Competences in Education and Cross-Border Recognition

Evaluation of the usefulness of learning outcomes and competences for international recognition

Final Report

June 2007

COMPETENCES IN EDUCATION AND CROSS-BORDER RECOGNITION

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1. INTRODUCTION

In response to the Bologna Process, a group of European universities has initiated a project called *TUNING Educational Structures in Europe (TUNING)*. The TUNING project was launched in 2000, in order to support universities across Europe to implement the Bologna Process at university level. In short, the TUNING project aims to make study programmes comparable and compatible, to facilitate transparency and academic recognition at European level and to build trust between institutions by offering a methodology to assure and enhance the quality of study programmes.

The ENIC and NARIC networks comprises (mostly) European national information centres that are responsible for the recognition of academic and professional qualifications. In principle, the outcomes of the TUNING project should be relevant to the recognition practice of the ENIC/NARIC networks. The Dutch NARIC and the UK NARIC have established a partnership to carry out a project called *Competences in Education and Cross-border Recognition (CoRe)*, in order to evaluate whether the TUNING project has succeeded in its aim to further facilitate transparency and academic recognition.

This document forms the final report of the CoRe project. The structure of the report is as follows: After this first introductory chapter, the background of the CoRe project will be elaborated upon in the second chapter. As the CoRe project was initiated to evaluate the value of degree profiles that are being developed by European institutions as a result of the TUNING project, background information will be given about the TUNING project here. In the third chapter, the goals and research questions, and the design of the CoRe project will be described. It will explain the initial project design and approach, and the slight changes that had to be made in the project approach during its conduction. In the fourth chapter the analysis results of the CoRe project will be illustrated. All the cases of degree profiles that have been evaluated will be described, and the clarity of the competences, the usefulness for credential evaluation and the recommendations for improving the degree profile are discussed. In the fifth chapter, overall conclusions of the CoRe project will be drawn, and recommendations will be given to the two main stakeholders in this project, the TUNING project and the ENIC/NARIC networks.

2. BACKGROUND OF THE CORE PROJECT

The CoRe project was initiated to evaluate the value of **degree profiles** (containing learning outcomes, defined in terms of competences) that are being developed as a result of the Europe wide initiative of the TUNING project. The main goal of the CoRe project was to evaluate whether these degree profiles provide credential evaluators with relevant additional insight in the level and content of educational programmes, and therefore improve the comparability and recognition of educational programmes across Europe. In order to fully understand the context in which the CoRe project was conducted, background information about the TUNING project has been provided in the paragraphs below[1].

2.1   Introduction to the TUNING project

The TUNING project was launched in 2000, in order to support universities across Europe in the implementation of the Bologna Process at university level. TUNING proposes and promotes the redefinition of educational programmes in an outcomes-oriented manner. Learning outcomes are expressed in terms of generic and subject-specific competences as well as ECTS credits that are based on workload. Currently, universities from about 35 countries in Europe work together in the TUNING process. Since 2005, the TUNING project has also been extended to the Latin American continent, from which institutions in a further 18 countries also joined the process. The focus of the TUNING project is not on the various educational systems of countries, but on the educational structures and content of educational programmes. Across all the participating countries, the project aims at identifying reference points for generic and subject-specific competences for both first (Bachelor) and second (Master) cycle graduates in a series of subject areas.

In order to be able to understand individual curricula and make them comparable, a methodology has been designed according to which common reference points could be identified. Within this methodology, the following five lines of approach were distinguished (González, J., & Wagenaar, R., 2005):
1. definition of generic (general academic) competences;
2. definition of subject-specific competences;
3. the role of ECTS as an accumulation system;
4. approaches to learning, teaching and assessment;
5. the role of quality enhancement in the educational process.

These five lines of approach will allow universities to *tune* their curricula without losing their autonomy and at the same time stimulate their capacity to innovate.

2.2   Linking learning outcomes, competences and ECTS credits

During the TUNING project execution, it was concluded that ECTS *workload based credits* should be linked to learning outcomes achieved by the students. These *learning outcomes* are to be expressed in terms of *competences* obtained by the students. The following definitions were formulated (González, J., & Wagenaar, R., 2005):
- **Learning outcomes** are statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of learning. They can refer to a single course unit or module or else to a period of studies, for example, a first or a second cycle programme. Learning outcomes specify the requirements for award of credit. They are formulated by academic staff.
- **Competences** represent a dynamic combination of knowledge, understanding, skills, abilities and values. Fostering competences is the object of educational programmes. Competences will be formed in various course units and assessed at different stages. Competences are obtained by the student.
- Learning outcomes are expressed in terms of competences. Competences may be developed to a greater degree than the level required by the learning outcome.

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[1] This summary is derived from the main features of the TUNING project as described in González, J., & Wagenaar, R. (2005). TUNING Educational Structures in Europe II. Universities'contribution to the Bologna Process. Final report Project Phase II. Universidad de Deusto / Universiteit Groningen.

In order to facilitate the process of defining learning outcomes and generic and subject-specific competences, the TUNING project has developed a model for designing, implementing and delivering curricula. This model consists of the following main steps (González, J., & Wagenaar, R., 2005):

1. Meeting the basic conditions for a programme;
2. Definition of a **degree profile**;
3. Description of the **objectives** of the programme and the **learning outcomes** (in terms of knowledge, understanding, skills and abilities) that have to be met;
4. Identification of **generic and subject-related competences** which should be obtained in the programme;
5. Translation into the curriculum: content (topics) and structure (modules and credits);
6. Translation into educational units and activities to achieve the defined learning outcomes;
7. Deciding on the approaches to teaching and learning, and methods of assessment;
8. Development of an evaluation system intended to enhance its quality constantly.

The programmes from universities that take part in the TUNING process are currently undergoing a process of redefinition according to the above stated model.

2.3   A Summary of Outcomes for each subject area

Within the TUNING project, a selection of subject areas was chosen to start the process of redefinition. Until now, the following subject areas are included in the project: Business Administration, Chemistry, Educational Sciences, History, Geology / Earth Sciences, Mathematics, Physics, Nursing and European Studies. Each subject area group gained insight into and built on what constitutes the vital core of their subject area. In other words: what makes a business programme a business programme. All subject area groups have defined these sets of key features that a programme in their subject area should have, which are described in a so-called Template, or *Summary of Outcomes*. This Summary of Outcomes facilitates the readability and rapid comparison across subject areas. It aims to provide the basic element for a quick introduction into the subject area, and is intended to be the common reference point for the particular subject area.

TUNING has discovered that in the vast majority of academic fields, second cycle degree profiles tend to be more diverse than first cycle profiles. This is not surprising since the second cycle is the period of specialisation and often reflects the particular expertise of the university concerned. Sometimes, these degrees are referred to as having a generalist or specific profile, a research profile or a professional profile. TUNING believes that this variety is to be kept, provided that:
a) it is articulated in a consistent manner at country and at subject area level, and
b) with the adequate tools for transparency the differences between profiles can be identified and recognition is made possible.

This means that there will most probably be more similarity in the degree profiles of Bachelor programmes than in the degree profiles of Master programmes.

2.4   A degree profile for each programme

All TUNING subject area groups have agreed on the key features that comprise a programme in their field, which are described in the Summary of Outcomes. However, on top of these key features, there is the opportunity to add learning outcomes and competences which are a specialising feature of the particular programme. This means that each programme within a same subject area in Europe may have a slightly different degree profile. As a consequence, every degree profile is unique, but one has to take into account the specific features which are crucial for the subject area concerned. The degree profile is defined in learning outcomes, which are formulated in terms of competences. Degree profiles should be developed for each cycle, according to the following process:
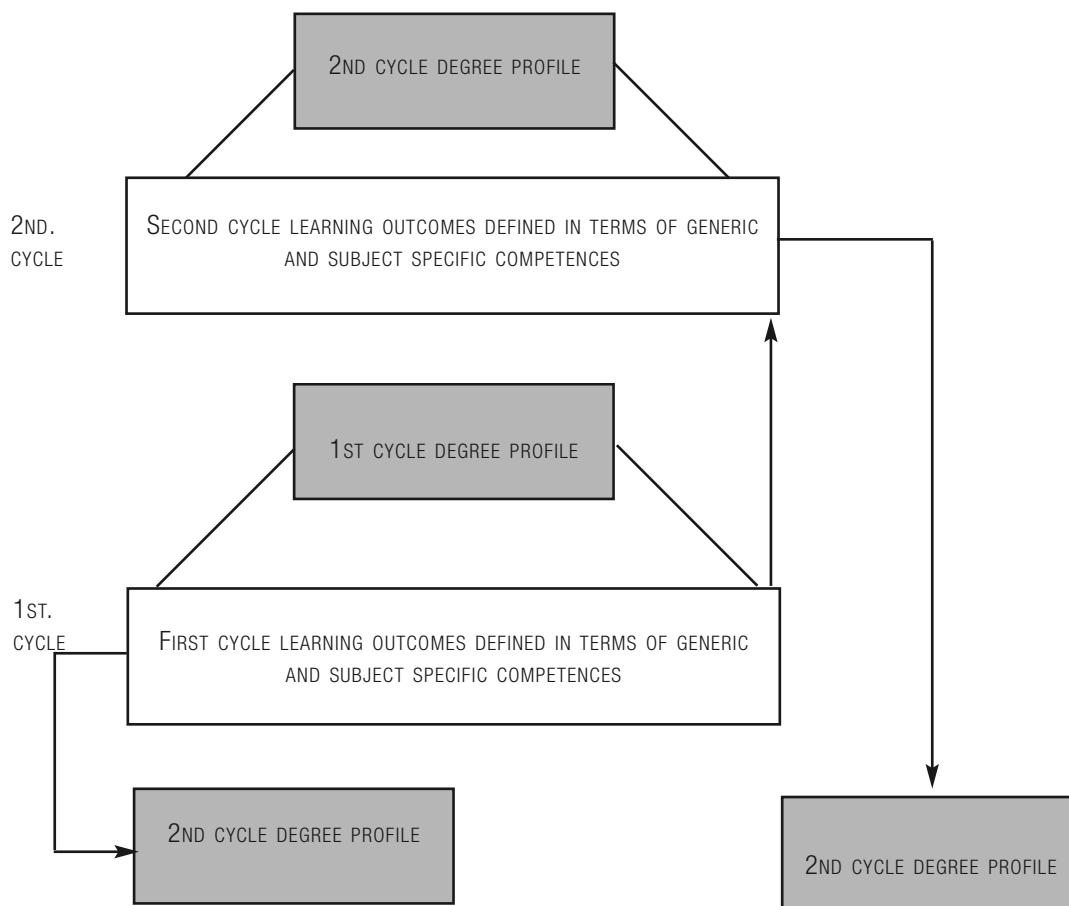
Learning outcomes are formulated both at programme level and on the level of individual course units or modules. The learning outcomes of the individual course units add to the overall learning outcomes of the programme. The situation for competences is more or less comparable. Competences are developed in a progressive way. This means that they are formed in a number of course units or modules at different stages of the programme. Only competences which can actually be assessed should be mentioned explicitly.

3. APPROACH OF THE CORE PROJECT

As explained in the previous chapter, one of the goals of the TUNING project is to facilitate transparency and academic recognition across Europe, by making study programmes more comparable and compatible. One of the instruments being developed in TUNING to facilitate this goal is the degree profile, based on common reference points, and defined in terms of learning outcomes and competences.

As the international recognition of educational programmes is the main responsibility of the national ENIC/NARIC's, these centres are an important stakeholder that could benefit from the TUNING initiative. In order to evaluate to what extent the TUNING project has succeeded in the improvement of comparability and recognition of educational programmes across Europe, and to find out to what extent degree profiles provide valuable additional recognition information for ENIC/NARIC officers, the CoRe project was initiated.

In this chapter there will be reflection on the current methodology of credential evaluation, and on how the TUNING approach (which is a response to the already changing learning paradigms in European higher education) might affect this methodology in the future. Next, the goal and design of the CoRe project will be elaborated upon.

3.1 Current methodology of credential evaluation

Credential evaluation is a research activity in which the credential evaluator analyses what a student has learned during an (usually foreign) educational programme. This analysis is made based on documents that provide information on the content of the study programme. The outcome of the analysis is compared to the global content of a similar study programme in the country of application. Based on the outcome of this comparison, it is decided whether the level of education that the applicant has reached is sufficient to be granted admission to a certain study programme, profession or job in the country of application.

To be able to make an evaluation of a foreign programme, credential evaluators need to rely on certain documents that provide information about the programme. At present, the following documents are required to undertake a credential evaluation:
1. the diploma that has been awarded;
2. the Diploma Supplement and/or transcript, which contains information about the subjects that were followed, the grades that were received, and the study load.

