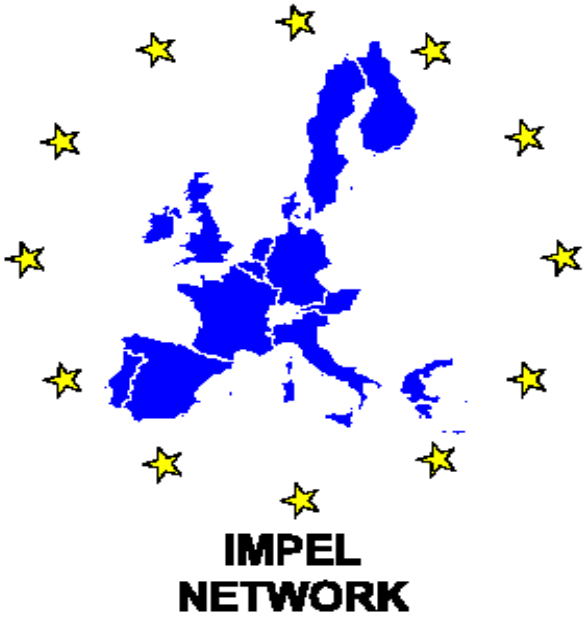
THE FINNISH COMPARISON PROGRAMME II

Web-based Distance Learning Component
1.4. – 30.11.2002



Pohjois-Suomen
ympäristölupavirasto

UNIVERSITY OF LAPLAND

CONTENTS

1. SUMMARY

The objective of this web-based distance learning project was to design and pilot a course component on the compliance monitoring of environmental permits. The pilot course *Compliance Monitoring of Environmental Permits* was designed as a first step towards developing and testing a true distance learning system that could form part of a comprehensive inspector training programme. Twenty environmental inspectors registered to take the pilot course, which was realized through a Finnish web-based learning environment, Discendum Optima. The course consisted of learning materials organized in the form of seven modules, a guidance module, multiple-choice tasks and discussions taking place in the discussion areas of the learning environment.

On the basis of the course experiences, participant activity logs in the Discendum Optima environment, participant feedback and theoretical models of meaningful learning, the pilot course was assessed and recommendations for its further development are presented. The recommendations underscore the fact that in the future development of web-based inspector training it will be important to acknowledge the previous knowledge of the learners, set learning goals and reflect upon these outcomes, involve the participants actively in the studying process, increase the level of co-operation and interaction, focus on real-world problems, and increase guidance for students.

The distance learning component *Compliance Monitoring of Environmental Permits* provided the partners and participants with valuable experiences of cross-cultural web-based study. Overall, the experience of the participants was positive, and the feedback indicated clearly that the respondents were agreed on the need for inspector training.

The project experiences demonstrate that web-based learning offers new opportunities to augment the more traditional forms of face-to-face instruction used in the training of environmental inspectors. It enables study for larger groups of students that is independent of where the students live. In addition, web-based learning provides for more intensive interaction among participants through the use of information and communications technology (e.g. web-based discussion areas, chat, video-conferencing). The new technology can be further exploited to implement activities, such as virtual field trips, which would otherwise be impossible or difficult to carry out for the majority of participants.

2. BACKGROUND

Finnish Comparison Programme II was the fourth programme executed in this new series and a follow-up to Finnish Comparison Programme I. The programme encompassed two themes: self-monitoring and electronic reporting of emission data (operators' periodic reporting to the authorities). The objectives of Finnish Comparison Programme II were a) to give an in-depth view of self-monitoring and electronic reporting based on information on detailed practical working methods and on information from workshops, and b) to produce a "lite" training package on these chosen themes for the IMPEL web site.

The distance learning component *Compliance Monitoring of Environmental Permits* is mainly based on presentations given during the project and was open for test use from 1 September to 8 November 2002. The purpose of this component was to test a new learning system. In the future, distance learning could form a part of a comprehensive inspector training programme which would ensure inspector competence and implement the practices developed in conjunction with IMPEL. The training envisioned may also include components such as theoretical studies, specialised courses, and study tours in different Member States to familiarise participants with good compliance monitoring practices and solutions.

3. THE WEB-BASED DISTANCE LEARNING COMPONENT

3.1 Objectives

The objective of the web-based distance learning component was to design and pilot a web-based course on the monitoring of environmental permits. The target group of the pilot comprised 20 environmental inspectors from different Member States, Norway and CION. The course was designed as a first step towards developing and testing a true distance learning system that could form part of a comprehensive inspector training programme.

The goals of the pilot course were to:

- present the Finnish compliance monitoring system and to introduce the Finnish model for self-monitoring
- introduce a new training opportunity for environmental inspectors in the Member States
- test and evaluate the usefulness of web-based training for environmental inspectors
- assess the preparedness of environmental inspectors in using information and communications technology in studying.

3.2 Partners

The project was led on behalf of Ministry of the Environment by the Northern Finland Environmental Permit Authority, which was responsible for setting the goals for the pilot course and providing the learning materials, learning tasks and content tutoring for the course. The Northern Finland Environmental Permit Authority worked together with the representatives of Ministry of the Environment, Lapland Regional Environment Centre and West Finland Regional Environment Centre.

