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│          EUI-Net            │
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│     External evaluation     │
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The present document aims at giving a contribution to the work of the Erasmus Thematic Network EUI-Net, and it is produced at the request of the Network
In accordance with the project management and the initial workprogramme, this external evaluation of the EUI-Net takes place at the end of the project's period, after three years of activity.

The following aspects of the project were taken into consideration as key components of the external evaluation:

1. Coherence between the initial workprogramme, activities achieved and final outputs
2. Quality control of final outputs / products, for each workpackage
3. Conclusions related to the transition between EUI-Net and EUE-Net

Through a systematic analysis, achievements, outputs, responsiveness, partner contributions will be covered in order to issue recommendations to the project managers and partners.
The following comments are based on the information available on the project's website. As an extensive source of information, the website provides a comprehensive overview of the project's activities and outcomes.

In addition, I had the pleasure to attend to the third General Assembly of the EUI-Net, held in Rome in May 2007. On that occasion, I could feel the welcoming atmosphere of the group and the commitment of the participants. At the meeting, I was also able to gather useful insights into the organisation of the Thematic Network itself.

The objectivity of this evaluation report is permitted by the content of the documents available to public (minutes of the meeting and workshops, presentations ppt of the network….).

1. **Coherence between the initial work programme, activities achieved and final outputs**

Generally speaking, the EUI-Net outputs present a comprehensive panorama of the engineering education in Europe, under the perspective of the relationship between universities and industry[1]. They also present a notable state of affairs of past achievements and studies, present practices and requirements relating to the cooperation between the academic and entrepreneurial fields.
Through a structured mapping of the current situation, the project demonstrates the need for a European approach to adapt the academic curricula to the realism of the industry sector and the great necessity to further explore this cooperation.

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[1] Industry is to be considered according to the following definition: "any unit equivalent to an enterprise"

Beside the ongoing work of the project managers and the activity of the Management Committee, the initial breakdown of the overall network into 9 workpackages (5 SIG + 4 KA) has demonstrated to be relevant in order to cover the various objectives and challenges raised by the project.

Each Special Interest Group and Key Action did complete its tasks, despite some slight delays in some of SIG workprogramme (activities of SIG2 and SIG4 in the first year of activity).

2. Quality control of final outputs / products, for each workpackage

In accordance with the European Commission's rules, all the outputs include the reference to the European Community funding and the Socrates Logo.

One general remark concerning the reference of the project on the outputs: the project number is not 116343 - CP -1-2004-1- RO - ERASMUS - TNPP but 116343 - CP -1-2004-1- RO - ERASMUS – **TN** as the TNPP only refers to the pre-proposal submitted in November 2003.

> **SIG 1 -** Generic and specific competences in the subjects relevant to the industrial sector (e.g. Electrical engineering, Mechatronics, Civil engineering), using the "Tuning" methodology

Output: book "Tuning Industrial Educational Structures in Europe, Part I"

The initial input of the Tuning counselor had a real impact in terms of launching the debate, presenting the importance of the Tuning methodology and its flexibility, which led to the decision to split the activities relating to the design of the generic and specific competences between SIG1 and SIG2.

- Strong points:

The Tuning research in the project, aiming at finding the match between the competences given by universities and the general requirements of the work in enterprises, was run very thoroughly, with successful results.

The book presents an extensive description of the Tuning research tools and outcomes, including the design of the questionnaires, the filling out process, an analysis of item-scale and reliability.

Putting together feedback on the competency profile of engineers, coming from employers, former graduates, and academics, the publication presents the research design and results, as an expression of synergy between pedagogical research and actual teaching. The book reaches the initial aim to help universities to tune their curricula to the present and prospective of the industry.

- Weak points:

The publication makes clear the difficulties encountered in the data collecting process, from the Tuning Questionnaires. The number of valid questionnaires collected (240 in total) was below the expectations. We learn from the minutes of the Management Committee meeting, held in Brussels in October 2005, that the expected number of respondents was around 500.

The newsletter n.6 plays a role in the completion of the Tuning research as an input from partners from countries less represented in the study is requested. This is a good example of the communication channels between the network's members.

A very few spelling mistakes and inconsistencies were noticed (e.g. "education and social sciences" appears twice among the six categories of academics, p. 8-9). Further editing might be accomplished.

The Tuning questionnaire, as starting point of the "Tuning research" should be listed as one of the SIG1 and SIG2's outputs.

SIG 2 - Generic and specific competences for practical stages of students as key component of the curricula in relation with the Industrial sector

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Output: book "Tuning Industrial Educational Structures in Europe, Part II"

The extensive study of the practical stages of students reveals a key aspect in the U-I cooperation. The conclusion reached by SIG2 raises the importance of mapping the various practices of student practical placement and of adapting the existing curricula. Some further activities will have to be run under the next round of activities of the network, under EUE-Net project as of October 2007.