Next to these documents, credential evaluators gather information themselves about issues concerning the educational system in which the diploma has been obtained, the quality and status of the institution and the programme (is a quality assurance system in place and has the programme been accredited), the design and learning goals of the study programme and the subjects that are being taught, etcetera.

Based on this information, credential evaluators evaluate the value of the foreign diploma, looking at least at the following criteria:
1. Entry requirements:
2. Formal duration/study load
3. Structure and contents
4. Formal rights associated with the obtained degree
5. Function of the programme

To improve the recognition of qualifications within the European region, several measures have been taken during the past decade. One of the most important initiatives was the development of the Lisbon Recognition Convention, which was jointly developed by the Council of Europe and UNESCO and came into force in 1999. The Lisbon Recognition Convention aims to facilitate the recognition of qualifications between countries in Europe. In the agreement it is stated that recognition requests should be assessed in a fair manner and within a reasonable time. Recognition can only be refused if the qualification is *substantially different* from that of the host country. The Lisbon Recognition Convention forms the legal framework according to which credential evaluators should work[2]. However, the difficulty here is to make

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[2] Formally, credential evaluators from a country that ratified the Lisbon Recognition Convention are only obliged to apply the LRC principles on countries that have signed the Convention as well, but many credential evaluators across Europe tend to apply them on all applications, irrespective of the country where the diploma was issued.

a fair decision on whether there are substantial differences, and to determine what is considered substantial. To be able to make a fair evaluation of this, it is of crucial importance that credential evaluators have *accurate information* at their disposal about the programme they evaluate and the national programme to which is compared. The degree profiles, containing more detailed information about the learning outcomes and competences of educational programmes and developed as a result of TUNING, could potentially be a source of valuable additional information that might help to conclude whether substantial differences do or do not exist between programmes.

3.2   Changing learning paradigms and credential evaluation

Many changes have taken place in education in Europe during the past years. Historically, curricula used to be developed according to a learning paradigm that was primarily based on obtaining knowledge and achieving learning goals. In general, curriculum designers determined which knowledge a student should obtain, on which basis the courses were designed, and learning goals were formulated. The forms of assessment and examination were primarily designed to measure whether a student did obtain this knowledge.

During the past decade it was mentioned from many sides that education should pay more attention to – in addition to teaching knowledge – teaching skills, behaviour and a certain attitude which are relevant at the work floor and in society at large. This initiated the development towards a more competency-based learning paradigm in education.

TUNING shared this vision, and joined the development towards an outcomes-oriented education approach. They wanted to redesign educational programmes in Europe based on a learning paradigm that focuses on the achievement of learning outcomes and the development of competences. They consulted the most important stakeholders of higher education, i.e. graduates, employers and academics, in order to determine the competences that should be developed during educational programmes within each subject area. As a consequence of this new learning paradigm, a different approach to teaching and assessment is required from educational staff. Teaching knowledge is different to teaching competences. Therefore, TUNING also pays attention to *developing approaches to teaching and learning*, and *methods of assessment* in their model for designing curricula.

This shift in learning paradigm also affects the work of credential evaluation, as it affects the meaning that can be attributed to a diploma. Since different abilities are being taught and assessed during educational programmes that have been designed according to the competency-based learning paradigm, this should also be noticed by a credential evaluator and potentially affect their evaluation conclusion. To clarify this: generally speaking, a graduate who obtained a diploma from a programme that has been designed according to the 'traditional' learning paradigm has shown to have obtained knowledge. A graduate with a diploma from a programme that has been designed according to the competency-based learning paradigm has demonstrated to have obtained knowledge, but also to have developed certain understanding, skills, abilities and values. The abilities that have been assessed and examined during the programme are different, which consequently also gives a different meaning to the diploma that has been obtained. This is certainly a factor that should be considered by credential evaluators.

For this reason it is very important that credential evaluators have access to adequate information about the design of the educational programme, and which aspects (knowledge, or also understanding, skills, abilities and values) have actually been assessed during the educational process, because this is what the diploma reflects. Consequently, to be able to make a fair evaluation, it is necessary to investigate what kind of learning a diploma reflects, based on what was intended in the design of the curriculum. The **degree profile**, containing information about the learning goals and competences that a graduate has developed after completion of the educational programme, could be an appropriate source of information on this for the credential evaluator.

3.3   Goal and research questions of the CoRe project

In the previous chapter, the main features of the TUNING project were described. It must be emphasised that this description reflects the *intentions* of how the TUNING approach is to be implemented, however it does not necessarily correspond with the actual implementation at most institutions taking part in the TUNING process.

Therefore, the main goal of the CoRe project is to investigate to what extent the degree profiles developed by educational institutions do provide relevant information about learning outcomes and competences of a particular

educational programme, and how this information can be improved. This leads to the following research questions:

1. *What information about the objectives, learning outcomes, and competences of an educational programme (as determined within the TUNING project) is currently produced by institutions taking part in the TUNING process (e.g. in the Degree Profile)?*
2. *Is this information appropriate and sufficient for the purpose of credential evaluation? If not, how can this be improved?*
3. *Does the information about the objectives, learning outcomes and competences of an educational programme give better insight in the level of the programme, and therefore have an additional value for the purpose of credential evaluation?*
4. *Would credential evaluators be able to use the documentation that describe the objectives, learning outcomes and competences in their daily practice of credential evaluation?*

3.4   Design of the CoRe project

For the conduction of the CoRe project, a practical exercise of credential evaluation was performed in order to obtain a realistic insight of the usability of the learning outcomes and competences as formulated by institutions in the degree profiles. Programme documents from twenty institutions (that participate in the TUNING project) from four different subject areas (five per subject area) were planned to be collected and evaluated. The subject areas that have been chosen for the project are: History, Chemistry, Business Administration and Nursing.

The credential evaluation process was performed by two teams of credential evaluators, one from the Dutch NARIC, and one from the UK NARIC. To be able to make a good comparison with the national programme, a programme from a Dutch institution and a programme from a UK institution should be included in the document collection for each subject area. The UK NARIC would evaluate the four foreign programmes (including the Dutch programme) and compare to the UK programme. The Dutch NARIC would evaluate the four foreign programmes (including the UK programme) and compare to the Dutch programme. Besides, as it was expected that the comparison between European countries will be somewhat easier because of a greater similarity of the design of the programmes, also one programme of a Latin American country[3] was proposed to be included for each of the four subject areas.

For each programme, the following documents should be received from the institutions:
1. the **Diploma Supplement** and/or transcript, which gives information about the subjects that were followed, the grades that were received, and the study load;
2. a **degree profile**, which gives information about the learning outcomes and competences that are intended to be developed during the programme.

However during the process of document collection it became apparent that many educational institutions taking part in the TUNING process had not yet developed a degree profile, and therefore could not provide the documents required for the conduction of the CoRe project. As a result it was difficult to collect documents from the planned number of institutions. Unfortunately it seemed impossible to receive documents from any Latin American institution for any of the subject areas. The subject area groups of Business and History were only able to collect documents from three European institutions, instead of the four originally planned. Figure 1 below illustrates the selection of institutions that were proposed, and the institutions from which documents were actually received during the project.

A second remark that has to be made here is that there seemed to be no consensus about the meaning of the word degree profile. Many institutions called the document providing information about the learning outcomes and competences that are intended to be developed during the programme competence profile instead of a degree profile. As the term competence profile clearly covers the listings of competences that have been evaluated during the project, it has been chosen to use this term in the rest of this document.

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[3] Since 2005, Latin America also joined the TUNING project.
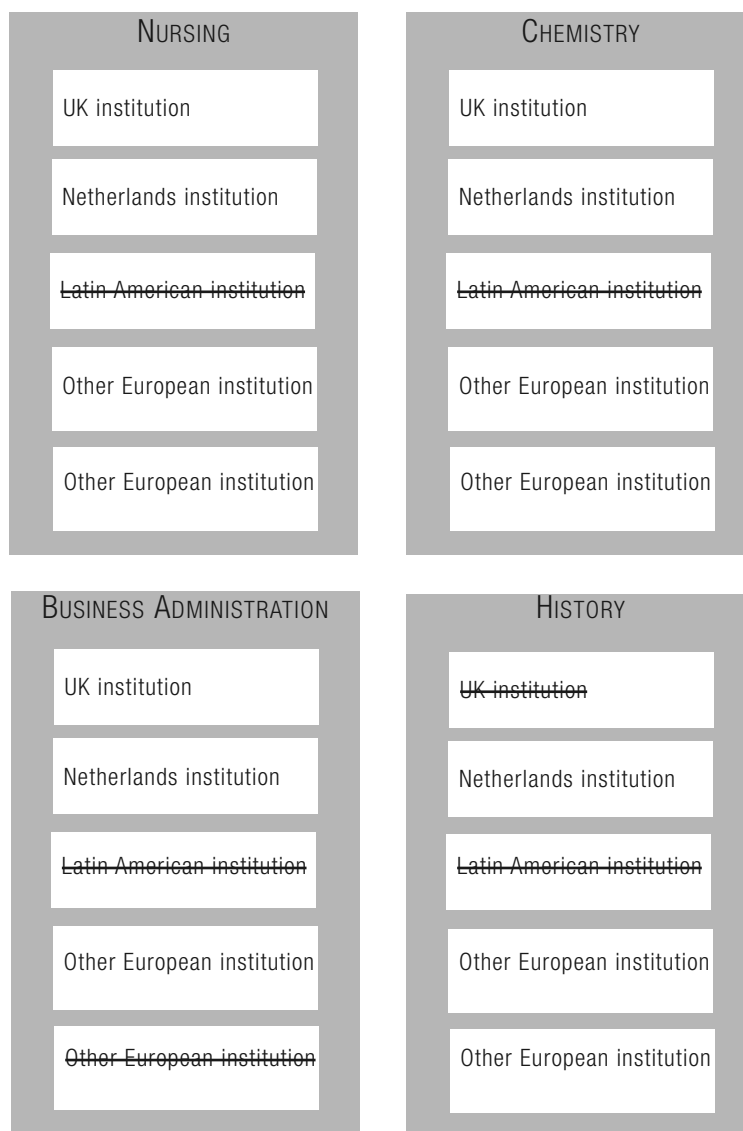
Figure 1: Overview of institutions from which documents were planned to be collected and actually received

Based on the information that was provided in the documents of the institutions, an evaluation of the study programmes and the value of the information for the purpose of credential evaluation were made. During the evaluation process, the following questions were asked:

1. Does the competence profile provide relevant additional information about the programme, which facilitates the making of a fair evaluation?
2. Are the formulations of learning outcomes and competences clear, brief and specific so that good insight can be gained into the level of achievement of the graduate?
3. Are the formulations of learning outcomes and competences that are used by the various educational institutions similar, so that they are comparable?
4. What information is missing to be able to make a fair evaluation, and therefore should be added in the degree profile?

To conduct the evaluation of the value of the information in the degree profiles for the purpose of credential evaluation, three evaluation steps were taken during the project.

Step 1: Evaluation of information necessary for credential evaluation

For each programme it was evaluated which information relevant for the making of a credential evaluation was provided in the received documents. An overview of the relevant information per document (diploma supplement, transcript, degree profile) was made in an evaluation form, discussing the five criteria that are taken into consideration in the process of credential evaluation:
1. Entry requirements
2. Formal duration and study load
3. Structure and contents
4. Formal rights
5. Function of the programme

Based on the information provided in the documents, a comparison was made with the national programme for this subject area. Potential differences of substantial or non-substantial nature were recorded in the evaluation form, after which an evaluation conclusion was drawn.

See Annex 1 for the evaluation form, containing the criteria for credential evaluation.

Step 2: Evaluation of information in the degree profile

After the evaluation of information necessary for credential evaluation of a programme, a more general evaluation of the value of the information in the competence profile was made. For each competence profile received, the following questions were asked:
1. Does the competence profile contain relevant additional information?
2. Are the formulations of competences clear, brief and specific?
3. What information is missing in the degree profile?
4. Does the information in the competence profile give you a better understanding of the level and content of the programme?
5. Does the information in the competence profile affect your evaluation conclusion?

To answer question 2, examples were identified of a) competences that provided relevant information for recognition purposes and/or were clear, brief and specific, b) competences that need further clarification and/or should provide more specific information, c) competences that didn't give any relevant information and/or were stating the obvious.
Based on the answers to the questions above, comments and/or recommendations were formulated for the improvement of each particular competence profile for recognition purposes.

See Annex 2 for the analysis form, for the evaluation of the information in the degree profile.

Step 3: Evaluation of the design of the competence profile

Before the start of the project it was expected that within the TUNING project a format for the degree profiles had been determined, and guidelines had been developed on the level and type of information that should be given. However, during the evaluation process it became apparent that the formats of the degree profiles that were received from the sample institutions varied greatly, both in terms of the structure, the presentation and the level and type of information given. Therefore it was decided to include a further step in the evaluation process, that being an evaluation of the design of the degree profiles.

