties to the Convention on Environmental Impact Assessment in a Transboundary Context (the Convention) agreed to establish, for a two-year trial period, a database (ENIMPAS, <http://www.mos.gov.pl/Enimpas>) to record data on EIA projects with transboundary effects, EIA legislation, institutions, etc. They also decided that the database would be evaluated and a report prepared for their second meeting in October 2000. Hungary agreed to act as lead country for the evaluation.
2. At its first meeting (17-18 May 1999, Budapest, Hungary), the Evaluation Group decided that it would consider the following issues: the need for the database; the database structure; the quantity and quality of the information; the content of the database; its uses; the capacity and willingness of countries to provide information for the database; the management of the database; its user-friendliness; and its costs and benefits.
3. Two methods were selected to collect and analyse information regarding the ENIMPAS database: (a) a user survey focusing on all the important aspects of the structure and function of the database, and (b) an Internet-technology-related survey, focusing on the major aspects of the Internet version (the website of the ENIMPAS database), since that is the dominant way of accessing the database.

I. RESULTS OF THE SURVEY

Questionnaire

4. Chapter I was compiled by the lead country of the Evaluation Group. It is based on the responses to a questionnaire and comments received from countries in the Evaluation Group.
5. A questionnaire was developed to cover all the important areas of the ENIMPAS database's structure and functions, according to the aspects identified at the Evaluation Group's first meeting. The following sub-titles reflect these aspects. The questionnaire contained some 55 questions grouped into: personal identification, technical background of users, experience using ENIMPAS, recommended improvements, authorized ENIMPAS users' section (see annex II below). It was aimed at collecting relevant information about the ENIMPAS database in order to objectively assess its trial period. Therefore, no hypothesis was put forward and checked in developing and evaluating the responses to the questionnaire. At the end of the following headings, short summaries are boldfaced; they do not necessarily reflect the opinion of the Evaluation Group. The "Options for the Future" at the end of this report are based on the Evaluation Group's analysis of the responses.

A. Country responses and users' backgrounds

6. The questionnaire was distributed to all 55 UN/ECE countries and the European Commission, and made available on the ENIMPAS web site. Of the targeted countries, 21 responded (annex III). The following results reflect these 21 sets of answers. Except for two answer sheets, most of the respondents answered about 75% of the questions, providing relevant information for the evaluation. Each of the answer sheets represents one country's opinion. The responses reflect the state of the ENIMPAS database in October to early November 1999.

7. All the respondents are from the government sector and, except one, all are aware of the Oslo decision about the ENIMPAS database. Regarding the technical background of the users, they have an average work experience with the Internet of two and a half years. 55% of users regularly use information technology, while 44% do so occasionally. All the users work in EIA, and on average have an EIA experience of 5.5 years and experience with the Espoo Convention for almost three years. The number of Espoo cases occurred so far in their countries varied significantly from 0 to 5, with an average of almost 2.

B. Need for the database

8. Almost 90% of the users said that the ENIMPAS database can help their Espoo-related work, and only 10% reported that the database is not useful from this perspective. The ENIMPAS database is mainly used for obtaining information, whereas both obtaining and providing information comes in second place. The use of the database only for providing information by authorized contact points is not typical.

9. Only 50% of users think that the database could improve the implementation of the Espoo Convention, and 50% state that the database can only partly improve such work.

10. Some of the users specify the reasons of improving the implementation of the database and mentioned: the usefulness for countries and NGOs, when providing impetuses and suggestions for third parties, EIA information is open, opportunity to gain EIA information, information about projects, ideas on EIA, better practice and practical information.

11. The most useful features for users are its information on other EIA cases and on relevant institutions and people. Finding pieces of legislation in other countries comes second.

12. **There is a clear need for the database to contain broad information assisting the Espoo-related work. On the other hand, the database is not seen as a powerful means for assisting the implementation of the Espoo Convention.**

C. Use of the database

13. 63% of the users use the database a few times a year, 16% on a weekly basis and 16% never. The number of hits on the Internet homepage was not taken into account, because it does not reflect the real use of the database and may therefore bias the evaluation.

14. Many users access the ENIMPAS database a few times a year, which may indicate that its information is not attractive enough and does not entice them to visit it more frequently.

D. Database structure

15. 2 users rate the structure of the database "excellent", 13 users "good" and 1 user "poor". The database structure is thought appropriate for serving the implementation of the Espoo Convention.

E. Quantity and quality of information - content of the database

16. 82% of the users do not find inaccuracies in the database, however 18% do (e.g. list of Signatories and dates), and use other UN/ECE homepages to find the correct information. 75% of the users report that they do not use the database as a resource, and the few who do find that the database does not provide relevant project information with one exception. The simple reason, according to the answers received, is that the database does not contain enough relevant information. Almost 70% of the users do not find the information they are looking for when searching for specific projects, institutions, legislation or research/training.

17. Regarding information about EIA legislation, 4 out of 18 users say it is very useful, 8 fairly useful and 8 not useful at all. Regarding information about transboundary projects, 5 out of 18 users think it is very useful, 6 fairly useful and 8 not useful at all. Regarding information on research and training in other countries, 2 out of 18 believe it to be very useful, 6 fairly useful and 9 not useful at all. Regarding information about EIA institutions in other countries, 7 out of 18 users find it very useful, 6 fairly useful and 6 not useful at all.