Pedagogical and technical expertise in designing, implementing and assessing the course was provided by the Centre for Media Pedagogy (CMP) at the University of Lapland. The CMP offers training and support services and carries out research and product development projects in the field of the educational use of information and communication technologies. The CMP cooperates with different educational institutions, businesses, and organizations at the regional, national and international levels.

Further details of the partners and their responsibilities are provided in Annex 1.

3.3 Operation

The first meeting was organized at the CMP in Rovaniemi in February 2002. In the following months the partners gathered five times to discuss and design the pilot course. The pilot course was

ready for implementation in September 2002. In addition, Finnish Comparison Programme II organized a project visit for its participants to University of Lapland in May 2002. During this visit, the project team introduced the pilot course and demonstrated the learning environment Discendum Optima to the participants. Further details of the meetings and the project visit are provided in Annex 2.

The pilot course, entitled *Compliance Monitoring of Environmental Permits* and implemented in the Discendum Optima learning environment, was available for study from 2 September to 8 November 2002.

Following implementation of the course, a final seminar was organized in November 2002 that assessed the course and discussed the possibilities of web-based learning in the training of inspectors.

Pictures. The project team at the final seminar in November 2002 in Rovaniemi.

4. PILOT COURSE *COMPLIANCE MONITORING OF ENVIRONMENTAL PERMITS*

4.1 Participants

Twenty environmental inspectors registered to take the *Compliance Monitoring of Environmental Permits* pilot course. The participants were a multicultural group representing the following states and CION: Sweden, Norway, Denmark, England, Ireland, Spain, Portugal, the Netherlands, Italy, Germany, France, Belgium and Austria. The list of registered participants is provided in Annex 3.

4.2 The web-based learning environment

Compliance Monitoring of Environmental Permits was implemented using a Finnish web-based learning environment Discendum Optima by Discendum (http://www.discendum.com/). The environment is available on the Internet and enables the user to:

- read and listen to different types of learning materials (text, graphics, images, voice, Internet pages)
- take part in discussions
- answer multiple-choice questions
- create documents (e.g. HTML pages)

In order to use the environment, the user must have a computer, an Internet connection and a WWW browser. The browser must be at least version 4 of Microsoft Internet Explorer or Netscape version 4.5.

4.3 Goals and learning materials

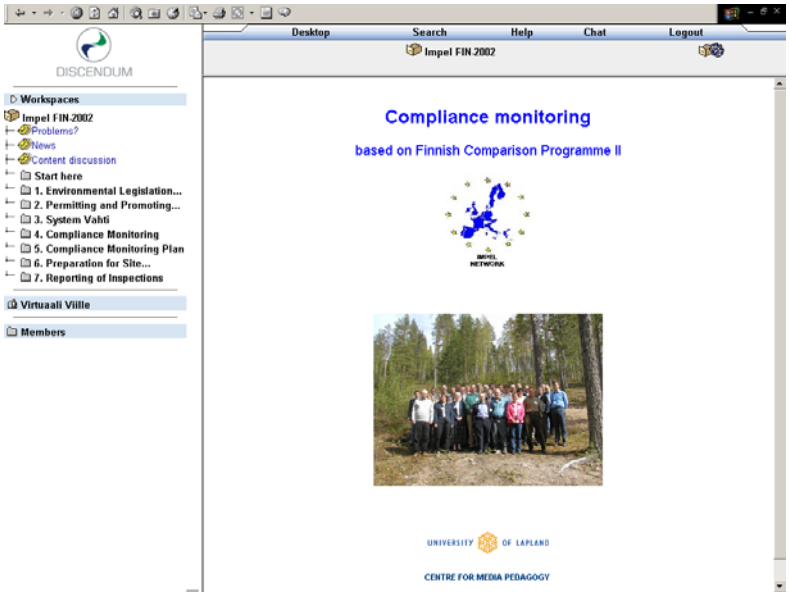
The goal for the learning materials was to present the Finnish compliance monitoring system and to introduce the Finnish model for self-monitoring. The goal of the pilot course was not to assess the learning outcomes of the participants in any way but, rather, to introduce a new training opportunity. In light of the following considerations, the goal was to design materials that are easy to navigate, use and work with:

- most of the participants had no prior experience of web-based learning;
- the computer skills of and equipment and network connections available to the participants were not known;
- the course was designed as a first step towards a more comprehensive training programme

All the material was produced by the partners. The course materials comprised 7 modules:

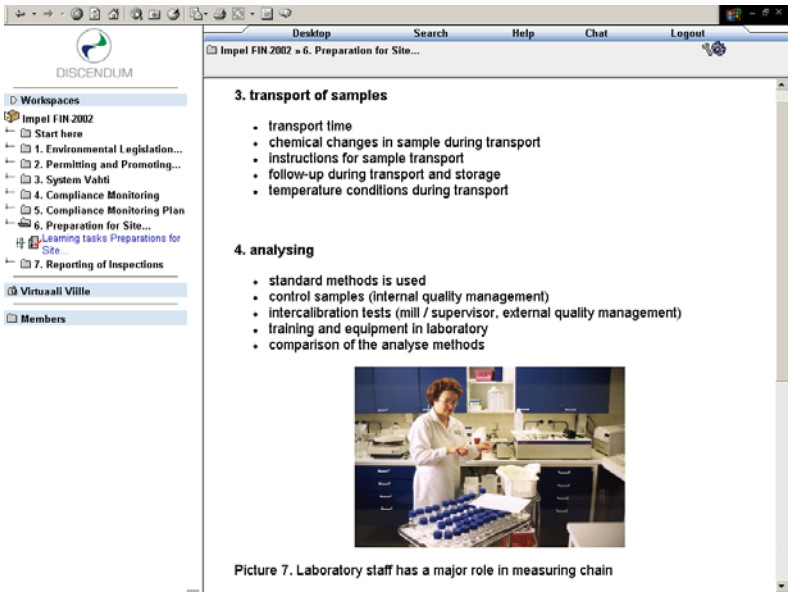
1. Environmental Legislation and Inspections
2. Permitting and Promoting Environmental Protection
3. The Compliance Monitoring System *Vahti*
4. Compliance Monitoring of Environmental Permits
5. Lapland Regional Environment Centre - The Compliance Monitoring Plan

6. Preparation for Site Inspections
7. Reporting of Inspections



Picture 2: The starting page of the course.

The learning materials in the modules consisted of an introduction by the content expert (text, image, sound), texts, images and graphics. Hyperlinks were used mainly as links to texts inside the module, not as links to other web pages. In addition, each module had a multiple-choice task component. The Discendum Optima environment guided the participants through the multiple-choice tasks and also scored the tasks.



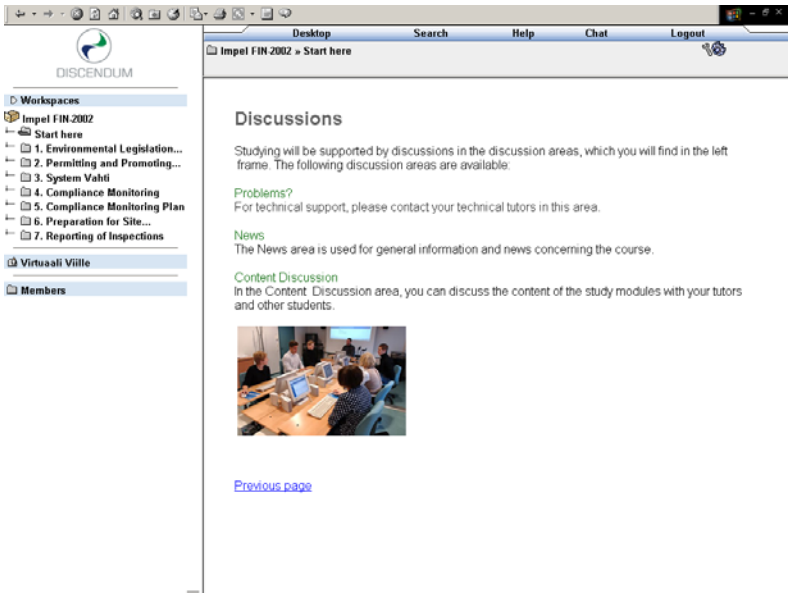
Picture 3: A sample of the learning materials in the module Preparation for Site Inspection.

4.3 Guidance

Guidance and support provided for participants were seen by the project team as a key factor in the successful implementation of web-based learning. Accordingly, a Start Here guidance module was designed in the environment. The guidance material in the module introduced the following components of the course to the participants:

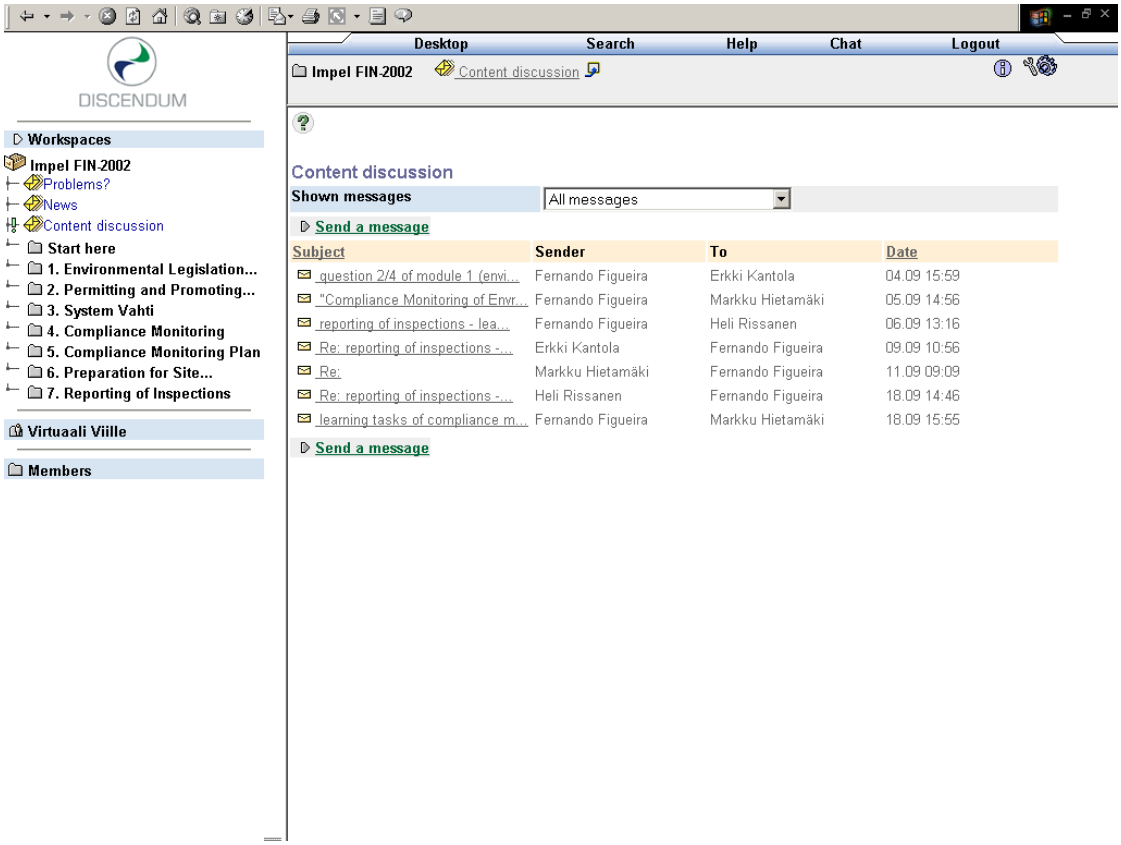
1. The Discendum Optima Environment
2. Goals and Contents of the Course
3. How to Study
4. Discussions
5. Tutoring and Technical Support
6. Feedback

In addition, students received a preparatory study booklet by e-mail. The booklet contained instructions on how to log into and work in the Discendum Optima environment.



Picture 4: A sample of the Start Here guidance module.

To support the learning process of the participants, three text-based asynchronous discussion areas were produced in the environment: Problems?, News and Content Discussion. The Problems area was produced for technical support and questions concerning the use of the Discendum Optima environment. In this area, two technical tutors were available for the participants. News was reserved for general information and news concerning the course. In Content Discussion, participants had the opportunity to discuss the content of the study modules with other participants and with three content tutors.



Picture 5: A view from the Content Discussion area.

5. ASSESSMENT OF THE PILOT COURSE

5.1 Participant activity

The activity of the participants was assessed through Discendum Optima activity logs. Of the 20 participants registered to take the pilot course, 80% (n=16) logged into the environment.

During the course, 55 logins to the Discendum Optima environment were recorded. The average number of times that the environment was accessed by the participants during the course was 3.4. This means that on the average 1 (0.8) person used the environment during each of the days that it was available. For the most part, the participants did not log into the environment during weekends. On the days when encouraging e-mail notifications were sent to the participants, the number of participants accessing the environment went up to 3-4 persons.

Of the participants who logged into the environment, 19% (n=3) posted messages to the discussion areas. All in all, there were 11 messages in the discussion areas (Problems: 4 messages; Content: 7 messages). Eleven participants completed the multiple-choice tasks in the environment.

5.2 Feedback

The participants were asked to fill in a feedback form (web questionnaire, see Annex 4) concerning their expectations, experiences and suggestions for improvements. Of the 16 participants who accessed the learning environment, 56% (n=9) filled in the feedback form. The following issues emerged from the participant feedback data:

<u>Expectations about the course</u>

Only one of the respondents had participated in a web-based course before this pilot course. Respondents were mostly expecting to refresh their knowledge of issues and ideas discussed during the actual Comparison Project. In addition, most of the participants expected a full learning package including a component to test learning outcomes and a forum to exchange experiences with tutors and other participants.

Two participants specified that because they did not participate in the first part of the project, they did not quite know what to expect. One respondent wanted more detailed information and one specified that the following expectations that he/she had were not met: evaluation of the learning results, opportunity to establish an on-line discussion with tutors and colleagues, and use of the full range of functions in the Discendum Optima environment.

What did you expect to get out of the course?	Not really	Something like that	Full match	Total
	%	%	%	%
A full learning package including a component to test the learning results.	25,0	50,0	25,0	100,0
A forum to exchange experiences and information with tutors and other participants.	12,5	62,5	25,0	100,0
A better ability to use the Internet to solve daily professional problems.	62,5	0,0	27,5	100,0
An opportunity to refresh my knowledge of the issues and ideas discussed during the Comparison Project proper.	25,0	12,5	62,5	100,0

Table 1: Respondents' expectations concerning the pilot course.

Studying on the course

56% (n=5) of those responding to the questionnaire worked on the course at their workplace, while 33% (n=3) studied both at home and the workplace. Only 11% (n=1) responded that they studied exclusively at home. 78% (n=7) had no problems accessing or using the Discendum Optima environment. The two respondents who reported occasional technical problems specified that they had problems in using the audio version of the presentation in the content module. All in all, the Discendum Optima environment and the materials in the environment worked well for the participants.