For each degree profile, the following questions regarding the design and structure of the competence profile were answered:

1. Information about what aspects of the programme is being provided in the degree profile?
2. How is the information presented (descriptive, in lists with bullet-points, in tables, or a combination of these forms)?
3. In how many categories are the competences clustered? And what are the names of these categories?
4. How many competences are given?
5. From which perspective are the competences formulated (i.e. what has a graduate learned vs. what should a professional be able to do)?

In the next chapter, each competence profile that was received will be discussed individually and a summary of the analysis results of the 3 steps that formed the evaluation process will be provided.

4.   ANALYSIS RESULTS

4.1   Overview of received documents

In total, documents have been received from 14 institutions. It became quickly apparent that for some institutions it was going to prove a difficult task to provide the required documents i.e. 1) Diploma Supplement and/or transcript, and 2) degree profile. Many institutions that were approached for participation in the CoRe project couldn't provide the required documents, probably because they hadn't developed a degree or competence profile yet. The documents that eventually were received from the institutions mentioned above appeared to vary greatly. Only few institutions provided a Diploma Supplement and a degree or competence profile as preferably was required. Other institutions provided a transcript instead of Diploma Supplement, probably because the Diploma Supplement wasn't implemented at their institution yet. Besides, the Diploma Supplements that were received were also quite different in format and type of information provided, even though a standard for the Diploma Supplement format has already been determined by UNESCO/CEPES. Again other institutions sent more extensive programme documents out of which the transcript or competence profile should be distilled by the credential evaluators. These varying combinations of documents and also varying formats of Diploma Supplements and competence profiles made the work of credential evaluation much more complicated, because it was hard to compare the available information with each other, and it took more time to find out what information was provided in which section of the documents, because it was presented in such different ways. More uniformity in the presentation of information in the Diploma Supplement and competence profile would definitely further facilitate the transparency and increase the comparability of educational programmes in Europe. An overview of the institutions per subject area and country from which documents were received, and the type of documents that were provided is given in the table below.

	Case	Country	Name of institution	Document 1: Diploma Supplement or Transcript	Document 2: Competence profile
Nursing	A	Denmark	University College Jutland	Diploma Supplement	Competence profile
	B	Malta	L-Università ta' Malta	Transcript	Competence profile
	C	United Kingdom	University of Southampton	Transcript	Competence profile
	D	Netherlands	Hogeschool Groningen	Diploma Supplement	Competence profile
Chemistry	E	Austria	Technische Universität Wien	Transcript described in *Studienplan für das Bakkalaureats-studium Technische Chemie* (13 pages)	Competence profile + Learning outcomes described in *Self-evaluation Report for the Application for the Chemistry Eurobachelor Label* (69 pages)
	F	Belgium	Universiteit Gent	Transcript described in *Self-evaluation Report for the Application of the Eurobachelor Label* (120 pages)	Competence profile
	G	United Kingdom	Nottingham Trent University	Transcript	Competence profile described in *Programme Specifications for The Chemistry Cluster of Programmes* (37 pages)
	H	Netherlands	Universiteit van Amsterdam	Diploma Supplement	Competence profile described in section 'Objective' of the Diploma Supplement + Learning outcomes described in *Self-evaluation Report for the Application of the Eurobachelor Label* (17 pages)

	Case	Country	Name institution	Document 1: Diploma Supplement or Transcript	Document 2: Competence profile
Business	I	Germany	Fachhochschule Osnabrück	Diploma Supplement	Competence profile
	J	United Kingdom	Leeds Metropolitan University	Diploma Supplement	Competence profile described in *Programme Specification for the B.A. (Hons) Business and Management Studies* (16 pages)
	K	Netherlands	Rijksuniversiteit Groningen	Diploma Supplement	Competence profile
History	L	Iceland	Háskóli slands	Diploma Supplement	Competence profile
	M	Italy	Università di Bologna	Diploma Supplement	Competence profile described in section 4.2 of the Diploma Supplement
	N	Netherlands	Rijksuniversiteit Groningen	Diploma Supplement	Competence profile attached as annex to section 4.2 of the Diploma Supplement

Table 1: Overview of institutions from which competence profiles have been evaluated, and documents that have been provided

4.2 Evaluation of competence profiles

In the paragraphs below, the competence profiles of all countries/institutions that were received per subject area will be discussed. First of all the structure of the profile will be described, then comments are provided on a selection of competences that were found in the profile, listed from good to less good examples. Next, comments are given on the usability of the competences for the purpose of credential evaluation. Last, suggestions are made for the general improvement of the competence profile, and their usability for credential evaluation.

4.2.1 Nursing – 4 institutions

A: Denmark, School of Nursing Silkeborg

Name of the institution	University College Jutland
Country	Denmark
Name of the qualification	Bachelor Degree in Nursing
Level of the programme	Bachelor
TUNING subject area	Nursing

Design of the competence profile - structure and format

The competence profile starts with a description of the purpose and function of the educational programme. Then it gives information about the kind of working environment students are prepared to work in. It is mentioned that the student is educated according to the following dimensions of nursing: *to conduct, manage, communicate and develop nursing.*

After this description, competence targets are given clustered in the following categories:
- Intellectual competences (10 competences)
- Professional competences (13 competences)
- Practice competences (14 competences)

Competences are described from the perspective of *what a newly graduated nurse can do or has learned.*

Clarity of competences

The competences in the competence profile are generally quite clear and brief, providing valuable information on the specific skills a graduate has obtained as a result of the programme. Examples of competences and evaluation comments are given below.

Competence description	Evaluation Comment
Masters basic academic working methods, which are prerequisites for acquiring post-graduate competences at master and candidate level	Indicates that the graduate has obtained academic skills that qualify for entrance to a research master's programme; this is interesting information as this is not usual for a nursing programme.
Can independently identify nursing needs, set targets, conduct, evaluate and adjust nursing to selected patient groups	Indicates that the graduate is able to independently provide nursing care
Knows the organization of the health services, including distribution of responsibility between different sectors, departments and players and is able to analyse nursing practice in the light of organizational and administrative framework and conditions of society	Indicates the ability to refer to related sectors in the health care service system, outside the nursing field
Has in-depth knowledge of central areas of nursing, health science, science, humanities and social science	Information is lacking about the level of competence that has been developed and raises the question what are considered as central areas
Can communicate in one of the main languages	This gives no information about the level of communication competence and raises the question which languages are considered 'one of the main'

Usefulness for credential evaluation

The key skills of a nurse are easy to identify in the degree profile, and for credential evaluation purposes it provides additional information regarding the abilities of a graduate. The competence profile gives relevant information with regard to some essential professional and academic skills, which is not provided in the diploma supplement.

A key issue in evaluating nursing programmes (especially for the purpose of entrance to the profession) is whether a nurse is capable of making a diagnosis and a treatment plan, or whether she is only able to work under supervision and instructions of a medical doctor. The competence profile makes it clear that the graduated nurse is able to function independently in these (and other) aspects of the profession.

The information that the graduate masters basic academic working methods, which are prerequisites for acquiring post-graduate competences at master and candidate level could affect the credential evaluation, especially in the case of the graduate seeking admission to a research Master's programme. In the case of professionally oriented programmes such as nursing, this information is quite relevant, since there are many nursing programmes which do not include preparation for academic research.

Recommendations for improving the competence profile

There is no connection between either the four dimensions of the nursing field that are mentioned in the first section of the degree profile, or the list of subjects in the diploma supplement. Describing competences that have been developed in this specific field or subject would make it easier to relate the competences to the structure/content of the programme.

There is no division made between generic and subject-specific competences (although a few generic competences are listed under intellectual competences). This measure would increase the usability of the competence profile for the purpose of comparing educational programmes for international recognition.

Only a few competence descriptions explicitly mention about a certain level of competence that has been acquired. This information is most interesting for credential evaluators and may give them further insight into potential differences in level between programmes. Most other competences describe content, but for a credential evaluator it is hard to assess whether this issue is dealt with more in-depth or more shallow if there is no indication of level, and no information about this particular aspect of content is available from the other programme with which is being compared.

See Annex 3 for the competence profile of this programme.

B: Malta, L-Università ta' Malta

Name of the institution	L-Università ta' Malta
Country	Malta
Name of the qualification	Diploma and Bachelor of Science (Honours) in Nursing Studies
Level of the programme	Diploma and Bachelor (Honours)
TUNING subject area	Nursing

Design of the competence profile – structure and format

The profiles of the Diploma and Bachelor (Honours) programme only contain descriptive information, no list of competences is provided. The description is structured along the following three subjects:

- *Course Objectives and Competences* – describes the general aim of the programme and the formal rights awarded after completion of the programme
- *The Profession* – describes the main activities a nurse has to do to provide nursing care to various groups of patients in various health care settings
- *Personal Qualities and Skills for Nurses* – describes the personal characteristics and physical requirements someone should have to be a nurse

The information is described from the perspective of what a professional nurse should know or be able to do. No direct information is given about whether this knowledge, skills or attitudes have been taught and practiced during the programme. Much of the information is also no competence information, but rather general information about the nursing profession. The section about *The Profession* describes the role of a qualified nurse in Malta, while the section *Personal Qualities and Skills for Nurses* describes the personal and physical requirements for the professional. This information is valuable for individuals who wish to be nurses, but is not relevant from a credential evaluation viewpoint. Neither sections mention the learning outcomes and competences being developed during the programme.

The information in the section about *Course Objectives and Competences* for the Diploma and the Bachelor (honours) programme is different, but the information concerning *The Profession* and the *Personal Qualities and Skills for Nurses* is exactly the same. As a result of this, the difference in the level of learning outcomes between these two programmes cannot be identified.

The information is described in paragraphs instead of in bullet-point lists. The result of this format is that it is difficult to identify the specific outcomes of the course. Because no list is given, each sentence in the description of the competence profile has been considered as 'one piece of competency information'. Feedback on the value of this information on some examples of sentences is given below.

Clarity of competences

Competence description	Evaluation Comment
The nurse responsible for the patient(s) assesses their nursing requirements and draws up a care plan outlining their needs and treatment schedule.	Indicates the ability to diagnose and develop a care plan.
Students are also academically prepared to meet the health care needs of different sectors of the population	This raises the question at what level students are academically prepared. And what are the health care needs of which sectors? It should be specified what a graduate has learned to meet which needs.
The nurse educates the patient throughout the stay in hospital and in preparation for discharge home.	Indicates the ability to inform / educate patients. However it is not stated that a graduate has learned to do these things.
Community based nurses may work in a health centre or clinic or may visit people in their own homes.	This is not a competence.
Technological advances mean that an understanding of, and interest in science is useful.	Whether understanding of and interest in a certain topic is useful is no competence information. Information should be given about what level of understanding about which technological advances the graduate has acquired.
Carrying out treatment requires nursing competence and good observational skills.	This is so obvious such a statement doesn't have any information value. What nursing competence is required, and at which level?
Much of the day may be spent walking, standing and lifting – one must be fit and strong enough to cope with this.	This is not a competence, but rather a physical prerequisite for the nursing profession.

Usefulness for credential evaluation

A key issue in evaluating nursing programmes (especially for the purpose of entrance to the profession) is whether a nurse is capable of making a diagnosis and a treatment plan, or whether she is only able to work under supervision and instructions of a medical doctor. The competence profile makes it clear that the graduated nurse is able to function independently in these (and other) aspects of the profession.

Otherwise, this competence profile is not useful for credential evaluators, since most information is general information about the nursing profession, instead of information about the knowledge, skills or attitudes that have been acquired during the programme.

Recommendations for improving the competence profile

The information given could be made more specific in two ways: by providing more qualifying information on the level of understanding acquired, and by providing more information on what particular (nursing) knowledge, skills and attitudes have been acquired.
There is no connection between the competence profile and the list of subjects in the transcript. A description of competences that have been developed in specific subjects would make it easier to relate the competences to the structure/content of the programme.
The information should be presented more consistently in lists, instead of in plain text.

See Annex 4 for the competence profile of this Diploma and Bachelor (Honours) programme.