18. Almost 61% of the respondents find the amount of information in the database unsatisfactory. Half the users state that information in the database is not useful in their work at all, 38% say it is fairly useful and only 11% assess it to be very useful.

19. Users suggest additional categories of information that can be useful, such as:

- Activities under the Convention work-plan (incl. small working groups);
- Different progress reports;
- List of country data managers;
- New documents under "What's New" regarding bilateral and multilateral agreements;
- Available EIA guidance.

However, one user believes that additional categories should be included only at a later stage.

20. By the end of the evaluation period the quality of information was acceptable. However, countries are in a position to judge the accuracy of their own information only. The usefulness of the information of the database is poor in the main branches of the services it provides so that half the users do not see the database as being useful in their work.

F. User-friendliness

21. 62% of users find the database very easy to use, while 31% have needed some time to get acquainted with it. 10 users out of 19 find the access via Internet fast, 5 think it is usually slow and 3 report it to be slow and sometimes not available.

22. ENIMPAS users also report some, mainly technical, hitches with the search facilities in the database, case-sensitivity, etc. Also, the preferred Internet browser (Netscape) is criticized, because it is not seen as mainstream software for the future. The right to enter information about a certain project into the database is sometimes considered to be a problem.

23. User responses show that the database generally has the technical and structural design to serve users effectively. However, authorized users indicate several problems when providing information and placing it in the database.

G. Database Management

24. Almost three quarters of users do not contact the Polish database manager; the ones who do tend to get a good or excellent response. Some difficulties are perceived in some cases when opening the software and due to a lack of training in using the database.

H. Cost-Benefit aspects

25. User opinions are not unanimous on whether the time and costs involved in using the ENIMPAS database are worth it: 64% say yes, while 36% say no. This seems to be in contradiction with the opinions regarding the poor amount of information available in the database.

26. Evaluating the direct operating costs of the database management was not part of the study.

27. **There is very limited information available regarding the cost-benefit aspects of the database. On the users' side, there is very little cost involved in obtaining information from the database once the hardware and software are in place. Major costs are foreseen for collecting and arranging information on the country level. Further steps could be taken to assess the database management costs, for which the start-up figures may serve as a starting point. The overall benefit of the database seems to be acceptable.**

I. Capacity and willingness of countries to provide information for the database

28. Regarding the special experience of authorized ENIMPAS users, more than half state that all the necessary information is available in their organizations, less than half say it is only partly available. The equipment and Internet connection are easily available to more than 70% of the users. Technical assistance is generally available in all organizations, though sometimes not easily.

29. The mechanisms for providing information for the database are reported to be fairly country-specific and in many cases still lack established procedures. Obstacles to providing information to the database, beyond the technical and procedural aspects, are the lack of direct Internet connection, frequent staff changes and the lack of capacity.

30. Users foresee about three Espoo cases on average before the second meeting of the Parties. Out of the four service areas of the ENIMPAS database, "Projects", "Institutions" and "Legislation" are used the most, "Research and training" is not a priority. 6 users out of 15 find better information on the same EIA issues elsewhere (www.europa.int, www.unece.org/env/eia or EU DGXI homepage).

31. Three quarters of authorized users do not specify further obstacles to providing information to the database beyond Internet access and in-country information management. **Generally, there are no major obstacles to providing relevant information for the database. Incentives and overall database management are needed for future improvement of the database.**

J. Other potential users

32. Users provided very limited contact information on potential interested actors on Espoo-related issues. Altogether 8 academic university contacts were mentioned and 3 NGO contacts.

**II. RESULTS OF THE TECHNICAL EVALUATION
OF THE ENIMPAS DATABASE WEB SITE**

33. The evaluation of the ENIMPAS database includes an assessment of its Internet technology (see annex IV). The Hungarian expert team has conducted a survey of the ENIMPAS Web site from a technical perspective. (The content of the database, the structure, detail, accuracy or credibility of the information stored in the database are not part of this assessment.)

A. Methodology

34. The Web site and the technology of the database were assessed according to the following criteria:

- The database's context on the Internet, and its trends;
- Accessibility;
- How fast does the database download, what specific requirements does it have on the user's side and how easy is it to find it through search engines;
- Database structure;
- Data structure and performance of the database;
- Web site design and construction;
- The Internet technology and design used;
- Navigation;
- How easy is it to find a piece of information in the database;
- Providing input;
- How can those who have permission enter information into the database.

35. The detailed assessment can be found in annex IV.

B. Recommendations

36. The recommendations from the users targeted three areas: (a) database content, (b) database layout and (c) database management.

37. Database content:

- Provide more information for the database;
- Enter information into the database;
- Obtain full text legislation with comments for the database;
- Make full text search available;
- Show links to other relevant sites;
- Put bilateral and multilateral agreements into the database;
- Facilitate the practical implementation of the Espoo Convention, do not develop ENIMPAS into a primary source about EIA in Europe and beyond.