All of the respondents felt that the guidance (study booklet, instructions in the guidance module, tutoring and technical support) was sufficient. When asked to grade the course on a scale from 1 to 5 (5= the best grade), 56% (n=5) gave the course a grade of 4. The average value of the grades given was 3.6.

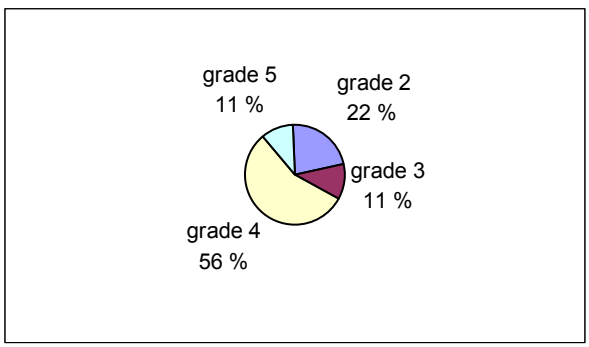


Table 2: Grades given to the pilot course.

Learning materials

All of the respondents found the *presentations* interesting and useful. All but one responded that the presentations were understandable and innovative. Some of the participants provided the project team with very valuable additional comments concerning the learning materials:

> "Learning module 6 was very good in my opinion, because the text was broken up with picture/figures which makes it easier for reading on the computer screen. Some of the presentations I simply had to print out, as I feel it is very hard to read everything (over a period of time) on the computer. "
>
> "The contents of the presentations could also be modified to include more specific instructions to new inspectors about where they can find more information as was done in nr. 4. This includes things specific to a certain regional office (where to find things electronically or administrative routines.)"
>
> "More multimedia, pics., video etc. "
>
> "I would suggest a little more balance and homogeneity in the several presentations, because some of them are quite long/short in comparison to others, and all of them have totally different styles."
>
> "This test-programme is a fine and various mix between texts, audio and pictures. "
>
> "Being familiar with the IMPEL Reference Book for Environmental Inspection and the EU Minimum Criteria before the course, I would have liked a more problem-based training, which would encourage discussions and exchange of experience between participants."

Learning tasks

Participants were also given an opportunity to comment on the *multiple choice tasks,* and five provided feedback. Four of the comments were critical, thus providing the project team with valuable information for further development of the course. These comments indicated that the multiple choice tasks:

- did not really allow full evaluation of the learning results; i.e. the questions were made to check that participants had read the texts, not whether they had understood the topic
- did not motivate the participants to study the module
- were not fully understandable
- had too many correct answers to the same question
- had answers that could not be labelled as simply "right" or "wrong"

Discussions

Of the participants who accessed the environment, 19% (n=3) posted comments on the discussion areas. Respondents specified that the lack of discussion was due to lack of time (n=1) or because the learning material was quite understandable and did not really encourage discussions (n=2). One respondent pointed out that there were no discussion threads that would have been relevant for him/her to join.

When asked whether they wanted more discussions in the discussion areas during the course, 33% (n=3) answered "yes", 33% (n=3) "no", and 33% (n=3) "Don't know/Not sure". Although there was not very much discussion in this pilot version, some of the participants saw the benefits of discussing the contents of the course:

> "I can see that this would be a very helpful training method, being able to ask questions, discuss things with others...very good. It would be important then, to get a very fast response to questions."

> "The IPPC Directive has a number of points, which are difficult to interpret. It would have been interesting to discuss these things (e.g. definition of "substantial change"). Relations between IPPC and the Seveso Directive and between land use planning and IPPC permitting could also be part of the course."

Future training programmes for inspectors

Seven respondents gave insights into the kind of inspector training programmes they would like to see in the future. The insights were as follows:

> "Audit in ISO 14000 rules."

> "Training programmes on the field of inspections made to specific industrial sectors, such as slaughterhouses/meat processing, milk industry, animal food industry, and others; and generally, I would like to see further developments in the area of inspection reporting, communication of results, and legal consequences, namely, how reports of inspection are done in different countries, how they are presented and how legal action (and what kind) can be taken as a result of an inspection report."

> "Change the information into the countries inspectors."

> "Refreshment of EC-directives."

> "It can be a training programme like this. It is important to meet in conferences first and then maybe continue with a e-learning course."

> "This was very good, but work on content also for more experienced inspectors, we also need updating!!"

> "Planning of inspections, Use of Brefs."

When asked what would be the main obstacles to participating in a comprehensive inspector training programme organised by IMPEL, 55.6% (n=5) of the respondents answered that there was "no time available"; only one answered that there was "no need for training".

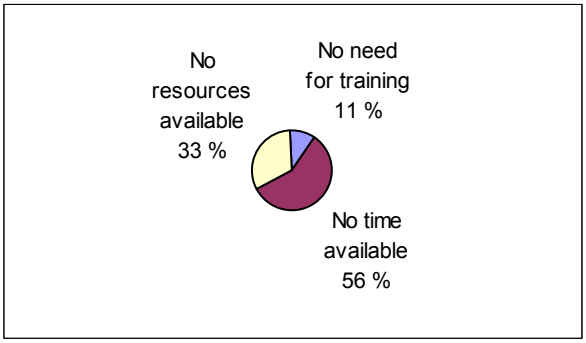


Chart 3: Main obstacles to inspector training according to the respondents.