C: United Kingdom, University of Southampton

Name of the institution	University of Southampton
Country	United Kingdom
Name of the qualification	Bachelor of Nursing (Honours)
Level of the programme	Bachelor (Honours)
TUNING subject area	Nursing

Design of the competence profile – structure and format

The competence profile starts with a list of six main aims of the educational programme, including its function. Separately mentioned is the fact that the programme *has been designed to prepare you to provide the nursing care required by patients/clients, safely and competently, so that you may assume the responsibilities and accountabilities necessary for entry onto the Professional Register and to ensure public protection.*

Also information is given about the quality assurance by stating that *all programme development is in accordance with Subject Benchmark Statements and the National Qualification Framework, published by the Quality Assurance Agency for Higher Education.*

After this description, intended learning outcomes are given for a) the Common Foundation Programme and b) the Branch Programme, clustered in the following NMC (Nursing and Midwifery Council) domain areas:

Common Foundation Programme
- Professional and ethical practice (5 competences)
- Care delivery (10 competences)
- Care management (3 competences)
- Personal and professional development (2 competences)

Branch Programme
- Competencies and Standards (9 competences)
- Principles and concepts: application (10 competences)
- Subject knowledge, understanding and associated skills (8 competences)

Competences are described from the perspective of what a graduate has achieved at the end of the programme.

Finally, information is provided on the assessment strategy for the programme, the main subject groupings and the criteria for admission.

Clarity of competences

Competence description	Evaluation Comment
Critically evaluate research findings and suggest changes to planned care	Indicates the ability to do this task independently
Critically evaluate outcomes of nursing and other interventions, adjusting care accordingly.	Indicates the ability to do this task independently
Contribute to the planning of nursing care, involving patients and clients and, where possible, their carers, demonstrating an understanding of helping patients and clients to make informed decisions	Indicates that the graduate can contribute to the planning of nursing care, but raises the question to what extent, which tasks can he do independently and which he cannot?
Select and apply knowledge and skills to complex and unexpected situations	This is so general, it raises the question what kinds of knowledge and skills the graduate has gained which he can use in complex and unexpected situations
Demonstrate critical understanding of research-based knowledge and the application to practice	This raises the question at what level graduates have developed understanding of research-based knowledge.
Discuss in an informed manner the implications of professional regulation for nursing practice	This is not a competence, but rather an activity. What should a graduate know/be able to do in relation to the implications of professional regulation for nursing practice?
Discuss methods of, barriers to and the boundaries of effective communication and interpersonal relationships	This is not a competence, but rather an activity. What should a graduate know/be able to do in relation to effective communication and interpersonal relationships?

Usefulness for credential evaluation
The competence profile gives relevant additional information on the specific skills of the qualified nurse in making a diagnosis, a treatment plan and in working independently, which is not available in the transcript.

Recommendations for improving the competence profile
There is no connection between the NMC domain areas and the categories of main subject groupings, which makes it difficult to relate the competencies being developed to the subjects being taught.

There is no division made between generic and subject-specific competences, or subject-specific competences and personal values/attitudes that should be developed. It would be easier to compare programmes with each other if these different types of competences would be clustered.

Many competence descriptions in this profile mention that the graduate is able to contribute to something. This raises the question at which level the student can contribute; which tasks can he do independently and which he cannot? Information about the level of competence is very important for credential evaluators, as this may provide clues for potential differences in level between programmes.

What is interesting about this profile is that competences have been formulated for different end levels in the programme: the Common Foundation Programme (after 1 year), and the Branch Programme (after another 2 years). Although only the Branch Programme competences are relevant for credential evaluators to look at when students have completed the programme, it certainly is valuable to also formulate competences at other levels in the programme, for the purpose of evaluating the capabilities of students who didn't complete the programme, or for flexible enrolment in the programme.

In the competence profile also information is given about the assessment strategy for the programme, the main subject groupings and the criteria for admission. However, this type of information is actually a duplication of information that is already should be given in the diploma supplement.

See Annex 5 for the competence profile of this programme.

D: The Netherlands, Hogeschool Groningen

Name of the institution	Hogeschool Groningen
Country	The Netherlands
Name of the qualification	Bachelor of Nursing
Level of the programme	Bachelor
TUNING subject area	Nursing

Design of the competence profile – structure and format
The competence profile describes competences which should be developed to be able to fulfil various roles in the nursing profession. The following 5 roles are discerned:
• Care provider
• Director
• Designer
• Coach
• Professional practitioner

For each role, one or more goals (key competence) are described. For each goal the competences that are needed to achieve this are given. Then the desired result is described. Each goal belongs to a certain domain and domain specification. Roles can be active in the same domain and domain specifications.

Divided over de several domain specifications, the following numbers of competences are listed: care provider (30 competences in total), director (19 competences in total), designer (33 competences in total), coach (15 competences in total), professional practitioner (16 competences in total).

Competences are described from the perspective of what a HBO nurse does. Most competences are more described as activities that belong to the work package of a role a HBO nurse can fulfil rather than as competences (knowledge, skills, attitudes) a graduate has developed during the educational programme.

Clarity of competences

The use of terms such as *professional standards* and *social standards* seem a little vague, therefore an explanation about what is meant by this in the form of a glossary or footnote may be useful. Equally, the rather vague reference to the use of Information Technology does not provide the reader with a clear picture of the skills possessed by the graduate. For recognition purposes, it would be much more useful to explain which machines the graduate is able to use and their level of computer skills, in order to match their competences against those required in another country. Examples of competences and evaluation comments are given below.

Competence description	Evaluation Comment
Makes an assessment or diagnosis on the basis of scientific knowledge	Indicates the ability to do this task independently
Formulates, elaborates and evaluates a care plan in accordance with professional standards	Indicates the ability to do this task independently
Influences the environment so that it becomes safer	This raises the question how far the circle of influence of a graduate should go; which environment has a graduate be able to influence, and which aspects?
Takes initiatives for improving quality at the departmental level	This raises the question what knowledge a graduate has gained about quality assurance in the nursing care profession?
Offers physical, psycho-social and (medical) technical aid	This is an activity, not a competence. Besides no information is given about the kind of aid a graduate is able to give.
Organizes activities	This is an activity, not a competence. Besides no information is given about the kind of activities a graduate should be able to organize.

Usefulness for credential evaluation

The use of key competences to underline the most important elements of the various roles within the job profile is certainly very useful. They provide a clear and easy-to-find outline of the competences required for the job, which assists the credential evaluation process in a different country. The subsequent list of ways in which the nurse fulfils this competence describes these tasks in more detail, thus encouraging transparency. Furthermore the use of outcomes for these competences demonstrates how their application has a positive impact on the patient/care requester. This patient-centric approach provides an insight into organisation of the sector.

A key issue in evaluating nursing programmes (especially for the purpose of entrance to the profession) is whether a nurse is capable of making a diagnosis and a treatment plan, or whether she is only able to work under supervision and instructions of a medical doctor. The competence profile makes it clear that the graduated nurse is able to function independently in these (and other) aspects of the profession.

Otherwise, this competence profile is not useful for credential evaluators, since most information is general information about the nursing profession, instead of information about the knowledge, skills or attitudes that have been acquired during the programme. Besides, the length of the profile of 11 pages is too excessive for a credential evaluator, and would therefore in its current form only be valuable for those who require a more detailed analysis of the professional competences of a Dutch graduated nurse.

Recommendations for improving the competence profile

The competence profile is a list of tasks a nurse that works in a certain professional role has to be able to fulfil. This means that the competence profile in its current form gives a good indication of what a Dutch graduated nurse can do in professional terms, which could be very useful for prospective employers. However, the profile doesn't really describe what knowledge, skills and attitudes a graduate from this programme has developed, and no direct relation with the educational programme can be found, so that for credential evaluation purposes the information is less valuable. The classification in professional roles is valuable as this gives information about the roles in which a graduate is able to function, but no information is given about the extent to which attention is paid to which roles in the programme, and which of the competences that are needed to fulfil these roles are actually practiced and developed during the programme. The descriptions could be made more specific in two ways: by providing more qualifying information on the level of understanding acquired, and by providing more information on what particular (nursing) knowledge has been acquired during the programme.

The structure of the competence profile with roles, domains and domain specifications is rather complicated. This makes it difficult to quickly scan the list of competences, which should be possible for the purpose of credential evaluation. Although most competences are described quite briefly and to the point, the list of competences is very long, due to the fact that the competences required to achieve a certain goal (belonging to a certain role) are described separately. There is no connection between the competences and the list of subjects in the transcript. A description of competences that have been developed in specific subjects would make it easier to relate the competences to the structure/content of the programme.

See Annex 6 for the competence profile of this programme.

4.2.2 Chemistry – 4 institutions

E: Austria, Technische Universität Wien

Name of the institution	Technische Universität Wien
Country	Austria
Name of the qualification	Bakkalaureus (Technische Chemie)
Level of the programme	Bachelor
TUNING subject area	Chemistry

Design of the competence profile – structure and format

The competence profile consists of half a page of written text. It starts with a few sentences describing the general purpose and outcomes of the programme. Next, there are two lists of competences under the following headings:

- *The graduates acquire* (consisting of 4 competences)
- *The graduates know* (consisting of 3 competences)

Finally, there are a few more lines of text, in which some further competences are described.

It is not clear why some of the competences are listed and why others are described in the main text. It is not clear whether there is any distinction between the two lists of competences. In the first list (The graduates acquire) there is a mention of generic competences, in the following way: generic skills which are applicable in many other contexts. No other generic skills are mentioned.

The competences are described from the perspective of what graduates are able to do or have learned.

Clarity of competences

Competence description	Evaluation Comment
The graduates are able to evaluate and compare different chemical processes with regard to their industrial application (e.g. from an economical, environmental, or legal point of view)	This gives specific information on clearly described skills which could be very helpful for an employer. In the transcipt, no economical, environmental or legal subjects are mentioned, so this information is only available in the degree profile.

The graduates are able to interpret the obtained data and evaluate these on a broader context	This raises the question what kind of data the graduates are able to interpret, and in what kind of broader context they are able to evaluate the data
The graduates are familiar with standard operations on laboratory as well as on industrial scale	This raises the question which standard operations the graduates are familiar with
The graduates acquire generic skills which are applicable in many other contexts	This is stating the obvious
The graduates know subject specific methods	This is so vague as to be meaningless

Usefulness for credential evaluation

This competence profile is not useful for credential evaluators, since the descriptions are too vague and do not add much to the information which can be obtained from the transcript of the programme.

On the other hand, one of the competencies described could be useful to employers, namely that the graduate is able to compare the industrial application of chemical processes from an economical, environmental or legal point of view. This information cannot be obtained from the transcript.

Recommendations for improving the competence profile

The descriptions could be made more specific in two ways: by providing more qualifying information on the level of understanding acquired, and by providing more information on what particular (chemical) knowledge has been acquired. There is no connection between the competences and the list of subjects in the transcript. A description of competences that have been developed in specific subjects would make it easier to relate the competences to the structure/content of the programme.

There is almost no information on generic competences.

The competences could be presented more consistently in lists, instead of partly in lists and partly in plain text.

Outcomes in Self-Evaluation Report for the application of the Eurobachelor Label

Besides a degree profile, also a Self-evaluation Report for the Application of the Chemistry Eurobachelor Label was received from this institution. This report also included a list of outcomes expected within the course (page 8-11). The value of this information for the purpose of credential evaluation has also been evaluated.

Design of the competence profile – structure and format (outcomes in self-evaluation report)

The section of the self-evaluation report describing the learning outcomes of the programme is divided into 2 parts:
• subject knowledge outcomes (consisting of 15 competences)
• generic competences (consisting of 11 competences)

Each section is structured differently; the subject knowledge outcomes section includes a table of outcomes, with a second column indicating the unit codes in which those outcomes would be expected. These outcomes are not formulated as competences, but rather as aspects of the subject area that are covered in the programme. The second part provides the generic competences, followed by an explanation of how these competences are accomplished within the programme, identifying the specific units where that competence is demonstrated. This layout makes it easy to identify key skills and competences, in specific areas.

Clarity of competences

As mentioned before, the elements of subject knowledge are actually not formulated in terms of competences, but rather as aspects of the subject area. Although it is clear and specific which aspects of the subject area are meant, it is not made clear to what level and in what context the graduates obtain this knowledge, and have learned to apply it in practice.

The generic competences are more specific to the context and application of the outcomes expected of graduates from this programme.

Usefulness for credential evaluation

The self-evaluation report provides an interesting insight into the different elements involved in the structuring of a Bachelor programme. However the report is very lengthy (69 pages) and complex; therefore it is not appropriate to be read by credential evaluators, institutions and prospective employers. For the purpose of this project, only the learning outcomes described on the pages 8-11 have been considered.

The generic competences are helpful in providing an insight into the specific outcomes of the course. The subject knowledge competences in their current format do not provide enough information on the outcome within that area to have any influence on the evaluation process.

Recommendations for improving the competence profile

The structure of the outcomes within the subject knowledge competences (i.e. in table format) is very clear, particularly the added value of linking the competences directly to the specific unit codes of subjects. However, the competences included need further explanation. Formatting the generic competences in the same way, from a credential evaluation perspective, makes it easier to examine the specific outcomes necessary for analysis of the qualification.