The question of student placement in enterprises is quite innovative in the frame of the Tuning methodology itself.

A workshop was dedicated to the European models and best practices on practical placement of students, in the context of the third EUI-Net Conference. The papers collected in the proceedings provide an excellent overview of the existing practices in Europe and complete the SIG2 activities and achievements.

SIG 3 - Synergies between teaching and research in the frame of U-I cooperation, to facilitate integration the results of research in teaching and for a better training of the future specialists and researchers

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Output: Workshop and synthesis book: "Guidelines and best practices in Europe - Teaching and Research synergies"

- Strong points:

The workshop dedicated to "European models of synergy between teaching and research in higher education" was organized in Estonia in May 2006, in the context of the Second General Assembly of EUI-Net. Extensive information about the workshop (programme, copyright guidelines, abstracts and proceedings) is available on the website.

The book is at the crossroad between case studies, study reports, past projects… The approach of the workshop is valuable in terms of applying Erasmus Thematic Networks priorities: Tuning research, as a reference to SIG1 and SIG2 activities, relation with other Socrates Actions (e.g. Minerva project), input from professors from non-Socrates countries, such as Ukraine and India.

- Weak points:

It is not clear why SIG3 has a separate website. Is it due to lack of space on the EUI-Net server or to another reason? A comment may be added for further clarification.

SIG 4 - European Innovation Capacity, Research and Technological Transfer using U-I cooperation

Output: - Web Database with good practice research projects
  - Web Database with research needs and offers
  - Web Database for innovation, good practice research projects, research needs and offers and technological transfer

Three good practice research projects are mentioned, including the impressive INTUITION project. Although the relation with those research projects is obvious (related thematic areas covered, common partners, coordination by one of the partner institutions…), it is not clear from the website how EUI-Net finds benefit in the projects' results. Further explanation might be added in the final report.

The link to VEGA project (Virtual Reality in product Design and Robotics) is not operational.

The "Innovation & technological opportunities" is linked to the website of the Innovation Relay Centres Network (http://www.innovationrelay.net/showroom/) providing "a selection of the best Technology Offers", among the most recent results of EU funded research and development projects (source: CORDIS).

The three questionnaires designed to collect projects to be included in the databases are not online. They might be added.

SIG 5 - Professional insertion - key issue for the cooperation between University - Industry as main indicator for learning outcomes and competences

Output: Web Database with graduates per specializations in industrial sector and available jobs

Although the databases were completed by this working group, it turned out that the existing tools at the regional and national level required a huge work of synthesis in a much wider database, at the European scale. The fact that one of the multilateral project proposals submitted by the network covers the need for such a Europe wide tool shows that the work required could not be accomplished under the current EUI-net project. Further explanation about the state of the art observed by the SIG5 members should be provided under the SIG5 outputs to give a clearer picture and justification of this workpackage's achievements. Some examples of existing databases could also be put online.

> **KA1** - EUI-Net legal framework

Output: Legal framework of EUI-Net, office and infrastructure

This output, crucial for the network sustainability, was successfully accomplished. The status of the Association Internationale sans But Lucratif, established in Belgium, is online. This is a good example of the effort made by the project management to allow transparency.

> **KA2** - Dissemination of best practice in University - Industry cooperation within the EUI-Net

Outputs: - EUI-Net dissemination website
- EUI-Net Conference and proceeding
- CD-ROM

A large range of dissemination activities were achieved successfully.
According to the title, the KA2 covers the dissemination of best practice in University – Industry cooperation. The website (see comments below) covers all aspects of dissemination, including dissemination of the network itself (presentation of the network in conferences, participation in summer programmes…). It is felt that the title of the KA2 does not cover all activities related to dissemination. The network visibility, which is a key issue in terms of dissemination, is left a part although activities were run by this workpackage. This might be a remark to take into consideration for future projects.

Website www.eui-net.org:

- Strong points:

EUI-Net website is fast, userfriendly, homogeneous, clear and contains a great deal of useful information in an accessible form. All facets are of the project are covered: background, objectives, partners, workpackages, meetings and workshops, outcomes, news… All outputs are visible online, which is a particular strength of the website.
The website is not only the core of the network's activities but also the heart of TN communication between meetings.
The publication of newsletters is also a valuable communication tool among the network's members.