Three of the respondents specified the obstacles in more detail. According to one respondent, a considerable obstacle was that the attitudes towards these kinds of initiatives are in some cases negative; i.e. people regard them as a sort of entertainment not to be taken seriously. This can lead to problems in getting permission to participate. Two respondents referred to language problems and the need to design the training so that it could be modified for local conditions in each of the participating countries.

77.8% (n=7) of the respondents offered the project team additional comments concerning the pilot course. The additional comments were extremely positive, thanking the project team for providing this new opportunity and indicating that this new form of studying should be further developed. One participant summed up the views of many:

> "..and I believe that this first step should not be left, but instead, should be studied, reviewed, improved, and then again, promoted in other programmes."

5.3 Conclusions

The project provided the project team and participants with valuable experiences of cross-cultural web-based studying. Overall, the experiences of the participants were positive; for example, the average value of the grades given to the course by the respondents was 3.6, the best grade being 5. Furthermore, the feedback indicated clearly that the respondents agreed that there is a need for inspector training.

Only two of respondents had occasional technical problems. The majority of the participants who filled in the feedback form did not have problems in accessing and working in the learning environment. On the other hand, it needs to be acknowledged that 4 registered participants did not access the environment at all, and information about their possible technical problems is lacking. Information about why 7 of the participants did not fill in the feedback form is also lacking. The accessibility of learning materials is crucial for the successful implementation of a web-based course, and if participants need additional software or plug-ins in order to access the materials, sufficient guidance and support has to be provided in installing this software.

One issue that emerged from the participant feedback was time. Five respondents identified time as a major obstacle for participating in web-based training. One of the challenges for web-based learning in inspector training is thus that the participants have enough time resources to allocate for studying. The present pilot course was an extra commitment on everyone's daily schedule. In future implementations of the course it will be extremely important that the allocation of time resources be discussed and agreed upon with the participants' supervisors.

Web-based learning requires by no means less time than more traditional face-to-face learning; indeed, it is often argued that, on the contrary, it requires more time. Lack of time seems to be a common problem identified by researchers and actors in the field of web-based learning:

> "It has become a commonplace to note how busy people are and how time has therefore become a precious commodity. With the advent of telecommunications technologies, distance is less a barrier to education than it was before the networked personal computer. In fact, it is hardly an exaggeration to say that time is now the barrier that distance used to be in higher education." (Mason & Weller 2000)

Another important issue in cross-cultural web-based learning is that the participants may come from different cultural educational traditions. This means that they may have different conceptions and expectations concerning, for example, the role of learners and teachers and the approaches and methods used in learning. Thus, celebrating and taking into account this cultural diversity can be seen as a major challenge. (Sancho Gil 2002; Brown 2002). It has been clearly demonstrated that one of the most important factors affecting students' satisfaction in web-based courses is the extent to which the course content and presentation fit the students' expectations (Mason & Weller 2000).

It was found that *Compliance Monitoring of Environmental Permits* is a good starting point that can be further refined and developed. In the following section, some more specific recommendations for the development of the course are made.

5.4 Recommendations

On the basis of the project experiences, participant feedback and theoretical models of meaningful learning (Jonassen 1995; Ruokamo & Pohjolainen 1999, 2000; Ruokamo & al. 2002), six recommendations for the further development of the pilot course have been made.

1. Acknowledging the previous knowledge of the learners

In order to be constructive and cumulative, the course should support the construction of knowledge by the learners on the basis of their previous knowledge. This means taking into account the **different levels of prior knowledge** of the participants. One participant also raised this issue in his/her feedback:

> "I welcome your initiative very much and recognize that you have done a great job on this course. However, I recommend that future courses shall be more specifically targeted, e.g. on new or experienced inspectors."

The goal is consequently that the course should cater for the needs of learners with different levels of knowledge and experience –both newcomers and more experienced inspectors.

2. Setting the goals for learning outcomes and reflecting upon outcomes

The studying process should be **goal-oriented** so that the participants have a clear picture of what the goal of the studying process is. Is it an increase in knowledge, skills (e.g. some practical skills or problem-solving skills), understanding, co-operation or something else? An important criterion for meaningful learning is that the learners are capable of defining and setting their own goals and that they have opportunities to reflect on and articulate what they have learned during the course.

3. Involving the participants actively in the studying process

The commitment of the management to **allocate resources** to the studying process is essential. Meaningful learning requires active and self-directed commitment to the teaching and studying process. Active commitment to the process should be supported first of all by allocating **enough resources and time** for the actors, i.e., tutors and students.

The **attitudes** and **practices** of the work environment should favour, not hinder, inspectors' taking part in a training programme that includes web-based components. As one respondent put it:

> " … unfortunately, not many people seem to take this kind of initiatives seriously, and instead, people regard them as sort of an entertainment or a hobby; so, I think a lot of work is needed in the area of

> demonstrating the interest and relevance of web based tools to improve the qualification of inspectors and to spread out the content of IMPEL work."