As an independent document for credential evaluation purposes these two tables are not sufficient. It would therefore be advisable to attach the competence profile as an appendix to or incorporate it within the Diploma Supplement.

See Annex 7 for the competence profile and the outcomes described in the self-evaluation report for the application of the Eurobachelor label of this programme.

F: Belgium, Universiteit Gent

Name of the institution	Universiteit Gent
Country	Belgium
Name of the qualification	Bachelor of Chemistry
Level of the programme	Bachelor
TUNING subject area	Chemistry

Design of the competence profile – structure and format

The competence profile consists of almost a page of written text. The competences are divided in three categories:
- chemistry-related cognitive abilities and skills
- skills related to the conduct of laboratory work
- generic skills

The competences are described in long-winded sentences, rather than summed up in concise lists. This makes it difficult to identify key points and areas. Initially, the competences are described from the perspective of which abilities and skills the students acquire during their study. However, halfway through the degree profile, the perspective changes to what graduates are able to do or have learned.

Clarity of competences

Competence description	Evaluation Comment
The students acquire knowledge and understanding of essential aspects concerning the relation between bulk properties of matter and the properties of the individual particles	Sums up concisely the ability to combine and apply various branches of chemistry, although the level of knowledge and understanding is not mentioned
Graduates are able to conduct a whole range of laboratory procedures and use of instrumentation in synthetic and analytical work	This raises the question what range of laboratory procedures graduates are able to conduct
Graduates have acquired numeracy and calculation skills and correct use of units	This is so general, it raises the question at what level graduates have acquired numeracy and calculation skills
Graduates are able to apply the knowledge to solve qualitative and quantitatively problems of a chemical nature	This is so vague as to be meaningless

Usefulness for credential evaluation

This competence profile is not useful for credential evaluators, since the descriptions are in general too vague and do not add much to the information which can be obtained from the transcript of the programme. Besides, due to its long and convoluted layout, it is not easy to quickly scan the degree profile, and as a result the information may be ignored.

Recommendations for improving the competence profile

This programme is quite general in nature, which partly explains the general nature of the competences described. Still, the descriptions could be made more specific by providing more qualifying information on the level of understanding acquired.

There is no connection between the competences and the list of subjects in the transcript. A description of competences that have been developed in specific subjects would make it easier to relate the competences to the structure/content of the programme.

The competences themselves lose clarity as a direct result of the structure. It would be preferable to present the competences in lists, and to describe them in shorter sentences.

See Annex 8 for the competence profile of this programme.

G: United Kingdom, Nottingham Trent University

Name of the institution	Nottingham Trent University
Country	United Kingdom
Name of the qualification	Master of Chemistry (Chemistry in Europe)
Level of the programme	Bachelor + Master
TUNING subject area	Chemistry

Design of the competence profile – structure and format

The competence profile forms part of the Programme Specifications for The Chemistry Cluster of Programmes of the Nottingham Trent University, which provides programme information in a style similar to that of the Diploma Supplement. The competence profile can be found in section 7 (Programme outcomes) of the Programme Specifications.

It consists of two lists of competences:
* *Knowledge and understanding* (6 chemistry-based competences)
* *Skills, qualities and attributes* (8 competences, mostly generic).

The competence profile is limited in scope and does not reflect the specifics of the programme. As some of the other sections of the Programme Specifications already offer key information on many aspects of the programme, it may have been a deliberate decision of the institution to provide a competence profile which is quite general in nature.

The competences are described from the perspective of what students should be able to do by the end of the programme.

Clarity of competences

Competence description	Evaluation Comment
By the end of the programme you should be able to demonstrate understanding (BSc –awareness) of major issues currently at the frontiers of chemical research and developments	This gives specific information on the level of the graduate's understanding of the frontiers of chemistry, which is not (as to be expected of a Master's programme) at MSc-level, but at BSc-level
By the end of the programme you should be able to demonstrate knowledge and understanding of the essential terminology, facts, concepts, principles and theories of chemistry and related topics, critically evaluating concepts and applying them in qualitative and quantitative problem solving	This raises the question at what level knowledge and understanding is demonstrated and in which essential terminology, facts, concepts, principles and theories of chemistry and related topics it is demonstrated.

By the end of the programme you should be able to analyse, interpret and evaluate critically data and information retrieved from a variety of sources	This is so general, it raises the question what kind of data the graduate should be able to analyse, interpret and evaluate, and from what variety of sources
By the end of the programme you should be able to solve problems from qualitative and quantitative information	This is so vague as to be meaningless

Usefulness for credential evaluation

The information that the graduate should demonstrate 'BSc-awareness' of major issues currently at the frontiers of chemical research could affect the credential evaluation, especially in the case of the graduate seeking admission to a PhD programme in chemistry in countries where it is required for admission to have research experience at Master's level. This information might be taken as evidence for a substantial difference in content: the graduate has no experience of chemistry research at the Master's level.

Recommendations for improving the competence profile

The competence profile should reflect more on the particulars of the programme, it should not be too general. For instance, the competence profile fails to mention any international or intercultural skills, although the programme includes an industrially based project outside the UK.

The descriptions could be made more specific in two ways: by providing more qualifying information on the level of understanding acquired, and by providing more information on what particular (chemical) knowledge has been acquired. There is no connection between the competences and the list of subjects in the transcript. A description of competences that have been developed in specific subjects would make it easier to relate the competences to the structure/content of the programme.

The subject-specific and generic skills could be separated more clearly.

See Annex 9 for the competence profile of this programme.

H: The Netherlands, Universiteit van Amsterdam

Name of the institution	Universiteit van Amsterdam
Country	The Netherlands
Name of the qualification	Bachelor of Chemistry
Level of the programme	Bachelor
TUNING subject area	Chemistry

Design of the competence profile – structure and format

The competence profile forms part of the Diploma Supplement, described in the section Objective. It consists of three lists of competences:
• *The objectives of the Chemistry bachelor's programme* (7 competences)
• *The final attainment levels of the Chemistry bachelor's programme* (12 competences)
• *General skills* (6 competences)
For some reason, all of the competences listed under General skills are also mentioned under The final attainment levels of the Chemistry bachelor's programme. Some of the other descriptions of competences are also repetitive.

The competences are described from the perspective of what the graduate is able to do or has learned.

Clarity of competences

Competence description	Evaluation Comment
The graduate has an independent, scientifically critical method of working and attitude	Indicates that the graduate has been trained to conduct academic research
The graduate has acquired a solid foundation for teacher's training	This raises the question how 'solid' the foundation for teacher's training of the graduate is, and whether the

	graduate has actually already been trained in pedagogics and didactics
The graduate is familiar with the safety and environmental aspects of chemistry	This is so general, it raises the question how familiar the graduate is with what kind of safety and environmental aspects
The graduate is able to collect and process information	This is stating the obvious

Usefulness for credential evaluation

The competence profile makes it clear that the graduate has been specifically trained in order to enrol in an academic, research-oriented Master's programme. In countries with a binary system of higher education this could be useful information.

Recommendations for improving the competence profile

There should be much less repetition in the competences described.

In our opinion, the competence profile may suggest that the programme contains elements of a teacher's training programme, which to our knowledge is not the case. It should be avoided that misleading suggestions can be read in the degree profile.

The descriptions could be made more specific in two ways: by providing more qualifying information on the level of understanding acquired, and by providing more information on what particular (chemical) knowledge has been acquired. There is no connection between the competences and the list of subjects in the transcript. A description of competences that have been developed in specific subjects would make it easier to relate the competences to the structure/content of the programme.

Outcomes in Self-Evaluation Report for the application of the Eurobachelor Label

Besides the competences that are described in the section Objective of the Diploma Supplement, also a Self-evaluation Report for the Application of the Chemistry Eurobachelor Label (17 pages) was received from this institution. This report also includes a list of outcomes expected within the course (page 8-11). The value of this information for the purpose of credential evaluation has also been evaluated.

Design of the competence profile

The section of the self-evaluation report describing the learning outcomes of the programme is divided into 2 parts:
- *subject knowledge outcomes* (consisting of 15 competences)
- *generic competences* (consisting of 11 competences)

Each section is structured differently; the subject knowledge outcomes section includes a table of outcomes, with a second column indicating the unit codes in which those outcomes would be expected. These outcomes are not formulated as competences, but rather as aspects of the subject area that are covered in the programme. The second part provides the generic competences, followed by an explanation of how these competences are accomplished within the programme, identifying the specific units where that competence is demonstrated. This layout makes it easy to identify key skills and competences, in specific areas.

Clarity of competences

As mentioned before, the elements of subject knowledge are actually not formulated in terms of competences, but rather as aspects of the subject area. Although it is clear and specific which aspects of the subject area are meant, it is not made clear to what level and in what context the graduates obtain this knowledge, and have learned to apply it in practice.

The generic competences are more specific to the context and application of the outcomes expected of graduates from this programme.

Usefulness for credential evaluation

The self-evaluation report provides an interesting insight into the different elements involved in the structuring of a Bachelor programme. However the report is too lengthy (17 pages) and complex; therefore it is not appropriate to be

read by credential evaluators, institutions and prospective employers. For the purpose of this project, only the learning outcomes described on the pages 8-11 have been considered.

The generic competences are helpful in providing an insight into the specific outcomes of the course. The subject knowledge competences in their current format do not provide enough information on the outcome within that area to have any influence on the evaluation process.

Recommendations for improving the competence profile

The structure of the outcomes within the subject knowledge competences (i.e. in table format) is very clear, particularly the added value of linking the competences directly to the specific unit codes of subjects. However, the competences included need further explanation. Formatting the generic competences in the same way, from a credential evaluation perspective, makes it easier to examine the specific outcomes necessary for analysis of the qualification.

As an independent document for credential evaluation purposes these two tables are not sufficient. It would therefore be advisable to attach the competence profile as an appendix to or incorporate it within the Diploma Supplement.

See Annex 10 for the competence profile and the outcomes described in the self-evaluation report for the application of the Eurobachelor label of this programme.

4.2.3   Business Studies – 3 institutions

I: Germany, Fachhochschule Osnabrück

Name of the institution	Fachhochschule Osnabrück
Country	Germany
Name of the qualification	Bachelor and Master in Betriebswirtschaft und Management
Level of the programme	Bachelor and Master
TUNING subject area	Business Studies

Design of the competence profile – structure and format

From this institution, both a competence profile from the Bachelor programme and from the Master-programme have been provided.

Both degree profiles form part of a German-language document that gives the *Lernergebnisse und Niveaustufen* (learning outcomes and levels) of the *3-jähriger Bachelorstudiengang* (3-year Bachelor's programme) and the *2-jähriger Masterstudiengang* (2-year Master's programme) in *Betriebswirtschaft und Management*. These learning outcomes are listed in a table, which gives the competences that are acquired at level 1, 2 and 3 (corresponding to the three years of the Bachelor's programme) and at the level 4 and 5 (corresponding to the two years of the Master's programme). This way of structuring is quite interesting, as it allows to plot personal progression over the course of the programme. This would be a particularly useful tool if issued at the end of each academic year, for example if the student wishes to transfer to another programme, as it illustrates the appropriate expected outcomes.

As a credential evaluator normally only evaluates the final level that has been attained during a programme, we have only looked in more detail at the competences at the final level of the programmes (level 3 for the Bachelor's programme, level 5 for the Master's programme).

The competencies in both the Bachelor and the Master profile are clustered in the following categories:
• Wissen und Verstehen
    • Wissensverbreiterung (Bachelor: 2 competences, 1 example; Master: 1 competence, 1 example)
    • Wissensvertiefung (Bachelor: 1 competence, 1 example; Master: 4 competences, 1 example)

- Können – Wissenserschliessung
  - Instrumentell – ICT und numerische Fähigkeiten/Fertigkeiten (Bachelor: 2 competences, 1 example, Master: 3 competences, 1 example)
  - Interpersonell/kommunikativ – Generische kognitive Fähigkeiten/Fertigkeiten (Bachelor: 4 competences, 1 example; Master: 2 competences, 1 example)
  - Systemisch – Anwendung des Wissens und Verstehens (Bachelor: 4 competences, 1 example; Master: 11 competences, 1 example)

Specific examples of competences for the subject of *Strategische Marketingplanung* (strategic planning of marketing) are given for all the above categories.

The competences are described from the perspective of what a student is able to do at a particular level of the programme (at the end of year 1, 2, 3, 4 or 5).

At the end of both documents, there is a list of 7 competences for both the Bachelor and the Master programme in the English language under the heading of *Ein Bachelor-Absolvent eines betriebswirtschaftlichen Studiengangs sollte folgende Lernergebnisse erreicht haben* (a graduate of a Bachelor's programme in Business Studies should have attained the following learning outcomes).