38. Database layout:

- "What's New" should take the user directly to the new item;
- Show link to Espoo Convention homepage;
- Show links to national relevant web sites.

39. Database management:

- Develop and deliver training course on using ENIMPAS;
- Database manager should assist in entering data into the database;
- Organize country data managers' training course.

40. In technical terms, the ENIMPAS database is a well-designed, well-implemented, standard, interactive, on-line database. Its technological solutions are appropriate for its purpose and are functioning well. No real mistakes or errors were found. A few peripheral elements are not yet completed. There are some aspects that can be improved to ensure better accessibility or navigability.

41. The main recommendations for improvement are:

- Create a text-only or a combined version of the front page;
- Improve headings and register in search engines;
- Improve the information content of front page;
- Complete missing elements;
- Improve navigation assistance (add navigation bar).

III. OPTIONS FOR THE FUTURE

42. This section was compiled by the lead country of the Evaluation Group based on comments received from the countries involved in the Evaluation Group.

43. The usefulness of the ENIMPAS database is based on two key factors. First, ENIMPAS as an Internet-based database was found to be a proper technical means of contribution to the implementation of the Espoo Convention. Second, the actual content, quantity and quality of the information in the ENIMPAS database were considered to be its main weaknesses. The management system with country data managers and one database manager does not seem to be effective in gathering all the relevant information into the database. So the prestige and the usefulness of the database were considered to be low.

44. The following scenario concentrates on the management and capacity on country-level issues, since the technical aspects of the ENIMPAS database are well established and relatively well managed.

45. The information gathering and provision are centralized and assigned to the database manager. He regularly requests information request from

countries, collects this information for the database, and assists to integrate information into the database in terms of both content and (Internet-based) technology. The database concentrates on providing links to other EIA-relevant sites and serves as a meta-database. The database focuses on Espoo projects; training and legislation are of secondary importance.

46. This scenario require countries to be willing to cooperate with the database manager in a timely manner. The database manager must be prepared for the extensive communication and support functions, and additional international funds have to be available to cover all database manager operating expenses. This option is considered viable.

Annex II

QUESTIONNAIRE - ENIMPAS DATABASE EVALUATION

Personal identification

Name.....

Position.....

Organization.....

Country.....

Sector - government - academic, university - business, consulting - NGO

ENIMPAS-related identification

1. Are you aware of the Oslo decision about the database?___Yes ___No

2. I am using ENIMPAS:

(Please tick one)

to obtain information

as an authorized contact point (providing input for the database)

both obtaining and providing information

Technical background

Informatics

3. How long have you been using Internet in your work?(years)

4. How do you evaluate the usefulness of informatics in your job?

(Please tick one)

I can live without it

It may assist me sometime

There are certain cases when I need it

Usually I need to use it

I am using it daily

Environmental Impact Assessment (EIA)

5. Do you deal with EIA in your work? ___Yes ___No

6. How long have you been working in the EIA field?(years)

7. When did you start to work in an Espoo Convention related field?
.....(date)

8. Was there any case in your country relating to the Espoo Convention?
_ Yes _ No

9. If yes, please specify:
.....
.....
.....

10. How many Espoo cases have you dealt with during this time?
.....(number)

Experience using ENIMPAS

11. Can such a database assist your work related to the the Espoo Convention? ___Yes ___No

12. If yes, in what way?
(Please tick where appropriate)

- S Learn about good practices
- S Get information on other EIA cases
- S Find institutions/relevant people
- S Help contacting relevant people
- S Find pieces of legislation in other countries
- S Learn about research and training projects
- S Other:

13. Has it ever happened that the information you read in the database turned out to be incorrect?
_ Yes _ No

14. If yes, in which case?

15. Could you please specify the information resource which assisted you to identify the incorrectness?
.....
.....

16. How often do you use the database in your work?
S daily
S weekly
S monthly
S a few times a year
S never

17. How easily accessible is the database through your Internet connection,

how fast does it download?

- Fast
- Usually slow
- Slow, sometimes not available
- Never accessible

18. Have you encountered any unforeseen difficulty when attempting to enter information (project) into the database? Please describe:

19. How early in a project phase can you submit information into the database?
 Please describe:

20. In your opinion, can such a database improve the implementation of the Espoo Convention? _ Yes _ Partly _ No

21. Please explain why:

22. How do you rate the structure of the database (its main categories of information):

- \$ not appropriate
- \$ poor
- \$ good
- \$ excellent

23. When you were looking for examples or case studies, did you find any relevant project in the database for your work, did you use the database as a resource? _ Yes ___No

24. If yes

- \$ rarely found
- \$ usually found
- \$ always found

25. If not, please explain why:

26. When you were looking for a specific project, institution, legislation or research/training in the database, did you find it? _ Yes ___No