- Weak points:

Among the "documents" available, the application and the activity reports (progress and final reports, when ready) should be added.
The website visitor must be familiar with the aim of each WP in order to find the related information. For example, the dissemination outcomes are only accessible through the outcomes of WP7. Dissemination activities and achievements deserve a separate section in the left column of the homepage.
A few inconsistencies are noticed: the link corresponding to "Project overall coordination" leads to the Tuning questionnaires while the section "network" leads to the Association status. The newsletters were designed to be quarterly whereas only 5 newsletters were issued during the project period. In addition, the 5th (instead of "5nd" as mentioned) issue refers to the Newsletter No.6.

The CD-Rom was not reviewed in the frame of this evaluation.

KA3 - Network expansion, International cooperation, links with other networks, services, fund rising

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Outputs: - New universities' database
　　　　　 - New industrial partners' database

The activities relating to this Key Action started as of Month 18, as planned in the initial work programme. This corresponds with the launching of the new University-Entreprise dialogue.

- Strong points:

Besides the setting up of the Association (see KA1), the network has been very active in exploring new perspectives for the project and in planning future activities.

The "Inner Circle of the EUE-Net Pilot Project" had a dynamic activity to generate a new dimension in the dialogue between universities and enterprises. Some very qualitative partners, especially from the professional sector, with a great added value to the network, were involved in the project,

In addition to the proposal related to the reorientation of EUI-Net, under the new EUE-Net, three proposals related to EUI-Net activities were submitted to the European Commission for funding. Some efforts to extend the activities to other continents were done through an Erasmus Mundus Action 4 proposal, directed to China.

- Weak points

The current status of some of the Inner Circle members is not clear, either because the list of partners has not been updated or because they are not formal partners yet (e.g. JEUNE, UEAPME, Academy AVIGNON). This issue should be clarified.

KA4 - Project activities & administration coordination and project reporting

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Outputs: - Project management
　　　　　 - Quality assurance procedures
　　　　　 - Progress and final reports

The Management Committee is a highly committed group who have ensured a smooth implementation of the project's objectives and facilitated the development of high quality results.

On basis of the minutes of the Management Committee meetings, the decision making process is efficient and constructive. Moreover, the members of the MC play an important role in the internal evaluation process. Critical analysis is performed, in terms of strong and weak points relating to achievements within the working groups. The content and structure of the outputs are discussed (e.g. Tuning Research book).

As a general frame for quality assurance, the Quality Assurance Procedures available on the website, provides excellent guidelines and demonstrates the project's concern about issuing quality results.

The "Action list", produced in the various meetings and workshops, is a very useful initiative as it allows a quick follow-up about the progress of the project.
Finally, the EUI-Net Copyright form, available among the documents related to the Workshop held in Tallinn in May 2006 (2nd EUI-Net Conference) is of great importance. This document should be more easily accessible on the website. A section including all the monitoring and administration documents should definitely be inserted on the website homepage.

Partners commitment:

- Strong points:
A particular attention has been given to the geographical coverage not only in the network but also in each working group.
Most of the partners are actively involved in the network's activities.

- Weak points:
Inactive partners were intended to be replaced by other partners from the same country, as mentioned in the minutes of Management Committee meeting held in Tallinn in January 2006, but there is not any clear follow-up about this issue.

3. **Conclusions related to the transition between EUI-Net and EUE-Net**

EUI-Net has demonstrated to be a forum for collaborative work. During the first three years of activities, EUI-Net has identified the needs, the existing facilities and the tasks still to be completed in the field of University - Entreprise cooperation. EUI-Net, with its current structures and members, is becoming a facilitator, an inspiration, a support network for graduates, academics and employers. The network has the potential to become a European framework to promote an active cooperation between the University and Entreprises sectors, with a long term vision.

As proven by the proceedings, the meetings, workshops and conferences that took place in the frame of EUI-Net, enhanced a proactive dialogue out of which all new ideas were explored. The first three years of activity led to the emergence of multilateral projects proposals and of sub-networks. The sub-networks, namely "Quality SNet", "CDO[2] SNet", the "Entrepreneurship teaching and learning SNet" and "Entrepreneurial mobility SNet", have a major role to play to ensure a smooth transition from EUI-Net to EUE-Net.

The transition between EUI-Net and EUE-Net means a change of focus of the entire network towards the craft and small enterprises rather than multinational corporations. Beside the creative dialogue that took place in the "Inner Circle of the EUE-Net Pilot Project", the entire network has been involved in this orientation of the network focus, in particular on the occasion of the 3rd EUI-Net Conference. As shown by the Newsletter published in April 2007, during the last months of activity of EUI-Net, the network has laid solid foundations in view of the upcoming EUE-Net project.

Maryline Fiaschi – October 31, 2007

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[2] "CDO" stands for Career Development Offices