Generally spoken, this competence profile has a structure which is quite different from the other degree profiles that were received.

Clarity of competences

Competence description	Evaluation Comment
Der Studierende hat die Fähigkeit Routinemethoden der Anfragen und / oder Forschung zu üben	This indicates that the student is able to use routine methods of research, rather than conducting original research
Die Fähigkeit zu belegen und/oder arbeiten mit/auf eines breiten und integrierten Wissens und Verstehens des Umfangs, der Hauptgebiete und der Grenzen eines Lerngebiets / einer Disziplin	This raises the question how broad and integrated the knowledge and understanding are, and what the range, main fields and boundaries of a discipline are
Die Fähigkeit zu belegen und/oder arbeiten mit/auf ein kritisches Verständnis einer Auswahl der wichtigsten Theorien, Prinzipien, Konzepten und Terminologie	This raises the question what the most important theories, principles, concepts and terminology are
Ein vertieftes Wissen in einigen Bereichen und/oder Wissen einer oder mehrerer Vertiefungen, die von aktuellen Entwicklungen getragen werden	This is so obvious, such a statement doesn't have any information value, it doesn't offer any further insight in the subject matter of which the student develops a deeper understanding.
Interface with other functions	It is not clear what is meant here
Have self-awareness	This is so vague as to be meaningless

Usefulness for credential evaluation

The competence profile gives detailed information about the competences that a student develops on a year-by-year basis, which enables the credential evaluator to understand what the graduate is able to do on completion of the programme, but also the level that has been attained after completion of parts of the programme.
The examples of how certain competences have been developed are quite valuable, as they demonstrate how these competences apply to a degree in business management.
However, the competence profile does not make it clear whether this programme prepares students for academic research or for the job market (a distinction which is usually quite clear in the German binary system of higher education).

Recommendations for improving the competence profile

The competence profile should more specifically reflect the goals and nature of the programme, and not make too many claims.

The descriptions could be made more specific in two ways: by providing more qualifying information on the level of understanding acquired, and by providing more information on what particular knowledge has been acquired. This specifically applies to the subject-specific competences.

The competences should be presented in simple lists, rather than in a complicated table.

There is no connection between the competences and the list of subjects in the transcript. A description of competences that have been developed in specific subjects would make it easier to relate the competences to the structure/content of the programme.

The information concerning the generic competences (like ICT competences) and how they relate to the modules of the programme may be very useful for employers, especially in an international context. However, in order to improve transparency, it would be useful to develop a set of standard descriptors for generic competences that could be used on a Europe-wide basis.

What is interesting about this profile is that competences have been formulated for different levels in the programme. Although only the competences that have been developed at the end of the three year programme are relevant for credential evaluators to take into consideration when students have completed the entire Bachelor-programme, it certainly is valuable to formulate competences at other levels in the programme, for the purpose of evaluating the capabilities of students who did not complete the programme, or for flexible enrolment in the programme.

See Annex 11 for the competence profile of these Bachelor and Master programmes.

J: United Kingdom, Leeds Metropolitan University

Name of the institution	Leeds Metropolitan University
Country	United Kingdom
Name of the qualification	Bachelor of Arts (Honours) Business and Management Studies
Level of the programme	Bachelor (Honours)
TUNING subject area	Business Studies

Design of the competence profile

The competence profile forms part of the Programme Specification of the B.A. (Hons) Business and Management Studies of the Leeds Metropolitan University, which provides programme information in a style similar to that of the Diploma Supplement. The competence profile can be found in section 9 (Specific learning outcomes) of the Programme Specification.

It consists of six lists of competences, two each for the 3 levels of the programme. For our purpose we have selected only the two lists of level 3, the final level of the programme.

These two lists are divided in:
* *unnamed skills* (6 competences in business and management)
* *skills and other attributes* (8 competences, partly generic).

The competences are described from the perspective of what students should be able to do on successful completion of level 1, 2 or 3.

Clarity of competences

Competence description	Evaluation Comment
On succesful completion of Level 3 students should be able to evaluate ethical and international issues facing organisations when formulating and implementing strategies	This description gives the information that ethical and international issues are part of the programme, which can not be obtained from subjects listed in the diploma supplement

On succesful completion of Level 3 students should be able to contribute to research into business and management issues using appropriate data, sources and methodologies	This raises the question what kind of contribution students should be able to provide to research, and what the appropriate data, sources and methodologies are
On succesful completion of Level 3 students should be able to address a range of contemporary and pervasive issues in relation to the management of change and innovation	This is so general, it raises the question which contemporary and pervasive issues students should be able to address
On successful completion of Level 3 students should be able to undertake appropriate further training or study of a professional or equivalent nature	This is stating the obvious

Usefulness for credential evaluation

The competence profile makes it clear that the programme does have an international orientation, which is not apparent from the Diploma Supplement. This might influence the evaluation, especially in case a comparison is made to a programme in international business studies.

Recommendations for improving the competence profile

The descriptions could be made more specific in two ways: by providing more qualifying information on the level of understanding acquired, and by providing more information on what particular knowledge has been acquired.
There is no connection between the competences and the list of subjects in the transcript. A description of competences that have been developed in specific subjects would make it easier to relate the competences to the structure/content of the programme.
The subject-specific and generic skills could be separated more clearly.
What is interesting about this profile is that competences have been formulated for different levels in the programme. Although only the competences that have been developed at the end of the programme are relevant for credential evaluators to take into consideration when students have completed the entire Bachelor's programme, it certainly is valuable to formulate competences at other levels in the programme, for the purpose of evaluating the capabilities of students who did not complete the programme, or for flexible enrolment in the programme.

See Annex 12 for the competence profile of this programme.

K: The Netherlands, Rijksuniversiteit Groningen

From this institution, competence profiles from two different programmes have been received: The Bachelor and Master of International Economics and Business, and the Bachelor and Master of International Business Management. The

Name of the institution	Rijksuniversiteit Groningen
Country	The Netherlands
Name of the qualification	Bachelor and Master in International Economics & Business
Level of the programme	Bachelor and Master
TUNING subject area	Business Studies

degree profiles of both programmes will be discussed below.

The competences in both the Bachelor and the Master profile of the International Economics & Business programme are clustered in the following categories:
- *Knowledge* (5 competences for the Bachelor, and 6 competences for the Master programme)
- *Skills* (5 competences for the Bachelor, and 5 competences for the Master programme)
- *Attitude* (5 competences for the Bachelor, and 6 competences for the Master programme)

The competences are described from the perspective of what graduates are able to do or have learned.

Furthermore, a table is provided in which the relationship between learning outcomes and courses is indicated, by marking off with an 'X' the courses in which a certain competence is developed (see below). For the Bachelor programme, the table contains 13 of the 15 competences of the profile, while 2 of the Attitude competences are lacking. For the Master programme, the table contains 14 of the 17 competences, while 3 competences are lacking. In one case, the description of the competence does not seem to correspond to the entry in the table: Graduates will be able to apply the analysis techniques and skills acquired to the economics knowledge area is summarized in the table as applying knowledge of lit.

Learning outcome / Courses	knowledge of the (int.) Economics knowledge area	relationships between the course	applying knowledge of lit.	critical assessment	language skills	routine research	collecting and analysing information	IT skills	comm. skills (SGT)	multidisciplinary teams (SGT)	investigative attitude	further study	intercultural context (SGT)
Bachelor's degree in IE&B													
International Business Ia	X				X		X	X	X	X			X
International Business Ib	X		X		X	X	X	X	X	X	X		X
International Business IIa	X		X		X	X		X	X	X			X
International Business IIb	X		X		X	X		X	X	X	X		X
International Business III	X	X	X	X	X	X	X	X	X	X	X	X	X
International Economics I	X				X			X	X	X			X
International Economics II	X				X			X	X	X			X
International Economics III	X	X	X	X	X	X	X	X	X	X	X	X	X
English (Ia,b,c,d)					X				X	X			X
Spanish					X				X	X			X
Electives	X				X					X			X
Study abroad	X			X	X				X	X			X
Bachelor's thesis	X	X	X	X	X	X	X	X	X	X	X	X	X
Macroeconomics I	X				X								
Microeconomics I	X				X								
Industrial Economics	X	X			X								
Finance (I&II)	X				X		X						
International Marketing (I&II)	X				X								
Statistics (Ia,b & II)			X		X	X	X	X	X	X	X		X
Mathematics (Ia,b & IIa)					X	X							
Financial Accounting	X				X								
Public Finance	X				X								

In principle, providing such a table seems to be a good method to show the connection between competences developed and subjects followed (which is lacking in most of the degree profiles studied).

Clarity of competences

Competence description	Evaluation Comment
Graduates will have a good command of English (written as well as oral) and a basic knowledge of a second foreign language, and will be able to apply this knowledge in the context of further study or in an international work environment within a commercial company or other organization	This explains the function of the two foreign languages appearing in the list of subjects of the Diploma Supplement, which might otherwise be interpreted as being general language courses selected by the graduate as optional subjects
Graduates will be able to apply the analysis techniques and skills acquired to the economics knowledge area	This raises the question which analysis techniques and skills the graduates are able to apply to which part of the economics knowledge area
Graduates will be able to collect quantitative and qualitative information and independently analyse and interpret it, including as part of a (multidisciplinary) team	This raises the question what kind of quantitative and qualitative information graduates are able to collect, analyse and interpret. Furthermore, it is not clear why the additional information on working in a (multidisciplinary) team is given here, especially as this skill is already mentioned in a separate competence.
Graduates are interested in (business) economics phenomena and questions, including in their social context	This is not a competence

Usefulness for credential evaluation

This competence profile is not very useful for credential evaluators, since the descriptions are in general too vague and do not add much to the information which can be obtained from the Diploma Supplement, with the exception of the explanation of the function of the foreign languages in the programme.

Recommendations for improving the competence profile

The descriptions could be made more specific in two ways: by providing more qualifying information on the level of understanding acquired, and by providing more information on what particular knowledge has been acquired.
A clear distinction between subject-specific and generic skills could be made.

Name of the institution	Rijksuniversiteit Groningen
Country	The Netherlands
Name of the qualification	Bachelor and Master in International Business Management
Level of the programme	Bachelor and Master
TUNING subject area	Business Studies

Design of the competence profile

The competence profile of this programme describes the following 5 competence areas:
- Disciplinary knowledge and understanding (4 competences)
- Methodological competence (4 competences)
- Working in an interdisciplinary way (3 competences)
- Academic attitude and skills (6 competences)
- Social communication skills (10 competences)

The information under these subject headings is of descriptive nature, no bullet-point lists of competences are given.

The outcome descriptions are very detailed and informative. The descriptions start with a number of competences printed in bold text, then provide the learning outcomes expected of graduates, and finally provide some more competences. It is not clear why the competences are split in this way.

The competences are described from the perspective of what graduates are able to do or have learned. There is no clear distinction between generic competences and subject-specific competences

Clarity of competences

Competence description	Evaluation Comment
Graduates are expected to be able to independently conduct research in a methodological way	This clearly establishes the academic, research-oriented character of the programme
Graduates are able to effectively cooperate and communicate in international and multicultural work environments	This gives detailed information in a concise way
Graduates are effective participants in meetings and are able to take minutes	This gives detailed information in a concise way
Graduates have an understanding of the methods and techniques that are needed for diagnosing organizational issues	This raises the question to what degree the graduates have an understanding of which methods and techniques needed for diagnosing what kind of organizational issues
Graduates have knowledge of the most important methodologies for business research	This raises the question what the most important methodologies are
Graduates must also be up-to-date with recent developments in the international aspects of the field of Business Studies	This is not a competence

Usefulness for credential evaluation

This competence profile is useful for credential evaluators, as it establishes the academic, research-oriented character of the programme.

Furthermore, it is easy to understand what the graduate of this business degree is able to do as a direct result of the programme. This is important from a credential evaluation perspective in ascertaining the level of the qualification, and the areas in which the individual will be able to work in the country of application.

Recommendations for improving the competence profile

As the competences are embedded in text it is difficult to identify them quickly, so a change in structure, to perhaps the use of bullet points, would be more helpful. For example:

Graduates of this programme are:
• able to effectively cooperate and communicate in international and multicultural work environments
• able to participate in task and goal-oriented project groups as well as supervise them
• effective participants in meetings and are able to take minutes

It would also add value from a credential evaluation perspective to identify the specific modules that led to the achievement of particular competences.

Some of the descriptions could be made more specific in two ways: by providing more qualifying information on the level of understanding acquired, and by providing more information on what particular knowledge has been acquired.
A clear distinction between subject-specific and generic skills could be made.

See Annex 13 for the degree profiles of the Bachelor and Master of International Economics and Business, and the Bachelor and Master of International Business Management.