27. Did you find the amount of information satisfactory?

- S not at all
- S fairly
- S very
- S exceptional

28. How useful do you consider information in the database about EIA legislation in other countries?

- S not at all
- S fairly
- S very
- S exceptional

29. How useful do you consider information in the database about transboundary projects in other countries?

- S not at all
- S fairly
- S very
- S exceptional

30. How useful do you consider information in the database about research and training in other countries?

- S not at all
- S fairly
- S very
- S exceptional

31. How useful do you consider information in the database about EIA institutions in other countries?

- S not at all
- S fairly
- S very
- S exceptional

32. What additional categories of information would be useful in the database? Please describe in keywords

33. Was the information in the database useful in your work?

- S not at all
- S fairly
- S very
- S exceptional

34. Can you mention a good example when you made use of the database?

35. Did you have any bad experience with the database? Please describe:

36. Which part of the database do you use (check as many as relevant)?

- Projects
- Institutions
- Legislation
- Research and Training

37. Have you found better information on the same issue on another website?

- Yes
- No

38. If yes, would you give us the address?

39. How many cases can you foresee from your country in the database by the second meeting of the Parties, Nov. 2000? Please give us an estimation here:.....(number)

40. Have you ever contacted the Polish database manager for any assistance, correction, etc.?

- Yes
- No

41. If you ever contacted the Polish database manager, how did you find the responsiveness?

- Excellent
- Good
- Fair
- Poor

42. How user-friendly is the database in your experience?

- Very easy to use
- Needed some time to get acquainted with it
- I've had serious difficulties using it
- I am not able to get along with it.

43. If you had any difficulties in using the database, please describe them below:

.....
.....

44. In your experience, is it worth your time and costs to use the ENIMPAS database?

- Yes
- No

45. How would you improve the database in order to better serve transboundary EIA processes?

Regarding database content (Please describe)

.....
.....
.....
.....
.....

Regarding database layout (Please describe)

.....
.....
.....
.....
.....

Regarding database management (Please describe)

.....

Other ENIMPAS users in your country

46. We would like to receive feedback on ENIMPAS from other users in your country. Please provide us with contacts below:

- government /contact information/

.....
.....

- academic, university /contact information/

.....
.....

S business, consulting /contact information/

.....
.....

- NGO /contact information/

.....
.....

Only for authorized ENIMPAS users

(Authorized users are nationally designated contact points who are allowed to provide information for the database)

47. Do you have all the necessary information in your organization to complete the database?

_ Yes _ Partly _ No

48. What is the mechanism in your country to provide information for the database?

Please describe

.....
.....

49. How many people in your organization are responsible for providing information for the ENIMPAS database? Please give a number here:

.....

50. Are the equipment and Internet connection available for entering information into the database?

- Yes, easily available
- Available, but not directly (e.g. in another office, only with a technician, etc.)
- No

51. If you use the database not through the Internet , but through a stand-alone facility, please describe the advantages and disadvantages of using the stand-alone facility below:

advantages:

.....
.....

disadvantages:

.....
.....

52. Do you have difficulties with entering information into the database?

Yes No

53. Can you get technical assistance in your organization when you need it?

Yes, easily Yes, but not easily No

54. Are there any other obstacles to providing information for the database?

Yes No

55. If yes, please describe:

Annex III

COUNTRIES THAT RESPONDED TO THE QUESTIONNAIRE

Albania
Austria
Azerbaijan
Bulgaria
Czech Republic
Denmark
Finland
Georgia
Germany
Hungary
Italy
Latvia
Liechtenstein
Lithuania
Poland
Republic of Moldova
Russian Federation
Slovakia
Sweden
Turkey
United Kingdom

Annex IV

TECHNICAL EVALUATION OF THE ENIMPAS DATABASE WEB SITE

I. CONTEXT

1. The Internet is the most extensive, global computer network. Any information service which is put on the Internet without special restrictions can be accessed by any one of the many millions of computer users around the world. The Internet is changing extremely rapidly in terms of volume (number of users, services and traffic) and technology. However, many users, mostly in less developed countries, do not have access to the newest technology, fastest computers and high bandwidth and are not skilled in or accustomed to using the state-of-the-art Internet technology. Both these factors must be taken into account when developing an Internet information service.

2. The ENIMPAS database is an interactive, on-line Internet database. This means that it is permanently accessible on the Internet, and can be searched for pieces of information in an interactive way, according to several search criteria (countries, keywords, institutions, events, etc.). There are so-called "privileged users", who have special permission (password) to feed new pieces of information, or modify earlier ones, in the database.

3. Such databases are relatively common on the Internet. They are widely used in the business, government or NGO sectors, on all sorts of topics. There are standard and customized elements of technology, and many Internet users are familiar with these.

4. From this point of view, an application which is user-friendly, i.e. does not require any special training or skills from its users and is easy to use, should meet the following criteria:

§ Be accessible with many different Web browsers and computer platforms;

§ Be accessible by users with poor Internet access, i.e. who use lower capacity computers or have a slow connection to the Internet (low bandwidth, noisy lines, etc.);

§ Be attractive also to experienced Internet users with fast computers and high bandwidth, who can use and are accustomed to state-of-the-art applications with lots of graphics, moving pictures, sound effects and other special features;

§ Be easy to navigate, search and feed information into.

5. The primary target group of the ENIMPAS database includes:

§ Focal points, responsible for the implementation of the Espoo Convention in each UN/ECE country;

§ Institutions and companies dealing with Espoo cases.