The commitment of the participants to the web-based course could be further increased by using a mixed-mode model of implementation. This means that the web-based course would also contain **face-to-face meetings** and meetings organized via **video-conferencing**. One of the respondents also commented on this:

> "It is important to meet in conferences first and then maybe continue with a e-learning course."

In addition, the electronic **learning materials** should be designed to offer added value when compared to more traditional learning materials (e.g. textbooks, articles). One way of enhancing the active involvement of the participants is to increase the amount of **multimedia elements** (sound, pictures, videos) in the learning materials. The multimedia elements should offer participants something that is very difficult or sometimes maybe even impossible to experience otherwise. In the case of inspector training, this could mean, e.g., "virtual fieldtrips" or "virtual interviews" in different locations in the Member States.

In addition, the use of the **Internet as an information source** could be further elaborated; i.e. the learning materials could include more hyperlinks to relevant materials on the Internet. In the design of the learning materials, more attention should be paid to the **consistency of style in the materials,** which was also commented on by one participant (see page 11).

4. Increasing the co-operativeness and interactiveness

Designing co-operation and discussion among the learners and tutors as central elements of the studying and learning process can have a significant impact on the learning experiences and outcomes of the learners. By working together, the participants have the possibility to utilize each other's knowledge and skills. The discussions should be seen as an integral and useful part of the studying process by the participants.

Learner-instructor/tutor and learner-learner interaction in web-based courses are often seen as the major added value that the web has to offer as compared to more traditional distance education as well as the critical factor in the success of web-based courses (Rasmussen et al. 1999). Web-based learning has been seen as a way to enhance the learning outcomes of well-motivated and well-prepared students who take advantage of the opportunities provided for increased interaction (Hiltz 1994).

The Internet offers the possibility to interact with participants from different Member States in a manner that was previously not possible – e-mail, discussion areas, chat, video-conferencing and many other media can and should be utilized to promote interaction and shared expertise among the participants. However, it should be underlined that a meaningful learning experience is a balanced mix of collaborative and individual work. Participants also need time to work individually on the materials and reflect upon them.

5. Focusing on real-world problems

The learning tasks should support the solving of real-world problems and one way of achieving this would be to use tasks that draw on **problem-based examples of real life**. By focusing on problems that have relevance to the participants, the motivation to study and the commitment to the studying process can be enhanced. The ultimate goal here is that the participants would have the possibility to define the problems and issues that they want to focus on. Furthermore, the goal of the studying process should be to understand issues and problems and to discuss and find solutions to them.

6. Increasing guidance

The feedback and support received from the tutors and other learners is central to meaningful learning and it should be promoted. Tutoring in a web-based course is a very time-consuming enterprise and adequate **resources** should be allocated for it. The participants considered the tutoring in this pilot course sufficient, and future realizations of the course should allocate a similar or greater level of resources for the purpose.

Researchers and actors in this field (see e.g. Kearsley 2000) emphasize the importance of the distance instructors/tutors actions in the learning outcomes of web-based courses. The following are regarded as necessary qualifications for tutors (see e.g. Arnold & al. 2002; Anderson & al. 2001): subject matter expertise, media competence, facilitating skills, the ability to support self-directed learning, and competence in arranging teaching and learning situations. It is thus evident that the **training of tutors** and **their actions during the studying process** are of central importance.

In the inspector training programme, this would mean, for example, that the web-based discussions during the course should be actively tutored. The following functions are part of active tutoring (see Anderson & al. 2001):

Facilitating discourse

- Identifying areas of agreement/disagreement
- Seeking to reach consensus/understanding
- Encouraging, acknowledging, of reinforcing student contributions
- Setting the climate for learning
- Drawing in participants, prompting discussion
- Assessing the efficacy of the process

Direct Instructions

- Presenting content/questions
- Focussing the discussion on specific issues
- Summarizing the discussion
- Diagnosing misconceptions
- Injecting knowledge from diverse sources, e.g. textbooks, articles, the Internet, personal experiences

Increasing guidance also means that a **more detailed curriculum** has to be set for the study process, for example, by setting e.g. a weekly syllabus for familiarizing participants with the learning material, taking part in discussions and working with the learning tasks.

ANNEXES

Annex 1: Partners

Design and implementation of the pilot course

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Content Modules:

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Tommy Hägg, West Finland Regional Environment Centre
Tiina Kämäräinen, Lapland Regional Environment Centre
Heli Rissanen, Lapland Regional Environment Centre

Guidance Module:

Päivi Karppinen, Centre for Media Pedagogy, University of Lapland
Maire Syrjäkari, Centre for Media Pedagogy, University of Lapland

ANNEX 2: Meetings

Date & Place: **February 11th 2002, University of Lapland, CMP**
Participants: Markku Hietamäki, Erkki Kantola, Jari Pasanen, Heli Rissanen, Maire Syrjäkari
Topics:

- Course design
- Project schedule

Date & Place: **April 25th 2002, University of Lapland, CMP**
Participants: Markku Hietamäki, Jari Pasanen, Maire Syrjäkari, Hannu Sääskilahti
Topics:

- Copyright issues
- The Discendum Optima learning environment
- Course design
- Project schedule

Date & Place: **May 13th 2002, University of Lapland, CMP**
Participants: Markku Hietamäki, Jari Pasanen, Maire Syrjäkari, Hannu Sääskilahti
Topics:

- Course design: target group, goals, learning materials and tutoring
- Demonstrating Discendum Optima to the participants on May 27th

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Date & Place: **May 24th 2002, University of Lapland, CMP**
Participants: Markku Hietamäki, Jari Pasanen, Maire Syrjäkari, Hannu Sääskilahti
Topics:

- Course design
- IMPEL FIN-2002 Project visit on May 27th

IMPEL FIN-2002 Project Visit

Date & Place: **May 27th 2002, University of Lapland**
Participants: Markku Hietamäki, Erkki Kantola, Maire Syrjäkari, Hannu Sääskilahti
Participants of the Finnish Comparison Programme II.
Topics:

- Presentation of the Centre for Media Pedagogy
- Presentation of the Pilot Course *Compliance Monitoring of Environmental Permits*
- Demonstration of the Discendum Optima environment

Date & Place: **August 5th 2002**, **University of Lapland, CMP**
Participants: Markku Hietamäki, Erkki Kantola, Jari Pasanen, Päivi Karppinen, Hannu Sääskilahti
Topics:

- Copyright issues
- Preparation of the project contract
- Course schedule and learning materials
- Assessment of the pilot course

Date & Place: **August 23rd 2002**, **University of Lapland, CMP**
Participants: Erkki Kantola, Jari Pasanen, Heli Ruokamo, Päivi Karppinen, Hannu Sääskilahti
Topics:

- Feedback form for the course
- Course schedule
- Final review of the learning materials in Discendum Optima
- Final report of the project

IMPEL FIN-2002 Final Seminar

Date & Place: **November 18th 2002**, **University of Lapland, CMP**
Participants: Markku Hietamäki, Erkki Kantola, Jari Pasanen, Päivi Karppinen, Hannu Sääskilahti
Topics:

- Project experiences and results
- Assessment of course and web-based learning as part of a comprehensive inspector training programme

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ANNEX 3 : Participants

1.	Alfred Hammler	Austria
2.	Andrew Fanning	Ireland
3.	Björn Pettersson	Sweden
4.	Brian Clarence	England
5.	Carolina Sahlen	Sweden
6.	Chiqui Barrecheguren Beltran	Spain
7.	Angela Miller	Norway
8.	Elin Markert	Denmark
9.	Fernando Figueira	Portugal
10.	Fokko Gerrit Bams	Netherlands
11.	Giuseppe Stanghellini	Italy
12.	Heinz Lackner	Austria
13.	Jurgen Bardenhagen	Denmark
14.	Laurent Foucher	France
15.	Miguel Costoya Rivera	Spain
16.	Nanna Rorbech	Denmark
17.	Paul Bernaert	Belgium
18.	Paul Van Damme	Belgium
19.	Sabine Sommer	CION
20.	Isabel Santana	Portugal

ANNEX 4 : Feedback form

1. Have you participated in a web-based course before this? *Yes/No*
2. What did you think to get out of the course*? Not really/Something like that/Full match*
    a) A full learning package including a component to test the learning result
    b) A forum to exchange experiences and information with tutors and other participants
    c) Better ability to use Internet to solve daily professional problems
    d) To refresh issues and ideas discussed during the actual Comparison Project
3. If you had any other expectations, please tell.
4. Did you have any difficulties accessing or using the Discendum Optima environment? *No/Sometimes/Often*
5. If you had difficulties, please tell us what kind of difficulties you had, and what do you think might have caused them.
6. Where did you study the course? *At workplace/At home/At workplace and at home/At some other place*
7. a) Do you think that the guidance (study booklet, instructions in guidance module, tutoring and technical support) was sufficient? *Yes/No*
7. b) If no, please give details and suggestions for improvements.
8. a) Was the content of presentations interesting/useful? *Yes/No*
8. b) If no, please give details and suggestions for improvements.
9. a) Was the way of presentations understandable/innovative? *Yes/No*
9. b) If no, please give details and suggestions for improvements.
10. Any other comments on presentations or learning materials (texts, audio, pictures)? Where there something too much/too little in the presentations? Anything you'd like to see added to the learning material?
11. a) Did you post any comments on the discussion areas? *Yes/No*
11. *b)* If no, please specify.
12. Would you have wanted more discussions on the discussion areas during the course? *Yes/No*
13. Comments on the multiple choice tasks.
14. How would you score this pilot course on a scale from 1 to 5? (5 = the best grade)
15. What kind of inspector training programmes you would like to see in the future?
16. a) If IMPEL will organize a comprehensive inspector programme including web-based learning, what do you think could be the main obstacles to participate*? No need for training/No time available/ No resources available*
16. *b)* If any other obstacles, please specify.
17. Any additional comments?

ANNEX 5 : References

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