4.2.4 History – 3 institutions

L: Iceland, Háskóli slands

Name of the institution	Háskóli Islands
Country	Iceland
Name of the qualification	Bachelor Degree om History
Level of the programme	Bachelor
TUNING subject area	History

Design of the competence profile – structure and format

The competence profile describes the competences that should be developed at the end of four phases of the study programme. At the beginning of each phase description, the main goal, the study load and the entrance requirements are described. The following four phases are discerned:

First cycle:
- one year academic basic study in History (60 ECTS, part of a BA degree)
- two years academic basic study in History (120 ECTS, main subjects of a BA degree)
- three years academic basic study in History (180 ECTS, BA degree)

Second cycle:
- two year academic post-graduate study in History (120 ECTS, MA degree)

The competences of the first cycle (BA) are clustered in the following categories:
- Knowledge and understanding (5 competences)
- Practical and academic ability (9 competences)
- Competence in communication (4 competences)
- General academic competence (2 competences)

The competences of the second cycle (MA) are clustered in the following categories:
- Knowledge and understanding (3 competences)
- Competences (8 competences)

Competences are described from the perspective of what a student can do or has learned.

Clarity of competences

Competence description	Evaluation Comment
The student is competent to write short scholarly articles where s/he discusses academic subjects and problems.	Indicates the ability to do this task independently
The student knows how to use scholarly references and to design bibliographies.	Indicates the ability to do this task independently
The student understands the diverse methods of historical research.	This raises the question about which methods of historical research the student has learned, and whether he/she is also able to apply these
The student can use statistics.	This raises the question at which level the student has learned to use statistics.
The student has acquired a critical perspective of history and understands that the past influences the present.	This competence is rather vague and doesn't give any measurable information on what the student has actually learned.
The student has acquired enough academic competence to continue his/her studies in history.	This competence doesn't give any relevant information; what is considered enough?

Usefulness for credential evaluation

The structure of the competence profile is quite clear, and enables a credential evaluator to view the projected progression of the student throughout both programmes. However, the competence descriptions themselves are in general too vague and do not add much to the information which can be obtained from the Diploma Supplement. From this point of view this competence profile is not very useful for credential evaluators.

Recommendations for improving the competence profile

There is no connection between the competence profile and the list of subjects in the diploma supplement. Describing competences that have been developed in a specific subject would make it easier to relate the competences to the structure/content of the programme.

Some competences mention about certain content which the student understands, without mentioning which content this is. The usability of such competences for comparison would increase if this content would be described more specific (in subject-specific competences).

No division is made between generic and subject-specific competences. Although some generic competences are mentioned in the category of 'competence in communication' and 'practical and academic ability', they are hard to find if a credential evaluator wants to make a quick comparison of two degree profiles from different programmes. A similar description format in which generic and subject-specific competences would be discerned would therefore increase the usability. Besides, a classification of categories of subject-specific competences which would be used for all history programmes would also add to this goal.

The competences in this competence profile are defined in terms of knowledge a student has obtained, while less attention is paid to the experience that is gained and the abilities that have been developed. The competences could be improved by also indicating to what extent students have learned to apply knowledge.
What is interesting about this profile is that competences have been formulated for different end levels in the programme. Although only the competences that have been developed after the three year programme are relevant for credential evaluators to look at when students have completed the entire Bachelor-programme, it certainly is valuable to also formulate competences at other levels in the programme, for the purpose of evaluating the capabilities of students who didn't complete the programme, or for flexible enrolment in the programme.

See Annex 14 for the competence profile of this programme.

M: Italy, Università di Bologna

Name of the institution	Università di Bologna
Country	Italy
Name of the qualification	Master Degree in Ancient History
Level of the programme	Master
TUNING subject area	History

Design of the competence profile – structure and format

The competence profile describes the competences that should be developed at the end of the 2 year Master programme. The competences are described in two parts, with the following category headings:
• *Learning outcomes – graduates are expected to acquire the following specific skills (5 competences, dealing with subject-specific knowledge and skills acquired)*
• *Graduates are also expected to acquire (11 competences of more generic academic nature)*

After these lists of competences, also information is being provided concerning the admission requirements, the final examination and the career opportunities after completion of this programme.

Clarity of competences

Competence description	Evaluation Comment
A detailed knowledge of the history of the Greek and Roman periods with particular emphasis on the transition periods and the areas and timing of interaction between cultures, such as the Hellenistic age and the post-Roman times	Demonstrates that the graduate is an expert on this specific aspect of the subject area
A complete mastery of reading methodologies, critical editions, analysis, heuristics, different types of documentary material, such as inscriptions, papyri, and ancient coins.	Demonstrates that the graduate is fully able to read any inscriptions out of the ancient period
The complete mastery of a wide range of techniques and methodologies, such as the ability to carry out bibliographical and archive searches, a critical reading and a textual analysis, a deeper knowledge of the variety of the historically most used methodologies, use of the statistical analysis and application of categories.	This competence is rather vague about the types of techniques and methodologies that are meant. An elaboration is given, but this is presented as if these are examples, instead of a total coverage of the techniques and methodologies meant.

Usefulness for credential evaluation

The competence formulations in this profile are generally quite clear, and provide a good insight in the subject-specific aspects that have been covered during the programme. This information can be a valuable addition to the information normally presented in the Diploma Supplement, and provide further insight in the nature and level of the programme to a credential evaluator.

Recommendations for improving the competence profile

In the profile is stated that graduates are expected to acquire the competences listed. This implies that it is rather doubtful whether the graduate indeed did acquire these competences. The information stated in a competence profile should be reliable for a credential evaluator, the educational institution should be able to assure that certain competences have been developed by graduates, because this has been assessed and examined by the institution.
The two categories of competences that are mentioned in the profile are not very discerning. For the clarity of the profile, and the possibility to make a quick scan of the information, it would be advisable to have categories of competences with a clear title which covers the content of the competences mentioned under this heading.

See Annex 15 for the competence profile of this programme.

N: The Netherlands, Rijksuniversiteit Groningen

Name of the institution	Rijksuniversiteit Groningen
Country	The Netherlands
Name of the qualification	Bachelor and Master Degree in History
Level of the programme	Bachelor and Master
TUNING subject area	History

Design of the competence profile – structure and format

The competence profile is attached as annex to section 4.2 (programme requirements) of the Diploma Supplement. From this institution, both a competence profile from the Bachelor programme and from the Master-programme have been provided.
Both profiles start with a brief description of the aim of the programme, followed by a list of competences, clustered in same type of categories.

The competences in both the Bachelor and the Master profile are clustered in the following categories:

- Subject-specific theoretical and practical knowledge (4 competences for the Bachelor, and 4 competences for the Master programme)
- Subject-specific skills and attitudes (9 competences for the Bachelor, and 5 competences for the Master programme)
- Academic and generic skills and attitudes
    - Academic (6 competences for the Bachelor, and 1 competence for the Master programme)
    - Generic (5 competences for the Bachelor, and 2 competences for the Master programme)

Competences are described from the perspective of what a graduate can do or has learned.

Clarity of competences

Competence description	Evaluation Comment
Are able to analyse documents critically and to distinguish between main aspects and related aspects	Indicates the ability to do this task independently
Have specialist knowledge of a specific theme or period, including knowledge of classical and current subject-specific discussions and trends within this theme or period	Indicates that the level of specialist has been attained for a specific theme or period of history
Are able to independently collect, evaluate, interpret and analyse and put into perspective the specific methods, techniques and skills, complex primary and secondary sources related to the chosen major	Indicates the ability to independently perform historical research
Possesses a broad basic knowledge of historiography and the theory of history	What is considered a broad basic knowledge? Should we assume this is the same for all European institutions?
Are familiar with at least one non-written technique	What does this mean?
Have familiarized themselves with several thematic fields	This is so general it doesn't give any information about the graduate's competence
Have a thorough grounding in history	This is so general it doesn't give any information about the graduate's competence

Usefulness for credential evaluation

This competence profile is not very useful for credential evaluators, since the descriptions do not add much to the information which can be obtained from the Diploma Supplement. However the fact that the competence profile is attached as part of the Diploma Supplement enables the credential evaluator to view all the necessary information within one document, which facilitates easy referencing.

Recommendations for improving the competence profile

The competence profile has a good structure and content with regard to categories and format. A good aspect is that a clear division has been made between subject-specific and generic competences. Nevertheless it would be recommended to expand on the generic competences, in order to assist employers, institutions and credential evaluators in ascertaining the level and abilities of the graduate.
Generally spoken, the list of competences is brief, and also the competences themselves are formulated quite brief and specific. This makes is easy for a credential evaluator to make a quick scan, and identify the specific skill areas. However, no connection has been made with the list of subjects, and the formulation and clustering of competences is different from other history programmes in Europe, which makes them hard to compare.
Besides, the titles of competency categories could be reconsidered to make them simpler and more understandable, or it could be considered to attach a glossary which explains the meaning of the different categories.

See Annex 16 for the competence profile of this Bachelor and Master programme.

5. Conclusions and Recommendations

In this chapter, a summary of the main conclusions that could be drawn out of the analysis of the CoRe project will be given. Secondly, recommendations will be formulated to the two main stakeholders in this project, the TUNING project and the ENIC/NARIC networks, on what should be done to further develop the degree/competence profile to increase its usability for the purpose of credential evaluation in the future.

5.1   Relevance of the CoRe project

During the process of document collection it became apparent that many educational institutions taking part in the TUNING process had not yet developed a degree/competence profile. The profiles that were received appeared to be structured in very different ways, including very different types and levels of information concerning the learning outcomes and competences of graduates. As it became clear that the institutions were still in the early stages of implementation and development of the degree/competence profiles, it could be considered that it was too early to carry out this project. The project team however strongly rejects this opinion, as it has provided the CoRe project with the opportunity to influence the development process, and give recommendations concerning the required format, type and level of information provided in the degree/competence profile from a credential evaluation perspective. It is therefore believed that the outcomes of the CoRe-project will assist the TUNING project and the participating institutions to continue their work, through the provision of guidelines on further development.

5.2   Main conclusions

The main conclusions that have been drawn during the CoRe project are the following:

1. Varying information provided in the degree/competence profile

There appeared to be a great variation in the type of information that was provided in the degree/competence profiles that were received. The core element to be evaluated in the CoRe project concerned the learning outcomes that a graduate achieved and the competences developed during the programme. Indeed, this information was available in most of the profiles evaluated in the project. However, quite a number of profiles also provided various other types of information, such as:

- the aim and function of the programme
- the formal rights of the programme
- the entry requirements/admission criteria
- the study load of the programme
- the assessment methods being used in the programme
- the way in which quality assurance is taken care of in the programme
- a list of subjects or subject groupings being taught in the programme
- a description of the profession/professional field in which the graduate is prepared to work
- the career opportunities after completion of the programme
- the roles a graduate is able to fulfil after completion of the programme
- the activities a professional should be able to perform
- the personal characteristics and physical requirements that are required for the profession for which the programme prepares

Some of these types of information (like the aim and function, formal rights, entry requirements, study load, list of subjects) were a duplication of information already provided in the Diploma Supplement. Other types of information were not relevant for the purpose of credential evaluation, although it might be considered valuable for other target groups. On the basis of this observation, it could be concluded that there is no similar perception among the institutions concerning the aim of the degree/competence profile and the information that should be provided here. Therefore, it should be considered necessary to develop clear guidelines concerning the different target groups (e.g. credential evaluators, admitting institutions, employers, educational institutions, students, etc.) for which the information in the degree/competence profile is intended and the type of information that these target groups are looking for.

2. Varying format in which competences are presented

Most institutions that submitted competence profiles presented the competences in a format of bullet-point lists, divided into certain categories of competences. Other competence profiles however, provided the information in paragraphs of text, and others presented it in tables. The project team considers the bullet-point lists as the most appropriate way of

presentation, as this enables a credential evaluator to obtain a quick overview of the competences developed. The presentation in table-form may also have advantages, in particular when this provides a connection between the competences and the subjects during which these competences are being developed. The full text presentation however, should be avoided, as this form makes it difficult to make a quick scan of the information.

3. Categories of competences vary greatly

As mentioned above, the majority of competence profiles that were received contained bullet-point lists of competences that were split into a number of categories. The CoRe project team considered this a good form of presentation, but the fact that all institutions categorised the competences differently made it very difficult to compare the profiles; it was difficult to understand and identify the link between competences described in one profile and compare that to another profile, because such a different categorisation and classification was used. There was a great variation both in the names of categories that were used, as well as in the number (varying from 2 to 5) of categories. To illustrate the variation, see Figure 2 below for an overview of the various categorisations being used.

The Core project team has the opinion that at least a distinction between the categories generic competences and subject-specific competences should be made in any degree/competence profile – a distinction that is also being promoted by TUNING. This distinction was found in a couple, but certainly not all profiles received.