6. Others who might be interested in the information of the database can therefore be regarded as secondary target groups:

- S Affected populations and their organizations;
- S EIA experts and students, even outside the UN/ECE region;
- S Other interested parties.

These target groups represent a very broad range in their technical equipment, quality of Internet access, computer skills and experience.

7. In comparison with other on-line databases, the ENIMPAS database is a well functioning, standard application, and is easily accessible without any special skills or training.

II. ACCESSIBILITY

8. In this chapter, the experts looked in more detail at how easily the ENIMPAS database is accessed from different parts of the world and with different technologies. Specifically, they looked at:

- (a) Downloading speed;
- (b) Browser compatibility;
- (c) Accessibility with poor Internet access; and
- (d) Accessibility through search engines.

A. Downloading speed

9. One key to the success of any Internet service is that it should not require much time to appear on the user's screen. Large files, especially images, and complex pages significantly increase downloading time.

10. When users access an Internet service, they are downloading files from a remote computer, which may be on another continent. The information usually goes through dozens of computers, so-called gateways. The capacity of the line between each gateway, the so-called bandwidth, may vary widely.

11. In this respect, the downloading speed of a specific Internet service very much depends on where the user is geographically: how many gateways are needed to reach the service's server computer and what is the smallest bandwidth en route. Therefore, the organization providing the service should:

- Put its service onto a high-capacity server with a high bandwidth;
- Keep files small.

12. The files on the ENIMPAS database are reasonably small; the use of graphics on the pages is not excessive. A few trace route tests were performed from Hungary and a few other places. These tests, which list the gateways and access speeds step by step en route, gave good results. From this point of

view, the accessibility of the ENIMPAS database seems to be fairly good.

B. Browser compatibility

13. The target group of the ENIMPAS database includes users with many different computer platforms and software versions. Thus it is essential that the database should not contain any technical solution which is not supported by all browser software. The ENIMPAS database can be used with all graphic browser software. It does not contain frames, java scripts or other special features which are not supported by older software versions. The only problem occurs on the front page with text-only platforms, or with users who have problems downloading images, because the main page contains information and links only on the images.

14. Some of the pages (the thematic search pages) are wide. This causes difficulty for users who do not have high-resolution screens. They are not prevented from using these pages, but it is very inconvenient for them.

15. The browser compatibility of the ENIMPAS database is close to excellent. It could be improved by a text-only version of the front page and by reducing the width of the thematic search pages.

C. Accessibility with poor Internet access

16. The UN/ECE region includes countries where Internet access is still poor even for government officials. This means slow and unreliable connections and/or low-capacity computers, which can run only older versions of software. These people may have serious problems with downloading large files or graphics. Usually these users switch off automatic downloading of images.

17. The front page of the ENIMPAS database does not have a text-only version, any information or link appears only when the user has downloaded the images. This may be a problem for some users. All of the other pages on the site are well usable without downloading graphics. A text-only main navigation page (front page) would be a good improvement.

D. Accessibility through search engines

18. Search engines are special services on the Internet where a user can enter names or keywords and the engines perform an automated search in millions of Web pages. This is the most effective way of finding information or important sites on certain topics.

19. Admittedly, the primary target groups of the ENIMPAS database, i.e. government officials and relevant institutions, are expected to learn about the database in official ways, not by searching the Internet. However, the affected population, its organizations, interested students and experts could make use of information in the ENIMPAS database, if they could find it through search engines.

20. A few test searches were carried out on three of the largest search engines on the Internet (Altavista, Yahoo and Excite), in order to see whether the ENIMPAS database could be found through them. Several combinations of keywords were searched for, thus making general and more specific searches as well.

The results of the searching tests are shown in the following table:

Keywords searched	Result in Altavista	Result in Yahoo	Result in Excite
Environmental impact assessment	Over 1.2 million matches, ENIMPAS not among the top 200	ENIMPAS did not show up among the results	ENIMPAS not among the top 100 matches
Environmental impact assessment database	266000 matches, ENIMPAS not among the top 10	ENIMPAS did not show up among the results	ENIMPAS not among the top 100 matches
Environmental impact assessment database transboundary	255000 matches, ENIMPAS not among top 100	ENIMPAS not among the top 100	ENIMPAS not among the top 80 matches
ENIMPAS	The only page that appeared was the ENIMPAS Manual page, which is empty (under construction)	ENIMPAS front page appeared on the top of the list	The only page that appeared was the UN/ECE secretariat (Bulletin board, which is empty

21. The occurrence of the ENIMPAS database in search engines is very poor. It could easily be improved by including relevant keywords in the title headings of the pages and by manual registration in the major search engines. This is not a requirement to achieve the main goal of ENIMPAS, but could greatly increase its contribution to professional information on the Internet.

III. DATABASE STRUCTURE

22. A database contains comparable pieces of information that are stored in a specific format and structure. This makes searching, updating, combining and processing information much more effective. With an electronic database data are stored in a computer, and if it is accessible on the Internet, it is an on-line database.

23. Designing and building the structure is the most important part of the ENIMPAS database, and the one which requires the most programming expertise. The main categories of the ENIMPAS database are: countries; projects; institutions; pieces of legislation; research and training events.

24. The structure and the construction of the database, inasmuch as can be seen from a user's perspective, seem perfect. Different searches have compatible outputs. Cross linking between projects, institutions, countries,

legislation, research and training events, and between the English and Russian versions works well.

25. On the page for searching by country, the only mistake found was in the country data: the dates of ratification and coming into effect on the main Convention page (http://www.mos.gov.pl/ENIMPAS-db/legislation?leg_text_id=23) seem to be updated (although the "last modification date" on the bottom of the page is not), but those data do not appear on the search pages by legislation.

26. The data structure of the ENIMPAS database is appropriate for its purpose and is performing well.

III. WEB SITE DESIGN AND CONSTRUCTION

27. The design and construction of a Web site covers aspects like how the information is broken into separate pages, how graphics are used, the quality and functionality of graphic elements, the use of colours and their function, the coherence of the layout of separate pages, how attractive the pages are, the layout of pages, how navigation is facilitated among the pages, how general information is provided.

28. Web design is very much a matter of taste. There are no standards which can be used as universal references. However, from a practical point of view, some benchmarks can be useful.

29. As the main purpose of the ENIMPAS database is to provide professional information (and not entertainment, for instance), the Web site should primarily be functional and easy to use. Its attractiveness is secondary. The ENIMPAS Web site has a good solid design. However, it uses many different background images and title graphics, and this may not be advantageous: it decreases identification with the whole site and generates unnecessary extra traffic.

30. The front page aims to be attractive with its picture composition. However, all the information and further links are on the images. For the user, who does not automatically download images (because of a slow connection, for instance), not a single piece of information appears on the screen.

31. The information content of the first page is weak. It says "Database on Environmental Impact Assessment in a Transboundary Context", and has the UN/ECE-EIA logo. This may not tell all visitors enough. On the other pages, visited links, not-yet-visited links and underlined text appear in exactly the same way. This might be confusing for users.

32. Several items on the "General information" page are empty, such as "The UN/ECE secretariat bulletin board" and the "ENIMPAS manual and related documents", which are linked. Probably, the first one is due to the lack of input from the secretariat, but this is not obvious.

33. The "What's New" page gives a good searching possibility for projects and research/training sessions entered into the database within the past year. A "© by Authors" note is placed at the bottom of each page, just below the main content of the page. This may be misleading, as it is not clear what the copyright refers to.

34. The design of the ENIMPAS Web site is simple and functional. A more homogeneous design could better connect the separate pages, but this is partly a question of taste.

35. The front page could be significantly improved in the following two ways:

- (a) A text-only version, or a combined solution, would make it possible to access the database by those who do not download images. This is especially recommended, since none of the further pages requires the use of graphics;
- (b) Some explanation of the role of UN/ECE and the Espoo Convention could prevent misunderstandings; so could a brief description of what kind of information from what sources can be found in the database.

36. On the "What's New" page an explanation or even a link to projects that are older than one year (but maybe still open) could help visitors to find what they did not find there.

37. If the "© by Authors" note was in the first column on the left, below the small ENIMPAS logo, some misunderstandings could be prevented.

V. NAVIGATION ON THE WEB SITE

38. The navigability of a Web site refers to how easy it is to get to the relevant page, how clear it is on each page where the users are within the site, and how clear it is what they will find on the site and what they will not. It is very important that users always know what they can find on the Web site and where. To assist in this, Web sites usually include a navigation bar on each page, or at least a "back" button, or a site map.

39. The ENIMPAS Web site is relatively small and not very complicated. Navigation starts from the front page. On each of the other pages, a small ENIMPAS logo links back to the front page. No other navigation tools are used.

40. Because all links from the front page are on the images, navigation is possible only after downloading the large graphic images. Most links point to an interim page (an html file), which then immediately takes the user to another (shtml) one. As a result, clicking on the "back" button in the browser does not take the user back to the previous page, but after a few seconds the user ends up on the same page again.

41. There is no "New search" button on the search pages, although this would be very helpful in many cases.

42. In general, navigation on the ENIMPAS site is fairly straightforward. It could nevertheless be improved by:

(a) Adding an alternative text-only or a combined version of the front page;

(b) Adding a navigation bar on each page;

(c) Excluding the interim html pages between the front page links and the real shtml pages;

(d) Adding a "New search" button on the search pages.

VI. PROVIDING INPUT

43. National focal points for the Espoo Convention, and maybe some other "privileged" users, have special permission to enter or change information in the database. These people have individual passwords, with which they can access the input forms. The input forms run on a secure server; this ensures that the passwords cannot be stolen. The input forms can be accessed only with the Netscape browser; Microsoft Internet Explorer cannot be used.

44. A four-page, illustrated manual was prepared by the ENIMPAS operators. It describes in detail how one can enter or change data in the database. With this manual, providing information is simple, no special technical skills or training is required. The input forms are simple and easy to use. Text can be typed in or copied and pasted from another file. Additional HTML formatting (character and paragraph formats) is possible for those who are familiar with the html code setting.