4. Number of competences varies greatly

The total number of competences that were described in the competence profiles varied greatly, from a minimum of 11 competences, to a maximum of 113 competences. Obviously, 113 competences are too many to study to get a quick overview of the main competences that graduates have developed during a programme. An impact of this great variation in numbers, is that also a great variety was found in the number of learning outcomes and aspects of the subject area included, as obviously more aspects can be covered when using more competences.

	1. Care provider 2. Director 3. Designer 4. Coach 5. Professional practitioner
1. Competencies and standards 2. Principles and concepts: application 3. Subject knowledge, understanding and associated skills	1. Intellectual competences 2. Professional competences 3. Practice competences
1. Course objectives and competences 2. The profession 3. Personal qualities and skills for nurses	1. Unnamed skills 2. Skills and other attributes
	1. Subject knowledge outcomes 2. Generic competences
1. Disciplinary knowledge and understanding 2. Methodological competence 3. Working in an interdisciplinary way 4. Academic attitude and skills 5. Social communication skills	1. Objectives 2. Final attainment levels 3. General skills
1. Subject-specific theoretical and practical knowledge 2. Subject-specific skills and attitude 3. Academic and generic skills and attitudes	1.Knowledge 2. Skills 3. Attitudes
	1. The graduates acquire 2. The graduates know
1. Knowledge and understanding 2. Skills, qualities and attributes	1. Care provider 2. Director 3. Designer 4. Coach
1. Chemistry-related cognitive abilities and skills 2. Skills related to the conduct of laboratory work 3. Generic skills	

Figure 2: Overview of varying names and numbers of competency categories

5. Varying perspective from which competences are described

The perspective from which the competences were described varied as well. The following variations were found:
What a graduate is able to do / knows at the end of the programme
What a graduate should be able to do / know at the end of the programme
What a professional should be able to do / know
This variation in the perspective from which competences are being described implies a difference in the meanings that can be attributed to the information. In principle, credential evaluators need to receive accurate information concerning the learning outcomes that a graduate has achieved during a programme, so that they can draw conclusions regarding the knowledge that has been acquired and the competences that have been developed. Therefore, information about competences that should be achieved by a graduate, or competences a professional should have are not relevant. The credential evaluator needs to obtain accurate information concerning the competences a graduate has actually developed during the programme, which should be easy to provide as these competences should be assessed.
In some cases however, institutions seemed to make unrealistic claims concerning the competences that were developed by a graduate. It is emphasised here that the claims made in a degree/competence profile referring to the competences being developed by a graduate should be substantiated by assessments during the programme.

6. Competence information is not sufficiently specific

In most of the competence profiles studied, the description of competences did not provide enough specific information on the subject area knowledge acquired and the skills and attitudes that have been developed. Many competences raised questions concerning the specific competence area that was meant, or were just too general, too vague or stating the obvious. Many examples of such competences that gave no specific information are provided in chapter 4. However, also some examples were found of competences that did contain relevant information that provided further insight on the level and content of the programme which could not be retrieved from the information provided in the Diploma Supplement and/or transcript. Therefore, even though at this stage not many competences could be found that might affect credential evaluation conclusions, the CoRe project team still believes that a competence profile has the potential to provide further insight in the content and level of a programme, provided that the competences are formulated in a more specific way. It is however clear that this will be a difficult iterative process of formulation, evaluation and revision, during which the competency formulations will need to be improved.

7. Varying competence language being used

One important problem that hinders the comparability of the degree/competence profiles is the use of different words and phrases, so that competences look different, while in many cases actually similar learning outcomes or competences are meant. When institutions use different language, it is very difficult for credential evaluators to match the competences in profiles that actually are describing similar learning outcomes, and to draw conclusions concerning the question whether the same competences are meant here, or whether there are differences in the learning outcomes and competences that have been attained. To increase the comparability of the degree/competence profiles, it will be necessary to develop standards and guidelines regarding the language and terminology being used. With specific regard for the generic competences it is recommended to develop standard competence formulations (preferably also describing the different levels at which a particular generic competence can be developed), which can be used by institutions as a resource for the development of their degree/competence profiles. This enables institutions to copy formulations of generic competences, appropriate to the level being developed in the individual programmes. For the subject-specific competences, guidelines can be developed concerning the way a competence should be formulated, and the type of information and the level of detail a competence should contain. To increase the similar use of certain words and phrases, a glossary could be developed so that institutions may understand and use words in a similar meaning.

8. No link between competences acquired and subjects followed

An important shortcoming that was identified was that the majority of the competence profiles that were evaluated demonstrated no link between the competences acquired and the subjects followed. The list of subjects that have been followed is currently an important source of information for credential evaluators to discover in which aspects of the subject area a graduate has obtained knowledge and understanding. The degree/competence profile could function as an elaboration on the list of subjects and give more insight to the scope and level of the subjects, by providing more detailed information concerning the (generic and subject-specific) competences a graduate has developed during these subjects. Only a few examples were found in which this connection between subjects and competences was made. To increase the usability for credential evaluation, it would be recommended to develop a practical format to present the competences developed in relation to the subjects followed in the degree/competence profile.

5.3   Usefulness for credential evaluation

As there is currently a lot of variation in the way competence information is being presented and formulated and the competence information is not sufficiently specific, the usefulness of the degree/competence profiles for credential evaluation at this stage was not always evident. However, the ENIC/NARIC networks recognise that learning outcomes and competences have a great potential to provide better insight in the level and content of educational programmes, which might help to apply the Lisbon Recognition Convention, and conclude whether substantial differences do or do not exist between programmes. The ENIC/NARIC networks therefore showed great interest in the outcomes of the CoRe-project, and expressed their full support to contribute to the further development of the competence profile, because they consider this as an important way to bring the international recognition practice in Europe further forward.

In the beginning of the CoRe-project, the representatives from the ENIC/NARIC networks in the CoRe project were somewhat doubtful about the possibility of providing further insight in the content and level of a study programme by means of competences, because to their experience competences often don't give sufficiently specific information in order to be valuable for credential evaluation. Even though the project results seemed to support this initial opinion to some extent, many of these ENIC/NARIC representatives gained faith in the potential of competence descriptions due to the few good examples that demonstrated how competences could provide valuable additional information.

The identification of the shortcomings of the degree/competence profiles in the CoRe project demonstrate there are still problems that need to be solved in the further development process of the degree/competence profile. However, the CoRe project team believes that if a greater extent of standardization could be achieved and solutions could be found for the problems mentioned, the competence profile does have the potential to provide further insight in the content and level of a programme. The information that is currently available to credential evaluators concerning the specific content and level of a programme is limited, as a list of subjects doesn't provide detailed information about the specific learning outcomes and competences that have been developed. The competence profile could provide a format to allow an elaboration of the list of subjects, and in this way contribute significantly to the improvement of the comparability of study programmes in Europe.

5.4   Recommendations to TUNING

1. Development of a format and guidelines for the competence profile

As has been acknowledged, there are currently different ways in which each aspect of the degree/competence profiles is being developed. To improve the level of standardisation, and therefore the comparability of profiles, it is recommended that TUNING develops a standard format for the competence profile to be used by institutions, providing clear guidelines concerning the type and level of information that should be included.

Concerning the format, the following recommendations are given:
• Competences should be presented in a clearly structured way, preferably in bullet-point lists or in tables.
• Competences should be presented in categories, at least identifying generic and subject-specific competences. The content-specific competences could then be further categorised to indicate sub-areas. Within each subject area, preferably the same titles of (sub)categories should be used. Competences that have been developed during elective courses should be mentioned in a separate category.
• The competence profile should demonstrate the relation between the competences being developed and the subjects being taught in the programme.

The guidelines should at least provide information on the following issues:
• Provision of a clear definition of the aim and target groups of the competence profile, and the type of information that should be provided. The agreements on the aim of the competence profile and the target audiences will contribute to the further determination of the content and format of the document.
• Competences should be described from the perspective of what a graduate is able to do and has learned on completion of the programme. The claims being made in the competence profile should be substantiated, as the students have been assessed for the competences being described.
• The provision of a framework of standardised generic competences, describing the different levels at which each competence could be developed. These standard competences could be used by institutions as a resource for the development of their degree/competence profiles. This enables institutions to copy formulations of generic

competences, appropriate to the level being developed in the individual programmes.
- For the subject-specific competences, guidelines should be developed concerning the way a competence should be formulated, the type of information and the level of detail a competence should contain.
- A glossary of terminology, which provides clear definitions of words and phrases being used in competence profiles (similar to the glossary already developed within the TUNING project). Examples of words that should be included in this glossary are words like competence, generic, subject-specific, attitude, etc. Examples of good practice, and of terminology or competence language that should be avoided could also be provided.
- Guidelines concerning the minimum and the maximum number of competences being described in the profile.

In order to develop the format and guidelines for the competence profile, it is recommended that a further project will be initiated. Within this project, the requirements of the different audiences of the competence profile, the purpose of the document and its position within the documents issued by the institution, should be analysed. This recommended project would benefit from the formation of a working group representing the different stakeholders, including TUNING project members, educational institutions taking part in TUNING, Bologna experts, credential evaluators, employers and other admitting institutions. The format and its guidelines should be made available to all institutions wishing to follow the TUNING approach, preferably via a website.

2. Integration of the competence profile into the Diploma Supplement

To facilitate the transparency of educational programmes, it is recommended that all information relevant for international recognition is as much as possible presented in one document. The Diploma Supplement has been developed to meet this goal. It is therefore recommended that the information concerning learning outcomes and competences is integrated into the Diploma Supplement. A few educational institutions whose profiles were evaluated as part of the CoRe project had already done this, by describing the learning outcomes and competences under section 4.2 of the Diploma Supplement, or by attaching the competence profile as an annex to section 4.2.

It is clear that section 4.2 is the most appropriate section for the description of learning outcomes in the Diploma Supplement. According to the explanatory notes of the Diploma Supplement, the information that should be provided in section 4.2 is information on the requirements for successfully passing the qualification (…), or details of the learning outcomes, skills, competencies and stated aims and objectives associated with the qualification. It has been acknowledged during the CoRe project that the interpretation of the subject heading of section 4.2, being Programme Requirements is rather misleading, as this may be interpreted as the admission requirements for the programme. In line with the recommendation to integrate the information concerning the learning outcomes and competences in section 4.2 of the Diploma Supplement, it may be useful to consider changing the subject heading into a name which better reflects the content.

5.5   Recommendations to the ENIC/NARIC networks

1. Active support of the further development of the competence profile

It is recommended that the ENIC/NARIC networks actively support the further development of the TUNING competence profile into a new and useful tool to be used for credential evaluation. It is clear that still a lot of work, thought and development has to be completed before the competence profile can be used as an effective information source for credential evaluation. However, as the learning paradigm according to which educational programmes are being designed in Europe is changing towards an outcomes-based approach, it will become increasingly important that credential evaluators find a methodology to evaluate the level of qualifications based on the outcomes that have been achieved. There is evidence to suggest that the competence profile will provide credential evaluators with more detailed information, to facilitate the identification of substantial differences, which in turn assists in the application of the Lisbon Recognition criteria. For this reason, the ENIC/NARIC networks have a great interest in this subject; the recognition practice in Europe is expected to largely benefit. Therefore the ENIC/NARIC networks should provide their active support by initiating future projects that focus on the further development of the competence profile, and by providing their cooperation, input and critical feedback on the results of these projects.

Secondly, it is important for the ENIC/NARIC networks to recognise the potential importance of the competence profile in the credential evaluation process, and to incorporate learning outcomes and competences as criteria in the methodology of international recognition. As can be concluded from the outcomes of the CoRe project, the competence profile is

currently not sufficient to be used as an information source during the credential evaluation process. However, with continued development and the above recommendations, it is expected to become a very useful resource in the future. In order to anticipate on the time that learning outcomes and competences can be used as an additional credential evaluation criteria, the ENIC/NARIC networks may prepare their members by organising and providing training sessions on how to use learning outcomes and competences in the recognition process.

2. Call for proper use of the Diploma Supplement

As was mentioned above it is recommended that the competence profile be integrated into the Diploma Supplement. As the ENIC/NARIC networks were closely involved in the establishment and development of the Diploma Supplement, they can also fulfil a role to endorse the integration of the competence profile into the Diploma Supplement.

Secondly, the Diploma Supplements that were received for the CoRe project appeared to vary considerably, both in terms of the format being used and the type of information being provided. This shows that, even though a standard format for the Diploma Supplement has been determined by UNESCO/CEPES, this format is not yet being used properly by many institutions. It is therefore recommended that the ENIC/NARIC networks call for measures to increase the proper use of the Diploma Supplement format by the institutions, so that the aim of transparency will be better achieved.