45. After the completed forms are submitted, the information is not automatically published, but goes to the operators, who check it before forwarding it to the database. This ensures that no fake or accidentally entered information is published. Only those who entered a piece of information can change it later.

46. One issue was raised about providing input. It is a policy question rather than a technical one. Until a project is entered into the database by its country of origin, the affected countries are not able to enter their data on that project. This kind of access issue may need to be revised at the policy level. A proposed technical improvement is to mark the fields of "obligatory text" in the input forms more strikingly.

Annex V

Database on Environmental Impact Assessment in a Transboundary Context

EVALUATION REPORT ON USE, COST-EFFECTIVENESS AND POSSIBLE FUTURE DEVELOPMENTS

1. Poland was responsible, during the trial period of two years - until the Second Meeting of Parties in 2000 in Sofia - for the maintaining and functioning of the Database for the EIA in a Transboundary Context. The financial support necessary to accomplish this task was provided via the Secretariat of the Convention in Geneva or directly by the supporting countries. Poland agreed to act as a lead country for the following main tasks related to the database:

a) The database must be made accessible on the Internet on the server of the Polish Ministry of Environment.

b) Poland will ensure the proper administering of the database and provide the technical staff support necessary for operating the database.

2. The database ENIMPAS, set up in Poland in accordance to the decision I/5 taken at the First Meeting of the Parties in Oslo was made available via Internet in June 1998, although its demo version was available a few months earlier. Before the Meeting the information about the logging on as an Authorised User and the short self-tutor guide has been distributed among the interested parties.

3. The database is available at the following two Internet addresses: The first one (<http://www.mos.gov.pl/enimpas/>) allows for a public access and does not require any logging: it allows for surfing throughout the database and eventually to write an e-mail to the database administrator. The other one (<http://www.mos.gov.pl/auth/enimpas-db/>) is for the restricted access and available for authorised users only, i.e.: database administrator, database content administrator, country data managers, and other authorised users.

4. It was also decided that during the trial period, the operation of the database will be monitored and evaluated by an Evaluation Group (led by Hungary) and the results will be presented at the Second Meeting of the Parties in Sofia.

Information required from the Parties to the Convention

5. Parties to the Convention were asked to provide the Database with the following information related to its activities regarding the implementation of the Espoo Convention:

a) Information relating to the project likely to cause a transboundary effect - In the case of party of origin the following information is required: project title, type of activity, key words, brief description of the project,

proponent institution name, competent authority, affected countries list and time frames of the procedure. In the case of affected party: date of notification, date of confirmation, decision of the affected party whether it intends to participate in the procedure, description of the environment of the affected party, forecasted characteristics of impacts, date of completing public consultations and affected country comments.

b) Information relating to the institutions, such as Focal Point for the implementation of the Convention, Contact Point for Notification, project proponent institutions, etc. - name of the institution, type of the institution, responsible administrator name, postal address, address of WWW home page, phone and fax numbers and e-mail address of the responsible person.

c) Information relating to a legal acts such as national EIA act, bilateral or multilateral agreement, etc - name of the legal act, type of the legal act, key words, list of the countries, which have signed, ratified and/or implemented an agreement or the legal act, description (or full text) of the legal act or its text divided into sections.

d) Information relating to research & training in the field of EIA - date when information was entered, date after which the information is not valid, title of a publication, name of a subject, training course or conference, key words, type of information (1. Assistance Projects on EIA, 2. Training Courses in UN/ECE Countries on EIA, 3 Research Initiatives, 4. Main Publications on EIA, 5. Conferences and seminars), country submitting information, proponent institution, description.

6. The Database, provided that it will be constantly fed with actual information and properly administered, should constitute:

- an archive of projects processed under Espoo Convention,
- a uniform archive of legal acts pertinent to EIA (national and international),
- an address directory of environmental authorities as well as persons and institutions involved in the transboundary EIA,
- a platform of communication between Focal Points from the different countries,
- a source of "good examples" (for environmental administration),
- a source of methodological information (for experts engaged in EIA),
- a source of an authorised information (for media & general public),

Database management

7. The Database is made available on the server of the Polish Ministry of Environment in the professionally maintained computer centre that is well protected against intruders. Constantly upgraded capacity of Internet lines allows for comfortable and efficient access to the database from any other site located in any country.

8. The responsible persons for the operation of the Database are:

(i) The database administrator: his task is the everyday care for a correct functioning of the database, specifically:

- checking up for correct format and entering new or modified data to the

database from user buffer or from disks sent by users of stand alone version (consulting with the database content administrator in any case of doubt),

- . providing for translation of all the documents arriving in only one language and entering them to the database,
- . taking care of the formal content and integrity of the database,
- . generating new versions of the database onto disks for MS-Access and sending them to the users, who have no access to the Internet,
- . servicing users requests sent via e-mail, answering them, resolving their problems in entering data, providing them with short instructions on the best use of EnImpAs capabilities,
- . training and instructing of Country Data Managers on the best use of EnImpAs capabilities.
- . acting as moderator in the discussion lists provided by means of publicly available EIA forum (with a help of the database content administrator, if needed),
- . administering networking available in the authorised version of the database,
- . management of privileged users' access rights,
- . collecting arriving information on the necessary changes to the structure and content of the database,
- . reporting to the Bureau of the Convention.

(ii) The database content administrator duties may include consultation of submitted data.

(iii) Technical consultant is responsible for the following tasks:

- . administering of server (and all installed software) in the Internet computer network,
- . care on the periodical backups of the database resources,
- . accepting by e-mail upgrades of EnImpAs pages & files,
- . aiding in the database recovery after crash,
- . monitor security measures in the site.

(iv) Country data manager: one person in each country nominated by the Focal Point for the Implementation of the UN/ECE Convention - administering the data pertinent to her/his country.

Funds allotted

9. To perform the tasks Poland received the following funding:

In 1998 9800 USD granted by the Government of Italy

In 1999 18000 USD granted by the Government of Germany

10. Additionally, in 2000 the Government of Denmark granted 9000 USD.

Accordingly to the work plan above funds were thought to cover expenses up to June 2000, the Government of Poland has covered remaining expenses from July 2000 up to February 2001 and partially covered costs of the Course for Country Data Managers held in Warsaw in February 2000. The first instalment Poland received in May 1999 via Secretariat in Geneva, the second one in January 2000 directly from the donor Country.

Incentives by the database management

11. In the following of the First Meeting of the Parties to the Convention the database administrator entered the data relating to the Focal Points from all countries-signatories and other institutions as obtained from the Secretariat of the Convention.

12. Polish programmers added also "UN/ECE Documents Discussion List" designated for authorised users. An authorised user, e.g. Focal Point can enter her/his intervention that will be attached at the end of the discussion on the selected document. The discussion list in the actual form will eventually be expanded into "networking" capability allowing for groups of authorised users to communicate on subjects of interest.

13. In June 1999 the Secretariat of the Convention have sent the letter drafted by the database administrator asking the Focal Points to nominate the Country Data Managers and to provide the data on the legal systems, correspondent institutions and on-going activity related to the projects.

14. The database administrator personally contacted by phone and e-mail Focal Points and CDMs in the different countries offering his aid in entering the data to the database. In September 1999 a short self-tutor guide have been prepared and distributed among parties to the Convention. In the same time the database authors completed a comprehensive manual of the database and sent it for translation.

15. The Focal Points identified the following three main reasons why they are not entering the data to the database:

- The Department is currently busy with other tasks and the Espoo related activity is treated at low priority. This situation will change soon and DA should expect a bigger interest paid to the database from our side.
- The Department actually has problems with availability of the personnel sufficiently skilled in computer and Internet applications.

- Materials that are to be entered to the database are currently available in the local language and we need time to have them translated.

16. Starting from the summer 1999 the database administrator started to introduce to the database information of research initiatives and training courses, on conferences and seminars and on the literature, as found in the internet and from other sources.

17. In February 2000 a three-day training course for Country Data Managers has been organised in Warsaw by the Ministry of Environment. The programme of this course covered the following subjects:

- § Introduction: (Espoo convention, role of EnImpAs in the transboundary EIA),
- § Information relevant to the transboundary EIA (legislation, project, procedure, methodology, expertise, training),
- § Data structures of EnImpAs,
- § Basics on Internet & World Wide Web,
- § A solid ½ day course of practical use of html language,
- § Tutorial: (entering legal act, entering project data, entering research & training data, modification of above, introducing of a privileged user, cancellation of a record of data, participation in the discussion list)
- § Network security

In the course participated 20 persons from 15 countries. During the course the manual in English and Russian languages have been distributed.

The Database manager has added the following data and information:

- § Environmental Impact Checklists for all the activities listed in the Appendix I of the Convention (in Research and Training: Assistance Projects on EIA)
- § On-line helps on database pages (in English and Russian)
- § Links to the UN/ECE pages and documents as well as to other sites containing information useful for the transboundary EIA
- § The loadable file containing the Notification Form (in the database for authorised users)
- § The table from the report prepared by Finland and Sweden describing practical implementation of the Convention
- § Some smaller modifications to the descriptions and labels on database pages, accordingly to the suggestions made by users.

Usage of the database

19. During the first period the Parties to the Convention have entered no real data to the database. The questionnaire prepared by the Hungarian evaluation group showed that the parties to the Convention are parties of origin of a few dozen of projects. Similar conclusions emerge from the Draft Report: Practical application of the UN/ECE Convention on EIA in a Transboundary Context prepared by Finland and Sweden (November 1999) showing that not less than 35 projects have been initialised accordingly to the Espoo procedure. However, only few of these projects have been entered by the correspondent Parties to the database.

20. Up to 10 of June 2000 Country Data Managers have entered 7 projects, being processed under the provisions of Espoo Convention. Moreover 16 records of the category Research and Training have been added as well as 25 legal acts and 122 records on institutions. The quantity and quality of information started to grow as a result of the training course for the Country Data Managers.

21. At present the database EnImpAs does not include many information and therefore its usefulness is limited. The Evaluation Report prepared by the group of experts led by Hungary points out this fact. This excellently prepared professional report is in the opinion of Polish Database management an objective and useful tool for the future database improvement and Poland in general shares its findings and conclusions.